THE AGRICULTURAL HISTORY REVIEW



a journal of agricultural and rural history

Volume 54, Part I
2006

The Agricultural History Review
Volume 54 Part I 2006

CONTENTS

Assarting and the dynamics of Rhineland economies in the ninth century: *Scarae* at Werden, Weissenburg and Prüm Abbeys	CHRISTINE GRAINGE	1
Between fact and fiction: Henry Brinklow's *Complaynt* against rapacious landlords	MARGARET YATES	24
The circulation of Scottish agricultural books during the eighteenth century	HEATHER HOLMES	45
Female agricultural labour on the Dixon Estate, Lincolnshire, 1801–17	DONNA J. ULYATT	79
Agricultural workers in mid nineteenth-century Brighton	JUNE A. SHEPPARD	93
From ideals to reality: The women's smallholding colony at Lingfield, 1920–39	ANNE MEREDITH	105
The development of irrigated agriculture in twentieth-century Spain: a case study of the Ebro basin	VICENTE PINILLA	122
Annual list of publications on Agrarian History, 2004	PETER McSHANE	142

Book Reviews

David Stone, *Decision-making in medieval agriculture*	BRUCE M. S. CAMPBELL	158
James Bond, *Monastic landscapes*	JANET BURTON	159
Amanda Richardson, *The forest, park and palace of Clarendon, c. 1200–c. 1650. Reconstructing an actual, conceptual and documented Wiltshire landscape*	OLIVER RACKHAM	160

Christian D. Liddy and Richard H. Britnell (eds), *North-east England in the later middle ages*	CHRISTOPHER DYER	161
Christopher Dyer, *An age of transition? Economy and society in England in the later middle ages*	MARGARET YATES	162
John S. Lee, *Cambridge and its economic region, 1450–1560*	CHRISTOPHER DYER	163
Michael A. Faraday (ed.), *Worcestershire taxes in the 1520s. The military survey and forced loans of 1522–3 and the lay subsidy of 1524–7*	JOHN S. MOORE	164
T. C. Smout, Alan R. Macdonald and Fiona Watson, *A history of the native woodlands of Scotland, 1500–1920*	OLIVER RACKHAM	164
John Barnatt and Tom Williamson, *Chatsworth. A landscape history*	DAVID HEY	166
A. J. Gritt and J. M. Virgoe with C. P. Brownrigg (eds), *The memoranda books of Basil Thomas Eccleston, 1757–1789*	MICHAEL WINSTANLEY	166
Stephen Randolph Gibbons, *Captain Rock, night errant. The threatening letters of pre-famine Ireland, 1801–1845*	CHRISTINE KINEALY	167
Philip Heath (ed.), *Melbourne, 1820–1875. A diary of John Joseph Briggs*	ROGER T. DALTON	168
Michael Freeman, *Victorians and the prehistoric. Tracks to a lost world*	PETER J. BOWLER	168
Keith Grieves, Nick Mansfield, George Sheeran, Winifred Stokes, Melanie Tebbutt, Andrew Walker and John Walton, *Rural and urban encounters in the nineteenth and twentieth centuries: regional perspectives*	PETER DEWEY	169
Abigail Woods, *A manufactured plague? The history of foot and mouth disease in Britain*	PAUL BRASSLEY	170
Jonathan Bell, *Ulster farming families, 1930–1960*	K. J. JAMES	171
Colin Pearse, *The whitefaced drift of Dartmoor's 'prapper' sheep: commemorating the fiftieth anniversary of the Whitefaced Dartmoor Sheep Breeders' Association*	JONATHAN BROWN	172
Michael Clayton, *Endangered species. Foxhunting – the history, the passion and the fight for survival*	R. W. HOYLE	173
Lawrence Garner, *Dry stone walls*; Tom Williamson, *The archaeology of rabbit warrens*	R. J. MOORE-COLYER	173

Tom Williamson, *Sandlands: The Suffolk coast and heaths* — ELIZABETH GRIFFITHS — 175

Robin Stanes, *Old farming days. Life on the land in Devon and Cornwall* — R. J. MOORE-COLYER — 175

Elsewhere and General

Richard W. Unger, *Beer in the middle ages and the renaissance* — WILLIAM H. TEBRAKE — 176

Viljo Rasila, Eino Jutikkala and Anneli Mäkelä-Alitalo (eds), *Suomen maatalouden historia*, I, *Perinteisen maatalouden aika, Esihistoriasta vuoteen 1870* — W. R. MEAD — 177

Jean-Marc Moriceau, *Histoire et géographie de l'élevage français du moyen âge à la révolution* — HUGH CLOUT — 178

Gérard Béaur, Christian Dessureault and Joseph Goy (eds), *Familles, terre, marchés. Logiques économiques et stratégies dans les milieux ruraux (XVIIe-XXe siècles). Actes du colloque France-Québec-Suisse, Paris, novembre 2002* — GEORGE GRANTHAM — 180

John McKendrick Hughes (ed. John R. Hughes), *The unwanted. Great War letters from the field* — HUGH CLOUT — 180

Jonathan Harwood, *Technology's dilemma. Agricultural colleges between science and practice in Germany, 1860–1934* — PAUL BRASSLEY — 181

Fernando Collantes Gutiérrez, *El declive demográfico de la montaña española (1850–2000) ¿una drama rural?* — JOSEPH HARRISON — 182

Giovanni Federico, *Feeding the world. An economic history of agriculture, 1800–2000* — CORMAC Ó GRÁDA — 183

Conference report: The Society's Winter Conference, 2005 — JOHN R. WALTON — 185

Notes on Contributors

CHRISTINE GRAINGE, BA, MA, a primary school headteacher for ten years, took her first degree in History at the University of Kent in 1990. She obtained an MA from King's College London in 1991. She has published in *The Mariner's Mirror*, the *Historical Metallurgy Newsletter*, *Friends of Rochester Cathedral Report* and *Archaeologia Cantiana*. She is currently working on aspects of ninth-century Europe. Address: 2 Finglesham Farm Barns, Marley Lane, Finglesham, near Deal, CT14 0NF, e.mail ChristineGrainge@aol.com

DR HEATHER HOLMES works for the Scottish Executive Environment and Rural Affairs Department. She received her PhD on potato harvesting in the Lothians, 1870–1995 at the University of Edinburgh in 1996. This won the Michaelis-Jera Ratcliffe prize in 1996 and was published in 2000 under the title of *As good as a holiday. Potato harvesting in the Lothians from 1870 to the present*. She has published numerous articles on seasonal agricultural workers and on eighteenth- and nineteenth-century Scottish agricultural books, newspapers and journals. Address: 37 Heatherfield Glade, Adambrae Parks, Livingston, West Lothian, EH54 9JE, e.mail heather.holmes@scotland.gsi.gov.uk.

DR ANNE MEREDITH received her D.Phil, entitled 'Middle-class women and horticultural education, 1890–1939' from the University of Sussex in 2002. Since then she has taught part-time in the adult and continuing education departments of the Universities of Surrey and Reading. Address: 23 Mareschal Road, Guildford, Surrey, GU2 4JF, e.mail anne.meredith@ntlworld.com.

DR VICENTE PINILLA is a Senior Lecturer in Economic History at the University of Zaragoza, Spain. His research interests lie in the international trade in agricultural products, Spanish agricultural production and mountain economies, depopulation and migration. He is the author of several books and numerous papers devoted to these issues. He is currently co-director of the Centre for Depopulation and Development of rural areas (Zaragosa). Address: Facultad de Ciencias Economicas y Empresariales, Gran Via 4, 50005, Zaragoza, Spain, e.mail vpinilla@unizar.es.

DR JUNE SHEPPARD is Reader Emeritus in Geography at Queen Mary, University of London. Her earlier work was on field systems, village plans and agricultural labourers in Yorkshire. She is currently working on Brighton's railway workers in the nineteenth century. Address: c/o Department of Geography, Queen Mary, University of London, Mile End Road, London, E1 4NS.

DR DONNA ULYATT received her PhD, 'Lincolnshire rural women, their employment and representation in contemporary written records, c. 1800–1875', from the University of Lincoln in 2004. She is currently engaged in research concerning the impact of historical flood events on the lives of vulnerable groups. Address: High Point House, Cambridge Crescent, Brookenby, Lincolnshire, LN8 6HB, e.mail donna.ulyatt@btopenworld.com.

DR MARGARET YATES is lecturer in history at the University of Reading where she teaches, researches and publishes on the social history of the period of transition from the fourteenth to sixteenth centuries. Her monograph *From medieval to modern. Society and economy from the fourteenth to sixteenth centuries in western Berkshire* is with the publishers. Address, The Department of History, University of Reading, Whiteknights, Reading RG6 6AA, e.mail m.h.yates@reading.ac.uk.

Work in Progress

At intervals the British Agricultural History Society revises of its listing of work in progress on rural and agrarian history. We are currently undertaking a new survey which will appear in the *Review* in 2007. This will cover any research on British and Irish rural/agrarian society (social, economic, political or technical) with a historical dimension from any period up to the end of the twentieth century. No one is excluded from these lists: they are open to all scholars of rural society working in the British Isles or researchers based abroad concerned with the rural/agrarian history of the British Isles. We encourage all researchers to respond: post-graduate students, established academics and non-university scholars.

Whether you have contributed to our work in progress list before, or are a new or returning researcher in these fields, please make a return by filling in the form inserted in this edition of the *Review* and returning it to Dr Nicola Verdon, History Subject Group, Faculty of Development and Society, Sheffield Hallam University, Collegiate Crescent Campus, Sheffield, S10 2BP by 1 January 2007. Alternatively you can access the form on the BAHS website (www.bahs.org.uk) and submit it online.

Forthcoming conferences

The British Agricultural History Society Winter Conference
Saturday 2 December 2006, Institute of Historical Research, London

Families and Farming

The speakers will be Dr Jeremy Goldberg (York), Dr Leigh Shaw-Taylor (Cambridge), Dr Nicola Verdon (Sheffield Hallam) and Professor Michael Winter and Dr Matt Lobley (Exeter).
Full details of the programme will be found inserted in this issue of the Review or may be downloaded from the Society's website, BAHS.org.uk. The conference fee is £20 (with lunch and £10 (without lunch).

The Interwar Rural History Research Group announces an international conference

Rethinking the rural: land and the nation in the 1920s and 1930s

to be held at Royal Holloway, University of London, Egham, UK, 4–6 January, 2007.
Keynote speakers include Dr Jan Bieleman (University of Wageningen), Professor David Danbom (North Dakota State University), Professor Kate Darian-Smith (University of Melbourne) and Professor Alun Howkins (University of Sussex).
The provisional cost of the full conference is £146. For more details contact enquiries@irhrg.org.uk. Anyone who would like to contribute a paper should look at the Call for Papers on http://www.irhrg.org.uk

Assarting and the dynamics of Rhineland economies in the ninth century: *Scarae* at Werden, Weissenburg and Prüm Abbeys*

by Christine Grainge

Abstract

The article contributes to the continuing debate about 'the Carolingian economy'. The first part introduces the reader to documents written in some of the hugely landed Carolingian abbeys in different parts of the Carolingian Empire: the second examines the meaning of the word *scara* as it appears in land surveys written in the second half of the ninth century at three monastic houses, the abbeys of Werden, Weissenburg and Prüm in the Rhineland. In Werden documents the word refers to division or share of land. In Weissenburg documents it refers to assartment of newly-acquired land. In a Prüm document written later in the century, the word means both assartment and division of land, and share or cut of the raw materials and commodities that came from the land. The word identifies the period of expansion initiated by abbeys which led to significant economic growth on monastic lands with access to the Rhine network of rivers. The Appendix offers a philological study of the word.

The present state of knowledge and understanding of 'the ninth-century European economy' has been summarised recently by the Belgian historian Adriaan Verhulst. After a lifetime of working around the subject, he sees the economy of the Carolingian empire, 'as part of a nearly continuous upward movement from the seventh century onwards, at least as far as the northern half of Carolingian Europe is concerned'.[1] This is too general a conclusion. It is time to finish with generalities concerning 'the Carolingian economy' and examine closely the socio-economic evidence written at certain points of time in the abbeys, the regional centres where large-scale agricultural change was planned and managed.[2] We now need to exploit the locally written evidence rather than rely on court-centred sources produced to boost the authority of

* The author is very grateful to the editor and his anonymous referees for their meticulous reading of earlier drafts of this paper and their kindly encouragement.

[1] A. Verhulst, *The Carolingian economy* (2002), pp. 1 and 135. See *AgHR* 52 (2004), p. 116, for a review of this book by Richard Hodges. See also R. Hodges and D. Whitehouse, *Mohammed, Charlemagne and the origins of Europe* (1983); R. Hodges, *Primitive and peasant markets* (1988); id., 'Trade and market origins in the ninth century: relations between England and the Continent', in M. Gibson and J. L. Nelson (eds), *Charles the Bald: court and kingdom* (1990); id., *Towns and trade in the age of Charlemagne* (2000).

[2] G. Astill saw the need for regional economic studies in his 'Archaeology, economics and early medieval Europe', *Oxford J. Archaeology* 4 (1985), pp. 215–31. Astill thought rightly that there had been an over-emphasis on the role of kings in the exchange of goods.

kings in the Carolingian courts at Aachen or Paris. In particular, we need to acknowledge the geographical shifts in socio-economic power, in labour, production of raw materials and commodities, finance, markets and trade routes that happened after the division of the Carolingian Empire in 843 and see how some regions benefited and others lost out. In this paper we first demonstrate the commercial importance of the Carolingian Abbeys in the first half of the ninth century, especially in the Rhineland after the division of the Empire, and not least through their working of iron. We then turn to consider the expansion of the monastic economy in the Rhineland in the second half of the century through the clearance of forest, indicated by the term *scarae*.

I

David Herlihy has shown that during the ninth century the ecclesiastical landowners on the European continent came to hold a third of all the land.[3] By the ninth century the larger Carolingian abbeys were headed by members of a powerful ecclesiastical aristocracy some of whom were in close contact with one another.[4] They could call on formidable material resources to underpin their local and regional authority. Not only were they able to draw income from tenants, but they were also active in inter-regional trade and industrial production. Archaeology has begun to confirm the range of buildings described in documents that formed the monastic complex, for apart from buildings to meet the physical and intellectual needs of large numbers of monks, there were extensive workshops, including metallurgical workshops and furnaces. The economic affairs of these abbeys are extensively documented in collections of charters dating from the time of their foundation, as from the joint abbey of Stavelot-Malmédy in the Ardennes, the abbey of St Gall near Lake Constance, the abbeys of Lorsch and Fulda east of the Rhine, and in documents called polyptychs or *Urbare* pertaining to a particular date in time, which give detailed information on the lands held by the abbey at that date and the annual rents and labour services owed annually to the abbey by its tenants. It is the data that can be extracted from a group of these *Urbare* that particularly concern us in this paper, but it may be useful to give a brief account of some of the major polyptychs that survive, not scraps of documents that reflect hard times, but ones that are complete and drawn up in periods of economic stability or growth.

The polyptych of the abbey of St Germain-des-Prés in Paris was written in medieval Latin between 825 and 829 and survives as a ninth-century compilation of descriptions of 25 units of land, written in several different scribal hands, in a weighty manuscript book held today in the Bibliothèque Nationale, Paris.[5] It captures an affluent period in the history of West Francia, later France, when named tenants, described mainly as *coloni*, and their families paid annual

[3] D. Herlihy, 'Church property on the European continent, 701–1200', *Speculum* 36 (1961), p. 92.

[4] P. K. Marshall (ed.), *Servati Lupi Epistolae* (1984); G. W. Regenos (ed. and trans.), *The Letters of Lupus of Ferrières* (1966). These letters cover the years 836–62 from the perspective of the West Frankish ecclesiastical aristocracy.

[5] M. B. Guérard (ed.), *Polyptyque de l'Abbé Irminon de l'Abbaye de Saint-Germain-des-Prés* (2 vols, Paris, 1844); A. Longnon (ed.), *Polyptyque de l'Abbaye de Saint-Germain-des-Prés* (2 vols, Paris, 1886–95); D. Hägermann, K. Elmhauser and A. Hedwig (eds), *Das Polyptychon von Saint-German-des-Prés* (2 vols, 1993).

dues in kind or silver coin, and carts drawn by oxen trundled to and from the abbey and to Angers and Orléans, situated on the river Loire, and to Le Mans, situated on a south-flowing tributary of the Loire, the river Sarthe. But there is a problem with this document that has not yet been addressed, although it has been edited three times, in 1884, 1886 and 1993. The problem concerns the location of three of the units of land, *Neuilly*, *Corbon* and *Buxidum*, which are described in a separate scribal hand and provide the abbey with most of its industrial production. All three editors locate these units of land in Le Perche forest in Normandy. One of these units of land produces for the abbey the enormous quantity of 2550 *libras de ferro* (pounds of iron) per year,[6] together with commodities such as 1400 *axiculi* (axles) and 87 *circuli* (iron bands used to encompass millstones or perhaps iron tyres for cartwheels). Mathieu Arnoux, in a detailed historical and scientific study, has shown that no iron was extracted from Le Perche forest or from anywhere in Normandy until the eleventh century.[7] The iron may have been smithied into components in the forest of Le Perche, but our knowledge of early medieval iron production suggests that such a large quantity of iron could not have come from forest iron retrieved from shallow trenches, but must have been produced from concentrated deposits of iron ore mined elsewhere. There are indications in the document to suggest that Le Perche should have been understood as Col de la Perche in Catalonia adjacent to the site of the later medieval fortress of Mont-Louis. Our suggestion is that rich iron ores were mined from the Pyrenees (*Buxidum*) and iron bloom, iron ingots and perhaps pig iron were processed and assembled on the high plateau known as Col de la Perche. Iron transports were rerouted from the Mediterranean and transported to Paris along the land and river routes running north: the river Ariège via Foix and Pamiers to Toulouse, then via the River Garonne to the Loire. The matter is an important one because the booming economy of the abbey before the 840s and its later decline cannot be understood unless the loss of its industrial production from its 'colonies' with similar names from south of the Loire, some of which it had held since 697, is taken into account.[8] The loss of these 'colonies' may have been caused by Muslim occupation of the iron-producing areas or simply by Scandinavian ships plundering the iron to sell elsewhere, for from the 840s Scandinavians were established on the river networks of the Garonne, the Charente and the Loire, along which heavy goods were transported back to the abbey in Paris. The abbey itself was raided by Scandinavian armies from 845.[9]

The extensive document describing not only lands and dues, but also all aspects of monastic life, known as 'The Customs of Corbie', was written between 822 and 826 by Abbot Adalhard on his return from political exile on the Isle of Noirmoutier, off the estuary of the river Loire.[10]

[6] Guérard (ed.), *Polyptyque … de Saint-Germain-des-Prés*, I, p. 858, '2600 *livres de fer*'; Verhulst, *Carolingian economy*, p. 77 calculated 2550 pounds of iron.

[7] M. Arnoux, *Mineurs, Férons et Maîtres de Forge: étude sur la production du fer dans la Normandie du Moyen Âge, XI-XV siècles* (1993).

[8] R. Pouparin (ed.), *Recueil des chartes de L'Abbaye de Saint-Germain-des Prés*, (Paris, 1909), charter 10, pp. 15–17.

[9] For the numbers of Scandinavian ships recorded as entering the river Seine see F. Grat, J. Vielliard and S. Clémencet (eds), *Annales Bertiniani* (1964); J. L. Nelson (trans.), *The Annals of St. Bertin* (1991): 845, 120 ships, 861, 200 ships, 865–8, 68 ships, 876, 100 ships, 886, 700 ships. Scandinavian fleets are documented on the river Loire at Angers from 854, at Orléans from 856, and at Le Mans on the Sarthe from 856.

[10] J. Semmler (ed.), 'Consuetudines Corbeienses' in K. Hallinger (ed.), *Corpus Consuetudinum Monasticarum* (1963 –), I, pp. 355–422; part trans. by C. W. Jones, in W. Horn and E. Born, *The Plan of S. Gall* (3 vols, 1979), III, App. 2, pp. 91–128.

Abbot Adalhard, grandson of Charles Martel, had been the trusted adviser of Pippin I (Charlemagne's father). He was a leading light in court and monastic circles before his exile. In 813, using his influence over a network of abbeys, he had arranged for an exchange of goods between the north Italian abbeys of Brescia and Nonantola.[11] It was in the following year that he had been exiled to Noirmoutier by Charlemagne's successor, Louis the Pious. In 822 Adalhard founded the abbey of Corvey on the river Weser and it may be that some of the extensive lands, workshops and water-mills described in the Corbie document relate to Corvey, for not all the units of land have been identified. The description of the exploitation of land which sounds like mining may relate to Corvey, where there is archaeo-metallurgical evidence in the area of the workshops of iron-working from the ninth century onwards.[12] At the time of the writing of 'The Customs of Corbie' the abbey was still obtaining luxury goods from its cell in Fos-sur-Mer, near Marseilles.

Similarities have been observed between the Corbie document and the detailed ninth-century architectural drawing of a monastery known as the Plan of St Gall, the original of which can be viewed today in the library at St Gall Abbey.[13] (St Gall is situated in Switzerland near the southern tip of Lake Constance and between the upper and lower reaches of the Rhine.) Both documents depict the complete life of the abbey, one in text and the other in a carefully labelled plan, from the abbey church, refectory and cellar, to the grain supply, the hospital, herb and vegetable gardens and kitchens, to accommodation for pilgrims and the poor, tithing barns for crops and animals, halls where coopers and wheelwrights, shoemakers and saddlers, carpenters and curriers worked. Both abbeys had workshops for goldsmiths, blacksmiths and fullers, for grinders and polishers of swords, and shield makers, all working under the eye of the chamberlain, the official who at Corbie counted the valuable iron tools and equipment in and out of storage. The archives of the abbey of St. Gall contain the most complete early charter record of any Carolingian abbey. They show how the abbey acquired control over its lands and tenants through new leasing agreements from 754 onwards in which property and lands were listed – fields, woodland, alp, vineyards, falling streams – as well as moveables and immoveables. Substantial annual dues were owed to the abbey, both in kind, pigs, beer, bread or in *fresh* produce, perhaps iron blooms, related to a unit of account described as *frischinga* (this vernacular word appears in many different spellings), and in metal-weight, such as two ounces of gold and five pounds of silver. A particularly interesting group of six charters (five drawn up at Rankweil and one at Bürs, considerably further south) between 818 and 825, when Gozbertus was abbot of St. Gall (to whom the Plan of St. Gall was sent), concern purchases of land made on behalf of the abbey by the local official Folcwin, termed *scultaizus*, who acted as the abbey's land agent. He was buying up land to the south-east of Rankweil, paying for each transaction in iron ingots or in iron value (*in ferro valiente*) related to an account of silver (*solidus*). Three of the parcels purchased were in the area of Bergun at the entrance to the Albula Pass. The Albula Pass, where the abbey may have collected tolls,

[11] G. Porro Lambertenghi (ed.), *Historiae Patriae Monumenta* 13 (*Codex Diplomaticus Langobardiae*, 88, 1873), p. 164.

[12] H. G. Stephan, 'Archäologische Erkenntnisse zu Karolingischen Klosterwerkstätten in der Reichsabtei Corvey', *Archäologisches Korrespondenzblatt* 24 (1994).

[13] Horn and Born, *Plan of St Gall*, I, p. 27

was a great strategic importance for it led to the Julier, Septimer and Ofen Pases into northern Italy.[14]

In the ninth century the abbey of St. Bertin at St. Omer, in the ancient territory of the Celtic tribe, the Morini, was situated on the coast. This was the result of the Romano-British or Dunkirkian Transgression at the end of the Roman period when there was a significant rise in sea level and much of the Flanders maritime plain, from Calais to Dunkirk and Nieuwport, went under water.[15] This left the settlement at the estuary of the river Aa, a few miles north of Thérouanne, centrally situated in the low-lying sandy *Sinus Itius* for the shortest passage across the English channel for pilgrims travelling to Rome. There is controversy concerning its beginnings. The traditional story records that the twin monasteries of St. Bertin and St. Omer were founded in *Sithiu* in 640 by monks from the abbey of Luxeuil.[16] The abbey of Luxeuil, founded by a colony of Irish monks in 590, was situated in the Vosges, upper Saône and by the middle of the seventh century housed six hundred monks. It was destroyed by Muslims in 731 in spite of Charles Martel's energetic defence of the Rhône valley. It was rebuilt in 746 only to be pillaged and fired by Scandinavians during the second half of the ninth century.[17] If the traditional story is correct it would mean that from their early days the abbeys of St. Bertin and St. Omer would have followed the Luxeuil use of the Rule of its Irish founder, Columbanus. An alternative, but much less convincing, view is that the abbey was founded much later by Amand from Aquitaine.[18] There is a great deal of place-name evidence within the St Bertin estates to suggest that Saxons had settled in the Pas de Calais, both before and at the beginning of the period of fifth-century invasions.[19] The undated polyptych of St Bertin is said by its editors to have been written between 844 and 856.[20] The polyptych records that there was a Saxon living at Tubersent, near the river Canche.[21] Charles Verlingen saw the area providing evidence of centuries of adjustments in what was a mixed zone where both Germanic and Romance languages were spoken and this seems a fair analysis.[22] All these factors make the polyptych difficult to evaluate, for example our understanding of the *herescarii* (located on two land-units), although the names of the 21 units of land have changed little and all can be located and visited today. The polyptych shows that at the time of writing, the abbey held more than 20,000 acres of land from the coast

[14] H. Wartmann (ed.), *Urkundenbuch der Abtei Sanct Gallen* (5 vols, 1863–1955), I, charters 235, 248, 254, 255, 262 and 293. c.f. K. Bullimore, 'Folcwin of Rankweil: the world of a Carolingian local official', *Early Medieval Europe* 13 (2005), pp. 43–77. Bullimore neither locates Bergun and the Albula Pass nor mentions that a quarter of the lands that Folcwin acquired for the abbey were purchased with iron ingots or 'in iron value' related to the unit of account, the silver solidus. Gozbertus was abbot of St. Gall from 816–36.

[15] A. Briquet, *Le littoral du nord de la France et son évolution morphologique* (1930), pp. 199–202, 355–9; R. J. N. Devoy, 'Controls on coastal and sea-level changes and the application of archaeological-historical records to understanding recent patterns of sea-level movement', in S. McGrail (ed.), *Maritime Celts, Frisians and Saxons* (CBA Research Report 71, 1990), pp. 17–26.

[16] G. W. Coopland, 'The Abbey of St. Bertin and its neighbourhood', in P. Vinogradov (ed.), *Oxford Studies in Social and Legal History* (9 vols, 1909–27), IV, p. 15.

[17] H. Baumont (ed.), *Étude historique sur l'abbaye de Luxeuil* (1896), pp. 1–7.

[18] R. McKitterick, *The Frankish Kingdoms under the Carolingians* (1983), p. 42.

[19] J. Bately, 'Grimbald of St Bertin's' *Medium Ævum* 35 (1966), p. 5. For example, Merckeg*hem*, Rumingh*em*, Tatingh*em*, Beingh*em*, Audre*hem*, Maningh*em*, Basingh*em*, Odingh*em* and Fresingh*em*.

[20] F. L. Ganshof, F. Godding-Ganshof and A. de Smet (eds), *Le polyptyque de l'abbaye de St. Bertin* (1975).

[21] ibid., p. 23, *Alfuuardus ille Saxo habet Bunaria viiii.*

[22] C. Verlingen, *Les origines de la frontière linguistique en Belgique et la colonisation franque* (1955), pp. 87–8 and 130–2.

south through Thérouanne and the forested Boulonnais to Tubersent and the estuary of the river Canche. Their lands would have included the emporium of Quentovic, for, although Quentovic is not mentioned in the 1975 edition of the document, it is listed in a fragment of the polyptych published in 1844.[23] The omission may be because it was sacked when a Danish fleet landed there at dawn, after a night crossing, in 842. It seems never to have recovered on its site 'on the south side of the river Canche' for archaeologists have found little evidence of a thriving emporium.[24] However, Lupus abbot of Ferrières attached considerable importance, between 843 and 849, to the retrieval of the monastic outpost called the Cell of St. Josse, situated just across the estuary of the river Canche from Tubersent. He was at pains to stress that he did not require the Cell to obtain 'gold, silver and other precious metals, *materia*'.[25] This suggests either that the Cell may have been an unofficial port of entry for imported goods or that his abbey wished to collect the tolls. It is likely that either Boulogne or St. Omer, depending on weather conditions for embarkation, sailing or landing, took the place of Quentovic as the trading area with Canterbury, the river Stour and eastern England until Calais 'emerged' from its sandbank in the tenth century to replace St. Omer which was becoming silted up.[26]

Certainly it was a traumatic but affluent century for the abbey. A very late ninth-century/early tenth-century manuscript describes a Viking visitation by a fleet in 861 when a second influential Adalhard held the abbacy.[27] The Vikings approached the abbey via the river Yser after a dawn landing. They made a show of beating up two priests and two deacons (who happen to have the same names as two local officials responsible for the area), and left the altar in the church piled high with silver – enough for the abbey to decide to rebuild their abbey church using new building techniques, roofing it with lead, rebuilding all the other churches on their estates and rebuilding their workshops, for the manuscript tells us that 'in the women's workshop spinning, carding, weaving and all women's work is done'.[28] The polyptych contains numerous references to women making cloth and garments as dues to the abbey, as well as references to seven water-mills. An eyewitness from the abbey continues the manuscript with an account of events in 891. He describes how counts and abbots fought for this rich and strategically-positioned abbey and how in 892 the Great Army came from East Francia and assembled on lands belonging to the abbey, before riding to Boulogne and taking two hundred and fifty ships for their crossing to Kent – to test to the utmost King Alfred's defence of Wessex.

[23] Guérard (ed.), *Polyptyque … de Saint-Germain-des-Prés*, II, App. III, p. 404: *In Quentvico mansum 1*.

[24] D. Hill *et al.* 'The definition of the early Medieval site of Quentovic', *Antiquity* 66 (1992), pp. 965–69.

[25] Marshall (ed.), *Servati Lupi Epistolae*, letter 44. Regarding Lupus' efforts to recover the Cell see also letters 11, 71, 31, 42, 43, 45, 55, 60, 50, 51, 92 and 88.

[26] By the late ninth century, erosion of the north-west tip of the Boulonnais and gradual accumulation of eroded material in the river beds along the Flanders maritime plain together with the reclamation efforts of successive abbots of St. Bertin had allowed much land to be recovered. The first charter pertaining to a settlement at Calais is dated 938. Thereafter Calais appears regularly in charters as it grew in significance as a *portus maris*, sea port, later a wool staple port.

[27] O. Holder-Egger (ed.), *Miracula S. Bertini Sithiensia* (Monumenta Germaniae Historica [hereafter MGH], supp. ser. 16, 1887), p. 509. Much localised chronicle evidence is included in this work which purports to concern miracles which happened at the abbey.

[28] MS St. Omer 764 fo. 85. *In genaecio ipsius nendi, carandi, texendi omnique artificio mulieribus operis (edoc)tus*. This is a previously unedited part of the manuscript, Franco-Saxon in style, that I transcribed as part of my unpublished MA dissertation, 'The Miracles of St. Bertin', King's College London, 1991.

The next major extant polytych was written in 862 at the abbey of Bobbio in Lombard Italy. The abbey was founded by the Irish monk Columbanus in 615, who even in the abbey's early days received pilgrims from Ireland who ventured up the Rhine in merchant ships to visit Columbanus' follower Gall's earlier foundation of 610, the cell, later the abbey of St Gall. Bobbio was situated near the river Trebbia that flowed in a northerly direction, not towards the Mediterranean, but into the fertile valley of the River Po in north Italy. The polyptych describes how the abbey held 19 units of land in the valley of the Trebbia from which it obtained as rent from its peasants hay, grain, honey, wax, poultry, salt, fish, wine and olive oil.[29] The polyptych goes on to describe the abbey's 'exterior cells',[30] its trading outposts,[31] for it held lands from north of Lago Garda, described as *Cella Summolaco*, where there was an *olivetum* providing the abbey with its largest annual harvest of olives, 2430 pounds, which the abbey clearly processed and traded. For these olives were collected in Garda, and olives and iron were hauled to Pavia on the River Ticino and to Piacenza on the River Po. There, on 'lands with tenants, and churches', recorded in the polyptych as *Cella Piacenza*, *Cella Parma*, *Cremona Portus* and *Cella Pavia*, the abbey owned mills to crush grain and press olives to produce olive oil. The abbey also had a cell at Genoa which provided it with chestnuts, wine and 40 pounds of olive oil a year. One hundred strings of figs, 200 citrons (sour oranges),[32] and 100 pounds of pitch were purchased here annually for the abbey. It was through Venice that in 862 the abbey received imported goods, for their share of tolls payable at the port of Mantua was 'the fifteenth ship from Venice and we get from it in cash six silver *solidi*, three pounds of pepper, the same amount of cumin and four pounds of fine cloth'.[33]

Lastly we should look at an extraordinarily rich abbey situated north of the River Po in Lombardy, founded in the 750s by the Lombard royal house, the abbey of Brescia. A document written between 879 and 900 describes its lands, farms and renders.[34] At this time it had 70 units of land and extensive trading outposts which stretched from the hinterland of the Italian Lakes to the Po valley, from Pavia to the Adriatic Sea. The abbey's land-units made annual payments

[29] C. Cipolla (ed.), *S. Colombano di Bobbio, Inventari altomedievali di terre, coloni e redditi*, in A. Castagnetti (ed.), *Instituto Storico Italiano per il Medio Evo, Fonti per la Storia d'Italia*, 104 (1979), pp. 128–31.

[30] ibid., pp. 131–39.

[31] Abbeys following the Rule of Columbanus from their earliest foundation had a headstart in economic matters. They did not come within episcopal jurisdiction, being directly under papal protection. Although very austere, there was no prohibition in their Rule concerning making a profit; S. M. Walker (ed.), *Sancti Columbani Opera*, (1957), Rules, pp. 122–68. The gentler, more practical discipline of the Rule of St. Benedict, included the instruction 'And, as regards the price … let the goods always be sold a little cheaper than they are sold by people of the world'. J. McCann (ed. and trans.), *The Rule of St. Benedict* (1970), p. 62. Under the influence of Abbot Benedict of Aniane, the Rule changed in this respect at the two Synods of Aachen of 816 and 817; J. Semmler (ed.), *Synodi primae Aquisgranensis decreta authentica* 816 and *Synodi Secundae Aquisgranensis* 817 (1963), in Hallinger (ed.), *Corpus consuetudinum monasticarum*, I, pp. 451–68, 471–81.

[32] A. M. Watson, 'The arab agricultural revolution and its diffusion, 700–1100', *JEcH* 34 (1974), p. 9 'sour oranges'; id., *Agricultural innovation in the early Islamic world: the diffusion of farming techniques, 700–1100* (1983), p. 42, sour orange, Latin *citrus aurantium*, p. 50 *cedri*; M. McCormick, *Origins of the European Economy* (2001), pp. 634–6.

[33] Cipolla (ed.), *S. Colombano di Bobbio*, p. 138: *Venit a nostrum parte(m) xv navis, Ven(et)icis navib(us), unde debent venire solidos vi, pip(er) lib(ras) iii, cyminu(m) similiter, linu(m) lib(ras) iiii.*

[34] G. Pasquali (ed.), *S. Guila di Brescia, Brevaria de curtibus monasterii*, in A. Castagnetti (ed.), *Instituto Storico Italiano per il Medio Evo, Fonti per la Storia d'Italia*, 104 (1979), pp. 43–94.

to the abbey in both coined money, silver *denarii*, or pounds of silver, and in kind; fish, poultry, grain, hay, salt, wine, wool, hemp, cloth of various qualities, barrels, in this document called *buttes* rather than *tonnae*, *anforae* (spelled thus), *urnae* (some sort of containers) and olive oil were rendered to the abbey. Seven of the units of land, which included Pisogne, at the northern tip of Lago d'Iseo, the 50 kilometre long Val Camonica, and the mountainous Clusone, paid their annual dues in iron ingots in weights of 20, 30, 60, 100 or 130 pounds.[35] In Pisogne, it was the *scarius* who held a *beneficium* who rendered annually to the abbey 130 pounds of iron.[36] Three other land-units located near the abbey paid annual dues in iron implements such as ploughshares, scythes, forks or hatchets. With regard to industrial plant near the abbey there was a *genetium* (spelled thus), a workshop where 20 women worked,[37] as at St. Bertin, St. Omer, and some 23 water-mills, some designated 'communal mills'. It owned 12 ships (*naves*) on the River Po, six based at Cremona carrying salt.[38] Like Bobbio, the abbey of Brescia had extensive trading outposts. It held 'lands and chapels' mainly in Cremona and Mantua, but also in Pavia, Bergamo, Piacenza, Modena, Padua and Parma as well as Genoa, Ivrea and Varese. Between five and twenty free men were based in these last three places. Were these some of the abbey's merchants? They each paid small annual dues to the abbey compared with the port of Pavia which gave the abbey 15 pounds of silver a year.[39]

In 843 the Empire was divided into three kingdoms and there was internecine strife between the rulers. The largely Romance-speaking Western Kingdom, a formerly affluent remnant of the Roman Empire, fell swiftly into decline, due in part to easy Scandinavian entry with large fleets, between 843 and 876, into the river networks of the Seine, Loire, Charente and Garonne, the estuaries of which were undefended. The West Frankish Kingdom had no offshore fleets. From 845 the estuaries of this kingdom were virtually blockaded by Scandinavian fleets. This was the end of the previously thriving Seine – *Hamwic* trade route.[40] Indeed it was not until 862 on the Seine and 873 on the Loire that one bridge on each river was fortified.[41] Mayke de Jonge has termed it 'the ramshackle but functional state of Charles the Bald'.[42] This is how it appears from the scraps of polyptychs surviving from abbeys in the Western Kingdom and from the extensive correspondence of Abbot Lupus of Ferrières, written between 840 and 862 to Charles the Bald and to many of his fellow abbots, including those at Corbie and Prüm, who regretted the passing of the good old days of Charlemagne; the imported goods to which they had been accustomed were now almost impossible to obtain in the Western Kingdom. In 840 the situation quickly worsened, for a letter from Odo, Lupus' predecessor as abbot of Ferrières

[35] Bobbio's iron production in 862 came from *Cella Summolaco* north of Lago Garda. The abbey of Brescia held land there where there were nine slaves *qui petras tantummodo operantur* (who only worked stones). This may refer to retrieving ore from ironstone.

[36] See Appendix.

[37] Pasquali (ed.), *S. Guila di Brescia*, p. 66.

[38] ibid., p. 78.

[39] ibid., p. 92

[40] Hodges shows that from *c.* 840 no imported pottery from Northern France arrived at *Hamwic*. The reason for this is likely to have been Scandinavian control of the Seine estuary. Hodges, 'Trade and market origins', pp. 214–5.

[41] S. Coupland, 'The fortified bridges of Charles the Bald', *J. Medieval History* 17 (1991), pp. 1–12. In this article Coupland confirmed the findings in his unpublished Ph.D. dissertation, 'Charles the Bald and the defence of the West Frankish Kingdom against the Viking invasions, 840–877', University of Cambridge, 1987.

[42] Mayke de Jong, 'Carolingian Monasticism: the power of prayer', in R. McKitterick (ed.), *The New Cambridge Medieval History*, II, c. *700*–c. *900* (1995), p. 635.

reads that 'the palace clerks are demanding control of various monasteries and that their only concern is to satisfy their personal greed';[43] abbots were advised to hide their treasure. Lupus himself, writing to invite a friend to visit him, warned: 'rebellions have broken out in the realm of King Charles, plundering is rife ... you must therefore seek a group of fellow travellers large and strong enough to keep off robber bands'.[44] In 844 Lupus sent three young men to the abbey of Prüm (where his friend Marcward was abbot from 829–53) for instruction in the German language.[45] He wrote later thanking Abbot Marcward for 'giving our boys an understanding of your own language, the need for which is very important at this time'.[46] In 849 he asked an acquaintance to provide him with Italian money for a journey to Rome, since West Frankish silver coin was no longer acceptable in Italy.[47] He asked Abbot Marcward of Prüm to obtain for him a horse and two blue robes and two linen garments as gifts for the pope on his forthcoming journey to Rome.[48] We might presume that these items were unavailable in the Western Kingdom.

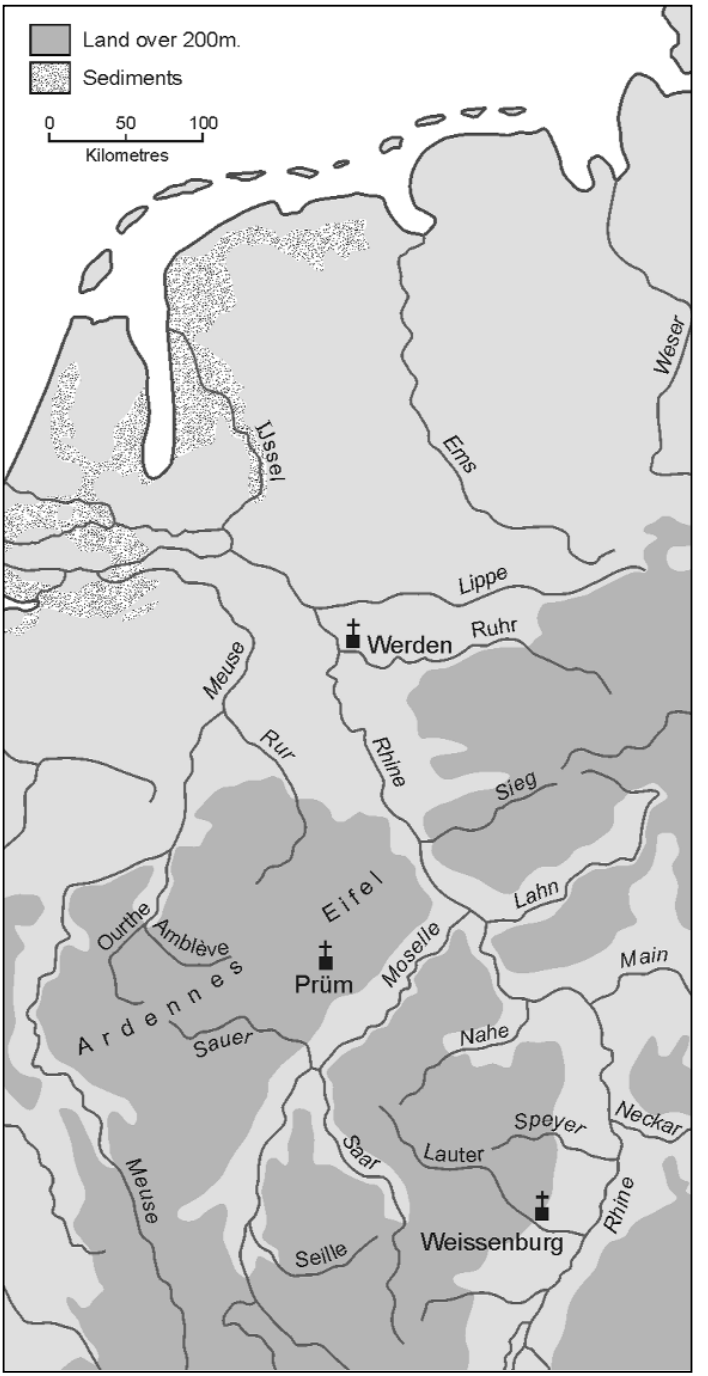
On the other hand, the Germanic-speaking Middle Kingdom, which stretched from the estuaries of the rivers Rhine, Ems and Weser south to Italy, and into which kingdom the three abbeys of Werden, Weissenburg and Prüm and their landholdings fell, was beginning to experience economic growth (Map 1). This was not only because of the decline of the Rhône/Saône route north from 840, due to Muslim and Scandinavian raids from the Mediterranean, but also because of the deliberate policy of its ruler Lothar I (co-emperor of the Carolingian Empire with his father Louis the Pious until 840). In order to encourage economic growth Lothar not only granted abbeys extensive lands and toll-free status along the rivers within his kingdom, but also gave to the abbey of Prüm immunity from fiscal dues, including freedom from toll on all goods traded throughout his kingdom by ship or by cart.[49] These rights were renewed by his son Lothar II, who held the Middle Kingdom until his death in 869. Such privileges had been enjoyed by the abbey of Weissenburg since the time of the Merovingian king Dagobert (629–39). In 870, by the terms of the Treaty of Meersen, and confirmed by their charters, the abbeys of Stavelot-Malmédy and Prüm with all their lands, both those in demesne and those held by vassals, became part of the eastern kingdom of Louis the German, as did the abbeys of Werden and Weissenburg.

This is the background to the buoyant, expansionist economies of which *scarae* prove to be additional evidence.

II

Most Carolingian historians think of *scarae* solely in terms of their inclusion in Carolingian court-centred sources. Principally in centrally written sources such as the *Royal Frankish Annals*, the *Annals of St. Bertin* and Carolingian Royal Capitularies, the word occurs with the

[43] Marshall (ed.), *Servati Lupi Epistolae*, letter 25.
[44] ibid., letter 104.
[45] ibid., letter 91.
[46] ibid., letter 70.
[47] ibid., letter 66.
[48] ibid., letter 68.
[49] T. Schieffer (ed.), *Die Urkunden Lothars I und Lothars II* (MGH, Diplomata Karolinorum III, 1966), charters 56 (841), 57 (841) and 85 (844). These rights were renewed by Lothar II in his charter 3 (856), and extended to include a market and a mint at Rommersheim, a unit of land near the abbey of Prüm in charter 16 (861).



MAP 1. Werden, Weissenburg and Prüm.

meaning of 'a detachment of soldiers'. Thus the *Royal Frankish Annals* describe how between 766 and 785 King Pepin, on one occasion, and then his son Charlemagne, on seven occasions, sent *scarae*, meaning well-equipped detachments of soldiers to deal with Aquitainians (766), Lombards (773) and the Saxons against whom there were four victorious attacks with *scarae* in

774, 776, 778 and 785.[50] Similar campaigns with *scarae* took place against the Slavs in 782 and the Westphalians in 784.[51] The continuation of these annals, called the *Annals of St. Bertin*, describe how Charles the Bald, king of the western part of the former Carolingian Empire after its division in 843, used *scarae* to deal with his enemies, but not for the first nineteen years.[52] The Annals describe how he used *scarae* against the Northmen in 862, 868, 869 and 876, the year he died. In 871 he used *scarae* against Carloman, his rebellious son, and his followers. A poignant reference in the year 882 written by Hincmar, who, as Archbishop of Rheims was an eye-witness, describes in the final annal a *scara* of Northmen approaching the city of Rheims. This is plainly not the usage of the word in the monastic sources being investigated here.

The first occurrence of the word *scara* from the abbey of Werden is in a heading to a charter in the abbey's oldest cartulary which is dated to the first half of the ninth century. The heading reads *De holtscara*. This *scara* certainly refers to beech and oak woodland as it is described in the Werden charter in association with the Germanic word *holt*.[53] This leaf woodland can be located on either side of the river Ruhr, in the proximity of the abbey. It was to be shared between 18 households for the pasturing of between 10 and 40 pigs.[54] The use of the *holt* for the purpose of pannaging these domestic swine is mentioned in the references to each of the households.

The next two references to *scara* occur in a Werden charter dated 855 concerning some of the abbey's newly-acquired woodlands situated rather further away. These were located to the north-west of Werden, on either side of the estuary of the Old Rhine, and in the marginal agricultural area known as the Veluwe, with its centre at Apeldoorn, situated to the east and south of the Aelmere as far as the river IJssel.[55] The charter specifies that 'in a wood called Putten there are 28 *scarae* and in another there are 60 *scarae*'.[56] Putten is situated to the west on an important cart-route across the Veluwe which led to the river IJssel and thence to the Aelmere and the North Sea.[57] Details follow concerning *scarae* in the areas round Nijmegen, Arnhem and in Kennemerland (between the west bank of the Aelmere and the North Sea) and it is unlikely that it was to the pasturing of pigs that these divisions or shares of land refer. The abbey of Werden held land right up to the river Ems. There are ten further references to *scarae* in Werden charters dated to the tenth century. Eight concerned woodland and two concerned wood and uncultivated land, but the use to which these divisions of land were put is not stated.[58]

[50] F. Kurze (ed.), *Annales Regni Francorum* (1895), pp. 24, 36, 40, 48, 52, 68.

[51] ibid., pp. 60, 68.

[52] Grat *et al* (eds.), *Annales Bertiniani*, 862 (p. 88), 868 (p. 151, 2 refs), 869 (p. 152), 876 (pp. 208 and 211), 882 (p. 250) *Scara autem de Nortmannis* . . .

[53] The word *holt* meaning 'woodland' is common in Germanic languages; for an example, see A. Everett, *Continuity and colonization. The evolution of Kentish settlement* (1986), p. 13, 'Downland place-name element indicating woodland settlements and ancient woods'.

[54] R. Kötzschke (ed.), 'Die Urbare der Abtei Werden a. d. Ruhr. Die Urbare vom 9–13 Jahrhundert', in *Rheinische Urbare, Sammlung von Urbaren und andere Quellen zur Rheinischen Wirtschaftsgeschichte* 20 (1906), pp. 3–4.

[55] See S. Lebecq, *Marchands et navigateurs Frisons du haut moyen âge* (2 vols, 1975), I, Figs. 22 and 23.

[56] Kötzschke, 'Die Urbare', p. 12: *In silva quae dicitur Puthem scaras xxviii viginti octo, . . . in illa silva scaras lx sexaginta.*

[57] H. A. Heidinga, *Medieval settlement and economy north of the Rhine* (1987), p. 157, Werden *scarae*. The IJsselmeer/Zuiderzee was known as the Aelmere in the early medieval period when it was rather smaller than it is today.

[58] Kötzschke, 'Die Urbare', pp. 27, 52, 53; p. 49, *saltus*.

The word *scara* occurs in a document written at Weissenburg abbey in 818–19 when the abbey held 25 units of land.[59] These lands were located, in the main, in the area to the west of the Rhine, from the abbey north to Mainz. It occurs first in the description of the land-unit Pfortz which is situated at the confluence of the rivers Lauter and Rhine.[60] At Pfortz there were 72 households. *Scara* occurs as dues/services owed to the abbey, for example, *ii scaras in anno* (two *scaras* per year). The description of this land-unit also includes an obligation to plough for a certain length of time; it is unlikely, therefore, that Weissenburg *scarae* referred to ploughing. The word occurs next in a description of Musbach, situated on the upper Rehbach, where the requirement is *in anno ii scaras* (two scaras per year).[61] The 818–19 document was written two years after the important decrees that followed the Synods of Aachen of 816 and 817. We know from the decrees that some monks had been occupied with economic affairs relating to the land, for we are told that 'They (the abbots) should not go round the outlying manors often or at all unless necessity compels nor should abbots entrust the guarding of the manors to their monks and if they have to go to them, when the necessary business has been completed they must return to the monastery'.[62] It seems likely that as they questioned the peasants 'What do you owe the abbey?' or 'What work has the abbey asked you to do?' they heard the vernacular terms relating to agriculture that were used by peasants working on the land, such as *scara*, and introduced them into the medieval Latin in which they wrote up their findings.

The Weissenburg document reveals a thriving economy in terms of industrial plant which included a metallurgical workshop, a salt-making workshop and 12 water-mills.[63] Commodity production included axles (camshafts), timber and cartloads of pitch from the enormous area of coniferous forest on its lands between the rivers Nahe and Lauter.[64] There was a clear specialisation of labour with smiths, millers and ploughmen mentioned. The abbey owned carts and had built its own ships, on three tributaries of the Rhine, that plied the river between Frankfurt and the abbey. The abbatial hierarchy, with the annual dues or tithes that it received in cash or in kind, played a capitalistic and entrepreneurial role; it would have had a hefty regular income to invest from its land-based enterprises alone.

Part of the Weissenburg document relates to conditions in 870. It shows that by that date the abbey of Weissenburg held 315 units of land.[65] This seems to have been the result of both the division of the 818–19 units of land within existing boundaries, when *scarae* are not recorded, and the acquisition of additional land where *scarae* are documented.[66] Thirty references to *scarae* occur in the 870 part of the document. Some of the names of the land-units mentioned

[59] C. Dette (ed.), *Liber possessionum Wizenburgensis* (1987).

[60] ibid., pp. 106–7.

[61] ibid., pp. 108–9.

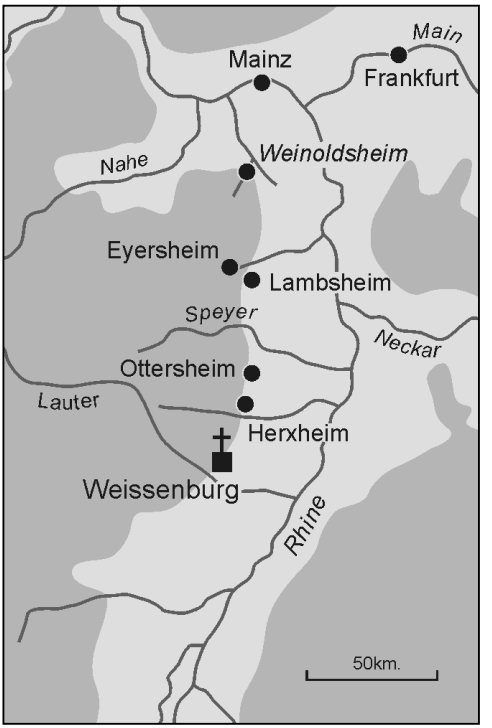
[62] Synod of Aachen 816, article 24: *Ut villas frequenter et nisi necessitas coegerit non circumeant neque suis illas monachis custodiendas committant. Et si eos ire ad eas necessitas fuerit expleto necessitatis negotio ad sua mox monasteria redeant.*

[63] Dette (ed.), *Liber possessionum Wizenburgensis*, pp. 104–5, *fabrica*. The abbey had held a salt-making workshop in Lorraine at Marsal on the river Seille since 682; K. Glockner and A. Doll (eds), *Die Urkunden des Klosters Weissenburg, 661–864* (1979), charter 213, pp. 427–9.

[64] Pitch, for conserving wooden structures, is made from tapping pine or burning pine very slowly as in the making of charcoal.

[65] Dette (ed.), *Liber possessionum Wizenburgensis*, pp. 26–315.

[66] P. Toubert, 'La part du grand domaine dans le décollage économique de l'Occident (VIIIe-Xe siècles)', *Flaran* 10 (1988), p. 65. Toubert notes that there has been no study of this very point.



MAP 2. Some of Weissenburg's assartment in 870.

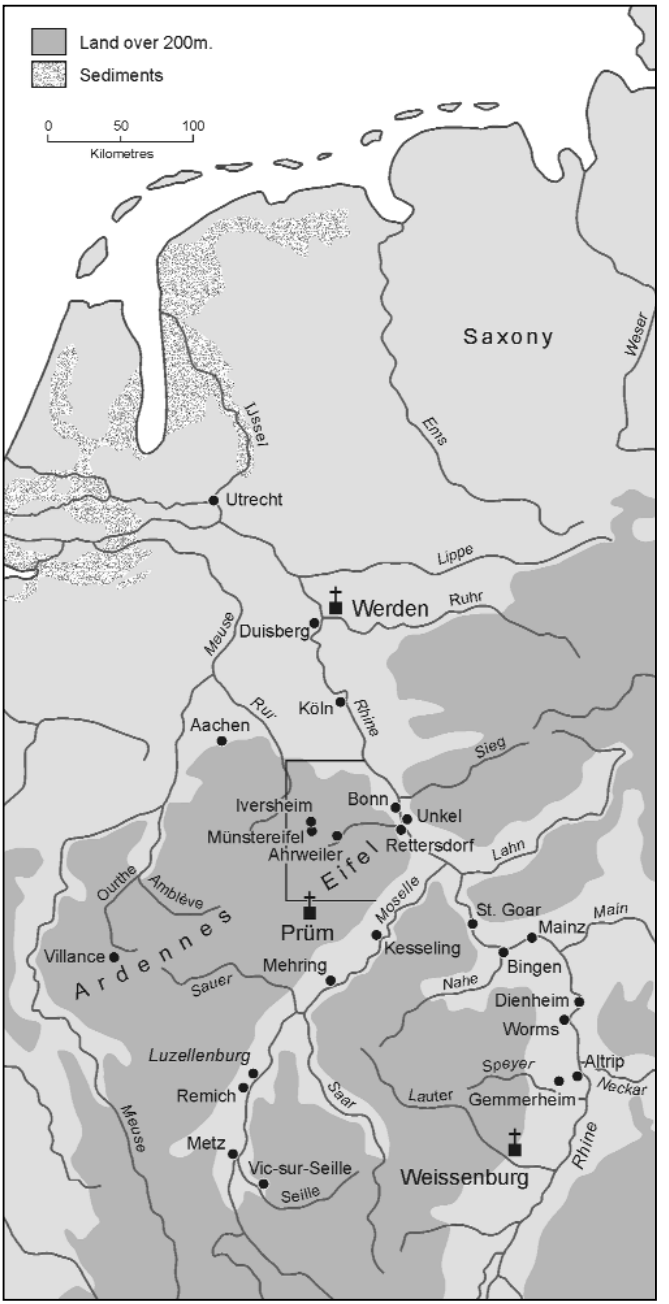
in the 818–19 document recur and there is some correlation between these names and the obligation to carry out *scara* on the newly cleared land which might suggest that *scara* means to assart this newly acquired land taken from the edge of coniferous forest, all of which was located near rivers that flowed into the Rhine (Map 2). Weissenburg *scarae* seem to refer to assartment of newly acquired land at the western edge of the Rhine valley, not to ploughing.

The phrase *scaram facit* occurs 34 times in a document from the abbey of Prüm dated by Devroey to 893.[67] By this time the abbey's lands stretched from the Rhine delta in the Netherlands where their lands, interweaving with Werden lands, extended from Teisterbant near the estuary of the rivers Maas and Meuse, east to Arnhem at the confluence of the Rhine and the river IJssel and south up the Rhine via their *portus* at Duisburg, Rettersdorf, Unkel and Bingen, to Altrip south of the confluence of the Rhine with the river Neckar, where the abbey's lands had bordered on Weissenburg lands since 843. The nucleus of Prüm's lands lay between the rivers Meuse and Rhine.

In his doctoral thesis of 1912 (sadly not published until 1989), Matthias Willwersch made a study of the acquisition of land by the Abbey. He found that since the 830s, the abbey had gradually been taking over land on the forested Eifel plateau to the north of the abbey and was beginning programmes of clearance.[68] An example of this was the way cut between Prüm

[67] I. Schwab (ed.), *Rheinische Urbare 5 Band, Das Prümer Urbar* (1983), pp. 166–259, with *Das Prümer Urbar Faksimile.* J.-P. Devroey, 'Les services de transport à l'abbaye de Prüm au IX[e] siècle,' *Revue du Nord* 61 (1979), repr. in id., *Études sur le grand domaine carolingien* (1993), p. 543. The document was drawn up during the abbacy of Farabert, 886–93.

[68] M. Willwersch (eds) I. Schwab and R. Nolden, *Die Grundherrschaft des Klosters Prüm* (1989).



MAP 3. Main area of Prüm assartment in 893 (rectangular box).

and Münstereifel in 844 (Map 3). A source describes how a procession led by monks carrying relics followed the men who cut down the trees to open up the way to the site of a new monastery, Münstereifel, that was to be built at the centre of early Eifel clearances.[69] To the

[69] O. Holder-Egger (ed.), *Ex translatione SS. Chrusanti et Dariae*, in MGH, SS 15, i, p. 375. See Schwab (ed.), *Das Prümer Urbar*, Map 7, p. 343.

west of the abbey its lands included much of the Ardennes, and by 893 the abbey held lands as far south as the river Seille. The abbey also held land in Saxony where a part of the *familia*, peasants or lay servants, was based.[70] In total the abbey controlled about 3000 peasant households.

The phrase *scaram facit* occurs in descriptions of annual dues owed from about a third of its 118 land-units. These references occur in two areas. Firstly they occur in descriptions of 30 land-units north of the Moselle between the abbey and the river Rur, eastwards to the Rhine, with two occurrences on the abbey's lands east of the Rhine. Secondly they occur on seven land-units between Mainz and the confluence of the Neckar with the Rhine at Altrip. The first area centres on the Eifel plateau where they often occur in proximity to the phrases meaning 'making a way through', 'heavy labour services', 'work gangs', and 'making a bed in a garden', which may refer to opening-up beds in quarries from which materials were dug.[71] At Ahrweiler, acquired by the abbey in 893, situated 60 kilometres north-east of Prüm on the river Ahr that flowed eastwards into the Rhine, the detailed description of agricultural and industrial produce owed annually to the abbey in tithes includes clay, iron bands, barrels, shingles, poles, wine and timber. The description of Ahrweiler also includes the sentence 'We find in the Ahrweiler communal woodland, *facit scaram* for 200 pigs'.[72] This reflects a similar meaning for the phrase *facit scaram* as in some of the Werden documents, that is the dividing-off part of the forest by fencing or ditching, so that these pigs could forage without destroying woodlands that were now being partially cleared or farmed on behalf of the abbey of Prüm.

These were no wholesale slash and burn clearances. The 893 Prüm document shows that areas of the forests were being systematically cleared in order to open up quarries, to make ways through for carts, or be systematically farmed for coppice-wood; firewood for heating, pine torches for lighting, charcoal for smelting, wood for the handles of tools and for wattles, and that they were being economically exploited on a large scale for timber.[73] Timber is sometimes named according to its length, as poles, or the purpose for which it was used, as axles or camshafts. Approximately 350 cartloads of timber were carted each year and 98 carts of *materia* which may have been a special type of timber. The abbey's carting services per annum can be calculated from the document. They were extensive, for carts were now able to be drawn by bullocks along the ways opened up by the work gangs: salt (2 carts), clay (90 carts), hay (200 carts), cereals (250 carts), vines and wine (350 carts). Timber was needed for making commodities such as barrels, shingles for roofs, carts, and for building large structures such as houses, barns, mills, ships and weirs, all of which can be identified in the document. It is likely that some of the timber was used for revetting river banks and building quays to assist the loading of heavy goods at the abbey's ship stage stations. These were ports at a day's

[70] ibid., p. 245: *De familia sancti Salvatoris, que est in Saxonia.*

[71] *Clausuram facit*; *corvadae*; *in horto lectum i.*

[72] Schwab (ed.), *Das Prümer Urbar*, p. 225: *Invenimus in Ara silva communia, facit scaram ad porcos cc.*

[73] C. Wickham, *Land and power* (1994), ch. 6, 'European Forests in the early Middle Ages', pp. 155–99. Wickham acknowledges his debt to the seminal work of C. Higounet, 'Les forêts de l'Europe occidentale du Ve au XIe siècle', *Settimane di studio* xiii (1965), pp. 343–98. Neither refers to the work undertaken by the abbey of Prüm in the Eifel.

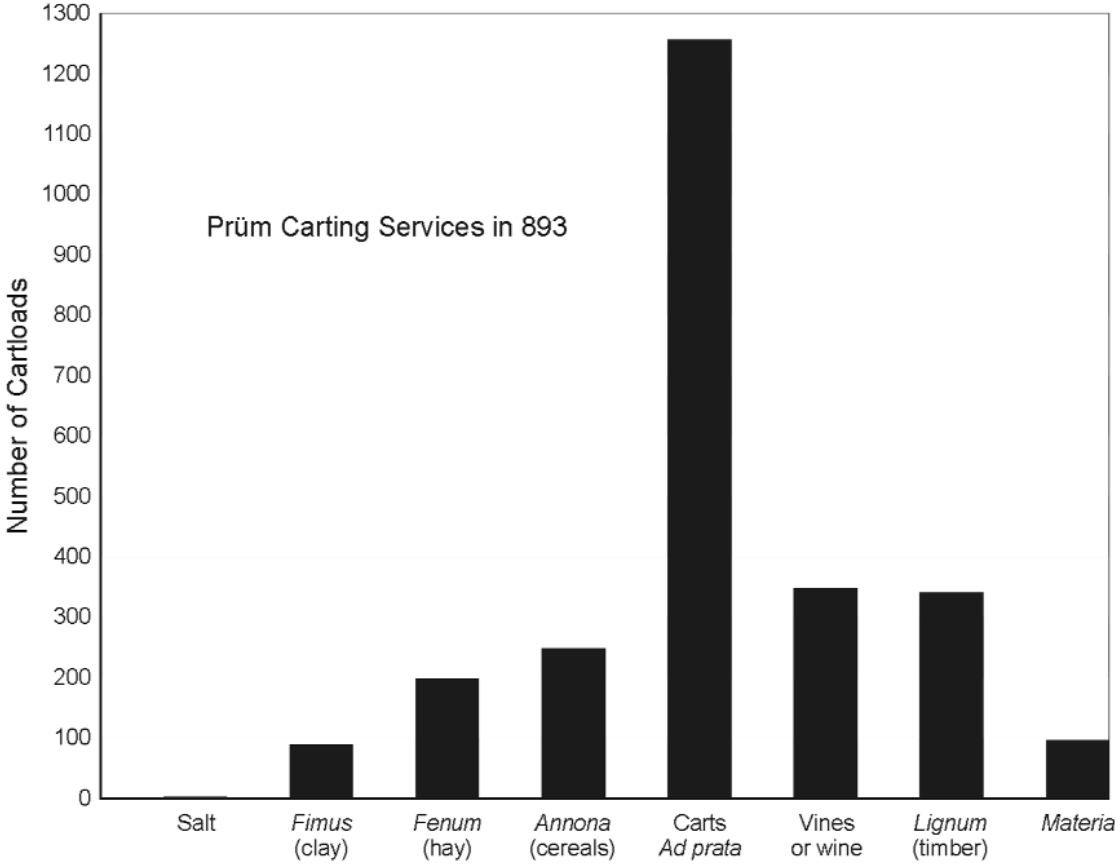


FIGURE 1. Prüm Carting Services in 893.

sailing/haulage distance from each other.[74] However, the largest number of carts per annum, approximately 1250, relate to carts going 'to the meadows'.[75] These do not refer to cartloads of hay or cereals, documented separately, but may relate to carts bringing heavy materials such as clay[76] or limestone from the newly opened-up areas to be transported elsewhere by river (Figure 1). The abbey of Lorsch, situated east of the Rhine, which also had its own ships, documents cartloads of limestone and lime-kilns on their land at Nierstein south of Mainz between 830 and 850.[77]

Clay was dug or processed on 11 land-units, nine in the Eifel, centring on Ahrweiler, two at ship stations or *portus*, one on the Moselle at Remich and one on the Rhine at Rettersdorf

[74] See Despy's account of *étapes de batellerie*, ports at a day's sailing/haulage distance from each other along the Meuse; G. Despy, 'Villes et campagnes aux IXe et Xe siècles: l'exemple du pays mosan', *Revue du Nord* (1968), pp. 145–68.

[75] *Ad prata.*

[76] The abbey of Prüm is thought to be associated with the production of Mayen ware; McCormick, *Origins*, p. 657.

[77] K. Glöckner (ed.), *Codex Laureshamensis* (1936), p. 174: *Ad furnum calcis de petris carr. v de lignis carr. v.*

adjacent to the Eifel. At Remich the obligation is 'to convey 15 carts of clay for the fueller'.[78] At a second place, Kesseling, further north on the Moselle, the obligation is 'to take eight carts of clay for the fueller'.[79] The 'fueller' may refer to the man who builds the kiln or furnace with clay, fills it with whatever is being 'baked', clay pots or ore, and fires it with charcoal provided by the *forestarius*. It is abundantly clear that parts of the forested areas had been cleared by the abbey of Prüm and were being commercially exploited. Further development in the Eifel is identified at Iversheim, situated 3 km north of Münstereifel, and developed in 871. From Iversheim Willwersch identified development at Wachendorf, Arloff, Kirspenich and Hockenbroich in 893.[80] Further detail is given concerning the phrase *scaram facit*. The description of Iversheim uses the phrase *facit scaram* to Prüm, Aachen, Köln, Bonn and St. Goar.[81] This seems to refer to the division, share or cut of the raw materials and commodities that came from the land, thus 'convey shares of the commodities to these places'. We know from the writings of the Prüm monk Wandalbert that in the eighth century merchants and pilgrims travelled on ships that had to be towed through the difficult waters of Prüm's Cell of St. Goar and had to pay a toll of a pound of silver to the abbey.[82] We also know that before 840, potters, perhaps from Prüm, were shipping their wares along the Rhine.[83]

The phrase *scaram facit* also occurs in descriptions of six units of land situated south of the Moselle between the Nahe and the Speyer, an area where land was greatly sought after by many ecclesiastical institutions.[84] Two of these units of land, acquired by the abbey in 868, were situated on the Nahe or its tributary the Glan which flow into the Rhine at Bingen, namely Bingen and *Winesheim*, probably modern Waldalgesheim. Three units of land were acquired earlier, Altrip (762) and Dienheim (835) both situated on the Rhine, and the sixth, Gemmerheim to the west was acquired in 831.[85]

The phrase *scaram cum nave bis in anno* (with a ship twice a year) occurs five times at the abbey's ship stage stations or *portus*, at the land-units that had ships for the transport of heavy raw materials and commodities. These ship stage stations were situated on the west bank of the Rhine, where the document written in 893 prescribes how often ships were to ply the Rhine between Duisberg (where there was a colony of Frisians who paid dues to the abbey) south to the confluence of the Rhine and the Neckar at Altrip, with stopping places, all held by the abbey, at Rettersdorf, Unkel, St. Goar, Bingen and Dienheim. The phrase *scaram facit pedestriam* or *scaram facit cum pedibus* (on foot) occurs six times, all pertaining to units of land in the Eifel and movement of commodities by cart. The phrase *scaram facit cum caballo* (with a

[78] Schwab (ed.), *Das Prümer Urbar*, p. 194: *Ducit pro lignario xv carradas de fimo*; Latham offers 'fueller' (for *lignarius*) or 'woodpile' (for *lignarium*); R. E. Latham, *Revised medieval word-list* (1989), p. 277.

[79] Schwab (ed.), *Das Prümer Urbar*, p. 222, *pro lignario ducit carrados viii de fimo.*

[80] Willwersch, *Die Grundherrschaft des Klosters Prüm*, p. 204; Schwab (ed.), *Das Prümer Urbar*, Map 7, p. 343.

[81] ibid, p. 218: *Facit scaram ad Prumiam, ad Aquisgrani, ad Coloniam, ad Bunnam, ad Sanctum Goarem.*

[82] O. Holder-Egger (ed.), *Wandalberti miracula S. Goaris* (MGH supp. ser. 15), 24 (p. 369), 27 and 28 (p. 370).

[83] McCormick, *Origins*, pp. 657–9.

[84] W. Fabricius, *Der Nahegau und der Wormsgau vom 8–12 Jahrhundert* in *Geschichtlicher Atlas der Rheinprovinz* (1914), Band 6 Map 1. The map shows that 25 ecclesiastical landowners, 16 bishoprics and nine abbeys held ninety per cent of the land. The Nahegau was held in its entirety by ecclesiastical landowners who included the abbeys of Weissenburg and Prüm.

[85] Willwersch, *Die Grundherrschaft des Klosters Prüm*, pp. 208–9.

horse) occurs once.[86] There is nothing in these references to *scarae* that is at odds with the *scarae* documented at Werden and Weissenburg for they all concern the division, share or cut, this time of the raw materials or commodities that came from the land.[87]

The phrase *scaram cum nave* is not used for ship transport on the river Moselle when the phrase *navigium facit* is used. This is used to describe passages between Vic-sur-Seille when once a month heavy cargoes were transported on the Moselle through Metz and Remich to Mehring.[88]

The term *scara* does not occur on Prüm's lands of marginal agriculture in the Ardennes where, following forest clearance, villages in close proximity to each other had developed as early as the middle of the eighth century following grants of lands made to the abbeys of Stavelot and Malmédy by Frankish rulers between 648 and 770.[89] The abbey of Prüm acquired its principal industrial land-unit in this area, Villance, near Wellin, from Stavelot-Malmédy sometime between 842 and 865.[90] By 893 it was divided into eight sub-units. A master-miner or mining-manager[91] is documented as living at Villance, as well as four chief foresters to organise the provision of the charcoal. The 893 document includes the obligation to build here annually a very large *lignarium*, the dimensions of which were 6 feet x 6 feet x 6 feet. This was no ordinary woodpile. It may have been a new type of furnace for producing a new type of iron product. It was producing *patellae*, which in this context seems to refer not to ordinary plates but to plate metal for workshop industry.[92] In 1978 Kuchenbuch detected what he saw as the seeds of an iron smelting economy on Prüm lands. He had noted the presence of the master-miner on the industrial land-unit.[93] Villance had a population of about 200 householders, in addition to which there was a colony of migrant workers described in the document as 'foreigners who live here under our jurisdiction'.[94] These foreigners may have been free miners from east of the Rhine for they are not named as are Prüm's own peasants. Their dwellings are termed *mansi absi*, which may have been offered as free accommodation, because the foreigners' expertise was of economic importance to the abbey.[95] The beginnings of the extraction

[86] Schwab (ed.), *Das Prümer Urbar*, p. 252.

[87] Perhaps there is a parallel with Domesday Book descriptions of land in 1086 when there is no clear distinction between the recording of ploughs and carrying out the labour service of ploughing.

[88] Schwab (ed.), *Das Prümer Urbar*, p. 197.

[89] J. Halkin and C. G. Roland (ed.), *Receuil des chartes de l'abbaye de Stavelot-Malmédy* (2 vols, 1909), I, charters 17 and 18 were redacted in 747. Some of these villages had formerly belonged to the abbey of St. Hubert; *Miracula S. Huberti* (*Auctores antiquissimi*) SS Nov 3, p. 819. This source records that a smith named *Anglemarus* took two *ferri fusuras*, perhaps fused iron bars, to sell at his local market at the abbey of St. Hubert in the Ardennes. He said 'I came in order to add something to my goods', pp. 819–20.

[90] Willwersch, *Die Grundherrschaft des Klosters Prüm*, p. 205.

[91] Schwab (ed.), *Das Prümer Urbar*, p. 206, *fossarius*. Georgius Agricola uses the word *fossores* for miners throughout his late medieval seminal work written in Latin describing mining in Germany. H. C. Hoover and L. H. Hoover (trans.), *Georgii Agricolae de re metallica: quibus officia, instrumenta, machinae …* (1950).

[92] Schwab (ed.), *Das Prümer Urbar*, p. 207: *Solvit annis singulis patella I nichil aliud.*

[93] L. Kuchenbuch, *Bäuerliche Gesellschaft und Klosterherrschaft im 9. Jahrhundert. Studien zur Sozialstruktur der familia der Abtei Prüm* (1978), pp. 289–92.

[94] Schwab (ed.), *Das Prümer Urbar*, p. 207: *Homines extranei, qui infra nostra potestate resident.*

[95] There is a lengthy bibliography on the meaning of *mansi absi* which is not relevant here where the meaning is plain. Carolingian historians have usually understood the phrase to imply a decrease in population.

and production of metals and the presence of migrant workers that we see in the Ardennes in 893 and in Catalonia *c.* 900 are indicators of economic development.

References to *scaram facere* in connection with division, clearance or exploitation of land do not occur on the abbey's lands in Luxembourg or on their lands in the Lahngau, the area east of the Rhine between the Lahn and the Main. Here there are references to the extraction of *ligna stratoria* and *substratoria ligna* which certainly seems to signify mining or quarrying into substratas, perhaps for brown coal.[96] We might conclude, therefore, that the phrase *scaram facit* does not refer to deep mining, but may have included the collection of iron ore thrown up to the surface during initial clearance of woodland, by the trampling and foraging of pigs, and later by the plough.

In 1935 Perrin saw the phrase *scaram facere* as describing 'a messenger service carried out on foot, on horseback or by boat'.[97] He was translating part of the marginal notes written on the 893 land-register by ex-abbot Caesarius of Prüm in 1222. This is an extremely significant source for what it tells us of early thirteenth-century conditions. The 'messenger service' was a euphemism for 'trade' for there were, as in the earlier medieval centuries, and even today, considerable ecclesiastical sensitivities about making a profit through trade.[98] Historians used to wresting meaning from difficult texts well understand this. In 1979 Devroey stressed that Caesarius' marginal notes were a response to the reality of the thirteenth century, when the abbey's interests were under threat, but there is nothing in the polyptych of 893 to allow us to say that *scara* was a messenger service. In one case, where the polyptych is explicit, 'it is about the transport of light goods, six salmon, eight garments or six pieces of cloth'. This meaning is taken from the single reference in the document to *scaram facit cum caballo* (with his horse) to Prüm from Gemmerheim.[99] Devroey's general definition of *scara* is 'a transport service, whether on foot, on horseback or by boat, without excluding, on occasion the carriage of messages'.[100]

In a marginal note Caesarius makes a significant comment about men designated as *scararii*. He says that all those who inhabit the abbey's land-units at Rommersheim and elsewhere are required to perform labour services, 'not only the tenants, but also the *scararii*, that is to say the *ministeriales*'.[101] This leads us to the question as to the identity of the *scararii* who in 1222 were equated with other officials with authority (*ministeriales*). *Scaram facere* in ninth-century sources referred to the assartment and cutting of land or of the raw materials or commodities that came from the land and it seems to follow that, in 893, the *scararii* were the key men who organised and carried out this work, providing and maintaining the iron implements required, that Caesarius in another note tells us were called by the vernacular word *scar*.[102] Prüm's *scararii* lived on units of land near the abbey, near the land-units termed *wihc*, and near

[96] Schwab (ed.), *Das Prümer Urbar*, pp. 245, 246.

[97] C. E. Perrin, *Recherches sur la seigneurie rurale en Lorraine d'après les plus anciens censiers* (1935), p. 769, 'D'un service de message executé à pied, à cheval ou en bateau'.

[98] Schwab (ed.), *Das Prümer Urbar*, p. 171, n. 1: *Scaram facere est, domino abbati quando ipse iusserit, servire et nuncium eius seu litteras ad locum sibi determinatum deferre.*

[99] Schwab (ed.), *Das Prümer Urbar*, p. 252; Devroey, 'Les services de transport', p. 545.

[100] ibid., p. 545.

[101] Schwab (ed.), *Das Prümer Urbar*, p. 167: *non solum autem mansionarii, verum etiam et scararii, id est ministeriales.*

[102] ibid., p. 193.

the *scararium*.[103] In 1222 they were equated with *ministeriales* because by that time they were of considerable status. But a close reading of this document of 893 shows that they are simply Prüm peasants carrying out a foreman role in organising men and the iron implements they used. This agrees to some extent with the opinion arrived at by Hans Planitz, at the end of a paper written in 1937, that the settlers of Prüm were ordinary peasants.[104]

Caesarius' use of the word *ministeriales*, however, sparked off a spate of articles between 1954 and 1960. The articles claimed that the ninth-century *scararii* of Prüm and the *scaremanni* of the end of the tenth to the beginning of the twelfth century at the abbey of St. Maximin, Trier, where the documents are known to be forgeries,[105] were the descendants of a special stratum of royal dependents, the so-called 'king's freemen' who were settled on royal land on the borders or newly conquered districts of the Frankish kingdom to carry out military, delivery and lookout duties, and that the power of Frankish kings was based in large measure on the control exercised by this very large group of people. In 1963 Erich Wisplinghoff carried out a thorough survey of these writings and showed them to be wholly erroneous.[106] He saw the *scararii* of Prüm as 'originating from the monastic domain; they are serfs, of whom a small number have just taken the first steps on the road to a more elevated status'.[107] These were the men at Prüm who in 893 were rapidly developing their metallurgic skills in their workshop called a *scararium*, and were becoming expert smiths.[108] It is known that master ironsmiths were considered to be of high status in the ninth century for they were the sometimes itinerant craftsmen who had mastered superbly the forging and sharp-edging of iron.[109] It may have been some of these itinerant smiths who made up the 264 *herescararii* documented earlier in the century at the abbey of St Bertin, St Omer, which, it will be recalled, was situated on the coast.[110] That as a group they could have been former king's freemen, may be described as out of the question. But 'imaginary precepts from Carolingian times about *ministeriales* had become an acceptable tradition in the twelfth century'.[111] Some Carolingian historians have accepted these 'imaginary precepts' uncritically.

These *scarae* in the court-centred sources have the similar meaning of cut, division or detachment, this time of an army. As we have seen, the *scarae* in the locally-written sources from Werden, Weissenburg and Prüm concern cutting and dividing land. It is when Charlemagne's *scarae* were digging themselves in, to besiege a city, that the meanings seem closest. It may follow that *scarae* in the sense of a detachment of soldiers meant soldiers with iron weapons, i.e. swords, and *scarae* referring to felled woodland meant woodland felled with iron tools and implements.

[103] ibid., pp. 168, 170, 173, 174 and 181.

[104] H. Planitz, 'Die Scharmannen von Prüm' *Festschrift Heinrich Lehman* (1937).

[105] H. Beyer, L. Eltester and A. Goerz (eds), *Urkunderbuch der, jetzt die preussischen Regierungsbezirke Coblenz und Trier bildenden mittelrheinischen Territorien* (3 vols, 1860–74), I, no. 382 pp. 439, 1082–84.

[106] E. Wisplinghoff, 'Königsfreie und Scharmannen', *Rheinische Vierteljahrblätter* 28 (1963), pp. 200–17.

[107] ibid., p. 217.

[108] Schwab (ed.), *Das Prümer Urbar*, p. 174.

[109] M. Müller-Wille, 'Der frühmittelalterliche Schmied im Spiegel skandinavischer Grabfunde,' *Frühmittelalterliche Studien* 11 (1977), pp. 127–201.

[110] See again n. 15; Ganshof *et al.* (eds), *Le polyptyque de l'abbaye de St. Bertin*, pp. 19 and 23.

[111] B. Arnold, *German Knighthood, 1050–1300* (1985), p. 50; id., *Power and property in medieval Germany* (2004), p. 179.

III

The documents from St. Germain-des-Prés and from Corbie describe affluent decades in the history of the western Romance-speaking part of the Carolingian empire which lasted until around 840. Then, for the first nineteen years of his reign, Charles the Bald, lacking fleets or fortified bridges, was unable to defend his kingdom. He denuded his abbeys of silver in order to pay the exorbitant tributes in thousands of pounds of silver demanded by the Northmen. West Francia was virtually blockaded. The Seine – Hamwic trade route disappeared. There was a near collapse in the Western kingdom. In the second half of the ninth century rulers of the largely Germanic-speaking Middle and Eastern kingdoms worked with abbots to their mutual benefit and the polyptychs, particularly when words related to *scara* are used, reflect the significant economic growth that resulted. From their powerful positions as great landowners the abbeys controlled the raw materials that produced the commodities, attracted both migrant and indigenous labour and received a regular annual income from rents and dues that could be ploughed back to develop infrastructures. They were able to develop local, regional and inter-regional mints and markets and received increasing tolls as regular trade burgeoned along the Rhine network of rivers and through the Albula, Julier and Septimer Passes into Lombardy.

The significance of *scarae* for our understanding of the larger economy cannot be overstated. This paper has established the meaning of the the word and shows extensive deafforestation in progress. The question remains to be answered as to whether in the Rhineland at the end of the ninth century, these large programmes of assartment were carried out with locally made iron tools or with imported half-made tools and implements imported from the east through the Baltic or the Black Sea and Danube.

Appendix
Scara: a philological study*

The *scara* root is not common to all Indo-European languages but is confined within Indo-Iranian, Celtic and Germanic languages. This may not necessarily tell us more than that the ancestors of these linguistic groups remained in close proximity at some time during the pre-historic phase. Walde and Pokorny note that this Indo-European root occurs in Armenian as *korem* and *kerem* (I scratch, I scrape).[1] This may be one of the earliest forms and relate to pre-historic working of the land with flint tools. Buck records that *scara* comes from an Indo-European root meaning 'cut'.[2] Walde and Pokorny record that it occurs as *krnati*, *krnoti* and *utkirna* (cut out, inscribed) in Sanskrit sources.[3] I have come across a cognate word in

* It was the late Professor Timothy Reuter who said that the word *scara* would repay study. The author wishes to thank Professor Janet Bately, Kings College London, for suggesting that she should consult Walde and Pokorny.

[1] A. Walde and J. Pokorny, *Vergleichendes Wörterbuch der indogermanischen Sprachen* (1928), p. 938.

[2] C. D. Buck, *A Dictionary of selected synonyms in the principal Indo-European languages* (1949), p. 556, 9.22, CUT.

[3] Walde and Pokorny, *Vergleichendes Wörterbuch,* p. 938.

descriptions of stone inscriptions in Buddhist sources from India and Sri Lanka as *aksharas*, strokes or cuts made in stone with iron tools.[4] *Aksharas* are sometimes recorded as being missing or damaged in descriptions of epigraphic inscriptions. In Sanskrit an *akshara* could represent a syllable, a letter, a vowel or a sound. There are hundreds of these inscriptions dating from as early as the third century BC, which provide epigraphic evidence of donation of land to Buddhist monasteries in India and Sri Lanka.[5] The word is cognate with Sanskrit *samscara* which has the similar meaning of 'separation'.[6] In Buddhist doctrine *samscaras* were forces or energies that caused elements to separate and ally with other elements. Buddhists related this to the soul separating from the body after death and having rebirth in another body. It has been suggested that early Iron Age cultures compared the separation of iron from extraneous elements in the ore, in the difficult process of smelting iron, with such a rebirth or regeneration.[7] There was such an iron age culture developing in Sri Lanka from the Asokan period, the middle of the third century BC.[8] It was the Asokan kings who espoused Buddhism, and developed maritime trading links across the Indian Ocean.[9]

I note the word *scarais* with the meaning of 'divide' or 'separate' in the Old Irish *Annals of Inisfallen*. The word occurs in the annal for the year 433 AD which describes, in garbled fashion, how Mil and his sons voyage westwards in four ships from Taprobane Island (Sri Lanka) via Egypt, the Caspian Sea, Gothia (Sweden), Germania and Spain to Ireland. During the voyage a great storm arose and one ship was separated (*scarais*) from the others and the crew were drowned.[10] Walde and Pokorny note Old Irish usage as *scar(a)im* (*skrami*) (I split).[11] It appears in the northern branch of Germanic languages as Old Icelandic *skera* (cut, prick, separate).[12] It occurs in Modern Swedish as *skär* (pure, clean), *skär* (pink, light red), *skär* (skerry, rocky inlet), *skär* ([cutting] edge, *skära* (sickle, crescent), *skär[a] skär skurit* (cut, carve).[13] *Scara* appears in

[4] M. M. Williams (ed.), *A Sanskrit-English Dictionary* (1899, 1956), *akshara,* p. 3.

[5] S. Paranavitana, 'Brahmi inscriptions in caves at Mihintale', *Epigraphia Zeylanica* V, (ii) (1963). There is an ongoing debate concerning the dating of these inscriptions between this writer and Indian palaeographer A. H. Dani who notes that 'The origin of Ceylonese writing is traceable to the style of writing in India which was made popular by the activities of the Buddhists'; A. H. Dani, *Indian Palaeography* (1963), p. 225. Maloney has mapped the distribution of early Tamil Brahmi inscriptions. He shows that the BC inscriptions all occur in south India and Sri Lanka, the AD inscriptions further north; C. T. Maloney, 'The effects of early coastal sea traffic on the development of civilisation in south India' (unpublished Ph.D thesis, University of Pennsylvania, 1968), p. 88.

[6] A. K. Warder, *Indian Buddhism* (1970), p. 118. The Buddha lived between 566–486 BC.

[7] See R. Hingley, 'Iron, ironworking and regeneration: a study of the symbolic meaning of metalworking in Iron Age Britain', in A. Gwilt and C. Haselgrove (eds), *Reconstructing iron age societies* (Oxbow Monograph 71, 1997), pp. 9–18.

[8] G. Juleff, 'An ancient wind-powered iron smelting technology in Sri Lanka', *Nature* 379, 4.1. (1996), pp. 60–4.

[9] H. P. Ray, *The winds of change. Buddhism and the maritime links of early south Asia* (1994), pp. 138–40, Map 17.

[10] S. Mac Airt (ed.), *Annals of Inisfallen* (1988), pp. 6, 46–7.

[11] Walde and Pokorny, *Vergleichendes Wörterbuch*, p. 939.

[12] T. Zoega, *A concise dictionary of Old Icelandic* (1926), p. 544.

[13] E. Gomer, *A modern Swedish English dictionary* (1979), p. 401. Note the similarity with *skorit* (he cut) in the Scaldic verse from Sighvatr's *Knutsdrapa* dated *c.* 1038.

Old High German as *sceran* (to shear, cut off) and in Old English as *scieran*, Modern English 'shear' cognate with 'shire'.[14]

Some of the ways in which Indo-European *scara* has come to be used are as words for Iron Age cutting implements. Thus it occurs in a Russian dialect as *tcherv* (sickle), in Modern Swedish as *skära* f. (sickle), as we have seen, and in Old Saxon as *sker-sahs* (shearing knife). A well-known occurrence with the meaning of 'ploughshare' is in Abbot Ælfric's Old English *Colloquy* written at the abbey of Eynsham in Oxfordshire *c.* 992. In the *Colloquy* the relative importance of the work of various craftsmen employed by the abbey is debated and the ploughman with his valuable *scear/scær* (ploughshare) is judged to be carrying out the most important manual work for the abbey.[15] In a document written in Lombardy at the abbey of Brescia between 887 and 906, describing the abbey's usage of its extensive lands, the word is used with the suffix *-ius* to refer to the men using the ploughshare. The title *scarius* now carried with it considerable status for these *scarii* (thirteen of them) held land in their own right, land which was known as a *beneficium*.[16] The Lombards had migrated with their king Alboin and with all their families from Pannonia (adjacent to a stretch of the middle Danube) in 568.[17] The word may have travelled with them. There seems to be an iron connection in these references, for by the end of the ninth century, four hundred pounds of iron per annum were being produced for the abbey on six of its seventy units of land. Other ways in which the Indo-European word *scara* came to be used was with the meaning of a division of an army, a crowd or a throng. This occurs as a *scara* in Old High German, and, as we have seen, principally in court-centred Medieval Latin sources, written between 766 and 882. This meaning of a division of an army, crowd or throng continued in Middle German as *schare* and in Modern High German as *Schar*.

The use of the word *scarae* in ninth-century documents from the three monastic houses identifies a period of assartment, division of land and commodity production in the Rhineland. This has not hitherto been recognised. Colin Renfrew argues that language and farming moved west together in a process of acculturation. The vernacular word *scara* seems to have travelled west, sometimes with migration, but mainly with agriculture and its need for the latest technology and implements. Renfrew notes that there are no certain Indo-European words for metals.[18] As a word for 'iron' we may have to make do with a single root that has divided and developed in more than one direction. It seems that the vernacular technical word *scara*, used by Germanic-speaking peasants working on the lands of the abbeys of Werden, Weissenburg and Prüm was taken into the medieval Latin documents from the three monastic houses, to describe the work of assartment and division of land with iron implements that was taking place on lands with access to the Rhenish network in the ninth century.

[14] J. Roberts, C. Kay and L. Grundy (eds), *A Thesaurus of Old English, introduction and thesaurus* (2 vols, 1995), II, p. 1292.

[15] G. N. Garmonsway (ed.), *Ælfric's Colloquy* (1939), p. 40, l. 228.

[16] G. Pasquali (ed.), *S. Guila di Brescia, Brevaria de curtibus monasterii,* in A. Castagnetti (ed.), *Instituto Storico Italiano per il Medio Evo, Fonti per la Storia d'Italia*, 104 (1979), pp. 54, 56 (2 refs), 61, 64, 65, 68, 70, 71 (2 refs), 74, 77, 80–1.

[17] J. Favrod (ed.), *La chronique de Marius d'Avenches* (455–581) (1991), p. 82.

[18] C. Renfrew, *Archaeology and language, The puzzle of Indo-European origins* (1987), p. 79. He notes the Sanskrit word for 'metal' as *ayas*; *A Sanskrit-English Dictionary*, p. 85.

Between fact and fiction: Henry Brinklow's *Complaynt* against rapacious landlords*

by Margaret Yates

Abstract

The purpose of this paper is to separate fact from fiction in the observations of economic trends contained in the writings of the evangelicals of 1542. It does so by examining the polemical tracts of Henry Brinklow and his fellow Protestants for their comments on rent, tenure and the engrossing of landholdings and then comparing them with data drawn from a case study of Brinklow's home parish in Berkshire. The result establishes that, although their writings did contain nuggets of truth, the evils were neither as widespread nor recent as they would imply. They were based on an established literary tradition that dated from at least the fourteenth century, augmented and justified by frequent references to biblical passages. The novelty was their urgency to bring about a godly commonwealth whilst there was still time.

This paper tackles the historian's recurring problem of how to distinguish the conventions of literature from the conditions of real life. It does so by comparing the polemical tracts of Henry Brinklow and his contemporaries with the situation in west Berkshire where Brinklow's father and brothers were farmers at Kintbury. Brinklow and the other authors considered in this paper were all Protestant evangelicals. Their primary concerns were to attack the failings of the church, especially the priesthood, and to promote new forms of religious observance that would bring about a godly society. In this they were advocates of an ideal Christian commonwealth. Social and economic concerns were secondary for them, but no less real or desired, and this article will concentrate on the specific themes of rent, tenure, and the engrossing or amalgamation of holdings. By examining texts of the same literary genre written within a year of each other, and then comparing them with the evidence from a detailed study of an area known to one of the authors, it will be possible to assess the reliability of the tracts as evidence for economic trends and make a contribution to our understanding of conditions in the early 1540s.

Brinklow and his contemporaries were anxious to bring about a godly 'commonwealth'. Their language was couched in terms of 'commen weel', 'comen welth', and 'commonality'

* I am indebted and would like to express my thanks for the very generous help that I have received with documentary references and interpretation from Dr Alec Ryrie on Brinklow and the other evangelicals and from Dr Anne Sutton on matters relating to the Mercer's Company and the Brinklow family. An earlier version of this paper was read at the Spring conference of the British Agricultural History Society, 9 April 2002 and I am grateful to the delegates for their very constructive comments. This paper has been considerably improved by the observations and suggestions of the anonymous referees who I would also like to thank.

when referring to an idealized state of Christian well-being that was shared by the majority of society. They were not innovators but wanted a return to the purity of true Christian belief and its code of behaviour. Their writings were laced with biblical quotations, references and justifications. A typical example is Brinklow's use of the book of Isaiah to attack the engrossers of holdings:

> Here shal all Inclosars, grossers up of fermys extorcyonars and oppressers of the common welth, be offendyd at me … but all such I send unto the fyft chapter of the prophete Esay, where he sayth: wo be unto yow which ioyne one howse to another, and bryng one land so nye unto another, tyl ye can get no more grownd.[1]

Many of the ideas of Brinklow and the other evangelicals were not new. They can be seen as a continuation of an established literary tradition that had developed over the medieval period, and especially from the late fourteenth and fifteenth centuries.[2] Langland's moral Piers, for example, criticized the wealth and abuses of the church and proscribed the duties of an ideal landlord.[3] John Rous wrote *c.* 1460 against enclosures and rural depopulation in Warwickshire that were grievous to all lovers of the commonwealth.[4] Yet this was not necessarily a criticism of contemporary events as it was a time when the population of England was low. The themes of commonwealth were continued in political discourses such as the manifesto of the Yorkists of 1469 where reforms were called for 'the common weal of all this his realm', 'the common wealth of this land', and the 'commonweal of this land'.[5] The ideas persisted and in the opening of Parliament in 1484 the chancellor employed enclosure and depopulation as examples of the disease of the political body.[6]

The medieval tradition of an ordered society continued into the sixteenth century in works such as Edmund Dudley's *Tree of Commonwealth*.[7] The sentiments and fears of the reformers, such as the effects of engrossing, were already firmly established in the language of the proclamations and statutes of the early sixteenth century, especially in the years 1514 to 1516, and were taken up by Wolsey's commissions of 1517 and 1518.[8] Thomas More's *Utopia* (1516), albeit

[1] Henry Brinklow, *The complaynt of Roderyck Mors, somtyme a gray fryer, vnto the parliament howse of Ingland his natural cuntry for the redresse of certen wicked lawes, euel customs, ad cruell [sic] decreys.* (Short Title Catalogue, sec. edn [hereafter STC], / 3759.5 published in 1542), chapter xx, v. 41. Quotation taken from Isaiah 5, 8. Brinklow had just used Matthew 10, 9–10 to attack the wealth and possessions of the clergy. See W. R. D. Jones, *The Tudor Commonwealth, 1529–1559* (1970), pp. 160–1 for examples of other authors who employed this passage from Isaiah.

[2] Studies of these trends include Jones, *Tudor Commonwealth*, G. R. Elton, *Reform and Renewal* (1973), A. McRae, *God speed the plough* (1996), and P. Slack, *From Reformation to improvement* (1999).

[3] A. V. C. Schmidt (ed.), *William Langland: The Vision of Piers Plowman* (1995), VI, for details of the ideal landlord at ll. 37–54. Several of Langland's ideas were taken up by the Lollards in their writings, A. Hudson *Lollards and their books* (1985). In addition, some were included amongst the demands of the peasants at Smithfield in 1381, such as, according to the Anonimalle Chronicler, a fair distribution of land and the disendowment of the church. R. B. Dobson (ed.), *The Peasants' Revolt of 1381* (1983), pp. 164–5.

[4] A. R. Myers (ed.), *English Historical Documents*, IV, *1327–1485* (1969), pp. 1014–15.

[5] ibid., pp. 300–01.

[6] ibid., pp. 1016–17.

[7] Written in 1510. D. M. Brodie (ed.), *The Tree of Commonwealth. A treatise written by Edmund Dudley* (1948), pp. 14–17, and continued in the text itself.

[8] For example, the proclamation 'Prohibiting enclosure and engrossing of farms' of 6 Henry VIII, pr. in P. L. Hughes and J. F. Larkin (eds.), *Tudor Royal Proclamations* (3 vols, 1964–9), I, pp. 122–3.

written in Latin and not for the common people, also dealt with the evils of enclosure, evictions and decay of housing, manipulation of prices, poverty and vagrancy; all themes that would be returned to by the reformers.[9] Simon Fish's *Supplication for the Beggars* of *c.* 1529 was a more general attack on the greed of the church and the poverty that this caused, rather than rents and enclosures.[10] The necessity for improving 'the true common weal' was addressed by Thomas Starkey in his *Dialogue between Pole and Lupset* which is now believed to have been first drafted in 1529–32.[11] Elton argued that the ideas of Starkey had a profound effect upon Cromwell, especially in the formation of his economic policies.[12] A break with the past occurred when Cromwell moved to convert ideas into actions in his programme of reforms of the mid- and late 1530s.[13] It was the failure to exploit the opportunities presented in 1536, and the shortcomings of the legislation, that led to disillusionment and disappointment amongst the reformers and fuelled the writings of 1542 which are the subject of this paper.

The ideas of Brinklow and his colleagues would continue after 1542 in works such as Thomas Smith, *A discourse of the common wealth of this realm of England*, those by John Hales, and in Bishop Latimer's sermons. The broader movement for reform and regeneration of the 'commonwealth' advocated by the evangelicals was, arguably, a serious influence in Edward VI's reign and particularly on Somerset's government.[14] Jones' assessment, however, is that ideas of the commonwealth continued to be essentially medieval in character between 1529 and 1559.[15]

The early 1540s were a time of enormous religious, social and economic change which took place against a background of an increasing population.[16] The Protestant Reformation had been instigated, the Dissolution of the Monasteries enacted, and the massive re-distribution of these lands into lay hands was at its peak.[17] The Pilgrimage of Grace had been suppressed.[18] War with Scotland was about to break out again.[19] The growing levels of government expenditure and costs of Henry's wars had placed a heavy burden on the taxable population.[20] In addition, prices were rising and the first debasement of that year accelerated the trend.[21] More positively, it was

[9] Thomas More, *Utopia* (1965), pp. 46–8, 54–5.

[10] Printed in F. J. Furnivall (ed.), *Four Supplications 1529–1553 A.D.*, (Early English Text Society [hereafter EETS], Extra ser. 13, 1871), pp. 1–18.

[11] T. F. Mayer (ed.), *Thomas Starkey. A dialogue between Pole and Lupset* (Camden Soc., Fourth ser., 37, 1989). For the date, pp. x–xii.

[12] Elton, *Reform and renewal*, p. 52.

[13] ibid., p. 99.

[14] D. MacCulloch, *Tudor Church Militant* (1999), pp. 122–6 where, additionally, he argues that the language of the rebels of 1549 was also drawing on this tradition.

[15] Jones, *Tudor Commonwealth*, pp. 81–3, 215. For Slack the shift in ideas in the years between Edward IV and Edward VI had implications for the future. Slack, *Reformation to improvement*, pp. 9, 11.

[16] For general introductions to the period see R. Tittler and N. Jones (eds), *A companion to Tudor Britain* (2004); K. Wrightson, *Earthly Necessities. Economic lives in Early Modern Britain* (2000). C. G. A. Clay, *Economic expansion and social change: England 1500–1700* (2 vols, 1984). The increase in population is discussed in J. Hatcher, 'Understanding the population history of England 1450–1750', *Past and Present* 180 (2003), pp. 83–130.

[17] F. Heal, *Reformation in Britain and Ireland* (2003). J. Youings, *The dissolution of the monasteries* (1971). For the specific context in which Brinklow was operating, see S. Brigden, *London and the Reformation* (1989).

[18] R. W. Hoyle, *The Pilgrimage of Grace and the politics of the 1530s* (2001).

[19] There was actually a lull in the conflict with France prior to Henry and Charles V making an agreement for a joint invasion of France in 1543.

[20] R. W. Hoyle, 'Taxation and the mid-Tudor crisis', *EcHR* 51 (1998), pp. 649–75.

[21] R. B. Outhwaite, *Inflation in Tudor and early Stuart England* (1969). The most intensive phase of price rises was to come with the debasements of 1544–5.

a time of fairly good harvests, and expanding industrial activity, especially in the production of cloth.

I

Henry Brinklow was a man of many parts.[22] He was a successful merchant and member, by 1531, of the Mercer's Company when he was the lessee of a large property belonging to the company in St Laurence Lane.[23] He was a Citizen of the City of London and travelled to Antwerp and elsewhere in Europe in the course of his trading activities as a Merchant Adventurer.[24] Henry promoted the mercers' interests when he was involved in putting forward a bill against merchant strangers in 1544, although it was ultimately unsuccessful.[25] In his *Complaynt* Brinklow criticized the level of customs import duties and attacked the rising cost of cloth.

> Than demand the clothyer, if he lyved not better, whan he sold his clothys for a resonable price the pack, and his carseys for xxii or xxiii pownd the pack, than he doth now, sellyng them for xxx pound the pack.[26]

Henry's brothers Hugh and Anthony were apprenticed to him as mercers and they traded together as a family firm. After Henry's death Hugh and Anthony continued to trade as mercers.[27] The Brinklows' commercial activities were similar to those of the Johnson brothers, a family firm of drapers and staplers who were also Protestants.[28] Indeed, John Johnson was a business acquaintance and had a trading account with Henry.[29]

Henry was married to Margery and they had a son John. Relationships within the Brinklow family were maintained as Henry remained in contact with his father and brothers in Berkshire. He and his son were beneficiaries of his father's will.[30] In his own will of June 1545 Henry mentioned his brothers John, George, Hugh, William and Anthony.[31] John and George,

[22] Biographical details are derived from J. M. Cowper (ed.), *Henry Brinklow's* Complaynt of Roderyck Mors, (EETS, Extra ser. 22, 1874), introduction; A. Ryrie, 'Brinklow, Henry (d. 1545/6)', *Oxford Dictionary of National Biography* (2004) [http://www.oxforddnb.com/view/article/3437, accessed Dec. 2004]. The wills of the Brinklow family are cited below.

[23] He was granted the lease 'of a greate tenemente in the voyde place in Sainte laurence lane', Mercers Company Archives, Acts of Court, 1527–60, fo. 55.

[24] Frans de Pape of Antwerp bought cloths valued at £38 Flemish from Henry Brinklow at the Bamismarkt in 1539. O. de Smedt, *De Engelse Natie te Antwerpen in de 16th eeuw (1496–1582)* (2 vols, 1950–4), II, p. 342.

[25] H. Miller, 'London and parliament in the reign of Henry VIII', *Bulletin of the Institute of Historical Research* 35 (1962), p. 146.

[26] Brinklow, *Complaynt*, Second chapter, v. 9.

[27] '1541 Hugh Brynckelowe late apprentice to Henry Brynckelowe'. '1545 Antonye brinckelowe late apprentice to henrye brinckelowe.' Mercers Company Archives, Register of Freemen of Company, 1347–1914. As apprenticeship took 10 years, this implies that Henry was a member of the company by 1531. I have Dr Anne Sutton to thank for the insights into apprenticeship and these references. In 1545 Hugh was in Hamborow with John Dymcoke acting as letter carrier back to Paget in England. *Letters and Papers of the reign of Henry VIII* (hereafter *LP*) XX (i), 1273. In 1565 Anthony Brinklow mercer owed £16 to John Isham. G. D. Ramsay (ed.), *John Isham, Mercer and Merchant Adventurer* (Northamptonshire Record Soc., 21, 1962), p. 94.

[28] Their letters and accounts survive due to the bankruptcy of John Johnson in 1553. B. Winchester, *Tudor Family Portrait* (1955).

[29] ibid., pp. 45, 212.

[30] TNA, PROB 11/29/24.

[31] TNA, PROB 11/31/20. His overseers were the London mercers Hugh and Anthony.

who lived at Kintbury, were in debt to Henry. Henry had remained in affectionate contact with the village as he bequeathed 20*s.* in apparel and money to each of ten of the poorest parishioners there. A successful merchant, he left an estate of over £350 divided into three as was the custom of the City of London: the first part to Margery his wife, the second to his son John, and the third, which was Henry's own part, to his brother Hugh. And he mentioned the uncertainties of being a merchant:

> I being a marchaunt whose state is mutche unconstante and specialie in those which have theire gooddes in strange cuntries farr from theyme as at this present tyme myne be.[32]

Brinklow is famous as the Protestant polemicist who published under the pseudonym Roderyck or Roderigo Mors. His two most well-known works, *The complaynt of Roderyck Mors*, and *The lamentacion of a Christian, against the citie of London*, were both published in 1542.[33] Brinklow held strong Protestant beliefs including a rejection of the real presence in the Eucharist, and denounced the whole doctrine of purgatory and the need for masses and prayers for the dead. Indeed he felt so strongly that he ordered that no one was to wear mourning for him after he died and went as far as to threaten to disinherit his wife:

> Other morening gownes to be worne for me I utterly forbidde aswell my wiff and my childe as all other my Freendes and that uppon the peane unto my wiffe of forfaiting the execution of this my testament and the bennefittes that to her shoulde come by vertue of the same … I freely geve to Margery my wiffe uppon condicion aforesaid that she were no worldely fantasticall dessembling black gowne for me nor no other by her appoyntment'.[34]

As a Merchant Adventurer Brinklow travelled abroad where he came into contact with Protestant beliefs, and of course the Mercers were involved in the early trade in printed books.[35] They supplied many early Protestant works, for example William Locke had obtained books for Anne Boleyn when he 'used to go beyond sea'.[36] Brinklow was a member of a cell of evangelicals within the Mercer's Company and part of a close network of friends and business associates who shared similar beliefs.[37] The group also included their wives and daughters. His widow Margery became the second wife of the merchant, diplomat and friend of Cromwell, Stephen Vaughan. 'I have long known the woman' Vaughan told Paget.[38] Indeed there are several letters from Vaughan to Paget and Wriothesley in 1545 and 1546 asking for their advice on the matter of taking a new wife and mother for his children.[39] Margery may have had rather more talents than just concern for domestic matters as in early 1547 Queen Catherine Parr's debts included £116

[32] TNA, PROB 11/31/20.

[33] The versions employed in this paper are: Henry Brinkelow, *The complaynt of Roderyck Mors, somtyme a gray fryer, vnto the parliament howse of Ingland his natural cuntry for the redresse of certen wicked lawes, euel customs, ad [sic] cruell decreys* (STC / 3759.5); id., *The lamentacion of a Christian, against the citie of London made by Roderigo Mors. Anno Domini M.D.XLII.* (STC /3764). Other versions are published in Cowper (ed.), *Henry Brinlow's Complaynt.*

[34] TNA, PROB 11/31/20.

[35] A. F. Sutton, 'Caxton was a mercer: his social milieu and friends', in N. Rogers (ed.), *England in the fifteenth century* (1994), pp. 118–48.

[36] Brigden, *London and the Reformation*, p. 127.

[37] ibid., pp. 411–13.

[38] ibid., p. 418. For Vaughan's biographical details see S. T. Bindoff (ed.), *The House of Commons, 1509–58* (3 vols, 1982), III, pp. 519–20.

[39] *LP* XXI (i) p. 47, dated from Antwerp, 22 Jan. 1545.

to Stephen Vaughan, 'husband of [Margery] Vaughan, late your grace's silk woman.'[40] They all married within their group (perhaps the women would not compromise their faith) and were active in maintaining this close-knit community.[41]

II

The farming members of the Brinklow family lived at Kintbury in western Berkshire. This is a large parish of *c.* 7,800 acres, crossed by the river Kennet and lying to the west of Newbury in an area of woodland pasture where mixed farming was the dominant form of agricultural activity in the sixteenth century.[42] It was also a diversified economy as tenants exploited the woodland and other natural resources, and were involved in cloth manufacture that was associated with the town of Newbury. The lands of the parish were largely divided between two manors held by the religious houses of Amesbury and Nuneaton. In addition there were several much smaller manors, and these included Anvilles and Balsdon where the Brinklows were leasehold tenants.[43]

Henry's father, Robert Brinklow, was living in Kintbury in 1522 where he was described as a householder assessed on £20 of goods, 'And hath harnesse for ii men & ii billes And is servante of Sir Edward Darell knight and kepeth his park of Balston [Balsdon]'.[44] Robert Brinklow died in 1543 and left a will in which he described himself of Hanfeldis (Anvilles) and wished to be buried in the churchyard of Kintbury 'besides the body of my mother'.[45] He may also have had Protestant leanings as he bequeathed his soul to 'almighty Jesu my maker and Redemer in whom and by the merits of whos blissid passhion is all my hole trust of clere remission and forgevenes of my synnes'. It is worth mentioning in this context that Newbury had been a centre of religious dissent and heresy in the later middle ages and as such drew in people from the surrounding villages.[46] Robert left a wife Sibyl and nine children.[47] He was obviously living and farming at Anvilles where he held the tenancy from Sir Edward Darell. His house was well

[40] Bindoff, *House of Commons*, III, pp. 519–20. After Vaughan died she went on to marry George Rolle and then Sir Leonard Chamberlain.

[41] Anne Vaughan married Henry Locke, from another evangelical family, and she became a great friend of John Knox. Brigden, *London and the Reformation*, p. 418.

[42] For details of the economy and society of Kintbury and cloth production in Newbury and the rural area see M. Yates, *From medieval to modern. Society and economy from the fourteenth to sixteenth centuries in western Berkshire* (forthcoming).

[43] For the manorial descent of these manors see *VCH Berkshire*, IV, pp. 206–14.

[44] 1522 Military Survey for Berkshire TNA, E315/464. In the 1524 Subsidy he was also assessed on goods of £20 and his name was followed by two men who were assessed on wages and may have been his servants, but the relationship was unspecified. TNA, E179/73/125, and also in 1525 E179/73/121.

[45] TNA, PROB 11/29/24. This implies that the family may have been resident in Kintbury for some time, although their origins remain unknown.

[46] J. A. F. Thomson, *The later Lollards, 1414–1520* (1965), ch. 3; A. D. Brown, *Popular piety in late medieval England* (1995) and A. Hudson, *The Premature Reformation* (1988). The town had a strong association with Lollardy and a series of heresy trials took place in 1491 that involved townspeople as well as those from the surrounding parishes including Thatcham, Shaw, and Speen. D. P. Wright (ed.), *The register of Thomas Langton, bishop of Salisbury, 1485–93* (Canterbury and York Soc., 74, 1985), pp. 69–79.

[47] In his will he mentioned his children: Henry as his eldest son, Joan Crowther, Agnes Chapperleyn, John, Alice Revell, George, Hugh, William, Anthony, also John his grandson and son of Henry, and two granddaughters Joan and Alice Chapperleyn. TNA, PROB 11/29/24.

furnished with various wallhangings and silver vessels and he bequeathed a number of sheep and cattle.[48] His son John was bequeathed the lease of the farm at Anvilles with the stipulation that he was not to give it to anyone except his heirs, and he also received most of the household furnishings. George received the house and land at 'Englood' (Inglewood) in Kintbury, and William obtained the tenement in Chilton. The sons who were London mercers dealt with the administration of the will; Hugh and Anthony were the executors, Hugh proved the will in London, and Henry was one of the overseers.[49]

John stayed on the farm at Kintbury and was assessed in the Subsidy of 1545 on £10 of goods.[50] He was an active participant in the manor courts of Balsdon.[51] In 1551 he, along with three other tenants, agreed to enclose a common called the Hill Croft for their use.[52] John died in 1558 and, from the evidence in his will and inventory, was actively engaged in farming a mixed farm which had an emphasis on raising sheep.[53] His inventory was valued at £315 8*s.* 0*d.* and included 31 yards of russet cloth and four yards of broad russet, 35 tods of wool, in addition to various horses, oxen, cows and the sheep. Wheat and barley were appraised on this farm and that at Inglewood.[54] His wife Julian was executrix of the will, and the children were all under age. His eldest son Hugh was to inherit the farm, and if he died then the farm would go to John's brothers successively: Hugh, Anthony, John Revell, and Edward Butler. The overseers of the will were his brothers Edward Butler of Reading, Anthony Brinklow of Antwerp, John Revell of London, and cousin William Boghton of Andover. Two local men were asked to look after the goods 'until the time that my brothers can come down'. John's wife Julian may have died shortly afterwards as the grant of administration was made for both of them in 1562 to Anthony Brinklow of the city of London. Subsequently the family ties between Kintbury and London were maintained for the rest of the sixteenth century.[55]

III

At the time that Henry Brinklow was writing his vitriolic *Complaynt*, the course of the English Reformation was suffering a reverse as conservative and radical factions at Court and in the Council were striving for dominance. London became a dangerous place for outspoken

[48] 180 sheep, four bullocks, two kine, two horses, and two mares.

[49] The other overseer was Stephen Waas. The witnesses to a codicil to the will were local men: Edward Darell esq., Martin Hollond vicar of Kintbury, Stephen Waas, Elys Wollryge, Thomas Bysgrove. TNA, PROB 11/29/24.

[50] TNA, E179/74/181. This was in the second tier of wealth of the vill and less than the farmers of the demesne such as Bartholomew Parrock who was assessed on £35.

[51] He was the first name in the list of jurors in 1552–3, and was affeerer of the court in 1553, but was fined for default of court in 1551. TNA, SC2/201/5.

[52] TNA, SC2/201/5.

[53] Berkshire RO (hereafter BRO), D/A1/39/129 in which he described himself as of Goldyngfyld in Kintbury. His sheep included 147 wethers, 292 ewes, 145 tegs and 14 rams which appears to represent an increase in the numbers since the time of his father's will.

[54] Thomas Dolman was a witness to the will and appraiser of the inventory. BRO, D/A1/39/129. Dolman's place of residence was never specified and so it is impossible to ascertain whether he was the famous Newbury clothier of that name. The presence of quantities of cloth in the inventory may be significant in this context.

[55] Anthony Brinklow of the City of London was granted probate for two John Brinklows in 1562 and 1571. BRO, D/A1/167, fos. 120, 149.

evangelicals following the enforcement of the 1539 Act of Six Articles and fall of Cromwell in 1540. Bishop Gardiner, who wished to restore the country to orthodoxy, initiated a campaign against heresy and especially against the dissemination of heretical books which were outlawed.[56] Some of Brinklow's friends were arrested, such as the reformist preacher Robert Wisdom, and Brinklow stood surety for him when he was imprisoned in 1543.[57] Henry himself escaped identification by employing a pseudonym, describing himself as a Franciscan friar, and by having his books published abroad.[58] Indeed Bishop Gardiner wrongly identified Roderick Mors as George Joye, 'a knave lurkyng in a corner, as Joye doth at Antwerpe' and described reading the *Lamentacion* as 'so moch displeasour as I received in reding of this most abhominable booke'.[59] The *Lamentacion* was publicly burned in London in 1546 along with many other books considered at the time to be heretical. It was not until the 1550s, and after Brinklow's death, that John Bale revealed that Brinklow was the secret author.[60]

Brinklow then was one of the most outspoken evangelicals of his time.[61] He wrote vigorously demanding that all remnants of the old religion be swept away, particularly attacking bishops whom he described as the 'forked cappes'. He openly criticized Henry VIII's ambivalent attitude to the Protestant cause. Yet he did not stick to religious issues. He attacked the general decline in morality, the greed of merchants, corruption of lawyers, called for the reform of the judiciary, and for the two houses of Parliament to be merged. Indeed, he can be read as propounding an egalitarian and almost socialist state when he put forward a programme for the full-scale redistribution of the wealth of chantries.[62] The source of his ideas may have been derivative, but the force of his language, the variety of subject matter, and scale of reforms he advocated were exceptional.

To provide close comparisons, additional context and aid evaluation, the works of Brinklow's fellow protestant authors who were also writing in 1542–3 have been selected for detailed examination. They were Thomas Becon (d. 1567 or 1570), Robert Wisdom (d. 1568) already mentioned, and the anonymous author of BL Royal 17 B. XXXV. Thomas Becon was vicar of Brensett near Romney in Kent at this time and wrote under the pseudonym Theodore Basil.[63] He was less successful than Brinklow in keeping his identity hidden and was spotted and arrested in 1541 and 1543, was made to recant his beliefs, and left London for the rest of Henry's reign.[64] A prolific writer, the two examples written in 1542 and employed here for comparison are *The new pollecye of warre* and *A newe pathway vnto praier*, and they were included in the

[56] Brigden, *London and the Reformation*, pp. 345–52, E. Duffy, *The Stripping of the Altars* (1992), pp. 423–5, 432–3.

[57] Brigden, *London and the Reformation*, p. 349.

[58] The various editions were published in different places including Geneva, Nuremberg and Turin. For details see Cowper (ed.), *Henry Brinklow's Complaynt*, p. xxii.

[59] J. A. Muller (ed.), *The letters of Stephen Gardiner* (1933), pp. 160, 163.

[60] R. L. Poole and M. Bateson (eds), *Index Britanniae Scriptorum. John Bale's index of British and other writers* (1902, repr. 1990), p. 159.

[61] I am indebted to Dr Alec Ryrie for this interpretation.

[62] See quotations below with reference to the poor in London.

[63] After which he was rector of St Stephen Walbrook on the presentation of the Grocers Company and one of the preachers of Canterbury. For further biographical details see S. B. House, 'Becon, Thomas (1512/13–1567)', *Oxford Dictionary of National Biography* (2004) [http://www.oxforddnb.com/view/article/1918, accessed Dec. 2004] and the 'Biographical Notice' in J. Ayre (ed.), *The early works of Thomas Becon* (Parker Soc. 9, 1843).

[64] For Derbyshire, Staffordshire and Warwickshire.

list of books proclaimed heretical in 1546.[65] Becon's fortunes changed on the accession of Edward VI when he returned to London and a place of influence at court.[66]

Brinklow and Becon were both friends of Robert Wisdom, the Oxfordshire-born protestant reformer, parson of Stisted in Essex, who by 1540 was also a preacher in London's evangelical circles.[67] He was also arrested in 1541 and 1543, recanted publicly at Paul's Cross, and left London for Staffordshire where Becon eventually joined him. He was tortured by guilt at having recanted (unlike Becon) and wrote a lengthy *Revocation* of his recantation in 1543.[68] In 1546, during the next major crackdown, the Privy Council ordered his arrest, but this time he escaped to exile in Bremen where he remained for the rest of Henry's reign.

The final text that will be examined in detail is by an anonymous London reformer written in 1541–2.[69] He wrote in a lively and interesting style and often employed tables to illustrate how clerical corruption led to general economic desolation.[70]

IV

A close examination of the texts of these reformers reveal their secular concerns in 1542. Certain common patterns of thought become apparent concerning rents, tenure, the engrossing of land (but not enclosure), and the plight of the poor. These are considered in detail and are followed by an examination of the 'reality' of the situation as experienced by Brinklow's father and his brothers living in western Berkshire.

Common to all the authors was their condemnation of landlords for increasing the rent and entry fines charged for land. Yet their explanations of the causes of this problem differed. Brinklow was very clear that the perpetrators for the rise in rents and many of the social and economic evils of the day were the new owners of monastic lands:

> Consyder yow, what a wickednes is comonly used thorow the realme unponysshed, in the inordinate inhansyng of rentys, and takyng of unresonable fynys, and every day worse than other: and evyn of them specially, to whom the kyng hath geven and sold the landys of those Impys of Antichrist, Abbays and nonryes.[71]

For Becon the increase in the cost of land was due to the new breed of gentlemen:

> kepyng slender houses and hongry hospitalite; but also after suche sorte let out theyr londes to other, yea and that for so hygh a pryce, as they were never wonte to be in tymes

[65] The quotations are taken from the two 1542 editions: Thomas Becon, *The new pollecye of warre* (STC / 1735). id., *A newe pathway vnto praier* (STC / 1734). Both were also published in Ayre, *Early works of Thomas Becon*.

[66] Nevertheless, he was imprisoned in the Tower under Mary and subsequently fled to Strasburg before returning to England on the accession of Elizabeth.

[67] A. Ryrie, 'Wisdom, Robert (d. 1568)', *Oxford Dictionary of National Biography* (2004) [http://www.oxforddnb.com/view/article/29785, accessed Dec. 2004].

[68] Emmanuel College Cambridge, MS 261, fos 88–130, from which the extracts are taken. He also wrote metrical psalms, a cycle of liturgical sermons, and translated several works by continental reformers.

[69] BL, Royal 17 B. XXXV, fos 1–21. I have to thank Dr Ryrie for drawing my attention to this document.

[70] For a pictorial illustration see MacCulloch, *Tudor Church Militant*, p. 124 although he dates the document to 1544–5. For a more general discussion of this text as part of the rhetoric of 'commonwealth', ibid., pp. 122–6.

[71] Brinklow, *Complaynt*, Second chapter, v. 6, f. 7.

> past, in so moch that they whiche hyre them, are utterly beggered & redact to extreme poverte.[72]

Robert Wisdom in his *Revocation* denounced the rich in general:

> that pilleth the pore and scrapeth them even to the bones, Their pride and ambytion, their excesse and vayne apparell, their banketting and dronkenshippe till every place be full of vomyt their vayne buildings as though thei wolde lieu here ever, their layinge howse to house and cowpling feld to fealde till pore men be eaten owt of the contraye, their engrossinge of fermes some man xxti in to his handes, their raysing of rents vnto the vtter empoverishinge of the pore.[73]

The Anonymous author set out his text in tabular form. The 'Enhawncements of rents' was due to a desire for 'Private lucre' caused by a lack of preaching as may be seen in Table 1.[74]

Closely associated with the increase in the cost of land were changes in tenure. Only Brinklow made the direct association with the change to leasehold which would become a feature of the literature later in the decade:

> And now the latyng and engrossing of them (leassys I meane) is one great cause of the inhansing of rentys: wherfore I pray god these leassys may have a fall, and come to an end shortly.[75]

Other common features of their writing were concerns about the engrossing of farms, depopulation, and shrinkage of settlement; although these subjects received less attention from the evangelicals than the enhancing of rents. It is important to note that there was no widespread outcry against enclosures during this particular period; it had been part of the earlier dialogue, and would come back in 1548, and especially 1549.[76] Nevertheless, it was not a theme in the discourses of the early 1540s when the emphasis was on engrossment.

The proscription in Brinklow's *Complaynt* was for one man to have one farm and certainly no more than two in a context of advocating a social ideal of a fair apportionment of farms and a more even distribution of wealth.[77] It was a cry against the engrossing of holdings and rural depopulation, particularly for sheep, that was part of a more general concern over depopulation, both rural and urban mentioned earlier.

> And evyn as a pryst shuld have but one benefyce, so make that one man, of what degree so ever he be, shal hold and kepe in his own handys or occupyeng no more than one ferme, maner, or lordshyp beyng a competent lyvyng, as of xx pownd yerely rent: so that it may be lauful for one man to kepe ii if thei both together be not above xx pownd: but no man to

[72] Becon, *The new pollecye of warre*, v. 58, f. 59. For a discussion of the significance of hospitality at this time see R. W. Hoyle, 'The origins of the dissolution of the monasteries', *Historical J.* 38 (1995), 275–305.

[73] Emmanuel College, Cambridge, MS 261, fo. 118v, by permission of the Master and Fellows.

[74] BL, MS, Royal 17 B XXXV, fos. 15v, 16.

[75] Brinklow, *Complaynt*, Second chapter, v. 7.

[76] J. Thirsk, 'Enclosure and engrossing', in Thirsk (ed.), *Agrarian History* IV, pp. 200–55. R. C. Allen, *Enclosure and the Yeoman* (1992), pp. 71–2 was influenced by Thirsk but he is now arguing that enclosure was less important as an instrument of change, 'Progress and poverty in early modern Europe', *EcHR* 56 (2003), pp. 403–43.

[77] He echoed the Statute of 25 Henry VIII, *Statutes of the Realm* (10 vols, London, 1810–22), III, pp. 451–4.

TABLE 1. The ‘pestilent evylls’ set out in British Library, Royal Ms. 17B XXXV

seduction rebownde upon their owne
Forheddes to their owne confusion and shame

Ignoraunce and non residence of the clergie breedeth lak of preaching lak of preaching breedeth lak of hearing lak of hearing breedeth lak of faith lak of faith breedeth lak of charite lak of charite breedeth universally privat lucre that is a private affection wherby every man is soblinded that withowt feare of god a loove of the comen welth he careth not how many be un doon so that he may enrich him self.	**Private lucre**	Enhawncements of rents	Inclosure of tyllag wastes and commens	dekay of man rode	A weake realme and strong enemyes		
				and	Thindignation of god and Endless dampnation	Sedition and Felonye	desolation
				Famyne of the poore			
		and		Universall povertie of alle estates within the realm	Intollerable exactions and lawes of manifest unrightwisnes	contemp of the power and defection to foren princes	desolation
		pluralite of fermes	Universall dearth of all things necessarie for life	Officers of a most insatiable coove tooseness	privey spoile of the kings beasure and Powling of the kings true subiects	A poore king and Riche officers	desolation
						desier to revenge and hate of the pour that will not suffer it	desolation
				A generall enrich ment of all foren cuntrees	Corage to warr agenst us and hope easely to overcome us		

Source, BL, Royal MS. 17. B xxxv, fo. 15v–16r.

> kepe above iii be thei never so smal rent. This were a brotherly and godly act. For by your oppressors and extorcyoners, how be the townys and villagys decayed? where as were viii, x, xii, yea, xvi howsoldys and more, is now but a shepe howse and ii or iii shepardys … So if ye seke this godly redresse, where as ye have a fewe in a contry, which be inordynate rych extorcyonars and a great multytude of poore peple, than shal ye have but a fewe poore, and a gret nowmber of a meane and reasonable substance, and fewe poor, & lesse extorcyonars: which wold be no smal ease to the common welth.[78]

Becon, in his *Pathway to Prayer*, placed engrossment within the general context of his criticism of greed, both lay and clerical:

> Where are these Catarpillers & Extorcioners of the poore people … Where are these rytch men, to whome God hath commytted the goodes of this world, which like insactable dogges havynge neuer ynough, do continuallye hunte after the augmentacion of mundane treasures, as by ioinynge Lordshyp to Lordshyp, ferme to ferme, lond to lond, pasture to pasture, house unto house, benefyce to benefyce, … & yet are they unmercyfull to the poore people, despyse the mayntaynaunce of hospitalite, which the holye scriptures commend so highly in every place[79]

Wisdom, as we saw in the earlier quotation, was concerned with the effects of the engrossing of farms until 'pore men be eaten owt of the contraye'. For the Anonymous author the enhancement of rents and plurality of farms led to enclosure of tillage, wastes and commons, that resulted in the decay of manhood and famine of the poor, a weak realm and strong enemies, the indignation of God and endless damnation. He was the only author at this time who specifically mentioned enclosure of tillage.

The outcome from these evils, according to the evangelicals, would be the detriment of the commonwealth and a rise in the number of poor people in rural and urban areas, especially in London. Brinklow expressed his outrage about the economic problems of London and was highly critical of the Londoners. The plight of the poor of the city was very obvious at this time and the visible differences between the very rich and the very poor were apparent:

> Oh ye Cytezens if ye wold turne but even the profettes of your chauntryes and your obbettes to the fyndyng of the poare, with a pollytique and godly provysyon, where as now London beyng one of the flowres of the world as touchyng worldly richesse, hath so many, yee unnumerable of poare people, forced to go from doare to doare, and to syt openly in the streates bedgyng, and many not able to do ere other, but lye in their houses in most grevouse paynes, and dye for lack of ayde of the riche, to the greate shame of the Oh London![80]

Indeed, there are numerous examples of the sentiments expressed in this type of discourse.[81] The Merchant Adventurers implemented various welfare measures of their own and in 1538

[78] Brinkelow, *Complaynt*, ch. 20, f. 41, v. 41.

[79] Becon, *A newe pathway vnto praier*, f. 5, v. 5.

[80] Brinkelow, *Lamentacion*, v. 10, f. 11.

[81] In the City of London until the 1530s there were occasional committees for debating 'matters concerning the common weal of the city' that compiled agendas for reform of everything from weights and measure to vagabonds and unruly behaviour. Slack, *Reformation to Improvement*, p. 13.

Richard Gresham petitioned for the re-establishment of St Bartholomew's and St Thomas's 'not to the maintenance of chanons, priests, and monks, to live in pleasure', but for 'the miserable people lying in every street, offending every clean person passing by the way, with their filthy and nasty savours'.[82]

The emphasis that Brinklow placed on the new owners of monastic land as the originators of social ills was not original. It has to be viewed in the more general context of the reformers' disenchantment after the dissolution. Their leaders, such as Latimer and Cranmer, had initially supported the dissolution in the belief that it would provide resources for charity and education, and both had preached on the subject at Paul's Cross in the 1530s.[83] The dispersal of lands, however, was dictated more by the need for revenue than by any social agenda. We need to establish if Brinklow was justified in singling out for attack the new owners of monastic land. To do this we can examine the evidence from the area where his family lived and farmed. In western Berkshire the religious houses held 27 per cent of the total income from land in 1522 and 45 manors changed hands as a result of the dissolution.[84] The majority of initial transfers were of grants by the king, only four being direct sales. In another four cases the current tenant or lessee obtained the manor and would have provided some measure of continuity for the inhabitants. The remaining manors changed hands frequently, particularly in the 1540s, and the chief beneficiaries were the gentry, nobility and merchants.[85] At Kintbury both the large manors of Amesbury and Nuneaton remained with the king from 1539 until 1542, the year of the *Complaynt* and *Lamentacion*. Kintbury Amesbury was then given to John Cheyney of neighbouring West Woodhay in exchange for West Enborne, whilst Kintbury Eaton was granted to the Earl of Hertford who sold it in 1544 to Richard Bridges of Shefford.[86] Thus when Brinklow wrote his *Complaynt* the main manors of Kintbury were in the process of being transferred into the possession of members of the gentry.

Whilst the evangelicals were unanimous in their criticism of the rise in rents, charting what happened to the cost of land and level of rent in the early sixteenth century is not straightforward. Rent was determined by the type of tenure and estate in the land, and landlords were further constrained in their ability to benefit from the general rise in land values by the custom of the individual manors.[87] In the decade preceding the dissolution many tenants held by

[82] J. Strype, *Ecclesiastical Memorials* (3 vols in six, 1822), I (i), p. 410. Gresham also ordered collections for the City's poor at the weekly sermons at the Paul's Cross during Lent 1538. Brigden, *London and the Reformation*, p. 293. Nevertheless, he was not adverse to profiting personally through the acquisition of monastic land as discussed below.

[83] Hoyle, *Pilgrimage of Grace*, ch. 3; McRae, *God Speed the Plough*, p. 29. Starkey had criticised the government for its failure to redirect the resources of the monasteries towards projects that would improve the commonwealth in his manifesto of 1536. Sections are printed in S. J. Herrtage (ed.), *England in the reign of Henry VIII* (EETS, Extra ser. 32, 1878), pp. xlviii-lxiii.

[84] The percentage figure is derived from the landowners listed in the 1522 Military Survey TNA, E315/464, and the land transfers from the manorial descents in *VCH Berkshire*, III and IV.

[85] For details of the transfers of land see Yates, *From medieval to modern*, ch. 2. The Berkshire figures are in line with those found elsewhere in England, see Youings, *Dissolution*.

[86] *VCH Berkshire*, IV, pp. 207–8.

[87] This is a technically complex subject and will not be examined here in the interests of space. An excellent introduction that covers both the medieval and early modern developments is M. Overton, *Agricultural Revolution in England* (1996), pp. 30–35, 147–186, 191–2. For the sixteenth century see Allen, *Enclosure and the Yeoman*, App. 1. R. W. Hoyle, 'An ancient and laudable custom. The definition and development of tenant right in north-western England in the sixteenth century',

TABLE 2. Income from lands in western Berkshire

Lord in 1522	*Total manors*	*1522*	*1539–40*
Abingdon Abbey	11	£393 15*s.* 2*d.*	£409 17*s.* 11*d.*
Amesbury Abbey	4	£90 8*s.* 4*d.*	£135 12*s.* 10*d.*
Beaulieu Abbey	5	£118 7*s.* 2*d.*	£102 3*s.* 2*d.*
St John of Jerusalem	3	£37 12*s.* 9*d.*	£62 14s 4 ½*d.*
Sheen Priory	1	£14 6*s.* 8*d.*	£36 15*s.* 0*d.*
St Frideswide's Priory	1	£18 19*s.* 0*d.*	£22 0*s.* 0*d.*
Battle Abbey	1	£27 13*s.* 4*d.*	£32 0*s.* 0*d.*
Cirencester Abbey	1	£22 16*s.* 3*d.*	£38 7*s.* 3*d.*
Glastonbury Abbey	1	£40 0*s.* 0*d.*	£4 17*s.* 6¼*d.*
Nuneaton Abbey	1	£20 0*s.* 0*d.*	£27 15*s.* 4*d.*

Sources: William Dugdale, *Monasticon Anglicanum* (6 vols in eight, 1849), volumes 1–3, 5–6, *passim*. TNA, E315/464, SC6/HENVIII/3986, 2402, 3739.

secure forms of tenure, or had recently renewed their tenancies, and thus the new owners of monastic land had few opportunities to manipulate their income from rents. The best chances a landlord had for increasing the cost of land were relating to tenancies-at-will, life tenancies, or to persuade customary tenants to exchange their copies for indentures of leases. Some lords, such as the earls of Pembroke, were able to benefit, but many were not.[88] Sir Richard Gresham did raise some of his rents at Fountains Abbey in 1541.[89] More significantly perhaps, in terms of the profit Gresham made from his purchase of the abbey, was the under-valuation by the Augmentations survey when compared with the income revealed from subsequent accounts. The evidence from Berkshire reveals a wide range and diversity of experience on manors that had been held by the dissolved houses. Table 2 presents a comparison of the assessments of income from land in 1522 with those of the first ministers' accounts after the dissolution on 29 manors. The tendency, overall, was for the rents to increase but with two notable exceptions.[90] These figures, however, should be treated with some caution because they do not distinguish between different types of lands and conditions of tenure. Leasehold tenure allowed the lord greater flexibility to change the level of rent on a property to reflect the current value of the land as economic rent. The rents on free and customary lands, which formed the larger part of the lands of Berkshire, had usually been established at a fixed rate at some point in the past and will be discussed below.

Past and Present 116 (1987), pp. 24–55; id, 'Tenure and the land market in early modern England: or a late contribution to the Brenner Debate', *EcHR* 43 (1990), pp. 1–20. P. Bowden, 'Agricultural prices, farm profits and rents', in *Agrarian History*, IV, pp. 674–5.

[88] J. Youings, 'The Church', in *Agrarian History*, IV, pp. 345–6.

[89] R. B. Smith, *Land and politics in the England of Henry VIII* (1970), pp. 240–2. A point that is expanded in a comparison of the rents between the pre-dissolution Valor and the 1544 ministers account for Fountains Abbey, see J. R. Wilbran (ed.), *Memorials of the Abbey of St Mary of Fountains* (Surtees Soc. 42, 1834), pp. 307–85, 396–418.

[90] They were Ashbury belonging to Glastonbury Abbey and Farringdon belonging to Beaulieu Abbey, and to a lesser extent the manors of Chievely and Uffington belonging to Abingdon Abbey.

Beyond Berkshire, the data on the movement of rents and cost of land drawn from a number of other English case studies provide further evidence that the increases were not as dramatic or uniform as Brinklow and his contemporaries would lead us to believe. The variety of experience was more significant. The best series are those produced by Kerridge where the data for the Herbert and Seymour estates generally support the argument for a rise in the cost of land as shown in the Table 4 below, whereas those from the crown estates do not.[91] The figures are, however, averages and therefore suppress the fluctuations which were a more realistic picture of the situation. Elsewhere the pattern was more changeable and depended on different landlords, types of tenure and geographical location. Blanchard found an increase in arable and pasture rents in Derbyshire but with important chronological variations of peaks in 1475–85 and 1505–20, but stagnation in 1520–40.[92] In Northallerton there was little attempt to re-vitalize rent and farm revenues before 1540.[93] In the south of England, especially in the areas around London, there was an increase in the cost of land. In the Lea valley rents on leasehold properties, of tenants-at-will, and sub-tenants did rise dramatically from the 1540s, whereas the bulk of the land, which was held by secure forms of copyhold, remained stable.[94] In north-east Norfolk on the manor of Hevingham Bishops, rents, fines and overall manorial revenues changed little in the period 1450 to 1575. Nevertheless, the price tenants charged each other for the sale of customary tenures increased in the 1530s and then steeply after 1544.[95]

Details from individual Berkshire case studies provide further comparisons. The data in Table 3 relate to the fifteenth and sixteenth centuries to create a long view and chronological background to Brinklow's comments. The table sets out the different amounts of rent due under different forms of tenure, whether by lease of the demesne or mills, or free tenancies or customary holdings. It is immediately apparent that the rents of leases were not constant but subject to fluctuations. For example, the rent of the demesne of Kintbury Eaton did not change in the early sixteenth century, whilst that at Kintbury Amesbury rose by 7½ per cent. The rent from the lease of the mills appears to be the closest to a concept of economic rent. The whole area of the Kennet valley was expanding both economically and demographically by the end of the fifteenth century and this is reflected in the rents of the mills of Kintbury and Shaw, but was not consistently found in the rents of the demesne lands.

[91] E. Kerridge, 'The movement of rent, 1540–1640', first published in *EcHR* 6 (1953), but see the preliminary results of Hoyle's reworking of these figures with additional material in R. W. Hoyle, 'Estate management, tenurial change and capitalist farming in sixteenth-century England', in S. Cavaciocchi (ed.), *Il mercato della terra secc., XIII-XVIII* (2004), pp. 353–82, and especially 358–64, 376–7, 382. In figure 1 he demonstrates that the first marked rise in fines for copies for two lives was between the 1540s and 1550s.

[92] I. Blanchard, *The Duchy of Lancaster's estates in Derbyshire 1485–1540* (Derbyshire Archaeological Soc. Record Ser. 3, 1971 for 1967), pp. 3, 8, 10–13. He also found rising pasture rents more generally on the Duchy of Lancaster's pastoral manors of the Pennine chain between 1485 and 1547, 'Population change, enclosure, and the early Tudor economy', *EcHR* 23 (1970), pp. 433–4.

[93] C. M. Newman, *Late medieval Northallerton. A small market town and its hinterland, c. 1470–1540* (1999), pp. 67–73, esp. p. 72.

[94] P. Glennie, 'In search of agrarian capitalism. Manorial land markets and the acquisition of land in the Lea Valley, *c.* 1450-*c.* 1560', *Continuity and Change* 3 (1988), pp. 15–18, 25. Nevertheless, rents and entry fines at Havering remained fixed and did not reflect true land values. M. K. McIntosh, *A community transformed. The manor and liberty of Havering, 1500–1620* (1991), pp. 94, 98–100, 117.

[95] J. Whittle, *The development of agrarian capitalism. Land and labour in Norfolk, 1440–1580* (2000), pp. 82, 106–114.

TABLE 3. Rents *per annum* on select west Berkshire manors

Manor and date	*lease of demesne*	*Customary rent*	*Free and customary rents*	*Lease of mills*
Kintbury Eaton				
1406		£13 1*s.* 1*d.*		
1421	£6 0*s.* 0*d.*	£13 1*s.* 1*d.*		£1 13*s.* 4*d.*
1450	£5 6*s.* 8*d.*	£14 14*s.* 5*d.*		£3 6*s.* 8*d.*
1539	£5 6*s.* 8*d.*	£11 15*s.* 11*d.*		£4 0*s.* 0*d.*
Kintbury Amesbury				
1535	£15 10*s.* 2½*d.*		£20 14*s.* 3*d.*	
1540	£16 13*s.* 4*d.*		£21 2*s.* 11*d.*	
Shaw				
1406	£12 10*s.* 0*d.*			£3 13*s.* 4*d.*
1449	£10 0*s.* 0*d.*	£4 19*s.* 2*d.*		£2 5*s.* 0*d.*
1498	£12 12*s.* 4*d.*			£5 6*s.* 8*d.*
1528	£13 2*s.* 4*d.*			£6 13*s.* 4*d.*
1547	£13 2*s.* 4*d.*	£7 9*s.* 10*d.*		£6 13*s.* 4*d.*
1570				£8 0*s.* 0*d.*

Sources: Kintbury Eaton, BL, Add. Rolls 49266, 49268, 49236, TNA, SC6/HENVIII/3739; Kintbury Amesbury, *Valor Ecclesiasticus*, II, p. 242, TNA, SC6/HENVIII/3986; Shaw, TNA, SC2/154/53, LR2/187, Berkshire RO, D/ENm M13, 52, 55, D/ENm1 T2.

The level of rent on free and customary lands was usually static. In general, free lands rendered a fixed notional rent to the lord. The rents on customary holdings had been fixed by 1400. They might change subsequently in specific circumstances, such as when holdings were amalgamated, or labour services commuted, or the quota of animals for pasture was apportioned, but these were isolated instances. At Shaw, where customary rents appear to have risen, it was due to the erection of additional buildings on the customary holdings, such as the tanhouse and cottages.

The estate by which tenants held their customary lands in western Berkshire usually comprized three lives, the named tenant, his wife (so long as she did not remarry when her continuation in the tenancy would require special permission), a named child in many, but not all cases, and there existed the possibility of extending the tenancy with the purchase of a reversion.[96] The cost of customary land to the tenant was a combination of the payment of annual rent, plus the two one-off sums of an entry fine at the beginning of the tenancy, and a heriot at the end. Should the length of the tenancy be extended, then another payment would be demanded.[97] One of Brinklow's concerns was over the rise in entry fines, as he said, it meant

[96] See Yates, *From medieval to modern*, ch. 4 for a detailed discussion of customary tenure, rents and entry fines in this area.

[97] Indeed, on occasion, tenants were prepared to pay heavily to obtain property as at Kintbury in 1431 when Robert Walrond paid 40*s.* for the reversion of the property currently held by Nicholas Alesaunder. BL, Add. Roll 49227, court of 4 July 1431.

TABLE 4. Index of approximate rents per acre on new holdings in Wiltshire

	Herbert family manors	*Seymour family manors*	*Crown manors*
1510–9	100	100	100
1520–9	95	134	100
1530–9	202	144	116
1540–9	210	153	117
1550–9	308	159	142

Source: E. Kerridge, 'The movement of rent, 1540–1640', *EcHR* 6 (1953), Tables 2, 5, 7.

that 'tenants are halfe undone in their incomnyng'. Indeed, entry fines are traditionally regarded as more responsive to the underlying economic conditions of the time than rents. Nevertheless, there were marked variations in the ways in which these were levied depending on local circumstances. In northern Berkshire, in the Vale of the White Horse, there was no evidence for a significant rise in the level of entry fines before 1550.[98] In the south of the county the situation was more varied. At Kintbury the amounts charged as entry fines remained relatively stable. On the manor of Kintbury Eaton entry fines were set at a mark or fraction of a mark, unless the holding contained items of value such as woodland.[99] Heriots were also set by custom, usually at 20*d.* for a cottage and 5*s.* for a virgate of land. Only occasionally were increases in fines discernable. For example, a messuage and virgate of land in 1471 had yielded 13*s.* 4*d.*, which had doubled in 1500 to 26*s.* 8*d.*; on another messuage with cottsetle of land the entry fine was 8*s.* 4*d.* in 1427, in 1454 6*s.* 8*d.*, and in 1500 13*s.* 4*d.*[100] Entry fines were more varied on the manor of Kintbury Amesbury in 1540, albeit with some standardisation of sums of money.[101]

The rise in entry fines is in fact much clearer on the manor of Shaw, situated closer to Newbury in the Kennet region and held by Winchester College. The increases of the sixteenth century were a continuation of a longer pattern. Entry fines fluctuated markedly before 1440, then rose in the 1440s, and again in the late 1480s, and throughout the sixteenth century. A typical example is 'Dikars', a standard holding of a messuage and half virgate of land which had an unchanged rent of 5*s. per annum*, and rendered an entry fine of 3*s.* 4*d.* in 1480, 11*s.* 4*d.* in 1538, and in 1605 40*s.* That is, the entry fine had more than trebled on each occasion whilst the rent remained unchanged. The increase in entry fines of cottages was proportionately greater. In 1539 a fine of 13*s.* 4*d.* was paid for two cottages which had an annual rent of 11*s.* 8*d. per annum* and in 1605 these were surrendered and taken again at the same rent, but the fine was £4 13*s.* 4*d.*[102]

[98] Yates, *From medieval to modern*, ch. 4.

[99] For example John Collins paid 33*s.* 4*d* for a messuage, virgate and the near wood of Inglewood. BL, Add. Roll 49227, court of 3 July 1433.

[100] But note, these were unusual as there were many more other properties where the level of entry fine remained unchanged.

[101] TNA, SC6/HENVIII/3986. The sums received as entry fines in 1540 were: for one messuage and two virgates of land, 26*s.* 8*d.*, one messuage and two virgates of land, 13*s.* 4*d.*, one messuage and one virgate of land, 13*s.* 4*d.*, one messuage and one virgate of land, 10*s.*, one messuage and half a virgate of land, 10*s.*

[102] For a more detailed discussion of these changes see Yates, *From medieval to modern*, ch. 4.

The *Complaynt* was also concerned with the matter of tenure and especially the effects of the rise in incidence of leasehold tenure.[103] The majority of land in western Berkshire, however, was held by customary tenure. It was predominantly the demesne lands that were leased for a period of years and had been since direct management had ceased, almost entirely before 1450. Brinklow's concerns over developments in leasehold tenure and more generally the insecurity of tenure was less, perhaps, a particular Berkshire phenomenon, but rather a reflection of what was happening in the law courts. The act of 1489 'agaynst pullyng doun of tounes' had outlawed depopulating enclosures and stimulated an increase in judicial activity that involved the articulation of concerns over the security of copyholders and leaseholders.[104] Subsequent legislation continued these themes. The increase in the number of cases of tenants using the common law courts to secure their rights of tenure was an important aspect of the development of property law in the sixteenth century.[105] These various proceedings alerted lords and tenants to the legal position of the enforceability of customary and leasehold tenure.[106] This may have been the context for Brinklow's comments and for his father's concerns that the lease of the farm at Anville's was neither alienated, sold or given away to anyone except his son's direct heirs.[107] It did not necessarily imply that the tenurial position of copyholders was weak in Kintbury, or that there was an increasing tendency for lords to convert to leasehold tenure.[108]

The final theme to be examined in detail is the engrossing of holdings. The picture that Brinklow painted finds support from the evidence at Kintbury, but over an extended period of time. The engrossing of farms here and elsewhere in western Berkshire had a long history and was not new in the sixteenth century. On the manor of Kintbury Eaton there had been a decline in the number of direct tenants over the course of the fifteenth century, and farm sizes increased proportionately.[109] There were already individuals with multiple holdings by the early fifteenth century.[110] Subtenants were allowed on this manor and licenses to do so were granted throughout the fifteenth century thought they increased in number after 1480. Early enclosure was a feature of the area and by 1400 some land was already held in closes and developments continued quite briskly in the first half of the fifteenth century.[111] Indeed, by 1600 as much as 40 per cent of the parish may have been enclosed.[112] John Houne, a farmer of Kintbury, was reported to the enclosure commissioners in 1517 for having converted one ploughland to pasture for animals in 1506 and evicting four people.[113] He was certainly active in the parish, both

[103] See quotation above.

[104] Thirsk, 'Enclosure and engrossing', pp. 200–55. These concerns continued to be expressed in the returns of the commissioners of 1517 and in the proceedings of the subsequent cases in Chancery and King's Bench.

[105] Hoyle, 'Tenure and the land market', pp. 10–11.

[106] Allen, *Enclosure*, pp. 71–2.

[107] TNA, PROB 11/29/24.

[108] In my larger study no evidence was found for either taking place in western Berkshire by 1542. Yates, *From medieval to modern*.

[109] From 19 customary tenants in 1448 to 13 in 1522. BL, Add. Roll 49235, court of acknowledgment 13 June 1448, and TNA, E315/464.

[110] For example Robert Godestok renewed his customary holding of one messuage and half a virgate of land in holt called odestokkes, one toft and one virgate of land in holt called Childerlonde, and one toft and half virgate of land in Holt called Popelonde, in all a total of over 60 acres of arable land. BL, Add. Roll 49223, court of 15 Dec. 1422.

[111] Thereafter tenants were not prosecuted in the manor courts and one wonders whether enclosures continued but went unchallenged, or whether they had ceased.

[112] J. R. Wordie, *Enclosure in Berkshire, 1485–1885*, (Berkshire Record Soc., 5, 2000), p. 97.

[113] I. S. Leadam (ed.), *The Domesday of Inclosures, 1517–18* (2 vols, 1897), I, p. 136.

peaceably and violently.[114] One cannot establish what made his enclosing behaviour noteworthy in the context of this parish; it was certainly not new. John Hales' comment that the worst was over by 1485 may have been applicable to Kintbury.[115]

Brinklow and his contemporaries argued that the effects of the engrossing of holdings would be rural depopulation and an increase in poverty. We have seen how concerns about depopulation had been a recurring element in the literature since the fifteenth century. A large number of case studies have been undertaken to investigate the history of rural settlements, their continuity, decline and desertion and these reveal a wide diversity of experience with a marked regional dimension.[116] We need to consider the situation in Kintbury where Brinklow's family lived. As we would expect from an area of woodland pasture there was evidence for a severe shrinkage in the size of some hamlets, and these were located in the south of the parish. Both Holt and Inglewood, where Brinklow's father had another farm, appear in the list of Deserted Medieval Village sites in Berkshire.[117] Holt's decline can be reconstructed from several sources: there were 29 individuals taxed in 1327, 23 paid the poll tax of 1381, there were 19 customary tenants in 1448, and 13 in 1522.[118] Thereafter details of the hamlet were subsumed into those for the parish as a whole. The site of the medieval settlement remains unknown but may have been situated in the vicinity of Holt Manor Farm.[119] The other hamlets of Anvilles, Titcombe and Templeton, all in the south of the parish, also experienced a reduction in population during this period. Decline and desertion, however, were not universal in the parish as the main settlement of Kintbury continued to flourish, as did the hamlets of Clapton and Elcot in the north of the parish. Shifts in the pattern of settlement within this parish do not support a picture of rural depopulation.

Both Brinklow and Wisdom were concerned that, as a consequence of engrossing, there would be an increase in the numbers of poor people. We cannot establish whether this was the case at Kintbury as the only evidence relates to the early 1520s and not to an earlier period. This does reveal that wealth was concentrated in the hands of the large farmers, especially the lessees of the manorial demesnes, whilst 75 per cent of the population had assessments of under £5 at this time.[120] Indeed these farmers were wealthier than Brinklow's father who was assessed on £20 of goods compared with neighbours like John Stevens (£55), Bartholomew Parrock (£50) or Robert Wace (£55).[121] The proportion of wage labour in Kintbury was also high: 41 per cent

[114] For example, in 1500 John Houne acted as pledge for John Cheyney for arrears of rent of two years being 10*s.* for a pasture called Le Fryth. BL, Add. Roll 49255, court 12 Nov. 1500. In 1520 John Cheyney was prosecuting Houne in the court of common pleas over a case of violent trespass that caused damage to crops valued at 40*s.*, TNA, CP40/1030, Mich. 1520. In 1493 John had obtained a license to take a subtenant for his lifetime, BL, Add. Roll 49249, court 4 July 1493. John may have been the son of Henry Houne who had been a tenant on the manor since 1473 and therefore from a settled family in the parish.

[115] M. Beresford, *The lost villages of England* (1999 edn), pp. 149–50.

[116] See C. Dyer's introduction to the 1999 edition of Beresford, *Lost villages.*

[117] M. W. Beresford and J. G. Hurst, 'Introduction to a first list of deserted medieval village sites in Berkshire', *Berkshire Archaeological J.* 60 (1962), pp. 92–7.

[118] TNA, E179/73/6, 55; BL, Add. Roll 49235, court of acknowledgment 13 June 1448, TNA, E315/464.

[119] NMR Numbers SU 46 SW 4, SU 46 SW 16.

[120] £50+, 3%; £20–<50, 1%; £10–<20, 7%; £5–<10, 14%; £2–<5, 36%; <2, 39%. Military Survey of 1522, TNA, E315/464.

[121] There was no assessment beside John Houne's name in 1522, but in 1524 he was assessed on goods of £30.

in 1522, and 48 per cent of those assessed for the lay subsidies of 1524 and 1525.[122] This did not necessarily mean impoverishment as, in addition to employment on the large farms, there were opportunities for diversified forms of economic activity in this area. Additional sources of income could make a relatively small farm viable; and there continued to be a large number of small holdings at Kintbury. In the 1520s there were no assessments on income from land in the parish and it was the yeoman farmers, rather than the gentry, who were the wealthy inhabitants. The social structure of the parish had changed by 1545 when, although these farmers continued to have large assessments based on moveable goods, there were also members of the gentry living in the parish. Thomas Knight of Templeton manor had been one of those active in buying up the lands of the dissolved monasteries in the Kennet area generally. Whilst the widow of John Cheyney of neighbouring West Woodhay, who obtained the Amesbury manor from the king in 1542, was assessed on lands in the 1545 subsidy, and one presumes was resident on this manor.[123]

Finally, if the evidence from Kintbury does not support Brinklow's vitriolic criticisms, did he have a specific individual in mind as the target for his attack? We will never know. Certain individuals, such as Sir Richard Gresham, were engaged in activities that made them suitable objects for Brinklow's condemnation. Gresham was also a mercer and merchant adventurer when Brinklow was active; but was engaged in a much larger scale of operation as in 1534 he was assessed at £2,000.[124] Unlike Brinklow, Gresham achieved high office in the company and City of London. He was elected warden of the company in 1525 and served as master in 1533, 1539 and 1549. He was prominent in the City as sheriff, alderman, MP, and was elected lord mayor in 1537. Richard Gresham's religious affiliations and allegiances were ambiguous and pragmatic. In 1534 Gresham was one of seventeen commissioners for London to inquire into the value of benefices prior to the suppression of the abbeys and he was active in the dissolution of the monastery of Walsingham. On the other hand, he was appointed as one of the commissioners, along with his brother John, to enforce the Six Articles that had such a detrimental impact on Brinklow's evangelical friends.[125] In 1540, with John Godsalve, he examined Henry Dubbe, a stationer of London, who was suspected of publishing 'a naughty booke made by Philipp Melanchton'. Gresham was certainly one of the new owners of monastic lands. He obtained large grants of monastic lands, in most cases by purchase, in Suffolk, Norfolk and Yorkshire. The chief of these possessions was Fountains Abbey which he bought in 1540 for £11,737 11*s.* 8*d.* Gresham was a landowner who was able to raise some of his rents at Fountains in 1541, just before Brinklow was writing. He died in 1549 and was unpopular enough to be the subject of at least one posthumous attack in the form of an 'epitaph' against his activities as a money lender and buyer of lands.[126] Gresham may not have been Brinklow's specific target but he did possess several of the characteristics that the author criticized.

[122] TNA, E315/464, E179/73/121, 125.

[123] TNA, E179/74/181.

[124] Biographical details taken from I. Blanchard, 'Gresham, Sir Richard (*c.* 1485–1549)', *Oxford Dictionary of National Biography* (2004) [http://www.oxforddnb.com/view/article/11504 accessed Dec. 2004], and Bindoff (ed.), *House of Commons, 1509–1558*, II, pp. 248–50 and other sources given below.

[125] J. Strype (ed.), *Ecclesiastical Memorials* (2 vols, 1822), pp. li, 565–7.

[126] A. G. Rigg, 'Two poems on the death of Sir Richard Gresham (ca. 1485–1549)', *The Guildhall Miscellany* 2 (1967), pp. 389–91.

V

This paper has attempted to separate fact from fiction in the observations of economic trends contained in the writings of the evangelicals in 1542. Their chief anxiety, and one on which they were all agreed, was the increased cost of land. Yet the 'facts' derived from the local case study revealed greater variety in the level of rents and entry fines than had been suggested by the evangelicals. Rapacious landlords were not a universal feature of 1542. The other shared concern of the authors was the engrossing of holdings and this was found to have been a common feature by the early 1540s. Nevertheless, engrossing of holdings was not new; it had a history extending over 100 years. Of particular interest was the *lack* of emphasis on the evils of enclosure that was not a subject of the writings of this period; although it had been, and would be again. It would appear that enclosure was not a part of the popular dialogue of 1542. So why did the authors continue to repeat ideas that had such weak foundations in contemporary events? To emphasize and give strength to their arguments we have shown that they employed concepts and images that were familiar to contemporaries, were based on an established literary tradition that dated from at least the fourteenth century, and they justified their arguments by frequent references to scripture. Their material did contain kernels of truth concerning the contemporary situation; but the evils were not as widespread or recent as they would imply. What was new in 1542 was their level of frustration. The potential for social improvement and reform of the 1530s had not been realised. Their godly commonwealth had not been achieved; but they had not given up hope. Whilst they felt there was still time they wrote vehemently, marshalling a ranch of popular and biblical ideas, in pursuit of their moral ideals. The writings of the polemicists do not have to remain 'somewhat mysterious to us'.[127] By fully contextualising the authors and their works we can indeed distinguish between fact and fiction, and are provided with a delicate instrument with which to view the concerns and discourse of the mid-sixteenth century.

[127] P. Collinson, *The birthpangs of Protestant England* (1988), p. 10.

The circulation of Scottish agricultural books during the eighteenth century

by Heather Holmes

Abstract

This paper focuses on aspects of the circulation of Scottish agricultural books in the eighteenth century to 1790. In viewing the books as an object of material culture, it considers a range of factors which affected their circulation: the progress of agricultural development, the rise of the Scottish book trades (and the demand for books), the methods that were available to publish books, the ability to read, the cost of books and their reputation. It concludes with a survey of the subscribers to a selection of agricultural books. These show that the range of people who purchased and read agricultural books widened, especially between the 1760s and 1790s.

Agriculture, it might be thought, is a practical business. Much agricultural knowledge though has been book learning; and there has been much interest from the pioneering accounts of George Fussell onwards in the role of print in spreading innovation and good practice. Although a number of agricultural historians have provided comprehensive surveys of the contents of eighteenth-century Scottish agricultural books, and the surveys of James E. Handley have become classic accounts, few scholars have examined the circulation of these books.[1] J. A. Symon, Alex McCallum and Charles W. J. Withers refer to a range of channels available to disseminate agricultural information and record a number of the more important agricultural books.[2] For English books, Nicholas Goddard discusses aspects of the circulation and readership of books in a survey of the period 1750 to 1850.[3] Other authors have suggested their influence. In an investigation of the agents of agricultural change in Scotland, Ian H. Adams suggests the impact which they had on the diffusion of agricultural innovations.[4] In England, their role has been briefly considered by J. D. Chambers and G. E. Mingay as well as Pamela Horn.[5]

[1] James Handley, *Scottish farming in the eighteenth century* (1953).

[2] J. A. Symon, 'Diffusion of agricultural knowledge', *Trans. Highland and Agricultural Society of Scotland* (hereafter *THASS*), fifth ser., 1 (1956), pp. 5–7; Alex McCallum, 'The diffusion of scientific knowledge to farmers – Scotland', *Scottish J. Agriculture* 17 (1934), pp. 372–80; C. W. J. Withers, 'William Cullen's agricultural lectures and writings and the development of agricultural science in eighteenth-century Scotland', *AgHR* 37 (1989), pp. 145–7.

[3] Nicholas Goddard, 'Agricultural literature and societies', in G. E. Mingay (ed.), *The agrarian history of England and Wales*, VI, *1750–1850* (1989), pp. 361–70.

[4] Ian Adams, 'The agents of agricultural change', in M. L. Parry and T. R. Slater (eds), *The making of the Scottish countryside* (1980), p. 174.

[5] J. D. Chambers and G. E. Mingay, *The agricultural revolution, 1750–1880* (1966), pp. 74–5; Pamela Horn, 'The contribution of the propagandist to eighteenth-century agricultural improvement', *Historical J.*, 25 (1982), pp. 313–29.

This paper focuses on aspects of the circulation of Scottish agricultural books in the eighteenth century until 1790. Viewing the books as an aspect of material culture, it considers a range of factors which affected their circulation: the progress of agricultural development, the rise of the Scottish book trades (and the demand for books), the methods that were available to publish books, their cost and reputation. It concludes with a survey of the purchasers and the readers of a small number of the agricultural books. For the purpose of this survey, the 'agricultural book' is defined in accordance with the bibliographical list of J. A. S. Watson and G. D. Amery who provide a handlist of Scottish agricultural literature to 1790. This is wider in its range than the bibliography of W. Frank Perkins which excludes a number of types of books such as those on beekeeping.[6]

I

Scottish agriculturalists and others interested in agriculture and rural affairs had access to, and could purchase, a wide range of agricultural books. (Agricultural information was also available in a wide range of general newspapers and journals, though these have not been included in this survey.[7]) These books varied in appearance, having a number of forms: the duodecimo (12mo), the octavo (8vo), the quarto (4to) and the folio (fo). The duodecimo was the format of seven books recorded by Watson and Amery.[8] Used for 'small and cheap books', these included some of the earliest books such as James Donaldson's *Husbandry anatomized* (1697), as well as others that were published at a much later date, such as James Bonner's *The bee-master's companion and assistant* (1789). The majority of the books (61 of the first editions noted by Watson and Amery), were published as octavos. These generally comprised a few hundred pages of text and sometimes a number of plates, encased in blue papers, boards or leather bindings. This format was well-suited to the production of scholarly books 'intended for general use and popular sale'.[9] The quarto, used for six first editions, was employed for 'relatively expensive works intended mainly for gentlemen's libraries' and to create an impact.[10] Although utilized for the *Overture for establishing a Society to improve the Kingdom* of 1698, it was rarely used before the late 1770s, when it was the format for two of James Anderson's books; Anderson's reputation could sell books in this format.[11] The folio was confined to one book, David Young's *The farmer's account book* (1790) which is not, however, noticed in Watson and Amery's list. Although such books were generally 'large, prestigious, and extremely expensive', his book was intended as an inexpensive publication.[12]

[6] J. A. S. Watson and G. D. Amery, 'Early Scottish agricultural writers', *THASS*, fifth ser., 43 (1931), pp. 60–85; W. Frank Perkins, *British and Irish writers on agriculture* (third edn, 1939), 'Introduction to the first edition'.

[7] For example *The Scots Magazine* frequently carried articles on agricultural subjects, as did the short-lived *Edinburgh Weekly Review* and newspapers such as the *Caledonian Mercury*.

[8] Richard B. Sher, 'Science and medicine in the Scottish Enlightenment: the lessons of book history', in Paul Wood (ed.), *The Scottish Enlightenment: essays in representation* (2000), p. 135.

[9] ibid., p. 138; *Caledonian Mercury*, 18 Jan. 1777.

[10] Sher, 'Science and medicine', p. 135.

[11] James Anderson, *Observations on the means of exciting a spirit of national industry; chiefly intended to promote the agriculture, etc, of Scotland* (1777); id., *An enquiry into the causes that have hitherto retarded the advancement of agriculture in Europe* (1779).

[12] Sher, 'Science and medicine', p. 134; *Caledonian Mercury*, 9 Aug. 1790.

During the eighteenth century, the publishing of agricultural books expanded at a great rate. Pamela Horn asserts that 'there is no doubting the rapid increase in the number of agricultural books that appeared during the second half of the eighteenth century'.[13] Writing of English agricultural books between the publication of Jethro Tull's *Horse-hoeing husbandry* in 1733 and the formation of the Board of Agriculture and Internal Improvement in 1793, Fussell observed that 'many more books on farming, horticulture, and farriery came off the press than ever before in a similar space'.[14] Large scale developments were also recorded in Scotland, although the publication of agricultural books was on a smaller scale. In 1697, James Donaldson observed that 'many large and learned treatises on husbandry' were available to the Scottish farmer.[15] Bibliographical evidence reveals that the books to which Donaldson refers to were written by English authors and were published in England: English books continued to be available to Scottish farmers throughout the eighteenth century.[16] Amery and Watson confirm that few books were published before 1697. They record only five authors who published their books in Edinburgh. These included a reprint of a popular English book, Thomas Tusser's *Five hundredth pointes of good husbandrie*, published in 1599, as well as books written by Scottish authors such as John Reid's *The Scots gard'ner* of 1683.[17] By 1795, James Donaldson refers to the 'abundance' of agricultural books that were available in Scotland.[18] Between 1697 and 1790 Watson and Amery list a total of 46 authors who published their books in Scotland. During this period, and into the early nineteenth century, they published a total of 77 books and pamphlets.[19]

In Scotland, this development had a distinct pattern. Amery and Watson record that few books were published until the 1730s and only three in the 1740s. In 1743, Robert Maxwell, the Secretary of the first national Scottish agricultural society, the Society of Improvers in the Knowledge of Agriculture in Scotland, could assert that 'there are few Scots books wrote upon husbandry'.[20] It was not until the second half of the 1750s that their numbers started to increase, a trend that is reflected in the number of English authors that were publishing their first book in England.[21] There was a further marked increase in their numbers in the 1760s and 1770s, though the number of new authors fell. During these two decades, agricultural writers of

[13] Horn, 'Contribution of the propagandist', p. 317.

[14] G. E. Fussell, *More old English farming books from Tull to the Board of Agriculture, 1731–1793* (1950), p. 1. See also id., *The old farming books from Fitzherbert to Tull, 1523 to 1730* (1947); id., *The old English farming books, 1793–1839* (1983).

[15] James Donaldson, *Husbandry anatomized, or an enquiry into the present manner of tilling and manuring the ground in Scotland* (1697), author's introduction.

[16] During the course of the eighteenth century, such books continued to be advertised in Scottish newspapers and were also sold by Scottish booksellers. For examples of advertisements for English agricultural books in Scottish newspapers, *Caledonian Mercury*, 26 Feb. 1776, 19 Aug. 1778, 14 Nov. 1778.

Examples of the buying of English books are noted. For example, John Paton wrote from Edinburgh to the Fife landowner Sir James Cheape of Rossie about a book order on 20 Oct. 1738. He asks 'as for gardening or husbandry, have you Miller's Gardener's dictionary or Tull's Husbandry. These are the latest, or Ellis' Practical farmer?'. Quoted in R. A. Houston, 'Literacy, education and the culture of print in Enlightenment Edinburgh', *History* 78 (1993), p. 381.

[17] Handley, *Scottish farming*, p. 117; Watson and Amery, 'Early Scottish agricultural writers', p. 79.

[18] James Donaldson, *Modern agriculture; or, the present state of husbandry in Great Britain* (1795), p. 325.

[19] Watson and Amery, *Scottish agricultural writers*, pp. 80–5.

[20] Robert Maxwell, *Select transactions of the Honourable The Society of Improvers in the Knowledge of Agriculture in Scotland* (1743), p. xvi.

[21] For comparative statistics see Horn, 'Contribution of the propagandist', p. 318.

enduring importance such as Adam Dickson, Henry Home (created Lord Kames in 1752) and James Anderson, started to publish their books. Additionally, an agricultural journal emerged, though this was only short-lived: *The Scots Farmer* of 1773 and 1774, which was reprinted and reissued as *The Northern farmer* in 1778.[22] At least one local agricultural society – the Society for the Encouragement of Agriculture within the counties of Dumfries and Galloway – also published its transactions; other regional, county or local societies may have also published books or pamphlets. The 1780s built on these earlier developments. Watson and Amery record that a further seven Scottish writers – Alexander Bald, Archibald Campbell of Fraser, James Small, David Young, Banffshire Farming Society, and two anonymous ones – started to write and publish agricultural books.[23] In the 1790s, there was a rapid increase in the number of new books that were published and authors who were publishing their books for the first time.

II

This expansion in the numbers of agricultural books is reflected in the growing number of genres of books. These evolved at distinct times of the eighteenth century, reflecting developments in agriculture and rural affairs. They highlight the increasing demand for different types of agricultural knowledge and for a widening availability of information. The first genre, which is noted from the earliest books onwards, were books that focused on a specific aspect of agricultural or rural affairs such as a particular crop, implement, or type of livestock. They include James Donaldson's *Husbandry anatomized* (1697) and Thomas Hope of Rankeillor's *A treatise concerning the manner of fallowing of ground, raising of grass seeds, and training of lint and hemp for the increase and improvement of the linen manufactories in Scotland* (1724). Aspects of husbandry are also recorded in a range of early edited collections of agricultural correspondence, notably those of Robert Maxwell, in the *Select transactions of the Honourable the Society of Improvers* (1743) and his *The practical husbandman* (1757) which was 'partly made up of papers chosen out of these transactions, revised and consequently improved'.[24] The second genre examines the scientific basis of agriculture. It was influenced by developments in the sciences, especially from the 1750s onwards. The most important book in this genre is Francis Home's *The principles of agriculture and vegetation* (1756), written for a competition held by the Edinburgh Society for the Improvement of Arts and Manufactures 'for the best dissertation on vegetation and the principles of agriculture'.[25] Such concerns are also recorded in the work of later agricultural writers such as Lord Kames in *The gentleman farmer* (1776) and James Anderson in *Essays relating to agriculture and rural affairs* (1775). Some of these books also belonged to a third genre: books which describe a complete agricultural system. These were not published until the earliest phases of agricultural improvement had been completed

[22] For a discussion of the English journals see G. E. Fussell, 'Early farming journals', *EcHR*, first ser., 3 (1931–2), pp. 417–22; Watson and Amery, 'Early Scottish agricultural writers', p. 83.

[23] Although most of the texts which Watson and Amery list were first published in Scotland, a number were first published in London. They list 11 texts which had first editions published in England, usually London.

[24] Robert Maxwell, *The practical husbandman: being a collection of miscellaneous papers on husbandry &c* (1757), 'To the reader'.

[25] Francis Home, *The principles of agriculture and vegetation* (1757), 'The design'.

and agriculturists could show the steps they had taken to undertake their improvements. They reflected the increased knowledge of agriculture by specific practitioners such as Sir John Dalrymple of Cowsland, Lord Kames and Adam Dickson. They also wrote their books with a view to filling a niche in the available agricultural literature. They acknowledged that few books were specifically written for the Scottish agriculturist. Anderson wrote his *Essays relating to agriculture and rural affairs* (1775) as he 'strongly felt the inconvenience here complained of, in the early part of his life, and would be glad if he could in any way contribute to prevent others from suffering in the same way'.[26] In addition, they wrote to provide Scottish agriculturists with books that would be useful to them.[27] Dickson points out that English books on husbandry 'were ill calculated to the soil and climate of Scotland'.[28] Their books, which often comprised more than one volume, provide comprehensive accounts of agricultural practices. Lord Kames' *The gentleman farmer* (1776) covers aspects such as the practice of agriculture (including implements, livestock and carriages, the preparation of land for cropping, plant cultivation for a range of plants, crop rotations, reaping, the feeding of livestock, the buying and selling of farm produce, manures, fences, and the size of a farm) and the theory of agriculture (preliminary observations, food of plants, the fertility of the soil, and means of fertilising soils).[29] In later years, David Young developed a system of agriculture in 27 essays.[30]

A fourth genre are books that comprise extensive extracts from others. This was not widely utilized until the 1760s when a sufficiently large body of books and other agricultural literature had become available for editors to draw upon and edit. The most important of these were collected essays and periodicals such as *Select essays on husbandry extracted from the* Museum Rusticum *and Foreign essays on agriculture* (1767) which were drawn from these two English periodicals, and *The Scots Farmer*.[31] The first of these collections included essays suited to Scottish conditions that would be of use to Scottish farmers. Scottish periodicals were established at a much later date than in England where Goddard suggests that they were pioneered at the end of the seventeenth century.[32] A fifth genre, which emerged in the 1770s, are books of farming tours in different regions of the country, or throughout it, published as agricultural surveys. These were largely undertaken or commissioned by national bodies that sought to improve Scottish agriculture. For Scotland, the first major survey was commissioned by the Board of Commissioners and Trustees for the Annexed Estates. Undertaken by Andrew Wight, it was published as *Present state of husbandry in Scotland extracted from reports made to the Commissioners of the Annexed Estates, and published by their authority* in four volumes between 1778

[26] James Anderson, *Essays relating to agriculture and rural affairs* (1775), p. ix.

[27] Late Sir John Dalrymple of Cowsland, *An essay on the husbandry of Scotland, with a proposal for the further improvement thereof* (1745); Adam Dickson, *The husbandry of the ancients* (2 vols, 1788), I, p. xi; Lord Kames, *The gentleman farmer* (fourth edn, 1798), p. xx.

[28] Adam Dickson, *Husbandry of the ancients* (2 vols, 1788), I, p. xi.

[29] Lord Kames, *The gentleman farmer* (1796 edn), contents page.

[30] David Young, *National improvements upon agriculture, in twenty-seven essays* (1785), contents page.

[31] Goddard notes that as the 'body of agricultural knowledge increased a number of attempts were made to compile volumes that brought the best advice together under one cover'. For him, this led to the development of the farming dictionary and encyclopaedia (Goddard, 'Agricultural literature and societies', p. 362); Watson and Amery, 'Early Scottish agricultural writers', p. 83.

[32] Goddard, 'Agricultural literature and societies', p. 366.

and 1784. Further ones for each county were commissioned as part of the Board of Agriculture's wider British survey, and were published from 1793 onwards, and again in the first two decades of the nineteenth century. Wight points out that these surveys could not be conducted before the latter part of the eighteenth century:

> Fifty years ago a survey of this kind would have been of no avail; because our practice, cramped by custom, was the same everywhere; and there was nothing to be learned. Fifty years hence, the knowledge and practice of husbandry will probably be spread everywhere and nothing will remain to be learned.[33]

Although some individuals undertook extensive surveys in England, no one similar emerged in Scotland. However, individuals recorded tours within books which had a wider focus. For example, David Young included the observations of two tours, one from Glasgow to Ayr in January 1787 and the other from Edinburgh to Ruthven of Badenoch via Fort William and Fort Augustus in October 1787 in his *Agriculture, the primary interest of Great Britain* (1788) so that he could show how the theories which he discussed in *National improvements on agriculture in twenty-seven essays* (1785) could be applied.

A sixth genre, emerging in the 1770s and the 1780s, encouraged the development of agriculture in the Scottish, British and European economies. Such books could only be written when agricultural development was being undertaken on a wide scale and with great progress, and its importance to the national economy was being acknowledged and recognised. The most notable books in this genre were those of James Anderson: his *Observations on the means of exciting a spirit of national industry; chiefly intended to promote the agriculture etc of Scotland* (1777) and *An enquiry into the causes that have hitherto retarded the advancement of agriculture in Europe* (1779). A seventh genre is the contemporary comment on the current state of agriculture and rural affairs which sometimes offered advice to the agricultural community. Such books were published from the 1770s onwards. They were short publications such as the anonymously published *A letter to the west country farmers, concerning the difficulties and management of a bad harvest* (1773) and James Anderson's *An enquiry into the nature of the corn laws* (1777). An eighth genre is the reference book, usually presented in tabular form, which provides farmers and others with a guide to prices, so they could undertake their daily, weekly, monthly and yearly activities in purchasing and selling their commodities. These appear to have been published from the 1770s onwards. They include John Thomson's *Tables, shewing, both in Scots and in sterling money the price of any quantity of grain &c from one lippy or one fourth part of a peck, to a thousand bolls* (1771)[34] and Alexander Bald's *The farmer and corndealer's assistant* (1780). Finally, accounting books were available to farmers from the second half of the 1770s, though estate managers had already been able to obtain these for a number of years. The first appears to have been John Rose's *The transactions of the British farmer accomptant, adapted to the four seasons of the year* (1776)[35] followed by David Young's *The farmer's account book of expenditure*

[33] Andrew Wight, *Present state of husbandry in Scotland, extracted from reports made to the Commissioners of the Annexed Estates, and published by their authority* (4 vols, 1788–84), I, pp. ix–x.

[34] This text is not noted by Watson and Amery. See *Caledonian Mercury*, 6 Mar. 1771.

[35] Reviewed in *The Monthly Review* 55 (1776), p. 74. This book is not noted in Watson and Amery.

and produce for each day, month, and year (1790).[36] Although Scottish agricultural books fall into a larger range of genres than those listed by Goddard (reflecting the wider definition of 'agricultural books' employed by Watson and Amery), they do not include the category of dictionaries or encyclopaedias which attempted 'to bring the whole body of farming knowledge under one cover', and which had been available in England from at least 1669.[37] However, a number of these were published in later years.

III

The circulation of agricultural books in their different genres was shaped by the market for them. This can be viewed from two perspectives. The first is changes in agriculture and rural economy which in turn shaped the demand for agricultural knowledge and the different genres of books. The second is the development of the Scottish book trades which allowed and facilitated the publication and circulation of the agricultural books, as well as books in general. In essence, this provided the vehicle through which agricultural information could be conveyed and thereafter circulated. Each will be discussed in turn.

Throughout the eighteenth century, agricultural and rural development played important roles in the demand and circulation of agricultural books. The major developments and innovations that took place during this period of change are already well known, though these have not been viewed in relation to the circulation of agricultural books.[38] The timing of these developments is especially important for the evolution of these books. Agricultural change did not take place at the same rate over the century. Indeed, there has been 'a good deal of scholarly controversy about the timing, scale and effect of agrarian change in eighteenth-century Lowland Scotland. Some see the process as essentially evolutionary in nature with acceleration in the later decades, while others view the movement towards an improved agriculture as more cataclysmic and dramatic'.[39] Nevertheless, there has been some agreement that the pace of change was slow during the first half of the eighteenth century. Ian H. Adams suggests that 'the agricultural depression of the 1690s, followed by years of glut at the beginning of the eighteenth century, did little to nurture economic conditions favouring the long-term reorganisation of agriculture'.[40] If these factors did not foster agrarian change, then two events in the 1720s, the foundation of the Society of Improvers in the Knowledge of Agriculture in Scotland in 1723 and the establishment of the Board of Manufacturers in 1727, were important for stimulating

[36] David Young, *The farmer's account book of expenditure and produce for each day, month and year, stating the profit and loss per year upon each article in the farm, containing a register of the whole work and transactions done upon the farm each day* (1790); Michael J. Mepham, *Accounting in eighteenth-century Scotland* (1988), p. 502.

[37] Goddard, 'Agricultural literature and societies', p. 362; G. E. Fussell, 'Eighteenth-century agricultural dictionaries', *Bull. Institute of Historical Research* 7 (1929–30), p. 144.

[38] For example, Adams, 'Agents', pp. 155–75; T. M. Devine, *The transformation of rural Scotland: social change and the agrarian economy* (1994); G. Whittington, 'Was there a Scottish agricultural revolution?', *Area* 7 (1975), pp. 204–06; id., 'Agriculture and science in Lowland Scotland, 1750–1870', in G. Whittington and I. D. Whyte (eds), *An historical geography of Scotland* (1983), pp. 141–64; R. H. Campbell, 'The Scottish improvers and the course of agrarian change in the eighteenth century', in L. M. Cullen and T. C. Smout (eds), *Comparative aspects of Scottish and Irish economic and social history, 1600–1900* (1977), pp. 204–15.

[39] Devine, *Transformation*, p. 41.

[40] Adams, 'Agents', p. 155.

agricultural development. In Adam's words, they 'gave sufficient impetus to encourage several landowners to embark on the improvement of their estates'.[41] Such bodies also published agricultural books and there was a 'revival of interest in agrarian development' in the 1730s. However, the 1740s was a period of economic difficulty with 'underlying political uncertainties' and the large majority of landowners showed a 'low plateau of development'.[42] Such circumstances ensured that the publication of agricultural books was kept at a low level. Nevertheless, T. M. Devine suggests that this decade was an important one, with much agricultural activity starting to take place, especially within the four counties he surveys.[43] Adams considers the Rebellion of 1745 as a key event in influencing agricultural change. After it, he believes that 'Scottish landowners went about improving their estates with a verve that reached fever pitch'.[44] Devine suggests that there was a 'modest increase' in the rate at which improvement was undertaken, with some parishes in the counties which he surveys beginning that process during the 1750s.[45] For Adams, 'the great changes' took place in the period 1748 to 1770, a period that was also a significant one for the expansion of agricultural books.[46] Within these decades, Devine regards the 1760s as a 'key decade' for initiating changes in a significant number of the parishes in his survey: the 'economic euphoria' of that decade led to 'the launching of so many schemes' with 'no less than 47 per cent of reporting parishes tracing the origins of improvement to these years and, in particular, the period after the end of the Seven Years War in 1763'.[47] As has been shown, a number of significant developments took place in agricultural book publishing during this decade. However, by the 1770s and 1780s, there was 'a good deal of evidence' that 'improvement was running into difficulties and that only in the later 1790s and the first few years of the nineteenth century did better times return'.[48] But this agricultural and rural development was also influenced by wider social and economic changes such as a growing population and urban and industrial expansion which have 'been acknowledged as among the fastest in western Europe'. That expansion stimulated the demand for raw materials for textiles, agricultural produce, and horsepower, and affected the trend in grain prices and settlement patterns.[49] By the 1790s, parish ministers 'were fully aware that they had witnessed revolutionary advances in their own lifetimes'.[50] At the end of the century, the transformation of the rural economy 'was really set in motion', though it was by no means complete.[51] The character and nature of their changes were summed up in an advertisement to the 1815 edition of Lord Kames's *The gentleman farmer*:

> Since the first publication of this work in 1776, the progress of Agriculture has been very great in almost every part of Britain, and particularly in Scotland. The improvements, so judiciously recommended by the practice and writings of Lord Kames, which were then in their infancy, have long since been firmly established and widely diffused. New varieties of the different crops, and of the several species of live-stock, have been introduced; a more correct

[41] ibid., p. 155; Withers, 'William Cullen's agricultural lectures', p. 145.
[42] Adams, 'Agents', pp. 155, 173.
[43] Devine, *Transformation*, p. 43.
[44] Adams, 'Agents', p. 155.
[45] Devine, *Transformation*, p. 43.
[46] Adams, 'Agents', p. 157.
[47] Devine, *Transformation*, pp. 43, 74.
[48] ibid., p. 74.
[49] ibid., p. 35.
[50] ibid., p. 44.
[51] ibid., p. 165.

system of management generally prevails; and some valuable additions have been made to agricultural machinery.[52]

IV

The circulation of agricultural books was also shaped by the market for books. In 1700 the Scottish book trade was small, with around half a dozen printing establishments in Edinburgh, and some booksellers in the major burghs and a few more minor ones. It employed less that 90 people.[53] The Scottish Enlightenment, which was focused in Edinburgh, gave an impetus towards learning and the obtaining of knowledge.[54] Indeed, Nicholas Phillipson suggests that 'by the 1760s Scotland had become a centre of learning and letters of international importance'.[55] This international renown gave the impetus for a greater number of books to be published there. By 1774, the printing and reprinting of books in Edinburgh gave employment to hundreds of paper mill workers, printers and binders. Hugh Arnot has estimated that in 1740, there were four printing houses, but by 1778 this had grown to 27, though this figure may have included enterprises outside the burgh.[56] So impressive was the development of the book trades in Edinburgh that it was to become one of the four leading centres of book production and distribution in the English-speaking world by the end of the eighteenth century.[57] Indeed, the majority of the agricultural books were printed, published and distributed by figures in this centre, and booksellers are noted on the imprints of 48 first editions of agricultural books.

From the 1740s onwards, a number of important developments took place in the book trades which had an important impact on the circulation of agricultural books. Printers and booksellers (and bookselling partnerships) emerged that were to have enduring importance into the early nineteenth century and beyond. Some of the most notable ones were involved in the production and circulation of agricultural books. These included Gavin Hamilton, bookseller, printer, paper maker and auctioneer from 1737 to 1764, Alexander Kincaid, bookseller, printer and stationer from 1739 to 1777, Alexander Donaldson, bookseller, publisher, printer and auctioneer from 1748 to 1794 and William Auld who had a printing business in Edinburgh between 1761 and 1776. There was also a steady growth in the book trades outside Edinburgh. This expansion allowed books, including agricultural ones, to be printed and distributed from a larger number and a wider geographical distribution of print centres; these developments were also recorded in England especially after the late 1760s.[58] However, these centres played a

[52] Henry Home, *The gentleman farmer* (sixth edn, 1815), 'Advertisment to the present edition'.

[53] Alastair Mann, *The Scottish book trade, 1500–1720: print, commerce and print control in early modern Scotland. An historiographical survey of the early modern book in Scotland* (2000), pp. 219–23, estimates 29 printing workers, 54 booksellers, stationers and bookbinders.

[54] Nicholas Phillipson, 'Culture and society in the eighteenth century province: the case of Edinburgh and the Scottish Enlightenment', in Lawrence Stone (ed.), *The university in society* (2 vols, 1975), II, pp. 407–8.

[55] Nicholas Phillipson, 'The Scottish Enlightenment', in Roy Porter and Mikulás Teich (eds), *The Enlightenment in national context* (1981).

[56] Hugo Arnot, *A history of Edinburgh: from the earliest accounts to the present time* (1788), p. 383.

[57] Richard B. Sher, 'Corporatism and consensus in the late eighteenth-century book trade: the Edinburgh Booksellers' Society in comparative perspective', *Book Hist.*, 1 (1988), p. 33.

[58] C. J. Mitchell, 'Provincial printing in eighteenth-century Britain', *Publishing Hist.*, 21 (1987), pp. 18–19.

relatively small role in the production of agricultural books. Four were printed and published in Aberdeen between 1757 and 1766, followed by a further one in 1788.[59] In Glasgow, these activities were spread over a longer period, with the first one being recorded in 1756, followed by others in 1757 (a joint publication with a number of Edinburgh booksellers), 1768, 1771, 1784 and 1791. Other centres emerged from the 1770s onwards, with Paisley being noted in 1773, Dumfries in 1776 and Berwick in 1789.

V

The extent to which agricultural books were circulated is revealed through aspects of their production. The nature of the book trade and the range of methods that were available to publish the books shaped the ease with which authors could publish their writing and the ways in which it was circulated. Publishing was expensive and not always remunerative for either author and bookseller. As Alexander Murdoch and Richard B. Sher note, the eighteenth-century Scottish booktrade 'was fraught with risk and uncertainty'.[60] The publication of a book required heavy financial outlays which were not always recovered. Indeed, after publishing three agricultural books, David Young could comment that he had 'incurred very heavy expenses; and it will be easily be conceived, that the sale of publications of this nature cannot be a lucrative business'.[61] The financial difficulties of James Small around 1788 were attributed to the cost of publishing his book, *A treatise on ploughs and wheel carriages*.[62]

Such difficulties shaped the options that were available for authors to publish their work. Throughout the eighteenth century, agricultural (and other books) were published in two ways. It was general for an author to use one or other of these, though a small number used both. First, a book could be printed for booksellers who distributed it. In this method, the printer and bookseller (which could be the same business) had control over the printing and publishing process and the distribution of the book.[63] The majority of agricultural books were published in this way. They included the most significant ones written by the most prominent authors, who were also members of the professions such as Francis Home, Lord Kames and James Anderson. By the time they published their agricultural books, they had established reputations in their own fields; others were members of the nobility and prominent landowners, some of whom also had a reputation as agricultural improvers which could be relied upon to sell their books. Second, authors could publish by subscription. Subscription was an:

> Agreement between an author or a bookseller on the one hand and a number of individuals

[59] See for example, Iain Beavan, 'The book trade in Aberdeen and area, 1700–1830', in David A. Stoker (ed.), *Studies in the provincial book trade of England, Scotland, and Wales before 1900* (1990), p. 58.

[60] Alexander Murdoch and Richard B. Sher, 'Literary and learned culture', in T. M. Devine and Rosalind Mitchison (eds), *People and Society in Scotland, 1760–1830* (1988–90), I, p. 135.

[61] David Young, *Address to the landed gentlemen and farmers of Great Britain to the town councils of the Royal boroughs in North Britain and to societies for promoting agriculture to which are added hints for lowering the price of provisions, and a memorial lately presented to the Convention of Royal Boroughs* (1791), p. 7.

[62] Michael J. H. Robson, *An ingenious mechanic of Scotland. James Small (c. 1740–1793) of Berwickshire and Midlothian* (1989), p. 16.

[63] A. T. Hazen, 'On the meaning of the imprint', *The Library*, fifth ser. 6 (1951), p. 120.

on the other; the author or the bookseller agrees to produce a book of specified content, size, and quality, whose publication is financed by the individuals, or subscribers, each of whom receives in return a copy or copies of the book.[64]

Eight authors who published eleven agricultural books between the 1750s and 1790 published their books in this way.[65] They were either agricultural societies and individuals who were members of the agricultural community, or had agricultural experience within it, sometimes for a considerable period of time. However, they were not always the most prominent authors or agricultural improvers. In essence, this method enabled them to have a means to publish their writing. They did not always use it for publishing all their books or their editions. Two authors, Adam Dickson and David Young, published a number of their books in this way. The first editions of Dickson's *A treatise on agriculture* and *The husbandry of the ancients* appeared by subscription. The later editions of *A treatise* were printed by booksellers. This can be attributed to the success which this book had and to the need to reprint it less than two years after it was first published. David Young used it for all four of his agricultural books, though not his non-agricultural ones. Each of the editions of Charles Varlo's *The modern farmer's guide* were also published in this way.

Subscription was also a popular method of publishing books in provincial areas of England. Wallis suggests that during the eighteenth century a total of 2073 books were published in this way, with some 1397 being issued before 1781. Between 1781 and 1791 there was a significant rise in their numbers, with 224 books being published between 1771 and 1781, and 319 in the 1780s.[66] Publication by subscription could help to alleviate some of the financial problems encountered in publishing. Subscriptions were collected before a book was published: in some cases, half of its cost was required to be paid at the time when a subscription was made and the remainder was due on publication. This let the author and bookseller know the amount of finance that was available to them and provided them with a source of income to print and publish the book before it was made available for sale. It also allowed them to ascertain the demand for a book and thus the size of the print run – some were only 'put to the press … as soon as a sufficient number of subscriptions are procured'.[67] However, as the evidence of Young shows, this process could still pose difficulties for their authors.

The extent of the circulation of agricultural books is also seen in the size of their print runs. Some books had a large demand. William Auld, the publisher of *The Scots Farmer*, comments that: 'So great has been the demand for this work, that the Publisher is obliged to print a second

[64] P. J. Wallis suggests that in Britain between 1701 and 1801, a total of 2073 books were published by this method. Between 1721 and 1781 an average of 211 books were published in each decade, a figure that increased to 319 books between 1781 and 1791. (P. J. Wallis, 'Book subscription lists', *The Library*, fifth ser., 29 (1974), p. 273); Sarah L. C. Clapp, 'The beginnings of subscription publication in the seventeenth century', *Modern Philology*, 29 (1931–2), p. 204.

[65] Watson and Amery also include the London published book [Anon], *The laird and farmer. A dialogue upon farming, trade, cookery, and their method of living in Scotland, balanc'd with that of England* (1750) in their list. This was published by subscription and was 'printed for the author, and sold by R. Griffiths' in 1750. These authors were Robert Maxwell, Adam Dickson, Society for the Encouragement of Agriculture within the Counties of Dumfries and Wigtown, Charles Varlo, Alexander Bald, James Small, David Young and James Bonner.

[66] Wallis, 'Book subscription lists', p. 273.

[67] Young, *Address*, p. 7; *Caledonian Mercury*, 13 Dec. 1760, 25 Jan. 1768.

edition of the first volume'.[68] However, evidence for the size of editions, including first editions, reprints and reissues, is fragmentary and only exists for a few editions; such a pattern is also noted for the English agricultural books.[69] Warren McDougall suggests that Francis Home's *The principles of agriculture and vegetation* had a first edition of 500 copies.[70] The discussions between Lord Kames and his publishers for the first edition of *The gentleman farmer* reveal that it was to have an impression of 1,000 copies.[71] These sizes of editions were common to other books. Some evidence also exists for journals. In 1793 James Anderson asserts that he could 'insure the sakes at 2000' copies for each issue of *The Bee* which included a large number of articles on agriculture and rural affairs. He believes that the 'lowest number that could allow the publication to go on' was not under 1,000 copies of each issue.[72] A number of books published by subscription include a list of their subscribers. Although this generally records the number of copies subscribed before a book was published, rather than the total number that were sold, for some books this was the actual total number. An advertisement for *The modern farmer's guide* of 1768 indicates that 'such booksellers as subscribe shall have the usual allowance; but no more will be printed than is subscribed for'; this policy is also noted in the proposals for Adam Dickson's *The husbandry of the ancients*.[73] Some of the books published by subscription had extensive lists of subscribers. David Young's *National improvements* records 308 individuals and organisations that subscribed 497 copies. The list in his *Agriculture*, which also recorded the names of subscribers to his *National improvements*, had 576 subscribers who subscribed 956 copies. His third book, *The farmers account-book*, had 196 subscribers who subscribed 310 copies. The list for Charles Varlo's *Modern farmer's guide* had 121 subscribers who subscribed 138 copies. These figures are comparable to other books published in this way. An analysis of 686 eighteenth-century books by Wallis, shows an average of 248 subscribers.[74] Although circulation figures are useful in suggesting the number of copies that were printed, and the extent of their availability, it should be considered that books could be distributed among a number of readers, and a copy could be read by a number of people. These included family groups, friends and neighbours as well as work colleagues. Further, a range of libraries which included agricultural libraries or those of agricultural societies also allowed copies of books to be circulated.

As in England, a number of agricultural books were reprinted and reissued, suggesting that there was a continuing demand for the most important ones and a demand for up-to-date information. Some of the earliest books, such as those of John Hamilton and Lord Belhaven, were reprinted two or three times during the 1710s and 1720s; Belhaven's *The countrey-mans*

[68] *Caledonian Mercury*, 14 Dec. 1774.

[69] For example, Goddard, 'Agricultural literature and societies', p. 362.

[70] Warren McDougall, 'A catalogue of Hamilton, Balfour and Neill publications, 1750–62', in Robin Myers and Michael Harris (eds), *Spreading the word: the distribution networks of print, 1550–1850* (1997), pp. 216–17.

[71] Sher, 'Science and medicine', p. 138.

[72] Aberdeen University Archives, MS 2787/4/4/10, dated 16 Aug. 1793.

[73] *Caledonian Mercury*, 25 Jan. 1768; the *Proposals for printing by subscription, an inquiry into the husbandry of the ancients by Adam Dickson late Minister of Dunse*, notes that the text 'will be put to the press as soon as there are a proper number of subscriptions, and there will be printed no more copies than are sufficient to answer these' (copy in National Library of Scotland, R. 234.6(1–30)).

[74] Wallis, 'Book subscription lists', p. 260.

rudiments also had a third edition in 1761.[75] However, it was not until the 1750s that reprinting became more frequent. Between the 1750s and 1770s the most important books were reprinted at frequent intervals and in some instances, over a number of decades. Francis Home's *The principles of agriculture and vegetation* had its second, third and fourth editions in 1759, 1762 and 1776, respectively; another issue was also made in 1757. Adam Dickson's *A treatise on agriculture* of 1762, had its second edition in 1765 and its third one in 1766. The second and third editions of Lord Kames' *The gentleman farmer* were published in 1779 and 1788 respectively; its sixth edition was issued in 1815. Alexander Bald's *The farmer and corndealer's assistant* of 1780 was reprinted in 1807.[76] This reprinting ensured that the most important books were available for a number of years and in some cases for several decades.

A number of books were also revised and updated at frequent intervals to reflect changing developments in agricultural theories and practices. These revisions were made to the general agricultural books such as those of Adam Dickson and Lord Kames, especially during the 1770s and 1780s. The title pages of the second and third editions of Dickson's *A treatise of agriculture* were published with 'large additions and amendments'. The fourth and fifth editions of Lord Kames' *The gentleman farmer* of 1798 and 1802 had the 'author's last corrections and additions'. Although they are not documented in the sixth edition, that edition included a supplementary 'account of the present state of agriculture, and of the improvements recently introduced', intended to bring it up to date. The title page of the second edition of James Anderson's *Essays relating to agriculture and rural affairs* (1777) asserts that it was published 'with large additions'. No such changes are noted for the third edition of 1784, though the fifth edition of 1800 was published 'with corrections and additions'. Authors also added a second or third volume to one of their books. This was primarily undertaken for the agricultural books of Adam Dickson and James Anderson. However, the publication of a second volume was not always undertaken within a short time of the first one. For James Anderson, there was only a gap of two years between the first and second volume of his *Essays relating to agriculture and rural affairs*, though the third volume followed some nineteen years after the second. Authors also undertook further work on their books after they were published, and issued supplements to them. Alexander Bald's *The farmer and corndealer's assistant* was published on 24 July 1780. Between then and 4 November, he compiled additional tables 'representing the conformity of the wheat measure of the several counties of Scotland have with each other, and the same with the barley measure'. Although they were not inserted in copies sold between these dates, the publishers made them available to these purchasers who 'may be supplied with them gratis, by applying to the above booksellers, or to the Author'.[77]

The distribution patterns of the books played an important role in their circulation. Their distribution was primarily undertaken by booksellers. Some, such as Archibald Constable of Edinburgh, stocked the most up-to-date books as well as older and second-hand copies, allowing them to be available for purchase for many years. In 1808 his sale catalogue included a

[75] *The Scots Magazine* (1761), p. 487.

[76] Bald had a further edition in 1807. See *Catalogue of books, ancient and modern, including the valuable library of the late William Fullarton, esq, of Carstairs, on sale at the shop of Constable, Hunter, Park and Hunter, 10 Ludgate Street, London, May 1 1809* (1809), item 2384.

[77] *Caledonian Mercury*, 4 Nov. 1780.

broad range of Scottish agricultural books and the most important English ones published in the 1720s, 1760s and from the 1770s onwards.[78] However, a small number of books were distributed by a number of other businesses. The imprint of David Young's *The farmer's account book* (1790) notes that it could be purchased from Messrs Alston and Austin, seedsmen in Glasgow, and Mr Adams, seedsman in Aberdeen. His pamphlet, *Address to the landed gentlemen and farmers of Great Britain* (1791) also includes the name of a seedsman in Glasgow as a distributor. James Bonner's *The beemaster's companion and assistant* (1789) was also sold by a seedsman.[79]

The main centre of book distribution (as also publication) for Scottish agricultural books (and books in general) was Edinburgh. The imprints of 26 first editions of these books record the names of booksellers located in this centre alone. Some had extensive partnerships with other booksellers in this hub, though not all of their distribution networks were stated on the imprints of the books which they distributed. The *Essay on the husbandry in Scotland* (1735) was 'sold at Mrs Dunning's shop and by other booksellers in town'. Some books had an extensive distribution in Edinburgh and with other booksellers in the principal burghs throughout Scotland. Some of the earliest books were distributed over a wide geographical area. Hugh Graeme's *A letter to a gentleman in Edinburgh, concerning Mr Graeme of Argomery's improvements of moss, and the benefits of these improvements to the nation*, published in Edinburgh in 1754, was sold by a number of booksellers in Edinburgh and others in Perth, Glasgow and Stirling. Robert Maxwell's *The practical husbandman* (1757) was sold in Edinburgh, Glasgow, Aberdeen, Dundee and Dumfries. *Thoughts respecting the proposed new corn bill* (1777) was sold by booksellers in Edinburgh, Glasgow, Paisley, Ayr, Greenock, Perth, Dundee, Montrose and Aberdeen. Some of the smaller books, and especially pamphlets, had very wide distribution networks. For Sir Archibald Grant's *A dissertation on the chief obstacles to the improvement of land and introducing better methods of agriculture throughout Scotland* (1760) this was Aberdeen, London and 'all the booksellers in Scotland'.

There is evidence that the bookselling networks extended in a range of ways during the second half of the eighteenth century. With the increase in the number of provincial printing centres, booksellers were able to establish a wider range of distribution networks. These did not always include booksellers in Edinburgh. Bonner's *The bee-master's companion and assistant* was printed in Berwick in 1789 and was sold by the author, Mr Nesbitt, and Mr Nealson of Haddington. Other networks were more extensive. *A dissertation on the chief obstacles to the improvement of land*, published in Aberdeen in 1760, was sold at the shop of Francis Douglas and 'by all the booksellers in Scotland'. After the middle decades of the eighteenth century, Edinburgh booksellers also sold their books to other booksellers in England. As Warren McDougall observes for the 1760s: 'certain kinds of books were becoming not so much Edinburgh published or London published as British published'.[80] This trend is especially noted for agricultural books which placed agriculture in a scientific framework. Francis Home's

[78] In Edinburgh, Archibald Constable had sale catalogues which included agricultural books. These survive for 1799, 1801 and 1814 (e.g. *Catalogue of books, consisting of nearly thirty thousand volumes, and including the valuable classical library of the late Professor Hensler of Kiel, in Holstein, on sale at the shop of Archibald Constable and Co. Edinburgh, January 1 1808* (n. d.); *Catalogue of books printed for Archibald Constable & Co* (1814)).

[79] *Caledonian Mercury*, 18 May 1789.

[80] Warren McDougall, 'Gavin Hamilton, bookseller in Edinburgh', *British J. eighteenth-century studies* 1 (1978), p. 1.

The principles of agriculture and vegetation had its third and fourth editions published in London in 1762 and 1776 respectively. George Forsyth's *Elements of agriculture*, published in Edinburgh in 1765, had its second, third, fourth and fifth editions published in London between 1771 and 1796. The later editions of James Anderson's *Essays relating to agriculture and rural affairs*, and his *A practical treatise on peat moss* (1794) were also published in that centre. Edinburgh booksellers also established branches in London.[81] David Young's *Agriculture* was sold by Charles Elliot in Edinburgh and Thomas Kay, his London partner. A number of books were also jointly published by Edinburgh and London publishers. Such enterprises emphasized the strong business relationships between these two bookselling centres. They were especially important for some of the most prominent writers such as James Anderson whose *Essays relating to agriculture and rural affairs* was printed for Thomas Cadell in London and William Creech in Edinburgh. Lord Kames' *The gentleman farmer* was also printed for these two booksellers. Anderson was the only Scottish agricultural writer whose books, including all of his first editions, were extensively published in this way.

VI

The demand for agricultural books, which in turn affected their circulation, was influenced by a number of factors. These include the ability to read, the cost of the books and their reputation. The ability to read had an important impact on their circulation. Throughout Scotland there were social, occupational and geographical differences in the participation of this activity.[82] In the agricultural community, it was most widely undertaken among the higher classes, especially the landowning ones, the leaders in agricultural improvement who were crucial in stimulating and implementing the first stages of agricultural change. It was more patchy among the tenant farmers who had varying degrees of wealth and education. In 1765, Adam Dickson observed that the tenants of large farms were 'men of greater wealth and more liberal education' than those of smaller ones.[83] Devine suggests that levels of education and literacy among the tenant farming elite in Lowland Scotland played an important role in the progress of agrarian change. As he suggests, 'an educated peasantry more readily turns its back on immemorial tradition because it finds on the printed page an alternative form of authority, and much of the new farming technology was disseminated in books and articles'. Although there were variations in the levels of reading throughout this class, Devine believes that 'some tenants received a fuller education than most of the rural population'.[84]

The price of the agricultural books generally reflected book formats – duodecimos, octavos, quartos and folios – with the first usually having the lowest price and the latter one the highest; the number of pages, plates and types of bindings also had an impact on this pattern. From the mid-eighteenth century onwards, duodecimos ranged in price from 1*s.* 8*d.* in boards for

[81] id., 'Charles Elliot's medical publications and the international book trade', in Charles W. J. Withers and Paul Wood (eds), *Science and medicine in the Scottish Enlightenment* (2002), p. 216.

[82] See R. A. Houston, 'Scottish education and literacy, 1600–1800: an international perspective' in T. M. Devine (ed.), *Improvement and enlightenment: Proceedings of the Scottish Historical Studies Seminar, University of Strathclyde, 1987–88* (1989), pp. 43–61.

[83] Adam Dickson, *A treatise on agriculture* (sec. edn, 1765), p. xxx.

[84] Devine, *Transformation*, p. 68.

A treatise on the manner of raising forest trees (1761), to 3*s.* for a sewed copy of *The beemaster's companion and assistant* (1789).[85] Octavos varied from 3*s.* for a copy of *The principles of agriculture and vegetation* (1756), to 6*s.* for a bound copy of the second edition of *A treatise on agriculture* (1765), or 7*s.* for the second volume of that book in 1769.[86] A bound copy of the third edition of *The gentleman farmer* could be purchased for 7*s.*[87] Books that had more than one volume were more expensive. The first volume of *The Scots Farmer* cost 7*s.* 6*d.* in boards and the two volumes, some 15*s.*[88] There was a great variation in the price of quartos. Some of them such as *An essay on the question, what proportion of the produce of arable land ought to be paid as rent to the landlord?* (1776) which comprised a small number of pages were inexpensive, costing 1*s.* 6*d.*, though others such as James Anderson's *An inquiry into the causes that have hitherto retarded the advancement of agriculture in Europe* was 13*s.*[89] The only folio, a book published by subscription, cost 6*s.* to non-subscribers.[90] While printing and publishing costs for the mid-eighteenth century were stable, they increased during the second half of the century, especially in the 1790s.[91] Although the price of agricultural books varied considerably, the most important ones, such as those written by Lord Kames, Adam Dickson and Francis Home, cost between 3*s.* and 6*s.* per volume.

The price could be varied further by altering the materials from which they were made and the processes used to publish them. Particular books were made more prestigious and expensive or inexpensive and cost effective. The practice of issuing a number of copies of an edition on different qualities of paper 'was not uncommon'.[92] *The Bee* was printed on two qualities of paper, ordinary and fine, which each had a different subscription rate.[93] A few copies of *Select essays on husbandry* (1767), which were usually sold for 5*s.*, were printed on fine paper, and sold at 6*s.* for a 'neatly bound and lettered' volume.[94] Books were also advertised for sale with different bindings, some of which were more expensive than others. James Anderson's *Essays relating to agriculture and rural affairs* (1777) cost 11*s.* in boards or 13*s.* bound in calf and lettered.[95] *A proposal for the uniformity of the weights and measures in Scotland* (1779) was 3*s.* in boards and 3*s.* 6*d.* when it was 'plain bound'.[96] The price of books also varied according to processes used to publish them. This was especially noted for books published by subscription. They cost less for subscribers who subscribed or showed their support for a book before it was published, than for non-subscribers who purchased it after that time. The advertisements for David Young's books indicate a price difference of one shilling.[97]

A number of authors complained that agricultural books were expensive to purchase. William

[85] McDougall, 'Catalogue', p. 227; *Caledonian Mercury*, 18 May 1789.

[86] *The Scots Magazine* (1765), p. 320; (1769), p. 155; *Caledonian Mercury*, 25 Dec. 1756.

[87] ibid., 15 Jan. 1789.

[88] ibid., 25 June 1774, 8 July 1775.

[89] ibid., 13 July 1776, 17 July 1779.

[90] ibid., 9 Aug. 1790.

[91] James Anderson (ed.), *Recreations in agriculture, natural-history, arts, and miscellaneous literature* (6 vols, 1799–1802), II, pp. 240, 320.

[92] Philip Gaskell, *A bibliography of The Foulis Press* (1964), p. 18.

[93] *Prospectus of a new work to be entitled The Bee, or literary weekly intelligencer, consisting of original pieces, and selections from performances of merit, foreign and domestic. A work calculated to disseminate useful knowledge among all ranks of people at a small expence* (1790).

[94] *Caledonian Mercury*, 14 Feb. 1767.

[95] ibid., 8 Feb. 1777.

[96] ibid., 23 June 1779.

[97] ibid., 19 Oct. 1785, 24 July 1788, 9 Aug. 1790.

Lorrimer considered that Tull's *Horse-hoeing husbandry* (1733) was 'too expensive. A rational husbandry may be carried on for less'.[98] Criticisms such as these continued to be made even until the end of the eighteenth century and the first decade of the nineteenth century when James Donaldson condemned the 'extraordinary price' of the publications of the Board of Agriculture and Internal Improvement.[99] The price of books was considered to be prohibitive for a number of groups in the agricultural community. In 1697 Lord Belhaven observed that 'these books are either so dear and ill to be had, that they cannot be easily got by ordinar farmers'.[100] The editors of *The Scots Farmer* noted that 'few' books 'can fall into the hands of common farmers: They either cannot afford money to purchase, or have not leisure or inclination to read them'.[101] James Anderson held that farmers did not have 'money to spend in buying many books'.[102]

Authors suggested that the format and production of books could be altered so that they would be more widely circulated. James Anderson proposed that they should be available at 'a moderate price as to be within the reach of every one'. Lord Kames also shared this belief.[103] Anderson, the editors of *The Scots Farmer* and James Donaldson suggest that inexpensive pamphlets and journals should be made available for farmers; this suggestion continued to be made into the early nineteenth century by authors such as James Trotter.[104] Lord Kames recommended that Philip Millar's *Gardener's dictionary*, which was 'beyond the reach of working people in two volumes folio', should be printed in a cheaper format, 'on a very small type and very coarse paper', so that it could be purchased by 'common gardeners'. He considered that this would allow 'knowledge in gardening [to be] spread much to the benefit of the public'.[105]

While these comments show that a number of authors recognised that there was a need to make agricultural books more widely available, some of them and their publishers took steps to reduce the production costs of their books. Sir Archibald Grant published two of his books as duodecemos so that landowners would make them available to their tenants. In *The practical farmer's pocket-companion* he asserts that:

> Tho' it contains matter enough to have made an eighteen pence pamphlet, it is sold at three pence, that Gentleman at a very small expense may put numbers of them into the hands of

[98] Jethro Tull, *Horse-hoeing husbandry: or, an essay on the principle of tillage and vegetation. Wherein is shewn a method of introducing a sort of vineyard-culture into the cornfields, in order to increase their product, and diminish the common experience; by the use of instruments described in cuts* (1733). The first edition of this text may have been as expensive as it was a folio. By the third edition of 1751 it was published as an octavo (see Adams, 'Agents', p. 173). For Lorrimer, Adams, 'Agents', p. 173.

[99] Donaldson, *Modern agriculture*, p. 326. In 1815, one farmer noted that it 'is much to be regretted' that the *Communications of the Board of Agriculture* 'are sold at a price which obstructs their extensive circulation among farmers, the greater part of whom never look into their pages' (Lord Kames, *The gentleman farmer*, sixth edn, 1815, p. 538).

[100] John Hamilton, Baron Belhaven, *The countreyman's rudiments; or advice to the farmers of East Lothian* (1699), p. 1.

[101] *Caledonian Mercury*, 3 Oct. 1772.

[102] James Anderson, *Essays relating to agriculture and rural affairs* (fifth edn, 3 vols, 1800), III, pp. 183, 185.

[103] ibid. Kames is quoted in Warren McDougall, 'Copyright litigation in the Court of Session, 1738–1749, and the rise of the Scottish book trade', *Trans. Edinburgh Bibliographical Society* 5 (1985–7), p. 7.

[104] Donaldson, *Modern agriculture*, p. 327; James Trotter, *General view of the agriculture of the county of West Lothian* (1811), p. 222.

[105] Quoted in McDougall, 'Copyright litigation', p. 7.

> their tenants. Those who incline to bestow them in this way, may order them from the publisher by their carriers. They who order fifty copies, will have them at the rate of one Guinea per Hundred.[106]

The publishers of David Young's *The farmer's account book* suggest that it was a cost effective book. An advertisement for it recommends that 'every gentleman who does not reside upon his farm, should have, at least, two copies, one for himself, and another for his overseer. The expense of ruling one copy of these tables would cost three times the sum that the whole if this book will cost'.[107] The publishers of *Select essays on husbandry* (1767) 'made the price very low, that it may come within the compass of every purchaser to whom it may be useful'. This 'neatly bound' book had a price of five shillings.[108] Charles Elliot, the publisher of *A proposal for the uniformity of the weights and measures in Scotland* (1779), used a format that allowed him to 'put [the text] into the smallest compass possible, that it might be afforded at a low price'.[109] Alexander Bald endeavoured to make the cost of *The farmer and corn-dealer's assistant* 'as low as possible' and omitted a number of tables of weights, measures and fiar prices so that its production costs could be reduced.[110] Publishers made new editions and additional volumes attractive to customers who had bought earlier ones. The 'large additions' that were made to the second edition of James Anderson's *Essays relating to agriculture and rural affairs* were 'printed by themselves, and sold in a separate volume with 18 new plates'.[111] Publishers of multiple volume books encouraged purchasers of their earlier volumes to procure later ones by reducing their price. Charles Varlo's three volume *A new system of husbandry* cost 15*s.* to non-subscribers. This third volume, which 'consists of his latest inventions', was sold at 5*s.* to customers who had purchased his 'former works'.[112] When the second volume of Adam Dickson's *A treatise on agriculture* was published in 1768, it sold for 7*s.* in bindings. The publishers advertised 'complete sets' of the two volumes for 13*s.*[113] New forms of agricultural books were developed to provide inexpensive publications. The editors of *The Scots Farmer* launched their journal, a monthly magazine, as an inexpensive publication that could be read by all members of the agricultural community, including farmers. It cost 6*d.* per month, stitched in blue covers; the two volumes cost 15*s.*[114]

The reputation of the agricultural books was an important factor in their circulation. Central to that reputation was the character of their authors. They belonged to a number of occupational groups and had a range of connections with agriculture and the land, including landowning and tenant farming. A significant number were members of the professions, some of which were not immediately associated with agriculture or rural development. Francis Home was a physician who was appointed the first Professor of Materia Medica in the University of Edinburgh in 1768.[115] George Fordyce, author of *Elements of agriculture* (1765), was a licentiate

[106] Sir Archibald Grant, *The practical farmer's pocket-companion, or a brief account of the husbandry that now prevails in Scotland* (1766), back page.
[107] *Caledonian Mercury*, 9 Aug. 1790.
[108] ibid., 14 Feb. 1767.
[109] ibid., 23 June 1779.
[110] Alexander Bald, *The farmer and corn-dealer's assistant, or, the knowledge of weights and measures made easy by a series of table* (1780), preface, p. v.
[111] *Caledonian Mercury*, 4 Jan. 1777.
[112] ibid., 20 Mar. 1771.
[113] ibid., 12 Dec. 1768.
[114] ibid., 3 Oct. 1772, 25 June 1774, 8 July 1775.
[115] *Dictionary of National Biography* (hereafter *DNB*), 'Francis Home'.

of the College of Physicians and later a physician at St Thomas's Hospital.[116] Lord Kames, the author of two books, was an ordinary lord of session and one of the leading figures of the Scottish Enlightenment.[117] John Swinton, whose *Proposal for uniformity of weights and measures in Scotland* was published in 1779, was appointed an Ordinary Member of the Board of Commissioners and Trustees for the Annexed Estates in 1761 and was elevated to the bench as Lord Swinton, on 21 December 1782.[118] Patrick Lindesay, author of *The interest of Scotland considered* (1733), was one of the Lord Provosts of Edinburgh.[119] William Thom, Adam Dickson and William Barron were ministers. Thom, author of *Seasonable advice to the land-holders and farmers in Scotland* (1770), preached at Govan until his death in 1790. Dickson, whose books included *A treatise on agriculture* (1762), preached at Dunse, Berwickshire, then at Whittinghame, East Lothian, and Barron, author of *An essay on the mechanical principles of the plough* (1774), at Whitburn, West Lothian.[120] David Young, who published his agricultural books between 1785 and 1791, was a merchant in Perth.[121] James Hamilton, author of *Virgil's pastorals* (1742), was a schoolmaster in East Calder, Mid Lothian.[122]

Because of the role and importance of landowning in Scottish society, a number of these authors were also landowners, tenant farmers or held land. Lord Kames was an improving landlord in Berwickshire who, after he married, undertook extensive improvements on Blairdrummond Moss.[123] Adam Dickson 'had the management of a considerable farm for many years' and lost 'no opportunity of gathering experience from the conversation of the neighbouring farmers, and the duties of his holy office'.[124] David Young was a tenant farmer at Woodhead, near Perth, from 1763 to 1778.[125] William Barron was a practising farmer who had 'a growing crop on the foot and some horses and cows and instruments of husbandry, farming utensils and other goods' at the time of his death.[126]

While these authors had a plurality of occupations, others were primarily members of the agricultural community. They were drawn from throughout its ranks. The largest numbers were from its upper ranks – the landowning classes (the landed aristocracy, wealthy landlords and lairds) – through which early agrarian developments and changes were first initiated and took place. Three of them were well known improving landlords: John Hamilton, second Baron Belhaven (author of *The countrey-mans rudiments*), Thomas Hamilton, sixth Earl of Haddington (author of *A short treatise on forest-tress … and grass seeds* of 1756) and Sir Archibald Grant of Monymusk (author of two books published in 1757 and

[116] ibid., 'George Fordyce'.

[117] ibid., 'Henry Home, Lord Kames'.

[118] ibid., 'John Swinton, Lord Swinton'; Annette M. Smith, *Jacobite estates of the Forty-five* (1982), p. 240.

[119] Watson and Amery, 'Early Scottish agricultural writers', p. 80.

[120] *DNB*, 'Adam Dickson'; William Thom, *Seasonable advice to the land-holders and farmers of Scotland: a sermon on Exod. iii 7,8 preached to a congregation of farmers* (1770), title page; William Barron, *An essay on the mechanical principles of the plough* (1774), title page; National Archives of Scotland (hereafter NAS), CC10/5/12/66 (Testament of Rev. William Thom).

[121] Young, *The farmer's account book*, appendix. He refers to his 'business in Perth'. The appendix to *The farmer's account book* indicates that he was offered a lease of the farm of Huntingtower in Perthshire. In 1789 that farm was tenanted by a Thomas Young.

[122] Handley, *Scottish farming*, p. 127.

[123] *DNB*, 'Henry Holme, Lord Kames'.

[124] Adam Dickson, *A treatise on agriculture* (1762), p. iii; id., *Husbandry of the ancients*, I, p. ix; *DNB*, 'Adam Dickson'.

[125] Young, *The farmer's account book*, appendix.

[126] NAS, CC10/5/12/67, Testament of Reverend William Thom.

1766).[127] Another one was from the lower ranks of this group – either the wealthy landowners or the laird classes. The 'Laird and farmer' was the author of *A dialogue upon farming, trade, cookery, and their method of living in Scotland, balanc'd with that of England* (1750).[128] Others were tenant farmers. Robert Maxwell 'engaged in agriculture, and about 1723 took on a lease of four periods of nineteen years a farm of 130 acres, all arable, at Cliftonhall, near Edinburgh'.[129] Andrew Wight was a farmer at Ormiston, East Lothian, and son of Alexander Wight and a grandson of Robert Wight, improving tenants under the Cockburns of Ormiston.[130] James Anderson 'undertook a farm which had long been in his family' at Hermiston, Midlothian, and later entered the tenancies at Cobbinshaw, also in that county, and Monkshill in Aberdeenshire.[131] Other farmers included James Donaldson, William MacIntosh of Borlum, Thomas Hope of Rankeillor, and Charles Varlo. One author was from the agricultural labouring class. *A friendly address to the farmers of Scotland* was written by 'an old ploughman'.[132] Another one was from the agricultural service industry. James Small, whose *A treatise on ploughs and wheel carriages* was published in 1784, was the son of a tenant farmer who set up a business making ploughs and other agricultural equipment at Blackadder Mount in Berwickshire and then moved to Rosebank in Midlothian.

Another group of authors was the agricultural institutions in Scotland that had a range of roles in promoting and undertaking agrarian and rural development. The first of these were institutions that sought to promote agriculture. The only one which was itself an author was the Commissioners and Trustees for Improving Fisheries and Manufactures in Scotland (Great Britain), which published and reissued two books which promoted flax growing. The Commissioners and Trustees for the Annexed Estates of 1755 to 1784 commissioned and published Andrew Wight's survey of the corn farms of the Annexed Estates and many of the agricultural districts throughout Scotland.[133] The second type of institution was the agricultural societies that had an increasing role in agrarian and rural development, especially during the second half of the eighteenth century when they appeared in increasing numbers throughout the country.[134] They wrote and published a small number of books. The earliest ones were primarily the national societies such as the Edinburgh-based Honourable the Society for Improving the Knowledge of Agriculture and the Dublin Society, which published its *Weekly observations for the advancement of agriculture and manufactures* in 1756; its other publications were published in Dublin. The *Prize Essays* (later the *Transactions*) of the Highland Society of Scotland, established in 1784, was issued from 1799 onwards. The city societies inspired a 'great number of smaller local clubs' in their activities, including the publication of their transactions.[135] The

[127] See Handley, *Scottish farming*, pp. 145–6; Henry Hamilton, *An economic history of Scotland in the eighteenth century* (1963), p. 59.

[128] 'The Laird and Farmer', *A dialogue upon farming, trade, cookery, and their method of living in Scotland, balanc'd with that of England* (1740); Watson and Amery, 'Early Scottish agricultural writers', p. 81.

[129] *DNB*, 'Robert Maxwell'.

[130] Handley, *Scottish farming*, p. 141.

[131] *DNB*, 'James Anderson'.

[132] 'An old ploughman', *A friendly address to the farmers of Scotland: wherein are set forth some heavy grievances under which the farmers presently labour; the causes of them; with some plausible methods to curb their growth and prevent them from spreading further* (1759).

[133] Smith, *Jacobite estates*, p. 239.

[134] For their development see R. C. Boud, 'Scottish agricultural improvement societies', *ROSC: Review of Scottish culture*, 1 (1984), pp. 70–90.

[135] Hugh Cheape, 'For the betterment of mankind: Scotland, the Enlightenment and the Agricultural Revolution', *Folk life* 40 (2001–02), p. 19.

most notable of these were the Buchan Society or A Small Society of Farmers in Buchan, formed around 1730, and the Dumfries and Wigtown Society which published two volumes of transactions in 1776.[136]

A number of these authors were enthusiastic about agriculture and rural affairs and in advancing them, not only on their estates and farms, but also nationally throughout Scotland. Some were highly regarded as agricultural improvers. Sir Archibald Grant was considered to be 'one of the foremost agricultural pioneers' in the country and was the 'greatest planter of his time', planting more than 3,000 acres, chiefly of fir. Wight confirms that 'there never existed a man of more zeal for promoting husbandry and manufactures' than him.[137] David Young was regarded by some of his contemporaries as a notable improver. Lord Kinnoull encouraged his tenants to 'go and see what David Young is doing, and follow his example'.[138] Robert Maxwell was an active and enthusiastic Secretary of the Society of Improvers in the Knowledge of Agriculture which Handley believed 'perhaps did more than any other to introduce or encourage the practices and new methods'. He also delivered a series of public lectures on agriculture in 1756 which may have been the first in Great Britain.[139] Lord Kames was 'probably the most important improver among several in the College of Justice'. He was recognised for his improving work and as an 'amateur agriculturist he acquired considerable reputation'. Kames was a significant figure in advancing and diffusing agricultural developments and was involved in the development of national agricultural and rural policies.[140] He was appointed a member of the Board of Trustees for the Encouragement of Fisheries, Arts, and Manufactures of Scotland in 1755 and as one of the Ordinary Members of the Board of Commissioners and Trustees for the Annexed Estates in 1761. He also played an important role in promoting surveys of existing agricultural and rural conditions that would help and promote improvements. Two extensive surveys resulted from his suggestions: the first was Dr John Walker's survey on the herring fishery, agriculture and pastoral farming of the Western Isles; the second was Andrew Wight's survey which was published by the Board of Commissioners and Trustees for the Annexed Estates.[141] The importance of Kames in this work is recognised and acknowledged by Arthur Young who asserts that 'we owe so much, not only for the public spirit with which he labours to promote the agriculture, manufactures, and general interest of his country'.[142] Wight refers to his 'vast abilities, and indefatigable exertions for the good of his country'.[143] He also describes in favourable terms another of the agricultural writers, James Anderson, as 'a young gentleman of a good stock, and addicted to husbandry', he 'could not have any doubt of finding a farm [Anderson's] in the very best mode of cultivation and highly improved'.[144] Anderson was also 'devoted to communicating

[136] ibid., p. 19.

[137] Hamilton, *Economic history*, p. 59; Wight, *Present state of husbandry*, III (ii), pp. 696, 697.

[138] Young, *The farmer's account book*, appendix.

[139] Handley, *Scottish farming*, pp. 151, 152.

[140] R. H. Campbell, *Scotland since 1707. The rise of an industrial society* (1965), p. 29; *DNB*, 'Henry Home, Lord Kames'; William C. Lehmann, *Henry Home, Lord Kames and the Scottish Enlightenment: a study in national character and the history of ideas* (1971), p. xxiii; Wight, *Present state of husbandry*, I, pp. 378–90.

[141] *DNB*, 'Henry Home, Lord Kames'; Alex McCallum, 'A great agricultural improver – Lord Kames', *Scottish J. Agriculture*, 18 (1935), pp. 337, 338; Smith, *Jacobite estates*, p. 240.

[142] Quoted in Wight, *Present state of husbandry*, IV (ii), pp. 690.

[143] ibid., pp. 612.

[144] ibid., III (ii), pp. 606–07.

ideas'.[145] He was highly regarded throughout the agricultural and the academic communities for his agricultural and economic writing. He was awarded LL.D from the University of Aberdeen in 1782, elected FRSE and FASS in the following years and became a corresponding member, honorary member and member of a number of agricultural and learned societies in Britain as well as in Europe and America, such as those in Dijon, St Petersburg, Berlin, Paris and Philadelphia.[146] He was considered to be one of the most important figures in British agricultural writing. Shortly after his death in 1808, *The Farmer's Magazine* suggested that he was one of the pivotal authors in the agricultural book trade. In 1793, it reflected, 'the book-trade of agriculture was almost entirely possessed by him [William Marshall] and Mr [Arthur] Young, there being no other opponent in the field than the late Dr James Anderson, who was then attracting the public notice'.[147] The tradesman James Small combined the design of the old Scots plough with features of the Rotherham plough and patented it as a new swing-plough. For Lord Kames, this was 'a capital improvement' which became extensively used throughout Scotland by the 1790s. Writing of its impact, Alexander Fenton believes that it 'had a deep influence on Scottish farming'.[148] The Commissioners and Trustees for the Annexed Estates had a range of roles in the development of the agriculture and rural economy of the estates that were under its control. Its work was summed up as being 'a potentially important, influential and dramatic experiment'.[149]

The Scottish authors, as also a number of English ones, took great efforts to emphasize their connections with agriculture and the extent of their agricultural experience and knowledge in their books. Lord Kames, the Earl of Haddington, James Donaldson, David Young and 'An Old Ploughman' noted their experience, its duration and nature.[150] This could be central to their books and authors emphasized its contribution and role. James Anderson comments that his *Essays relating to agriculture and rural affairs* were 'chiefly the result of his own experience'.[151] They intended that this experience and knowledge would demonstrate that their writing could be trusted by other agriculturists. It also emphasized that it was based on personal observation, and not only theory alone, a major criticism of agricultural books in general. Some authors also noted that they could also draw upon their experiences from reading a range of agricultural books. They could make extensive use of these, quoting the most well-known and acclaimed

[145] Charles F. Mullett, 'A village Aristotle and the harmony of interests: James Anderson (1739–1808) of Monks Hill', *J. British Studies* 7 (1968), p. 95.

[146] Peter John Anderson, *Records of the Marischall college and University of Aberdeen* fasti academiae Mariscallanae Aberdonsis, II, *officers, graduates and alumni* (1898), p. 99; Sheila Devlin-Thorp (ed.), *Scotland's cultural heritage*, I, *One hundred medical and scientific fellows of the Royal Society of Edinburgh, elected from 1783 to 1832* (1981), 'James Anderson'; See title page, *The Bee, or literary weekly intelligencer* 1 (1791).

[147] *The Farmer's Magazine*, Dec. 1808, p. 503.

[148] James Small, *A treatise on ploughs and wheel carriages, illustrated by plates by James Small, plough and cart wright, formerly at Blackadder-mount now at Rose-bank, near Foord, Mid Lothian* (1784), title page; Alexander Fenton, *Country life in Scotland. Our rural past* (1987), pp. 99–100. The county surveys of the Board of Agriculture and Internal Improvement record the wide extent of the adoption of Small's plough.

[149] Annette M. Smith, 'The administration of the forfeited annexed estates, 1752–84', in G. W. S. Barrow (ed.), *The Scottish tradition: essays in honour of Ronald Gordon Cant* (1974), p. 210.

[150] 'Old ploughman', *A friendly address*, p. 6; Donaldson, *Modern agriculture*, p. ii; Kames, *The gentleman farmer* (1776 edn), p. 17; David Young, *Agriculture, the primary interest of Great Britain* (1788), p. vii.

[151] Anderson, *Essays* (fifth edn, 1800), p. x.

authors in Scotland, England as well as Europe. Adam Dickson and James Donaldson had a wide knowledge of agricultural literature, with the latter noting that he had 'read almost all the books which this age had produced on that subject'.[152] However, others would not refer to other agricultural books. In *The modern farmers guide*, Charles Varlo states that he had not referred to any as he believed that they would have introduced inaccuracies and misguided theories into his book.[153]

Although these authors were well qualified to write about agriculture and rural affairs, a range of commentators note that agricultural books – Scottish and English – were not always favourably looked upon. Pamela Horn is critical of the English books.[154] Writing of English books between 1750 and 1850, Nicholas Goddard remarks that 'books which proclaimed some great advance in method, but which were written by authors with insufficient knowledge of their subject, cast suspicion upon the whole body of farming literature in the minds of many agriculturists'.[155] His conclusion can be applied to the opinions of a number of agricultural authors in Scotland, especially those who published their books from the 1760s when the publishing of agricultural books expanded and books that were to have lasting importance were being published. Lord Kames who had an extensive knowledge of Scottish, British and European agricultural books, was especially critical of individual ones and the character of the agricultural book trade. His comments were also echoed in the later criticisms of other agricultural authors.[156] He acknowledges that 'the commerce of books is carried on with no great degrees of candour: those of husbandry with very little.'[157] In his preface to *The gentleman farmer*, he records the character of the agricultural book trade:

> Behold another volume on husbandry! exclaims a peevish man on seeing the title page: how long shall we be pestered with such trite stuff? 'As long, sweet Sir, as you are willing to pay for it: hold out your purse, and wares will never be wanting'.

He was aware of the consumer demand for books at a time when agriculture received increasing attention. He observes that 'everything is made welcome on that subject'.

Other Scottish authors were also critical of the books and the character of their authors. They commented on their suitability to write books and the reputation of their books. Authors with agricultural experience complained that some of them had none or pretended to have some. According to Lord Kames: 'writers on agriculture, very few excepted, deliver their precepts from a study lined with books, without even pretending to experience'.[158] David Young believed that

[152] 'A Real Farmer' [C. Varlo], *The modern farmers guide. A new system of husbandry, from long experience in several kingdoms; never before made public. With tables shewing the expence and profit of each crop, how to stock farms to the best advantage; how the crops are to follow each other, by way of rotation, and how to maintain the poor well, and lower the poor-cess. Likewise some hints humbly offered to the legislature, on inclosing commons and open town fields, with several plans of new invented machines; some valuable receipts for the cure of cattle etc etc, to which is prefixed a short abstract of the author's life and travels* (2 vols, 1768), I, p. 26; Donaldson, *Modern agriculture*, p. ii.

[153] 'A real farmer', *Modern farmers guide*, p. 27.

[154] Horn, 'The contribution of the propagandist', pp. 319–20.

[155] Goddard, 'Agricultural literature and societies', p. 361.

[156] See for example, the textual references throughout *The gentleman farmer* (1776).

[157] Kames, *The gentleman farmer* (fifth edn, 1802), preface, p. vii.

[158] Kames, *The gentleman farmer* (fourth edn, 1798), preface, p. viii.

'it has been a frequent complaint against writers on agriculture, that they were too little acquainted with real business; that from hence their theories were often without foundation, and many of their proposed improvements absolutely impracticable'.[159] James Anderson suggested that the 'most conspicuous writers on that subject, having been themselves entirely unacquainted with the practice of that art, and of consequence unable to select with judgement from the works of others, have frequently copied their errors with the same scrupulous nicety as the most valuable parts of their works'.[160] This led authors to make imaginative and fanciful plans of improvements which were rendered 'much more perfect than anything that really takes place in practice'. However, these plans would 'catch the attention of an inexperienced compiler' who would 'persuade his readers to adopt these particular practices'.[161] As a result of this situation, Anderson concluded that:

> Books of that kind [copied from other ones] contain observations that may be of very great utility to an experienced farmer, who may be able to distinguish between the good and the bad; yet to those who have most need of instruction, and who oftenest consult them, these books frequently prove the source of very capital errors: so that it would usually be better for such farmers that no such books had ever been written.[162]

The 'harm' which books could do was also observed by David Young who criticised the writing of theoretical rather than practical agricultural books: 'And it is a question whether a great many books that have been written upon Agriculture, by persons who write from theory alone, have not done more hurt than good'.[163] For him, 'some' books had been 'rather apt to mislead than to instruct'.[164] Charles Varlo was distrustful of books and refers to 'the precarious information of others'.[165]

However, the authors who made these comments do not specifically state whether they applied to English or Scottish books. Similarly, although agricultural authors – both Scottish and English – were critical of the extant agricultural books and noted their defects, sometimes at great length, they did not always indicate whether they were referring to books from these different parts of Britain. Although this situation makes it difficult to assess the reputation of the Scottish books, the relatively small number of them published suggests that it is likely that the Scottish authors were commenting on English ones. This is supported by the character of the Scottish authors, many of whom had agricultural experience and to the evidence of one author who suggests that he was referring to the 'most conspicuous writers on that subject', who, in the mid-1770s, continued to be English.[166] However, it must be remembered that Scottish authors and other readers bought and read these books and were influenced by them.

While these comments apply to books in general, specific comments were also made about individual ones. Authors evaluated specific books throughout their writing, noting both their agreement and disagreement with the observations contained in them. Although books were reviewed in general journals such as *The Scots Magazine* and *The Monthly Review*, as well as

[159] Young, *Agriculture*, p. 173.
[160] Anderson, *Essays* (1775 edn), p. vii.
[161] ibid., pp. vii–viii.
[162] ibid., pp. viii–ix.
[163] Young, *National improvements*, p. vi.
[164] ibid., p. vi.
[165] 'A real farmer', *Modern farmers guide*, p. 27.
[166] Anderson, *Essays* (1775 edn), p. vii.

agricultural journals such as *The Scots Farmer*, very few reviews gave a critical evaluation of their merit. They largely reported their contents and quoted extensive extracts from them or simply recorded their publication details. Where they offered criticism, their comments generally affected relatively minor aspects of the books. For example, the review of Young's *Agriculture* which appears in *The Monthly Review* notes that it contains 'agricultural knowledge buried among heaps of rubbish, which greatly tend to diminish the intrinsic value'. However, although his writing style and language were commented upon, that reviewer suggests that it contained 'several interesting facts, and important observations, on agricultural subjects' and quoted these at length.[167] The printing quality of the books was also commented on. The first edition of Anderson's *Essays relating to agriculture and rural affairs*, which was described as 'a valuable publication', was 'uncommonly correct in the printing and exhibits many grammatical errors, which must be the effect of carelessness alone'.[168]

However, Scottish agricultural books in general, as well as specific ones, were also highly praised and approved of by other authors, the wider agricultural community and other readers. Especially from the 1750s onwards, some authors record that their books were well received. James Anderson notes the 'favourable reception' which the first edition of his *Essays relating to agriculture and rural affairs* received.[169] In *Agriculture, the primary interest of Great Britain*, David Young inserted a testimonial to his *National Improvements* which was signed by sixteen farmers who praised it for being 'general, plain, practical' and 'extremely useful for the improvement of the nation in general, and of many farms in particular'; they also believed that it was 'suited to the capacities of Farmers'.[170] Authors were encouraged by the reception of their books and as a result, wrote further ones. In the first volume of *A treatise of agriculture*, Adam Dickson suggests that if that book was favourably received, he would write a second volume: this was published in 1769.[171] So encouraged was David Young by the 'favourable' reception which 'the most eminent practitioners of agriculture' gave his *National improvements* that he too wrote further ones.[172] Some books were highly regarded for many years after they were published. In 1829 George Robertson refers to Robert Maxwell's *The practical husbandman* as 'a work of great merit, in which more knowledge of the subject is displayed than could have been expected at such an early period'.[173] Sir John Sinclair regards James Small's *Treatise on ploughs and wheeled carriages* as 'certainly one of the best and most useful, as well as one of the earliest publications, on this interesting subject'.[174] Some books were considered to make an important contribution to the dissemination of agricultural knowledge. Adam Dickson's *A treatise on agriculture*, which continued to be published for many years after the author's death, retained a lasting importance until at least 1788. The editor of Dickson's manuscript of *The husbandry of the ancients* commented on its significance:

[167] *The Monthly Review*, 81 (1789), p. 20.

[168] *The Edinburgh Magazine and Review*, III (May 1775), p. 326.

[169] Anderson, *Essays*, (fifth edn, 3 vols, 1800), I, dedication.

[170] Young, *Agriculture*, pp. xi–xii, x.

[171] Dickson, *A treatise on agriculture* (first edn, 1762), II, p. liii.

[172] Young, *Agriculture*, preface, p. vi.

[173] George Robertson, *Rural recollections; or, the progress of improvements in agriculture and rural affairs* (1829), p. 14.

[174] Sir John Sinclair, *An account of the systems of husbandry adapted in the more improved districts of Scotland: with some observations on the improvements of which they are susceptible* (2 vols, 1813), I, p. 42.

> The first volume of this treatise was published in the year 1764; and the second some years afterwards; and has ever since been held, not only to be the book best adapted to the practice of the Scottish farmer, but, upon the whole, one of the most judicious and practical treatises on the subject, that has ever been published in Britain.[175]

Almost a decade after the first volume and three or four years after the second volume of that book were published, the editors of *The Scots Farmer* published extensive extracts from it. These played a central role, being the leading and opening article in each issue, as well as the largest one.[176] Even in the second decade of the nineteenth century, Sir John Sinclair could regard Lord Kames as 'one of the ablest writers on agriculture in modern times'.[177] So important was *The gentleman farmer* that when its sixth edition was published in 1815, some 41 years after it was first issued, a supplement, written by an unnamed editor, commented on the validity of Kames' theory and practice in relation to the present state of agriculture and recent agrarian improvements, noting that it 'correctly displayed' 'both the principles and practice of the art' of agriculture and 'confirm[s] the justness of his Lordship's views, and enhance the value of his work, instead of superseding its utility'.[178] That editor considered that Kames had few inaccuracies or misjudged opinions throughout that book and that many of his predictions on agricultural development were fulfilled.[179] The importance of Kames's book was noted even as late as 1829 when George Robertson believed that it 'was the best treatise on husbandry then extant, and is still justly held in high expectation'.[180]

VII

Who bought and read the Scottish agricultural books? Books had an intended and an actual readership. A number of authors note the character of the intended readers. Some books looked for a readership that was restricted to particular groups of the agricultural community. These could be the landowning classes. Lord Kames' *The gentleman farmer* was to be read by 'gentlemen of land-estates'.[181] David Young and the editors of *The Scots Farmer* consider that their books were more suitable for the landowning classes than other groups.[182] As Young points out: 'They may, indeed, do very well for the amusement of a gentleman in his country-retirement, and be the means of inciting him to try experiments, from which some new discovery may be made that may tend to the general good'.[183] The readership of some books was also extended to tenant farmers. In *A treatise of agriculture* Adam Dickson refers to his intended readers as 'gentlemen or tenants'.[184] The Honourable Society for Improving the Knowledge of Agriculture in Scotland describes them as 'the Common Farmers' and Robert Maxwell notes that 'care has been taken to make the Book instructing and useful to every

[175] Dickson, *Husbandry of the ancients*, I, pp. xi–xii.

[176] *The Scots farmer: or select essays on agriculture adapted to the soil and climate of Scotland* (2 vols, 1773–4).

[177] Sir John Sinclair, *An account of the systems of husbandry adopted in the more improved districts of Scotland* (1812), p. 408.

[178] Kames, *The gentleman farmer* (sixth edn, 1815), 'Advertisement to the present edition', p. vi.

[179] ibid.

[180] Robertson, *Rural recollections*, p. 557.

[181] Kames, *The gentleman farmer* (fourth edn, 1796), p. xiv.

[182] *The Scots Farmer*, I, p. 9.

[183] Young, *National improvements*, p. vi.

[184] Dickson, *A treatise on agriculture* (new edn, 1770), I, p. lxv.

farmer'.[185] Further ones included other sectors of the agricultural community. The readers of William Thom's *A letter of advice to the farmers, land labourers and country tradesmen in Scotland concerning roups of growing corn, and of tacks* were to be 'the farmers, land-labourers, and country tradesmen in Scotland'.[186] Charles Varlo intended that *The modern farmer's guide* should be read by 'my farming-readers' who included 'Farmers and Country Gentlemen' and also the 'simple and unlearned'.[187] Some were specifically intended for the least educated members of that class. *The Scots Farmer* was to be read by 'our lowest class of farmers'.[188] David Young 'mostly intended' his *National improvements* 'for those who have little knowledge in improvements'.[189]

Although these authors state that their books were to have a range of readerships throughout the agricultural community, there is relatively little evidence to show who actually purchased and read them. For the eighteenth century, almost no records of booksellers have survived. However, some evidence can be gleaned from other sources. A few of the books which were published by subscription include a list of the individuals and organisations that gave their patronage to the book before it was published. In addition, the *Select Transactions of the Honourable the Society of Improvers in the Knowledge of Agriculture in Scotland* (1743) contains a list of the members of the society. Although the readership of a society's transactions and its membership are likely to differ, it is very likely that each member received a copy of the transactions. That publication may have been more widely distributed outwith the society to people who were interested in the society's activities. The evidence from these sources provide glimpses into the purchase and readership of agricultural books at different times of the eighteenth century.

The membership list of the Society of Improvers in the Knowledge of Agriculture in Scotland, in *Select Transactions*, records the names of 301 members.[190] As has been noted, this was the first national agricultural society in Scotland, and was based in Edinburgh. Its members represented 'the greatest, wisest, and most learned of a Nation' and were restricted to specific social classes. They include three dukes, 20 earls, 21 lords, two marquis, one Lord Viscount, 48 who have the title 'Sir', five with military or naval ranks and 56 who have the designation 'Mr'; the remaining ones did not have a title, though other contemporary evidence suggests that they were landowners. They extended from the great landowners – the landed aristocracy and the wealthy landlords – who held large tracts of land across Scotland and included the most important agricultural improvers, to others that belonged to the lower classes of this group, the lairds, who played an important part in agricultural improvements on a more local level within a county and a parish.[191] Their occupations are sometimes recorded. A significant number of members were from the law profession: nine were Senators of the College of Justice, 49 advocates and 10 writers to the signet. The presence of large numbers of members of the legal profession in this

[185] *A treatise concerning the manner of fallowing of ground* (1724), p. 6.

[186] William Thom, *A letter of advice to the farmers, land-labourers, and country tradesmen in Scotland, concerning roups of growing corn, and of tack* (1771), p. 6.

[187] Charles Varlo, *A new system of husbandry, from long experience of several kingdoms* (1768), p. 25, 'Advertisment'.

[188] *The Scots Farmer*, p. 15.

[189] Young, *National improvements*, p. 96.

[190] Maxwell, *Select transactions*, p. xvi.

[191] Loretta R. Timperley, 'The pattern of landholding in eighteenth-century Scotland' in M. L. Parry and T. R. Slater (eds), *The making of the Scottish countryside*, p. 142; id., (ed.) *A directory of landownership in Scotland, c. 1770* (1976).

society has been observed by Adams who suggests that they had an important role to play in agricultural developments: 'in their role of *doers*, commissioners and factors for estates all over Scotland', they 'were in a unique position to disseminate both knowledge and action'.[192] They also acted as a source of funds for investments and gave financial advice and steered funds.[193] Other members held central positions in Scottish public administration: they included two Barons of the Exchequer, the Lord President of the Session (and a former one), three Principal Clerks of Session, and the Lord Provost of Edinburgh (and two former ones). Four members were Professors at the University of Edinburgh: two were professors of law and the others were professors of mathematics and anatomy. Only a few merchants were recorded, and there was also one bookseller. They resided or were employed across a wide geographical area of Scotland, both Highland and Lowland. However, because of the role which Edinburgh had as a legal and administrative centre, and the Lothians as a progressive agricultural district, a significant number were from these areas. Some burghs, smaller settlements and districts had a number of members. These formed communities of members. Members were also well known to one another and also created further networks through their acquaintance and contact.

Charles Varlo's *The modern farmer's guide* (1768), a two volume book, was 'a new system of agriculture' which largely dealt with crop husbandry and contained a biographical account of the author's life as a farmer in which he had 'long experience in several kingdoms'. The two volumes cost 12*s.* to subscribers.[194] The subscribers in the subscription list, which lists 121 names, had a character that contrasts with those recorded on the membership list in *Select transactions*. The distribution of their social classes is greatly altered. One of the subscribers had the title 'The Most Notable', four had 'The Right honourable', three the title of 'Sir', 14 had 'esq.', 14 had 'gent.', and one each had 'Colonel' and 'MD'; a further 70 had 'Mr'. With the exception of three female subscribers, two of whom were married, all were males. The occupations of very few subscribers is recorded in their subscription entries, and these are all confined to the occupation of rector. Their geographical extent reflects aspects of Varlo's life. By the time he published *The modern farmer's guide* he had been a labourer and a farmer in a number of counties in England, Ireland and Scotland. In 1767 he moved from Ireland to Scotland where he farmed in the neighbourhood of Glasgow. Shortly afterwards, he moved to Richmond in Yorkshire where he wrote and published this book.[195] Only four of the subscribers were Scottish, all of whom were members of the landed gentry, including noted agricultural improvers, scattered throughout Lowland districts of the country: the Earl of Eglintoun, the Earl of Errol, the Earl of Haddington and the Earl of Cassilles. The remaining subscribers were English and came from a relatively restricted geographical locality. Eighty three settlements are named in the addresses of subscribers. Sixty one subscribers came from 23 of them: two came from sixteen settlements, three each came from Eastwood and Cortlingstoke, four came from Epperston, six from Westerfield and seven from Mansfield. The remaining settlements each had

[192] Adams, 'Agents', p. 171.

[193] Alastair J. Durie, 'Lairds, improvement, banking and industry in eighteenth-century Scotland: capital and development in a background economy: a case study', in T. M. Devine (ed.), *Lairds and improvement in the Scotland of the Enlightenment* (1979), pp. 21–2.

[194] *Caledonian Mercury*, 25 Jan. 1768.

[195] Desmond Clarke, *The unfortunate husbandman. An account of life and travels of a real farmer in Ireland, Scotland, England and America by Charles Varley or Varlo with a preface of his life and times* (1964), pp. 16, 17, 19.

a single subscriber. Place-name evidence suggests that their subscriptions were primarily drawn from Leicestershire, Nottinghamshire and Derbyshire. A small number of subscribers subscribed more than one copy of the book, and were multiple subscribers. With the exception of Sir Clement Trafford of Dunston-Hall, all were members of the Scottish nobility. The Earl of Eglintoun subscribed 10 copies, and the Earl of Errol some five; each of the remaining ones subscribed two copies. These statistics suggest that they were not using all of the copies for their own personal use and were distributing some of their copies to others. The subscription list in Varlo's book clearly demonstrates that it was initially distributed throughout a limited area of England. However, on publication, it was advertised in Scottish newspapers and it is likely that further copies were sold to purchasers in Scotland, though evidence for their sales is not available from booksellers' records.[196]

Extensive subscription lists are included in three of the agricultural books of David Young, published between 1785 and 1790: his *National improvements*, *Agriculture* and *The farmer's account book*.[197] Young, a merchant, and a former farmer near Perth, who had 'pondered upon the subject of national improvements of agriculture for "many years" ', had 'at different times, laid before the public, in different shapes, the result of my own knowledge and experience, and proposed plans of improvement and advantage to the country'.[198] He was enthusiastic about disseminating his ideas. This is reflected in the large numbers of subscriptions which he collected for his books. These were secured from personal contacts of neighbouring farmers and members of the Perthshire farming community where he had been a farmer, the business community in Perth, individuals whom he encountered during the course of his agricultural surveys, and by directing his proposals at specific individuals who occupied a range of posts in public administration. In addition to these activities, booksellers in Edinburgh who were involved in the production of the books, as well as other distributors such as other booksellers and seedsmen in Glasgow and Aberdeen also collected additional subscribers.[199] The three books had similar prices. A copy of *National improvements* in boards cost 5*s.* to subscribers and 6*s.* to non-subscribers. *Agriculture* cost 5*s.* in boards or 6*s.* bound. For non-subscribers, *The farmer's account book* cost 6*s.*, a sum that was also noted after its publication.[200]

Although Young's three books each belonged to different genres of agricultural books, there is a good deal of overlap in the subject matter of *National improvements* and *Agriculture*. Indeed, Young continually refers to the same ideas in both books and his second book essentially shows how the improvements which he suggests in the first one could be applied and put into practice. He regarded his third book, *The farmer's account book*, as a separate project. This is reflected in the subject matter of the book (an analysed account book for farmers to record a year's agricultural activity), and its format (a folio rather than an octavo), which also primarily comprises tables rather than written prose. However, this book also has connections with his earlier ones, and these are extensively referred to in an appendix. These relationships are

[196] *Caledonian Mercury*, 25 Jan. 1768.

[197] These have been discussed in detail in Heather Holmes, 'For the encouragement of agricultural improvement in Scotland in the 1780s: subscribers to the agricultural books of David Young', *ROSC: Review of Scottish culture* (2004–05), pp. 22–56.

[198] Young, *National improvements*, p. viii; Young, *The farmer's account book*, Appendix.

[199] Holmes, 'Encouragement'.

[200] *Caledonian Mercury*, 19 Oct. 1785, 9 Mar. 1789, 9 Aug. 1790.

also seen in the subscription lists in the books. A total of 256 of the 576 subscribers in *Agriculture* are also recorded in *National improvements*. Indeed, this list was a composite list of subscribers to the two books. In addition, a further 27 subscribers who subscribed to both of these books are also recorded in the list in *The farmer's account book;* 27 also appear in the list in that book as well as in *Agriculture*.

As I have shown elsewhere, the subscribers in the three lists came from a wider range of social classes than those in either *Select transactions* or *The modern farmer's guide*.[201] Their extent is clearly demonstrated in the list in *National improvements*. It lists one duke, two earls, five lords, one lady (the only female subscriber), 101 subscribers who had the designation 'esq.', and 154 who had the title 'Mr'. In addition, a further 20 had occupational titles such as 'Dr', 'Provost' or 'Bailie' and 11 had military titles. These subscribers, and those in Young's other books, had a wide range of occupations. The largest occupational group came from the agricultural community. This included the most important and extensive classes of landowners: the landed aristocracy, wealthy landowners, wealthiest lairds, middle lairds and lesser lairds. Some of these were the most prominent landowners in the country, as well as their factors, some of whom subscribed on behalf of their employer, or as well as them. Others were important over a smaller geographical area which encompassed counties and parishes. Farmers were another large group of subscribers: 46 were recorded in *National improvements* and 67 in *Agriculture*. Andrew Wight's surveys, which referred to a number of the farms and estates owned and tenanted by subscribers, stressed that many of these subscribers were attentive and interested in agricultural improvement.[202] Some were also agricultural authors, a small number of whom wrote county surveys for the Board of Agriculture and Internal Improvement.[203] Another group from the agricultural community, who comprised seven subscribers to the three books, were employed in its ancillary trades: seedsmen, nurserymen and corn factors; three agricultural societies, at both local and national levels, were also represented.

A significant number of subscribers were also drawn from the professional classes, especially law, public administration, finance and the Ministry; smaller groups were medicine and education (usually the rank of Professor). The law was an especially important group, with some 52 subscribers recorded in the list in *Agriculture*, of which 31 were writers, six were Senators of the College of Justice and five were writers to the signet. A number of public administrators held key posts in the British government and public service in Scotland: the Commissioner of Customs, the Postmaster-General for Scotland, the Treasurer to the Navy, and the provosts of burghs such as Edinburgh, Dundee and Stirling (a total of nine were recorded on the three lists). Another significant group, comprising 42 subscribers to the three books, was the military, of whom 18 were designated as being landowners. Although a very small number of merchants were recorded in *Select transactions*, their number increased to 49 subscribers throughout the three of Young's books; they included some of the most important Glasgow merchants.[204] A total of 21 booksellers were also recorded in the three lists. For the first time, trades were also represented including vintners (some 16 subscribers to the three books) a coachmaker, coppersmith, founder, wright, saddler, plumber, plasterer, engineer and marble-cutter.

[201] Holmes, 'Encouragement'.
[202] ibid., pp. 36–8.
[203] ibid., p. 40.
[204] ibid., p. 32.

The size of these occupational groups varied between the three lists. Each was shaped by the extent of the subscription lists, with the largest ones being noted in *Agriculture* and the smallest ones in *The farmer's account book*. The different subject matter and genres of the books, especially between Young's first two books and his *The farmer's account book*, also had an impact. A number of distinct changes are highlighted in the occupations of the subscribers of these books. First, *The farmer's account book* had a relatively small agricultural community which comprised 16 nobles, three estate factors, ten farmers and three landowners who had military titles. Second, a number of occupational groups were more prominent. A total of 21 subscribers were from the law profession and there were nearly as many merchants (some 14 in number) as in *National improvements* (some 15). Third, some groups increased significantly in size. This is especially noted for the MPs who included six of the eight MPs and 11 of the 21 booksellers recorded on the three lists.

As in *The modern farmer's guide*, the subscription lists in Young's books also record the place of residence or occupation of the subscribers and reveal their location and the geographical distribution of his books. Throughout the three lists, the subscribers were scattered from Shetland to Galloway and Fort William to Aberdeen. Within this area, large concentrations were recorded in east central Scotland, especially Perthshire, Fife, Angus, and Kincardineshire, the counties nearest Perth, where Young resided and was a merchant. Extensive numbers were from Edinburgh and the Lothians, as well as Lanarkshire, Renfrewshire and Dumbartonshire. Their distribution reflected the methods used by Young, his booksellers, and other businesses to collect subscriptions.

The geographical location of the subscribers changed significantly between the three books. Although the core area for subscribers in all of the lists continued to be east central Scotland, especially Perthshire, they also became drawn from a wider geographical area. In *Agriculture* additional subscribers were gathered from Stirling, Dundee and Fort William and there was also a sharp increase in the numbers from Aberdeen and Glasgow. Glasgow became an important place for the collection of subscriptions for *The farmer's account book:* a total of 27 of the 196 subscribers came from this centre alone; further ones also resided in the neighbouring counties. This widening distribution is also reflected in the increased number of subscribers from England, though their numbers are small. Two are recorded in *National improvements*, six in *Agriculture* and one in *The farmer's account book*.

The subscribers to the three books had a broad rural and urban divide. *National improvements* records that 136 of the 308 subscribers were employed or resided in villages and burghs. For *Agriculture*, the corresponding number is 330 of the 576 subscribers and for *The farmer's account book*, some 113 of the 196 subscribers. Edinburgh was an especially important centre with a total of 97 subscribers to the three books being recorded there, followed by Glasgow with 41 and Perth with 22. These settlements, as well as many others, had communities of subscribers, a feature that was also noted in the subscribers to *The modern farmer's guide* and the membership list in *Select transactions*. Some counties also had small communities of subscribers, with Fife having some 47 burghs and villages with this character. Other communities were also found in rural areas. Especially around Perth and in the Carse of Gowrie, these included neighbouring farmers and landowners.

As in *The modern farmer's guide*, a number of subscribers to Young's three books also

subscribed a number of copies of each one and were multiple subscribers. Each book had a significant number of them: *National improvements* had 51, *Agriculture* had 98 and *The farmer's account book* some 33; a total of 110 individuals and organisations had this character. They accounted for a significant number of the total copies of the books that were subscribed, some 238, 496 and 165 copies of each book, respectively. Each subscriber requested between two and 13 copies, with one organisation subscribing for 40 copies of *Agriculture*. Some occupations had large numbers of these subscribers, who also subscribed a significant number of copies. The landowners, their factors and farmers had the largest numbers: 52.7 per cent of the nobles had this character; 21 per cent of the factors; 24 per cent of the other landowners in 1788 and 8.4 per cent of the farmers to the three books. Some subscribed large numbers of copies: the Duke of Athol and Archibald Kidd, farmer at Queensburgh, Alexander Mitchell, farmer at Carriston, each subscribed six copies of both *National improvements* and *Agriculture*, and William Forbes of Callander and Charles Kinnear, farmer in the Carse of Gowrie, eight copies of each. Another group had a range of roles in Scottish society, combining public duties with landowning ones. They included five MPs, the Board of Trustees for Manufacturers and Fisheries, the Lord Chief Baron and the Postmaster General for Scotland.

The membership list in *Select transactions* and the subscription lists in the books of Charles Varlo and David Young reveal that each had a number of communities of readers. They comprised a range of different social and occupational groups who were located throughout a number of geographical areas of the country. This is confirmed for England by Goddard, who points out that English agricultural books showed 'many indications' of readership patterns.[205] These groups of readers were shaped by the methods used by authors and their booksellers and other distributors to collect subscriptions. As has been demonstrated for Young's books, they could be enterprising and use a wide range of methods to secure them.[206] The subscription lists show the full extent of the distribution of a book while their imprints on their title pages show the main centres from which they were distributed. These distribution centres were primarily urban, though authors who collected subscriptions also went into rural areas. Subscribers who subscribed more than one book, and who were located in a rural area, also created further distribution networks which may have extended further throughout this area.

The readers and subscribers were drawn from a range of social and occupational groups. These were not restricted to the agricultural community, or all classes of it, and extended to a wide range of occupations, some of which were not immediately associated with it. Some groups were more prominent than others. These patterns also applied to the multiple subscribers, with some occupational groups being more prominent than others. Young's books clearly demonstrate that patterns of subscribers varied even for the books of a single author. These differences are especially highlighted in the subscription lists in *Agriculture* and *The farmer's account book*. There also appears to be wider differences in readership patterns between Scotland and England. Goddard quotes the opinion of Lord Somerville that farmers were 'not a reading class of people'.[207] However, the subscription lists in Young's books from the 1780s shows that they were indeed an important group.

[205] Goddard, 'Agricultural literature and societies', p. 366.

[206] Holmes, 'Encouragement', pp. 27–8.

[207] Goddard, 'Agricultural literature and societies', p. 366.

The membership list and the subscription lists reveal that the books were being purchased and read by key figures in the agricultural community, the people through whom agricultural changes were introduced, facilitated and took place. Landowners played a critical role in these developments. Indeed, the role of landowning was pivotal in Scottish society, and landowners had a range of roles in social and economic development. Landowners encompassed a wide range of people. As Smout observes, 'such a life and such prestige were so desirable that everyone of lower rank bought land if they could'.[208] Not only did this group include the landed gentry, but also the professional classes such as 'lawyers, Ministers, private gentlemen, noted generals and admirals', manufacturers and colonial careerists.[209] Devine sums up their role, asserting that 'in Scotland, apparently, agrarian change had often to be encouraged from above. It did not simply develop autonomously from below'. For him, 'landowners, through their factors, played a very important role, especially in the initial phases of agrarian improvement in the later eighteenth century'.[210] Adams considers that they undertook a range of roles: as pioneers, they introduced 'novel ideas in the face of hostility', as generators, 'who recognised the benefits of improvement', as adopters who emulated the ideas of the generators, as implementers, largely land surveyors and principal estate officials 'who had a firm grasp on the new methods', and as managers, 'mostly commissioners and factors, who nurtured the new system to its full potential'.[211]

Although landowners were critical to the changes that took place, another group also played an important role in bringing these about. Adams suggests that the 'revolutionaries', the 'Improvers', also 'occasionally included tenants'.[212] For Devine, the 'existence of a pool of tenants within the existing social order with the capital resources and the commercial expertise to respond rapidly and energetically to the new opportunities', became 'even more crucial over time'.[213] These ranged in social and economic status and character, making some more important than others in initiating changes. There were more substantial, prosperous and forward looking tenants who were 'even beginning to engage the interest', in the mid-eighteenth century, but also smaller ones that did not have the necessary capital to act as revolutionaries; some 'showed little enthusiasm for these new ways of farming'. Henry Hamilton suggests that 'tenants generally had neither the knowledge nor the capital to make improvements'.[214]

As the membership list of *Select transactions* and the subscription lists were published at different times of the eighteenth century, they are able to show changes to the character of the people who purchased and read agricultural books. They clearly demonstrate that as the eighteenth century progressed, these activities were undertaken by a widening range of classes and occupational groups. As agricultural developments became more widespread, and undertaken at a rapid rate, and as tenant farmers played a greater role in these, they started to make a wider use of agricultural books, which were also starting to consolidate the broad range of knowledge that was available. By the end of the period of this survey, the subscription lists of Young's

[208] T. C. Smout, 'Scottish landowners and economic growth, 1650–1850', *Scottish J. political economy* 11 (1964), p. 218.

[209] ibid; James E. Handley, *The agricultural revolution in Scotland* (1963), p. 9; J. A. Symon, *Scottish farming, past and present* (1959), p. 146.

[210] Devine, *Transformation*, p. 60.

[211] Adams, 'Agents', pp. 159–60.

[212] Adams, 'Agents', p. 155.

[213] Devine, *Transformation*, p. 165.

[214] William Ferguson, *Scotland: 1698 to the present* (1977), p. 170; Hamilton, *Economic history*, p. 73.

books were not confined to the members of the agricultural community and its stakeholders such as the legal profession, but were also purchased and read by members of the wider Scottish society for whom agricultural and rural development were subjects of interest. These broadening patterns are also reflected in a number of general comments about the readership of Scottish agricultural books. In 1760 Sir Archibald Grant observed that 'common farmers do not read'.[215] A decade later a similar observation was made by the editors of *The Scots farmer* who suggest that 'it may be safely said, that the inferior class of our Farmers (and they comprise the greatest part) are not yet in a condition to use these books with judgment, so as to profit by them'.[216] However, these comments contrast with a remark made by Alexander Bald in 1780 who points out that 'books on agriculture are now so universally read'.[217] Indeed, in 1816 Sir John Sinclair could note the 'ample provision' that was made for the education of 'all ranks' of the Scottish population, and he commends Scottish farmers for their habit of reading.[218] By the time Sinclair made his comments, agricultural books were being more widely purchased and read throughout the agricultural community. However, even until the mid-nineteenth century, attempts continued to be made to make them, and other printed media such as newspapers and journals, accessible throughout the agricultural community, especially to farmers.[219] The circulation of agricultural books in the eighteenth century can be considered to represent the earliest stages in the use of the printed word to circulate agricultural information to the wider agricultural community.

[215] Sir Archibald Grant, *A dissertation of the chief obstacles to the improvement of land, and introducing better methods of agriculture throughout Scotland* (1760), p. 91.

[216] *The Scots Farmer*, I, p. 10.

[217] Bald, *The farmer and corn-dealer's assistant*, preface, p. vii.

[218] Sir John Sinclair, *General report on the agricultural state, and political circumstances of Scotland* (5 vols, 1814), III, p. 395; id., *An account of the systems of husbandry adopted in the more improved districts of Scotland*, p. 2.

[219] Heather Holmes, 'Scottish agricultural newspapers and journals and the industrialisation of agriculture, 1800–1880', *Folklife*, 40 (2001–02), pp. 25–39.

Female agricultural labour on the Dixon Estate, Lincolnshire, 1801–17

by Donna J. Ulyatt

Abstract

This article continues the examination of women's work in the early nineteenth century drawing on two detailed logbooks kept on the estate of the Dixon family of Holton Hall, Lincolnshire, 1801–17. Some of the women working can be identified as the wives of labourers working on the estate. Others were girls, including the daughters of the same labourers. Female labour seems to have been drawn on most heavily in the first years of the century and diminished thereafter although later evidence is offered to show the practice continuing even in mid-century. Women were used most heavily in weeding, hay making and harvest work: there were occasions when they were employed in heavy work such as dung-spreading.

In a recent article, Pam Sharpe commented that we 'have little idea of where and when women worked on farms'. Despite the work of Sharpe herself, and other historians such as Burnette, Gielgud, Speechley and Verdon who have addressed the work of women in agriculture in general and in particular regions or counties, much remains to be done to elucidate how often women were employed in agriculture and what those who were employed did in the fields.[1] They and other authors have particularly drawn on farm accounts which, as Verdon argues, offer a more reliable account of the employment and wages of agricultural workers than some contemporary published sources which are tainted by the preoccupations of largely male writers.[2] Or, as Gielgud has suggested, 'it is from farm records that women's value as workers is most practically and authentically revealed'.[3] This paper aims to contribute to our knowledge of women's work by offering an analysis of their work on a single Lincolnshire estate which possesses records of unusual quality from the first two decades of the nineteenth century. The source is two logbooks from the estate of William Dixon of Holton-le-Moor which cover (with gaps) the years 1798–1817 and record the work undertaken by seventy women and girls.

[1] P. Sharpe, 'The female labour market in English agriculture during the industrial revolution: expansion or contraction?', *AgHR* 47 (1999); N. Verdon, *Rural Women Workers in nineteenth-century England, gender, work and wages* (2002); J. Gielgud, 'Nineteenth-century farm women in Northumberland and Cumbria: the neglected workforce' (unpublished D.Phil thesis, University of Sussex, 1992); H. Speechley, 'Female and child agricultural day labourers in Somerset, *c.* 1685–1870' (unpublished PhD thesis, University of Exeter, 1999) and J. Burnette, 'The wages and employment of female day-labourers in English agriculture, 1740–1850', *EcHR* 57 (2004).

[2] Verdon, *Rural Women Workers*, p. 36; also Speechley, 'Female and child agricultural day labourers', p. 77.

[3] Gielgud, 'Nineteenth-century farm women', p. 79.

They detail the number of days worked, pay received and in many cases the type of work undertaken by the women. The records of women employed as domestic servants were kept separately from those employed on the land and there was very little or no interchange between the two roles.

I

The three villages mentioned in the text, Holton-le-Moor, Nettleton, and Thornton-le-Moor lie south-west of Caistor on the north-western edge of the chalk wolds and sit partially on limestone heath and partially on clay. The Dixon family acquired Hall Farm at Holton-le-Moor and Gravel Hill Farm at Thornton-le-Moor in 1740 from the Bedstoe family.[4] They also held land at Normanby, Searby, North Kelsey, Hibaldstow, and marsh pasture at Theddlethorpe, Great Carlton, and Skidbrooke.[5] William Dixon built Holton Hall in 1783. By the nineteenth century, he was a relatively large landowner, owning well over 3,000 acres, having gained a further 131 acres in 1791 following the enclosure of the adjoining parish of Nettleton.[6] The enclosure of Holton–le–Moor appears to have come about in two stages, the first in the early seventeenth century led to the disappearance of the open fields and the ending of common grazing rights on meadow and pasture land, leaving some 600 acres of rough pasture and warren unenclosed.[7] The enclosure of this land at Holton-le-Moor was delayed in the early nineteenth century by the question of tithes and by William Dixon's own fondness for the large warren on the moor.[8] Dixon regularly employed warreners, such as William Markham in 1816, which implies that it was a profitable enterprise.[9]

In his notebooks Dixon registered his concern that the side effects of rapid enclosure were bad for public welfare and would cause considerable hardship to those without land.[10] Dixon believed that 'landlords benefited at the expense of farming tenants' upon the enclosure of Caistor Moor in 1814.[11] The experiences of Viscount Cholmondeley and his family, with whom Dixon had worked in setting up and running the Caistor Society for Industry in 1800, had led Dixon to believe that enclosure raised poor rates.[12] Late enclosure was common on less fertile or disputed land and the enclosure of Holton–le–Moor was not completed until 1838, some fourteen years after Dixon's death.[13]

[4] *Holton le Moor* (unbound pamphlet 12628, Lincoln Central Library).

[5] H. Fuller, 'Landownership in Lindsey *c.* 1800–1860 with particular reference to the role of the large landowner as an agent of agricultural improvement and landscape change' (unpublished MA thesis, University of Nottingham, 1974), p. 79.

[6] E. and R. Russell, *Parliamentary enclosure and new Lincolnshire landscapes* (1987), p. 113.

[7] R. Olney, 'The Enclosure of Holton-le-Moor', in Dinah Tyszka, Keith Miller and Geoffrey Bryant (eds), *Land, people and landscape. Essays on the history of the Lincolnshire region* (1991), p. 122.

[8] J. Yates and H. Thorold, *Lincolnshire. A Shell Guide* (1965), p. 122.

[9] Lincolnshire Archive Office, Dixon 4/3/141. All documents cited are held by the LAO.

[10] Olney, 'Enclosure of Holton-le-Moor', p. 123.

[11] ibid.

[12] D. Hey, 'The north-west Midlands', in J. Thirsk (ed.), *The Agrarian History of England and Wales*, V, *1640–1750* (2 vols, 1984), i, p. 150. The Caistor House of Industry is referred to once in the women's work logbooks where it is noted that during July 1811, six unnamed inmates worked for Dixon. However, this is the only reference to House of Industry inmates in the women's work logbooks, suggesting that they were not employed on the estate on a regular basis.

[13] Olney, 'Enclosure of Holton-le-Moor', p. 124.

Alongside their farming interests, the Dixon family were benefactors of the community, particularly in Holton-le-Moor. Over the 150 years that they owned the land, they built a school, almshouses, a village hall and funded the restoration of the parish church.[14] Despite their philanthropy, the Dixon family did not enjoy the status and standing of their near neighbours, the Yarboroughs. In a letter to Lord Brownlow in 1837, Reverend William Cooper considered Thomas John Dixon, William's son, a 'Highly respectable and very opulent yeoman' but not suitably educated for magisterial duties.[15] *The Stamford Mercury* nevertheless reported on the death of William Dixon in 1824, that 'he was universally respected by all who knew him, and a great part of his life was spent in bettering the conditions of the labouring classes'.[16]

Although the estate remained under William Dixon's control during his life, a comparison of the handwriting in the logbooks with other Dixon notebooks appears to show that Thomas John Dixon, William's eldest son, kept them.[17] From 1805, Thomas John was farming at Nettleton and Thornton le Moor with other family members and later in his own right. When his father died in 1824, Thomas John Dixon took over the running of the estate. He married Mary Anne Roadly in 1827 and they had four children. In 1821 the total estate acreage was 2,037, which increased to 3,352 acres when 1,315 acres at Searby, Hibaldstow and North Kelsey were annexed to the Dixon estate on the marriage of Thomas John to Mary Ann. Thomas John Dixon enclosed the moor in 1838 and carried out much of the expansion of the arable acreage on the estate.[18] Additional purchases and further reclamation increased the acreage of the estate to 4,124 acres in 1860 and to 5,043 acres in 1870.[19] Thomas John's son and heir Richard died just twenty-one days after his father in 1871.[20] The Estate then passed to Mary Anne and following her death to their three daughters, Ann, Amelia, and Charlotte in succession.[21] The family maintained their position as landowners until 1890s. Although the house remained in the family's possession, the estate itself was broken up following a dramatic fall in land prices.[22]

By the end of the eighteenth century, some changes in farming practice had been undertaken at Holton-le-Moor, although much of it remained either moor or warren suitable only as sheepwalks and rabbits.[23] The women's work logbooks indicate that the crop rotation used on Dixon land was one of which Arthur Young would have approved.[24] It consisted of turnips and other fodder crops, beans, barley and clover with some wheat and potatoes. There is evidence for the limited use of fallow.[25] The Dixon family were clearly engaged in a form of mixed farming by the end of the eighteenth century, using both old and new farming techniques to grow cash and fodder crops and also breed and fatten livestock for market. Dixon farm accounts from the year 1835 listed the livestock kept which included 78 pigs, 165 cows and 1968 sheep.[26]

In a later set of farm accounts, dated 1852, Thomas Dixon detailed the crops grown and techniques used, many of which were similar to those used during the period of the logbooks.

[14] ibid.
[15] LAO, 4BNL Box 1.
[16] *The Stamford Mercury*, 17 Dec. 1824.
[17] Dixon 5/4/1 and 5/4/2.
[18] Olney, 'Enclosure of Holton-le-Moor', p. 122.
[19] Dixon 1/C/12/3 and 1/C/14/65.
[20] Dixon 10/12/1.
[21] M. Levy, 'Domestic service in rural England during the nineteenth century', (unpublished MA thesis, University of Nottingham, 1992), p. 8.
[22] Olney, 'Enclosure of Holton-le-Moor', p. 180.
[23] A. Young, *General View of the Agriculture of the County of Lincolnshire* (1813, repr. 1970), p. 123.
[24] ibid., p. 129.
[25] Dixon 5/4/1.
[26] Dixon 5/1/9.

He listed the main crops as beans, carrots and turnips, the cultivation of which was labour intensive and often required hoeing and weeding on a two-weekly basis for the first two months. The use of fallow was still common when it was not profitable to transport manure to a field or when manure was in short supply.[27] Dixon detailed the land preparation required for planting clover, cabbage and 'mangol wuzels'. These fodder crops were hand sown in soil that had been double ploughed, which had had stones removed and was then hand hoed up to three times. The fields also required hand weeding, women, and children, Dixon explained, usually did the weeding and the hoeing.[28]

II

The records are by no means complete and although the cover of the first logbook is dated 1798 the entries inside the book do not start until 1801. There is also no record of work undertaken in the three years 1806–8 or in 1816 in either book.[29] Evidence from the 1802 Dixon farm account book indicates that the male labourers continued to work in the same manner during 1806, 1807 and 1808, adding weight to the supposition that the records are incomplete.[30]

The women's work logbooks provided an important record of the type of work women did, the number of days they worked and the pay they received. Whilst many of the women appear to have been day labourers, a number of the women in the logbooks were the wives or daughters of the 'confined' labourers employed by Dixon. 'Confined' labourers were usually married labourers employed by the farmer or landowner on a permanent or yearly basis and who lived in cottage accommodation on the farm.[31] Many of the labourers employed by Dixon appear in the estate labour accounts for a number of consecutive years. One such example is William Westfield who was first engaged as a shepherd by William Dixon in 1796 and was still recorded as working for Dixon in 1817.[32] Elizabeth Westfield, William's wife appears sporadically over much of the length of the Dixon women's work logbooks in 1801, 1812 and 1817. Mary Robinson and her husband William appeared in the first logbook and William appeared in a male labourers' account book dating from 1804.[33]

Transcripts of the parish records for churches in Holton, Thornton and Nettleton show that thirteen of the women were linked to men working for Dixon. The birth of Olive Dawber is recorded at Holton in 1792. Her parents Sarah and William Dawber were both mentioned in the logbooks and Olive herself is listed in the second logbook as weeding for 4½ days in 1801 for which she received the child rate of 6*d.* per day.[34] Parish records from Thornton-le-Moor show John and Elizabeth Hand as the parents of a son and daughter buried in 1810. Both John and Elizabeth worked on the Dixon estate from the 1790s, Elizabeth also appears in the logbooks and

[27] Dixon 10/5/1.

[28] Dixon 10/5/3.

[29] Dixon 5/4/1 and 5/4/2. The first book is entitled 'Women's Logbook' and is dated 1798, however the second book which deals largely with pay, has the titles 'Common Day Book' and also 'Waste Book' scrubbed out and 'Women's Work Ledger 1801–1813' added. The greater part of this paper is based on an analysis of these volumes: specific references will not normally be offered.

[30] Dixon 4/6.

[31] BPP, 1867, XVI, *Sixth Report of the Children's Employment Commission*, p. 15.

[32] Dixon 4/3/135.

[33] Dixon 4/6/68 and 5/4/1.

[34] Dixon 5/4/2.

in a farm account book in 1824. The baptism registers at Thornton confirm the marriages of Bridget and William Proctor and Thomas and Mary Sharlack, all of whom appear in the Dixon estate records. By cross-referencing of the names in the logbooks with those in other Dixon estate records, it is possible to show that 19 of the 70 women listed are the wives of confined labourers.[35] A further 16 of those listed appear to be daughters of confined labourers.

The estate records show that at least two of the women were hired alongside their husbands in a package deal not dissimilar to the 'bondager' system practised in the north-east. Pinchbeck believed that many farmers and landowners preferred to employ the wives of their labourers as day labourers, as this helped to keep down their wages bill.[36] In 1792, Hugh Sparrow was hired with his wife Lucy. He received sixteen guineas a year, a cottage, turf, a shoe and boot allowance and various amounts of grain. Lucy was recorded as working for around 70 days that year, undertaking work that included weeding, haymaking, harvest, and shearing.[37] Lucy Sparrow also appears in the Dixon logbooks in 1809, 1810 and 1811.

The women with unknown or unproven links to Dixon labourers may possibly have been other relatives, or women and girls from the surrounding villages. It is possible that some of the women were single women employed as farm servants. However, there is no mention of female farm servants in the logbooks or in the other Dixon account books. Of the women named in the logbooks, some were adult women and others girls. There are two factors which can be used to distinguish them. The first and most obvious is the amount they were paid. The second logbook shows that girls were paid around 6*d.* a day, approximately half of that the women received. On this criteria 16 of the 70 women employed could be classed as girls. The logbook shows Ann Linderson earning £1 9*s* 1*d* in 1813 for 47 days work at an average of 6*d.* per day. She appears again in the 1824 accounts for the full female rate.[38] Without knowing the ages of the individual women and girls, there is no way to discern the age at which a girl was considered an adult and given adult pay.

The second factor distinguishing women from girls relates to the frequency and duration of employment. The same 16 girls were found to be employed less often and for shorter periods than the adults. They were also employed, alongside their mothers, in more general tasks such as weeding and haymaking. Sarah Dewry worked with her mother, Mary in 1802. They are both recorded as weeding for 4 days in May and 20 days in June. Mary was consistently employed and appears in the logbooks for nine of the thirteen years and was paid the full rate whilst Sarah was only listed in 1802 at the child rate.[39]

The question will inevitably asked as to whether data drawn from the years of the Napoleonic wars can be typical. Whilst it may have been the case that 'the Napoleonic Wars led to an increase in the number of women employed in agriculture' in some parts of the country, it is far from clear that military service led to a significant absence of male agricultural labourers in Lincolnshire.[40] A number of confined labourers are known to have been working on the Dixon estate during these years and their names appear on a loose note in the second women's work

[35] Dixon 4/6/68, 4/11, 4/3 and 5/4/2.

[36] O. Pinchbeck, *Women Workers and the Industrial Revolution, 1750–1850* (1931, repr. 1981), p. 91 and B. Hill, *Women Alone, Spinsters in England, 1660–1850* (2001), p. 178.

[37] Dixon 4/3, fo. 140.

[38] Dixon 5/1/1.

[39] Dixon 5/4/1 and 5/4/2.

[40] Pinchbeck, *Women Workers*, p. 62.

logbook. They include William Robinson, Thomas Cash, and William Dawber. Unfortunately there are no comparable records of male day labourers on the Dixon estate for this period making it difficult to assess the total number of days worked and the percentage of the total represented by the women's work recorded in the logbooks. There is however, one book of accounts, covering the period from 1802 to 1809 that shows that men were employed in number of both skilled and semi-skilled roles on the estate.[41] Whilst some of the men's work is listed in this account book, it also includes payments made to traders, and suppliers such as millers and blacksmiths and payments made by tenants. The logbooks do show that total number of days the women worked fell from 648 in 1801 to 111 in 1817 with the highest number of days worked in any one year being 667 in 1802. In addition, there was a decline in the number of individual women employed during this period. The logbooks show that 16 women were employed in 1801, falling to 14 in 1817 and a low of one woman in 1814. Figures from 1817, which represent the employment of fourteen girls for one week in July of that year, distort the overall trend (Table 1). There is therefore some evidence that women were offered less work after the end of the war but their employment did not end then. The 1824 farm account book is very detailed and lists the names of labourers and the pay they received.[42] However, it does not link individual women to individual tasks and therefore gives no indication of the work in which they were engaged or its duration. It shows that there were nineteen women employed throughout the year although the largest numbers of women were working in July and August. The type of work they were undertaking is mentioned only four times. On 31 July 1824, Maria Wilson was paid 5*s.* 6*d.* for threshing and loading and Maria Duffield was paid 7*s.* 8*d.* for haymaking and manure. In August 1824, Mary Jackling was paid 5*s.* for taking a wagon of bones to Brigg and in September Elizabeth Brown was paid 1*s.* 8*d.* for two days haymaking. Only three of the names match those of women from the earlier logbooks. Ann Linderson (as already mentioned), Elizabeth Hand and Elizabeth Brown. Elizabeth Hand's son Matthew and Elizabeth Brown's husband William are also recorded as working on the estate in 1824.

The next surviving farm account book is dated 1835 and is similar in form to the 1824 account book.[43] It lists 18 women as working in much the same way over the whole year from January through to December. There is again, however, no indication of the nature of the work these women were engaged in. The year round employment of the women plus the lack of references to harvest work suggest a shift away from harvest employment towards spring weeding and summer haymaking.[44] Much later James Green Dixon, Thomas Dixon's brother, gave evidence to the commissioners of the Commission into the Employment of Children, Young Persons and Women in Agriculture which reported in 1868 in which he confirmed that it remained the practice on his land to hire the wives and children of his labourers.[45]

The women in the logbooks were paid by the day. Burnette's study of the pay and work of female day-labourers in the eighteenth and early nineteenth centuries indicates that nationally, women were paid between 4*d.* and 15*d.* per day.[46] However, the women in the logbooks were

[41] Dixon 4/6.
[42] Dixon 5/1/1.
[43] Dixon 5/1/9.
[44] K. D. M. Snell, *Annals of the Labouring Poor, Social Change and Agrarian England, 1660–1900* (1985), p. 45.
[45] Olney, 'Enclosure of Holton le Moor', p. 283.
[46] Burnette, 'Wages and employment of female day-labourers', p. 668.

paid at the higher rate and received between 12*d.* and 18*d.* per day.[47] Whilst the record of the pay the women received is incomplete and the women's earnings from other sources are not known, the logbooks do show that the average annual earnings were £3 6*s.* Elizabeth Hand earned the highest sum in any one year, £6 7*s.* 2*d.* in 1811 whilst the lowest total was 6*s.* paid to Mary Cessy in 1813. However, the average earnings are better illustrated by Mary Clark who earned £3 14*s.* 11*d.* in 1809 and by Elizabeth Taylor who earned £3 5*s.* in 1810. By comparison, male labourers listed in farm account book such as William Robinson and Thomas Smith were employed on a yearly basis and received an annual wage of between £18 and £22 per annum plus cottage accommodation and other payments in kind.[48]

III

Gielgud's work on women agricultural workers in the North, Miller's work on farm workers in Gloucestershire and Speechley's on women agricultural workers in Somerset indicate that women were engaged in a range of agricultural tasks, similar to those carried out on the Dixon estate, during this period. Whilst Speechley concludes that rural working women in Somerset undertook labour intensive tasks such as hoeing, weeding and stone picking but that heavy tasks such as ground clearing and spreading manure were undertaken by male workers.[49] Miller suggests that in Gloucestershire women did 'most of the unskilled, back breaking types of work.'[50] On the Dixon estate many of the tasks the women undertook were dirty and heavy such as muck breaking and dung spreading.[51] Mary Dickinson and Mary Dewry provided examples of such work. Mary Dickinson was recorded as 'dung spreading' in July 1803 and Mary Dewry was recorded as 'muck breaking' in May and June 1813. Manure was used as a fertiliser to improve areas of thin soil and Dixon describes how wet manure was thrown by hand on the land in winter by labourers, both male and female.[52]

The work the women undertook also differed over time (Table 2). Haymaking was the biggest single task undertaken by the women, occurring throughout the season in most of the years between 1801 and 1814. The women were engaged, mainly in haymaking with some weeding and hoeing, for 248 days during August 1811, the highest number of days worked in any one month. Between 1801 and 1809, the women appear to be engaged in a wider range of tasks. In September 1801 the women are recorded as working in eight different tasks. Between 1801 and 1809 harvest and haymaking represent the core of their employment in the autumn months. However they were also engaged in threshing, barley sheafing and potato and turnip picking. Between 1810 and 1814 there is an apparent reduction in their autumn employment, which appears to be confined to haymaking, some weeding in 1810 and turnip picking in 1811.

The seasonality of women's employment is shown in Table 1: the tasks undertaken by the women may be found in Table 2. Some 45 per cent of the entries in the logbooks included the type of work undertaken. Whilst acknowledging that the sample is small, the evidence is detailed and provides sufficient evidence for a case study. A number of the tasks carried out by

[47] Dixon 5/4/1 and 5/4/2.

[48] Dixon 4/6.

[49] Speechley, 'Female and child agricultural day labourers', p. 100.

[50] Miller, 'Farming, farm work and farm workers', p. 83.

[51] Dixon 5/4/1.

[52] Dixon 10/5/3.

TABLE 1. Women's seasonal employment patterns on the Dixon estate

	Number of Days Worked by Month						*Total number of days worked*	*Number of women*	*Average number of days worked per woman*
	May	*June*	*July*	*August*	*September*	*October*			
1801	14	82	91	237	201	23	648	16	40.5
1802	42	182	150	135	128	30	667	13	51.3
1803	3	110	65	113	98	0	389	12	32.4
1804	20	70	48	71	47	21	277	4	69.25
1805	0	0	7	25	8	2	42	2	21
1809	0	0	14	3	0	0	17	4	4.25
1810	0	8	132	77	57	0	274	15	18.26
1811	0	0	199	248	0	0	447	19	23.52
1812	4	27	36.5	15	25	0	107.5	8	13.4
1813	4	20	11	17	19	0	71	7	10.14
1814	22	21	26.5	0	0	0	69.5	1	69.5
1815	0	11	30	0	0	0	41	4	10.25
1817	0	0	111	0	0	0	111	14	7.9

Note: 1806–8 and 1816, no data.
Source: LAO, Dixon 5/4/1 and 5/4/2.

the women, such as weeding, hoeing, and potato setting, were undertaken during the spring months (Table 1). The logbooks show that between 1801 and 1814 the women were engaged in weeding during 25 of the 50 months for which there are records. Weeding was most often, but not exclusively, undertaken in May, June and July.

The women maintained their involvement in the harvest and were also engaged in additional autumn and winter tasks such as threshing, turnip pulling and potato picking and sorting. Spring work including weeding and hoeing was undertaken by women and children for a fraction of the cost of using male labourers.[53] Many of the women were recorded as weeding individually or in small groups throughout the logbooks. However, in June 1802 eight of the women, including Ann Cash, Sarah Brown and Elizabeth Smith, were recorded as weeding on the same days from the fifth to ninth of June. There is no indication as to whether they were working together at a single site or in smaller groups at separate sites. Four entries in the first logbook refer to weeding undertaken for a W. Rayner during the month of June 1803 and 1804. Two of those engaged in this weeding were girls who worked together and the other two were women. They were all paid by Dixon, which could suggest they were on loan to a neighbour.[54]

A number of the women were recorded as weeding and hoeing in May, June and occasionally other months. Unfortunately, there is no distinction made in the logbooks between the different sorts of weeding and hoeing undertaken. However, crops known to require regular hoeing and weeding include turnips, potatoes and other root crops. The 1801 crop returns

[53] Snell, *Annals of the Labouring Poor*, p. 59.

[54] Dixon 4/6.

show that in addition to wheat and barley, turnip production accounted for some 22 percent of total arable acreage on the wolds.[55] The lighter soils on the wolds were highly suited for turnip cultivation. Farming in this area relied heavily on sheep production and the turnip made an excellent fodder and forage crop. Snell suggests that the involvement of women in turnip cultivation was 'slight, but was nevertheless an additional aspect of their spring work'.[56] However he does make a distinction between the south and east and those areas such as Norfolk and Lincolnshire where in the nineteenth-century agricultural gangs were used to cultivate and harvest such crops.[57]

Turnips are mentioned on two occasions, first in July 1803 when Mary Dewry is recorded as working at weeding, twitching (the removal of couch grass), potatoes, and turnips for eight days and in October 1811 when Sarah Croft worked for sixteen days at turnips.[58] Mary Dewry was clearly engaged in a number of other tasks over the eight days for which she is shown to be 'at turnips', and the fact it was July suggests she was not pulling the turnips but was perhaps undertaking tasks such as additional weeding or hoeing of the turnips. Sarah Croft appears to have been working only at turnips for sixteen days in October; this may have been the case as turnip pulling was one of the few tasks undertaken by women during October. None of the other women were recorded as working with turnips on these days, which could indicate that Sarah alone worked at turnips however, it seems more likely that she worked either with women whose work on those days was not recorded or perhaps with male members of her family. Turnip pulling, like potato digging, was not the light task so often associated with rural working women, it was hard dirty back-breaking work, which blistered the hands, and was often undertaken in very cold weather.[59]

The second logbook shows eight women engaged in equally strenuous woad pulling during June and July of 1812 and 1813.[60] The cultivation of woad, a plant with a taproot approximately 20 cms long, would have been difficult on the thin soil of wolds. According to Young, writing in the early nineteenth century, woad was best cultivated on fresh grassland. It therefore seems likely that it was grown, as recommended by Young, for a few years, on newly converted land. After thorough preparation of the land, the first seeds would have been broadcast in March. Woad required careful weeding and successive crops were weeded and cropped at the same time. This was a task 'executed with much attention by men, women and children, on their knees, using short spuds with one hand, and drawing the weeds with the other'.[61]

Potato setting, weeding, and picking, which feature regularly in the Dixon logbooks, were equally arduous tasks.[62] The 1801 crop returns indicated that potatoes were not a significant crop in Lincolnshire. However, the women in the Dixon logbooks appear to have been employed in potato production through much of the year over the life of the logbooks.[63] The recorded incidence of potato setting undertaken by the women was second

[55] C. Rawding, 'Agricultural land use in 1801', in S. Bennett and N. Bennett (eds), *An Historical Atlas of Lincolnshire* (2001), p. 92.
[56] Snell, *Annals of the Labouring Poor*, p. 55.
[57] ibid., pp. 55–6.
[58] Dixon 5/4/1.
[59] Pinchbeck, *Women Workers*, p. 61.
[60] Dixon 5/4/2.
[61] Young, *General view … Lincolnshire*, pp. 174, 176.
[62] Dixon 5/4/1 and 5/4/2.
[63] Rawding, 'Agricultural Land Use', p. 92.

TABLE 2. Work Undertaken by women on the Dixon estate

	May	*June*	*July*	*August*	*September*	*October*
1801	Haymaking Potatoes	Haymaking	Weeding Hoeing	Haymaking Harvest Shearing Threshing	Harvest Haymaking Threshing Turnips Beans Corn Potatoes Sheafing Barley	Harvest
1802	Weeding Potatoes	Weeding Haymaking Potatoes Threshing	Haymaking Weeding Turnips Washing Locks	Harvest	Harvest Haymaking Threshing Weeding Shearing	Harvest Beans
1803	Weeding	Weeding Haymaking Potatoes Twitching Threshing Dung Spreading	Haymaking Weeding Dung Spreading	Weeding Haymaking Threshing Shearing Pig Tending	Harvest Haymaking Threshing Beans	
1804	Weeding Potato setting	Weeding	Weeding Haymaking Hoeing Twitching Threshing Potatoes	Haymaking Shearing	Haymaking Shearing Weeding Sheafing Barley	Haymaking Potatoes Beans
1805	Carting and setting potatoes Burning off stubble	Weeding			Sheafing Barley	
1809	Weeding	Weeding	Haymaking	Haymaking Shearing	Harvest Sheafing Barley	
1810		Haymaking	Weeding		Weeding Haymaking	
1811	Weeding Muck breaking	Weeding Muck breaking	Haymaking Hoeing beans Weeding	Haymaking		Turnips
1812	Weeding	Weeding	Haymaking Weeding Dung Spreading Woad pulling			

	May	*June*	*July*	*August*	*September*	*October*
1813	Weeding Potato setting Muck breaking	Weeding Twitching Muck breaking	Haymaking Weeding Woad pulling	Haymaking Weeding corn Clover Muck breaking Setting potatoes	Haymaking	
1814	Weeding Muck breaking	Muck breaking	Haymaking			

Note: Multiple entries are listed in descending order of frequency.
Source: LAO, Dixon 5/4/1 and 5/4/2.

only to weeding during May for many of the years between 1801 and 1814.[64] Potato picking was one of the few tasks undertaken in the month of October; Ann Cash was recorded as at potatoes for five days during October 1804 for which she was paid 5*s*.[65]

IV

The logbooks show that next to weeding and hoeing, haymaking and the harvest were the biggest employers of the women. Both were a vital part of rural life and indeed of the rural economy. The work itself was often strenuous and dirty and women's involvement varied from area to area with some women engaged in reaping or shearing and others raking, gathering and gleaning.[66] Excluding those women listed as sheafing, the peak of the women's involvement in haymaking and harvest was in September 1801 when the logbooks show that twelve women were recorded as having worked a total of 136 days. A further 74 women are recorded as working a total of 1160 days during the harvest and haymaking months of July, August, September and October over the thirteen years. Unfortunately there is no indication of the individual tasks that they were engaged in. However it is reasonable to speculate that a significant portion of the women were engaged in haymaking and harvest tasks.[67]

Haymaking took place from July to September. Young writing in 1813, stated that in some parts of the county the start of haymaking was delayed until September due to the 'want of labourers'.[68] Nevertheless, in many of the years covered by the logbooks, haymaking on the Dixon estate took place from May through to October suggesting that the availability of women's labour offset any labour shortage and may also signify the use of new crops or successive cropping of older crops. Thirsk suggests that grasses such as clover and ribgrass were good for haymaking and grazing and could be mown as early as June and in some cases May.[69] The bulk of haymaking on the Dixon estate appears to have taken place during the summer months of July and August. However, Rebecca Smith was recorded as haymaking for

[64] Dixon 5/4/1.
[65] Dixon 5/4/2.
[66] Pinchbeck, *Women Workers*, p. 56.
[67] Dixon 5/4/1 and 5/4/2.
[68] Young, *General view … Lincolnshire*, p. 223.
[69] J. Thirsk, 'Farming techniques, 1500–1640', in Thirsk (ed.), *Agrarian History of England and Wales*, IV, *1500–1640* (1967), p. 180.

four days in May 1801. Clover was mentioned once in August 1813 when Sarah Croft is recorded as working at clover.

The logbooks show that alongside the laborious, heavy and dirty work and dirty work of weeding, dung spreading and the harvest and haymaking period, the women were sometimes engaged in skilled or semi-skilled work such as sheafing and threshing. Ten of the women were involved in 'shearing' or 'sheafing' (the spelling changes from one entry and the next), during the months of August and September, particularly between 1801 and 1804. Sheafing involved the collection and binding of newly mown crops such as wheat, barley, rye and sometimes grass. An entry in the second logbook relating to Ann Thompson lists her as 'wheat shearing' in August and September 1810. There are several entries concerning barley sheafing in the logbooks, including the collecting, binding, and stacking. At the turn of the nineteenth century, the crop returns placed barley as the most important crop at county level. Barley was a 'triple purpose' crop suitable for bread, malt, and stock feed.[70] It was successfully grown on the thin and less fertile soils and was therefore important to heath and moor areas where up to 34.4 per cent of available arable acreage was cultivated with barley.[71]

A paper loosely inserted in the second logbook shows Mrs Sparrow, Mrs Dent, and Mrs Richards were each employed for fifteen days twining, stacking, and taking away barley. The women were recorded as 'at barley' for a further nine days. Unfortunately there is no year or month listed on the insert. There are another five entries in the logbooks for 'sheafing' barley, all immediately post-harvest in the September of 1801, 1804, 1805 and 1809. The fact that the women were paid 1*s.* 6*d.* per day, 50 per cent more than the average daily rate for the women on the estate at that time, suggests that there was either an increased demand for labour at harvest time or that the women's sheafing skills were worth paying for. There is however no evidence to suggest that the women on the Dixon estate were engaged in reaping or mowing during the period of the logbooks. The 1802 Dixon farm account book does however show that male labourers on the estate, William Robinson and Thomas Smith, were mowing barley at the same time, during September of 1803, 1804 and 1805, as the women were sheafing and binding it.[72]

Both men and women on the estate were recorded as threshing during months of September and October.[73] Threshing was largely undertaken by hand in the early nineteenth century, before machines powered by horses and later stream gradually took over.[74] White wheat, when mown by the scythe, was cut earlier in the season often when not fully ripe and was handled more easily with the use of the threshing machine as opposed to hand flailing.[75] The Dixon logbooks indicate that the women were engaged in threshing during August, September and in October of 1801 to 1804.[76] However there is only one reference to a threshing machine in the logbooks, which says simply that in 1815, '5 days at threshing machine'. Without additional evidence concerning the use of threshing machine on the Dixon estate at that time, the role of the women in wheat and barley shearing is difficult to discern.

[70] Thirsk, 'Farming techniques', p. 170.

[71] Rawding, 'Agricultural Land Use', p. 92 and *Lincolnshire Echo*, 13 June 2002, p. 5.

[72] Dixon 4/6.

[73] Dixon 4/6 and 5/4/1.

[74] T. W. Beastall, *Agricultural Revolution in Lincolnshire* (1978), p. 195.

[75] J. A. Perkins, 'Harvest technology and labour supply in Lincolnshire and the East Riding of Yorkshire, 1751–1850', *Tools and Tillage* 3 (1977), p. 127.

[76] Snell, *Annals of the Labouring Poor*, p. 222.

V

Haymaking and harvest 'traditionally' employed all available local labour including indoor servants and villagers. In some cases people came from nearby towns.[77] It is reasonable to suppose that women made up a sizeable proportion of those engaged in haymaking and harvest related tasks. The communal nature of haymaking and harvest imbued a certain respectability in the work and in many cases, this respectability was reinforced by the fact that the women often worked in family groups under the supervision of male members of the family.[78]

A number of the women are recorded as working the same locations over a period of time, which could support such notions of respectability. The female members of the Smith family, Rebecca, Elizabeth, and Mary were consistently recorded as working at Ewefield. They were engaged in a number of tasks including twitching, weeding, haymaking, harvest, threshing, and potato setting. A number of the other women were recorded as working at Holton, Thornton, or Nettleton. However, during 1801, Elizabeth Carline, worked from May through to November at Mount Pleasant where she was engaged in similar tasks to those women working at Ewefield, Holton, Thornton or Nettleton including setting potatoes, haymaking, harvest and also threshing. The apparent loyalty of the women to a particular area could have been due to a number of reasons. They could have simply been told where to work. They may have worked in the same areas as their husbands or other relatives, or they worked in areas not far from their cottage accommodation, making it easier to care for any young children and also their own cottage gardens and livestock.

The number of days each woman worked each year varied and was probably linked to their ages, marital status, and other demands on their time. Elizabeth Hand, who was married to one of Dixon's confined labourers, worked on average 72.6 days per year whilst Ann Leonard, who had no proven link, worked only two days. The wives of confined labourers had an opportunity to earn a wage and tend a cottage garden. They were in a better position to survive changes in employment opportunities than other women who took work as day labourers. The wives of confined labourers appear to have worked more often and for longer periods than those women not identified as married to confined labourers. Two further examples are those of Mary Dickenson who worked for a total of 121 days in 1804 and Rebecca Smith who worked for 104 days in 1802. Mary worked consistently for the first four years then disappeared from the books whereas Rebecca reappears in 1810 and 1811 but is found to have worked only seven days and eleven days respectively.[79] It could be argued that between 1805 and 1817, these women were occupied elsewhere or that life cycle demands such as child care or nursing prevented them from working. On the other hand, despite their relatively privileged position, these women could have been unable to find suitable work due to an overall decline in agricultural employment.

Whilst there is no direct evidence, it seems likely that when labourers' wives and daughters were not working for wages they were maintaining the cottage garden and making what they could at local markets from the sale of any excess produce, butter and milk. Such skills and

[77] K. Sayer, *Women of the Fields, Representations of rural women in the nineteenth century* (1995), p. 56.

[78] ibid., p. 30.

[79] Dixon 5/4/1 and 5/4/2.

abilities were considered vital to the family economy. 'The wife's management of the livestock, together with the earnings of herself and her children in hay time and harvest etc, produce nearly as much money in the course of the year as her husband by all his labour during the same time.'[80]

VI

The decline in overall numbers of both men and women regularly employed in agriculture was already significant by the end of the eighteenth century with seasonal under- and unemployment being commonplace.[81] However, Gielgud suggests that labour intensive farming methods 'increased the regularity and diversity' of women's work in the first half of the nineteenth century'.[82] Any increase in the amount or type of work rural women undertook was subject to regional variations and could have been a result of the decline in farm service, the growing demand for food or perhaps – more significantly – an increase in the demand for cheap labour as a result of the use of labour-intensive farming methods.[83] Farmers and landowners in Lincolnshire were not competing for labour with the large scale industry found in other regions, yet the women in the logbooks were paid above average wages, at between 1*s.* and 1*s.* 6*d.*, which suggests that there was demand for their labour.[84] Whilst domestic service may have drawn some younger women and girls away from agriculture, it was not an option for married women or women living in more remote areas of the county. The women in the logbooks, who supplied the flexible and cheap labour that enabled Dixon to grow a variety of labour intensive crops, were able to make a substantial contribution to their family's income.

Laying aside any reservations about the limitations of the Dixon logbooks, it is apparent that a significant number of rural working women were engaged in a range of agricultural tasks on the Dixon estate at the beginning of the nineteenth century. The failure to acknowledge the agricultural work rural women undertook creates a partial and misleading picture of the size and nature of the agricultural work force in Lincolnshire and more generally during the nineteenth century.

[80] Anon, *A Political Enquiry into the Consequences of Enclosing* (1785), p. 43, quoted by Snell, *Annals of the Labouring Poor*, p. 212.

[81] J. Burnette, 'Labourers at the Oakes. Changes in the demand for female day-labourers at a farm near Sheffield during the Agricultural Revolution', *JEcH* 59 (1999), pp. 41–67.

[82] Gielgud, 'Nineteenth century farm women', p. 101.

[83] ibid., p. 53; Speechley, 'Female and child agricultural day labourers', p. 76 and Miller, 'Farming, farm work and farm workers', p. 220.

[84] Burnette, 'Wages and employment of female day-labourers', p. 668.

Agricultural workers in mid nineteenth-century Brighton*

by June A. Sheppard

Abstract

Like many other English towns, Brighton had a number of residents who described themselves as agricultural workers in the 1861 census. This article examines where they were born, when they moved to Brighton, their housing and occupational histories. Most seem likely to have been casual workers on South Downs farms within walking distance of the town.

According to the census taken on 7 April 1861, there were agricultural labourers living in every one of the 72 towns outside London for which separate occupational details were listed. The percentage they formed of total number of adult males (aged 20 and over) was often very small but it tended to rise as the size of town decreased. In 31 towns the agricultural labourers formed under two per cent of the adult males; most of these were industrial towns or ports, but the list includes Oxford, Cambridge, Bath and Brighton. In another 27, between two and five per cent of the adult males were agricultural labourers: these towns were mainly long-established and medium-sized, and included county towns such as Carlisle, Lincoln and Winchester, together with a few industrial towns. The 14 towns with over five per cent of their adult males classed as agricultural labourers were all fairly small and located in arable or mixed-farming districts; the highest percentages were in Wisbech, Dorchester, Bedford, Bury St. Edmunds and Maidstone.[1] (The Appendix lists the percentages for all 72 towns.)

While it has long been known that small country towns housed a number of agricultural labourers, the contingents living in less obviously rural towns give rise to some interesting questions.[2] Were they employed within the town's boundaries on farms round the fringes of the built-up area, or did they travel to work in surrounding parishes? Were they employed all the year round or only at seasons of high demand? Alternatively, were they too old to work and simply recording their former chief occupation? Had they been born in the town or were they migrants from the countryside? And why did they work in agriculture while living where many alternative occupations were available? This article will attempt to answer such questions for Brighton, which had a total population in 1861 of 77,693; there were 314

* I am grateful to Edward Oliver, cartographer in the Department of Geography at Queen Mary, University of London, who drew the figures.

[1] *1861 Census of Population*, II, (1863), Cmd 3221.

[2] C. W. Chalkin, 'Country towns' in G. E. Mingay (ed.), *The Victorian countryside* (2 vols, 1981), I, pp. 281–2.

agricultural labourers among the 19,461 males aged 20 and over (1.61 per cent) and 54 among the under 20s.

I

By 1861, Brighton had grown from a small fishing town into a seaside resort that stretched for some two miles along the Sussex coast, from Kemp Town in the east to the border of Hove parish in the west.[3] Expansion inland was stimulated by the opening of the railway station in 1841, which led to a growing influx of holidaymakers, followed in the late 1840s by the establishment of the London Brighton and South Coast Railway Company's main engineering works in the town.[4] Working-class housing gradually spread across the town's former open fields, and by 1861 little farmland survived within its boundaries. It is the agricultural workers living in this northern part of Brighton, covered by Enumeration Districts 15 to 45 of the 1861 Census, that form the focus of this study.

Most English towns in the nineteenth century had an army of casual workers living within their boundaries who would take any labouring job that came along.[5] These men would have been classed by the census enumerators as labourers, general labourers or day labourers, and there were many of these in Brighton in 1861. It is assumed that those who said that they were *agricultural* labourers would have been more dependent than these general labourers on farm work. Within Enumeration Districts 15 to 45 in 1861, there were 145 men who recorded their occupation as agricultural or farm labourer, together with one shepherd and two farm bailiffs. The 145 agricultural labourers included 117 men aged 20 and over (37 per cent of Brighton's total of agricultural labourers in this age group) and 28 younger men (50 per cent of Brighton's total). For the current analysis, these 148 men are divided into three groups: 96 heads of household (including three men in the Brighton workhouse), 17 lodgers, and 35 sons or other relatives living in the households of others. The decision to live in Brighton in the case of the relatives would have been made by the household head, and the main question of concern for this group is why these (mainly young) men chose agricultural work when there were urban alternatives on their doorstep. The other two groups are of greater interest and we need to ask why they were living in Brighton while working in agriculture? Or the reverse, why were they working in agriculture while living in an urban area?

Brighton is located where the South Downs meet the coast between the valleys of the rivers Adur and Ouse (see Figure 2). The higher and steeper parts of the Downs were devoted to sheep pasture in the mid-nineteenth century while lower and more gently-sloping land supported arable fields.[6] The farms were often several hundred hectares in extent and each employed many men, made up of a small band of permanent employees who were housed nearby and a

[3] Sue Berry, 'Brighton in the early nineteenth century', in Kim Leslie and Brian Short (eds), *An Historical Atlas of Sussex* (1999), pp. 94–5.

[4] June A. Sheppard, 'Brighton's railway workers in the 1850s', *Sussex Archaeological Coll.* 139 (2001), pp. 191–201.

[5] Raphael Samuel, 'Village labour', in Raphael Samuel (ed.), *Village life and labour* (1975), pp. 3–5.

[6] Brian Short, 'Agricultural regions, improvements and land use, *c.* 1840', in Leslie and Short (eds), *Historical Atlas*, pp. 96–7.

larger group of casual workers who were often drawn from a distance.[7] Downland farms within about 90 minutes walk of Brighton would between them have needed several hundred casual workers at busy times such as harvest, and men living in Brighton would have been well-placed to exploit the opportunities offered. Such was the demand that even those who were slowed by age or infirmity would probably have been welcomed.

Figure 1 shows the addresses listed in the 1861 Census Enumeration Books (CEBs) of those agricultural workers who were lodgers or household heads.[8] Some were living close to the one surviving farm in the borough, known as Scabe Castle, and others were close to the boundary with Preston where much farm land still survived.[9] The remainder lived in ordinary urban streets, mostly in one of four clusters: around Elder Street and New England Street, between London Road and the railway land; in the fork between London Road and Ditchling Road; around Frederick Street, in the angle between Trafalgar Street and Queen's Road; and on Albany Hill, east of St Peter's Church. These streets were characterised by relatively low rateable values and houses or rooms that could be rented fairly cheaply.[10]

The CEBs also tell us the ages of Brighton's agricultural workers in 1861. As might be expected, sons were mostly in their teens or early twenties. Twelve of the 17 lodgers were under 36 (eleven were unmarried and one widowed); one had been born in Brighton and the remainder were migrants from the rest of Sussex. Five lodgers were aged 50 or over, all of whom were widowers or unmarried and born in the rest of Sussex. The 93 household heads were aged between 22 and 73, while the three men in the workhouse were aged 73, 77 and 80. Nine of these 96 men said that they had been born in Brighton, 11 were born outside Sussex and 76 gave their birthplace as a parish in the rest of Sussex.

The discovery that the majority of the 1861 agricultural workers had been born in the more rural parts of Sussex prompts several further questions. At what age did they move to Brighton and how long had they been living in the town? Had they been agricultural workers throughout their lives? What led them to move to Brighton? Since these men would not have had much formal education, they are unlikely to have left any answers of their own, and an alternative approach has to be used to provide answers.

Each 1861 lodger and head of household was sought in the 1851 CEBs for Sussex, using name indexes that cover Brighton itself, the whole of East Sussex and large parts of West Sussex.[11] Those men with fairly uncommon names, such as Stephen Akehurst, posed few problems of identification, but in the case of those who were called Thomas or William combined with a common surname like Turner or Smith, it was necessary to look closely at the other details provided when comparing the 1851 evidence with that for 1861, especially the man's age and

[7] Brian Short, 'Landownership in Victorian Sussex', in Leslie and Short (eds), *Historical Atlas*, p. 98.

[8] TNA, RG9/595–8.

[9] Sue Farrant, 'The Stamford Estate in Brighton and Hove, 1870–1939', in Sue Farrant (ed.), *The Growth of Brighton and Hove, 1840–1939* (1981), pp. 35–40. Most of the land around the race course was downland pasture.

[10] Brighton Rate Book, Jan. 1855, East Sussex Record Office, (hereafter ESRO) BH/B/4/42/1.

[11] For East Sussex: C. J. Barnes, *East Sussex Census 1851, Index*, parts 1–23 (1987–94); part 24 (2001) on fiche, pub. by Family Roots (Eastbourne and District) FHS. For Brighton: Sussex Family History Group Microfiche Series, PF 12–19 (1997–8). For West Sussex: *Sussex Family History Census Index 1851, Thakeham Registration District* 1 and 2 (1989); Microfiche series, PF30 Horsham, 1841 and 1851 and PF50, Petworth 1841 and 1851 (2000); Microfiche Series for 1841–91 Census Indexes for 45 West Sussex parishes (1994–2002); all published by the Sussex Family History Group.

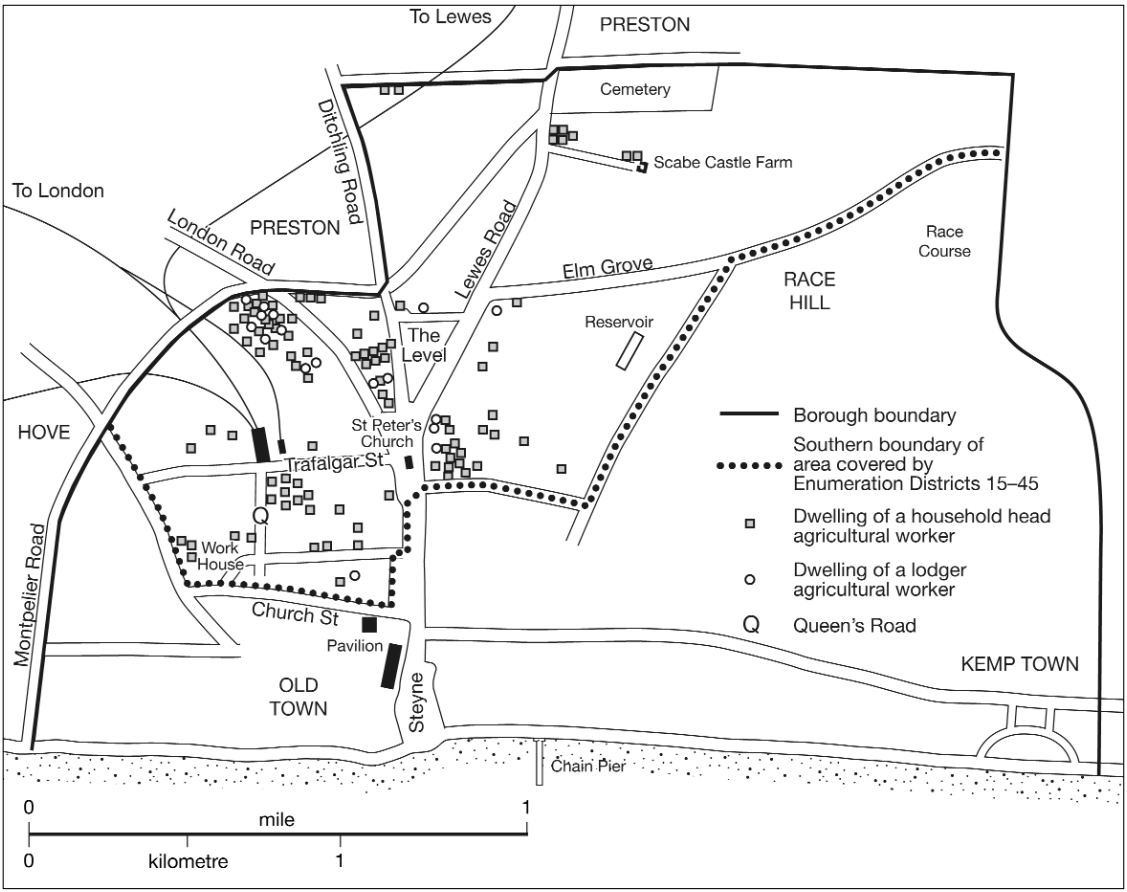


FIGURE 1. Brighton in 1861: residences of agricultural labourers in Enumeration Districts 15–45. The base map used is an undated (1850s?) map by J. Rapkin in Brighton Reference Library; the scale is approximate.

Source: TNA, RG9/595–8.

birthplace and the names and ages of his wife and any children. In the process, some minor discrepancies were discovered between the 1851 and 1861 records, even when there was no doubt that the same individual was involved. Some 1851 teenagers had exaggerated their ages, while older men sometimes did the opposite, in both cases probably to make it easier to convince an employer of their suitability. Taking account of the ten-year interval, variations of up to three years were regarded as acceptable where other details agreed. In a number of instances, different but adjacent birth parishes were named, and occasionally more widely separated places; these discrepancies seem likely to have been due to moves in early childhood that were later forgotten. For the majority of the 1861 heads of households, however, the combination of age, birthplace and family details was sufficient to ensure correct identification, though two men with names that were repeated 20 or more times (William Smith and William Knight) had to be omitted from the search. There is less evidence available in the case of lodgers because of the absence of any family in 1861, hence the linkages suggested for them should be regarded as more tentative.

Out of the 113 men sought, 77 (68 per cent) were found in 1851, with roughly equal numbers living in Brighton, living in the rest of Sussex and not found. There are three possible reasons why some men were not found in 1851: they were living outside Sussex; they were living in a West Sussex parish not covered by a name index; or they were living in Sussex but because of variations in the spelling of surnames (exacerbated in some cases by the enumerator's handwriting), they were not identified.[12]

II

The 1861 CEB evidence used on its own allows a consideration of the birthplaces and residences of the agricultural worker lodgers and heads of households on 7 April of that year. The sample of 77 men for whom data for both 1851 and 1861 are available enables us to examine their occupational changes and ages, including likely ages of migration to Brighton. A closer study of these four aspects of the lives of the 1861 agricultural workers sketches out the context within which decisions were taken that may explain their presence in Brighton.

(a) Places of Birth

According to the 1861 CEBs, nine of the agricultural workers who were then heads of households had been born in Brighton, 76 in other parishes in Sussex, nine in other English counties and one in Ireland. One lodger was listed as born in Brighton, with the remaining 16 born in other Sussex parishes. Some discrepancies in birthplaces recorded in 1851 and 1861 have already been noted. Three men who gave Brighton as their place of birth in 1861 had named a rural Sussex parish in 1851; it is assumed here that the place named in 1851 was the correct one. On this basis, 79 out of the 95 heads of household with birthplace details (83 per cent) and 16 out of the 17 lodgers (94 per cent) were migrants from elsewhere in Sussex.

Figure 2 shows the distribution of these Sussex places of birth. In those cases where different parishes were listed in 1851 and 1861, the two places are shown linked, apart from the three Brighton discrepancies where the 1851 parish only is plotted. It is apparent that most migrants had been born within a radius of about 25km (16 miles) of Brighton; the only distant birthplaces (Bosham, Sidlesham and Oving near Chichester, some 40 km west of Brighton, and Battle, a similar distance to the east) are omitted from the map. Within the area mapped, it is noticeable that few men were born in parishes on the South Downs, and that the majority had come from parishes in the Weald, north of the Downs. Access to Brighton from this district was easy as it was crossed by the main roads and railway between the town and London.

The predominance of Wealden over downland birthplaces is likely to be linked with contrasting patterns of landownership, farm sizes and rates of population growth in the two areas. During the nineteenth century, the South Downs were characterised by parishes dominated by a few large landowners, large farms and stable or declining population numbers, resulting in few potential migrants. Wealden parishes had many small landowners, small farms and

[12] It was largely by chance that the lodger named as William Gasgun in 1861 was identified as the William Gausden of 1851.

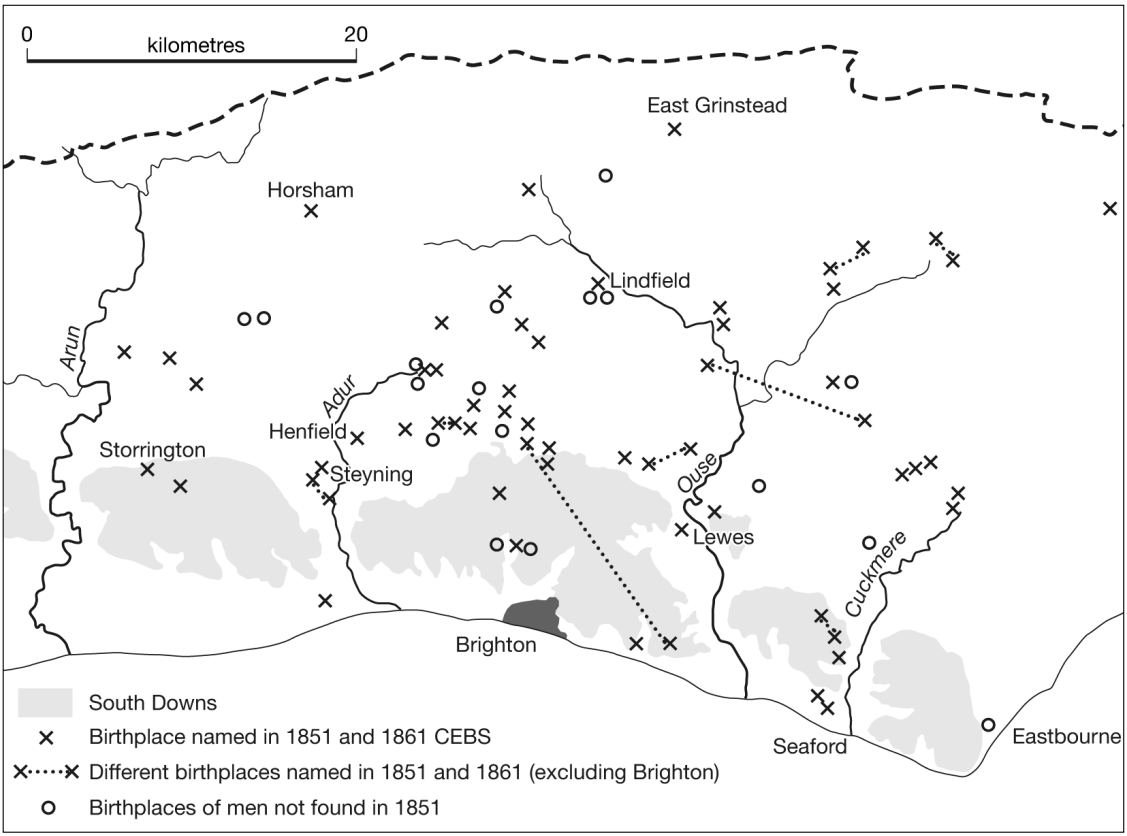


FIGURE 2. Sussex places of birth (excluding) Brighton) of agricultural labourers living in Brighton in 1861.

Source: TNA, RG9/595–8.

growing population numbers during the same period.[13] High levels of seasonal unemployment had long been common among the numerous casual workers of Wealden parishes, many of whom had become accustomed to travelling to other districts, including the South Downs, to find work at certain times of the year.[14] In the process, they may have passed through or visited Brighton and have come to appreciate that the town offered advantages as a place from which a range of employment could be accessed. It is therefore not surprising to find that many of the 1861 agricultural workers in the town were born in Wealden parishes.

[13] Brian Short, 'The evolution of contrasting communities within rural England', in Brian Short (ed.), *The English rural community; image and analysis* (1992), pp. 19–43; id., 'Landownership in Victorian Sussex', pp. 98–9.

[14] E. J. T. Collins, 'Migrant labour in British agriculture in the nineteenth century', *EcHR* 29 (1976), pp. 38–59; Peter Brandon and Brian Short, *The South East from AD 1000* (1990), p. 32; Peter Dewey, 'Farm Labour' in E. J. T. Collins (ed.), *The Agrarian History of England and Wales*, VII, *1850–1914* (2 vols, 2000), I, pp. 823–5.

TABLE 1. 1861 agricultural labourers searched for in the 1851 CEBs

	Found in Brighton	*Found in Sussex*	*Not found*	*1861 total*
Lodgers	3	6	8	17
Household heads	38	30	28	96
Total	41	36	36	113

(b) Ages and dates of migration

Table 1 summarises the results of the search for the 1861 agricultural workers in the 1851 CEBs. Out of the 96 heads of households, 38 were found to be already living in Brighton ten years earlier; if we deduct the six who had been born there, we are left with 32 men who had moved to the town before 1851. Thirty heads of households were found living in other Sussex parishes in 1851, so these must have moved to Brighton between then and 1861. Twenty-eight were not found in any name index examined; of these, six had birthplaces outside Sussex and are likely to have still been outside the county in 1851, leaving 22 men whose non-identification must be explained by the reasons discussed above. Out of the 17 lodgers of 1861, one Brighton-born and two Sussex-born men were living in the town in 1851, six were identified as living in other Sussex parishes and eight were not found.

The ages in 1861 of the lodgers and household heads are plotted in Figures 3A and 3B respectively. On the assumption that most lodgers were recent arrivals, their ages hint that most migration was taking place at two different stages of the life cycle: between about 18 and 35, or in the 50s or 60s. The motives of the two groups are likely to have been different, with family circumstances far more significant for the older men.[15]

Figure 3B shows that most heads of household were aged 30 or over in 1861, a reflection of the usual age of marriage, combined with the most common age of migration. The largest age group was those aged 40 to 49 years, with steadily decreasing numbers in the older groups. The size of each group reflected both age-related mortality and the numbers moving to Brighton at earlier dates, and the bars are shaded in an attempt to provide some indication of decadal variations in migration to the town. Brighton-born men formed half of the 20 to 29 year-olds and 14 per cent of the 30 to 39 year-olds, but were otherwise insignificant. Those who were already in Brighton by 1851 formed 60 per cent of the 40 to 49 year-olds but a much smaller percentage of all other year groups. Those who had arrived after 1851 predominated in all groups except the 20–29s and the 40–49s. These patterns seem to suggest that there was a large movement into Brighton from the 1840s onwards.

Many of those who moved to Brighton when in their twenties or early thirties were single and all their children were born after they had arrived in the town. In a few cases, however, the ages and birthplaces of children allow us to date the father's move more precisely. The clearest instance is provided by Reuben Brown, who in 1861 had one child aged 12 born in Rotherfield,

[15] Of the five men over 50 in 1861, three said that they were widowers and two that they were unmarried. However, one of the 'unmarried' men had a wife in 1851, and it is therefore possible that the remaining man had also been widowed before the 1851 census.

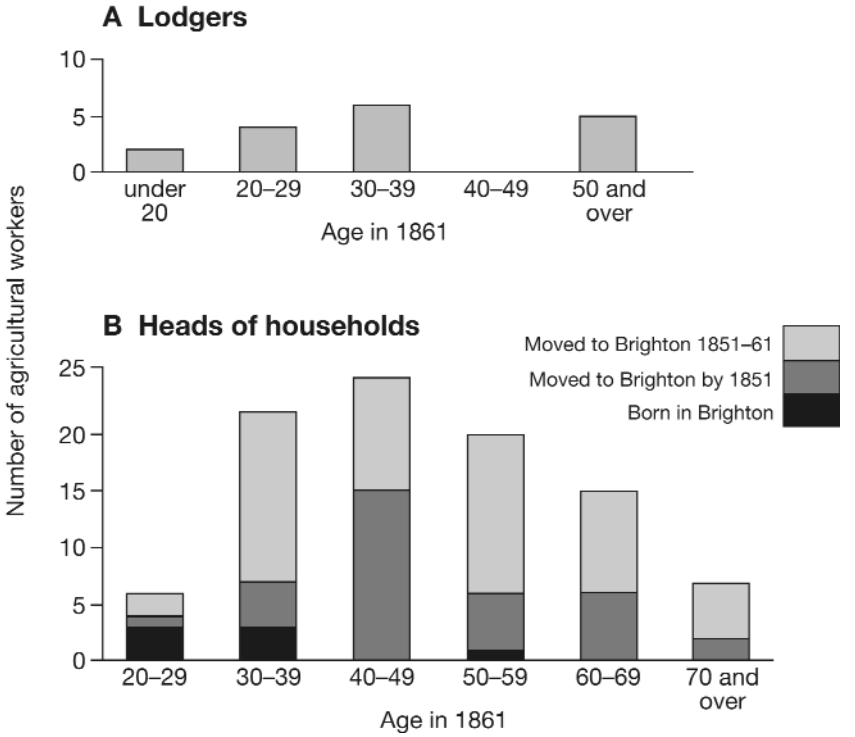


FIGURE 3. Ages of agricultural labourer lodgers and heads of households living in Brighton in 1861.

Source: TNA, RG9/595–8.

where Reuben was living in 1851, and another aged nine born in Brighton. Reuben was 43 in 1861, so we can calculate that he moved to Brighton in 1851 or 1852 when he was 32 or 33, towards the latter end of the usual age for migration.

If there was, as suggested above, a particularly large movement into Brighton from the 1840s, what might be the explanation? The arrival of the railway, bringing more visitors and more employment to the town must have been one factor, At the same time, improved communications were widening the horizons of those living in the countryside, making them more aware of the opportunities available in towns like Brighton. It seems unlikely that the Poor Law Amendment Act of 1834 had any significant influence, for recent work suggests that patterns of outdoor relief were not significantly different in the 1840s from those that prevailed before 1834.[16]

[16] Richard Smith, 'Charity, self-interest and welfare: reflections from demographic and family history', in Martin Daunton (ed.), *Charity, self-interest and welfare in the English past* (1996), pp. 23–50; Steven King, *Poverty and welfare in England, 1700–1850: a regional perspective* (2000), chs. 5, 8.

(c) Occupations

During the nineteenth century, migration from the countryside to a town was usually associated with a change of occupation, the new occupation varying with the town's economy.[17] In the case of mid-nineteenth century Brighton, workers were needed particularly for the building, service and holiday-resort industries. Whether the 1861 agricultural workers living in Brighton had changed from jobs in agriculture to these urban-type jobs on arrival in the town can be tested by comparing the 1851 occupations of the men still living in Sussex at that date with the occupations of those who were by then in Brighton.

Of the 26 heads of households who were living elsewhere in Sussex in 1851, and for whom occupational data are available, 19 were working on the land: 14 agricultural labourers, three farm servants, one farmer's son and one gardener. The remainder had a range of menial occupations: bone boiler, bricklayer's labourer, lime-burner's labourer, day labourer, chair bottomer, roadman and house servant. Among the six lodgers found living elsewhere in Sussex in 1851, five were agricultural labourers and one a child in Lindfield workhouse. The majority of the 1861 agricultural labourers in Brighton evidently had some experience of working in agriculture in their youth.

The 41 men who were already living in Brighton by 1851 (38 heads of households and three lodgers) provide us with a sample of the types of occupation that the rural migrants adopted once settled in the town. Nine heads and one lodger had regular jobs in 1851 that would have been reasonably well-paid by working-class standards: engine-driver, railway plate-layer, police inspector, fly driver, painter, baker, brick maker, whitesmith, maltster and journeyman wheelwright. One carter, one cellarman and three house servants had less well-paid employment, and the remaining 25 men had labouring work of some kind, including ten who described themselves as agricultural labourers.

This sample suggests that many of the 1861 agricultural labourers had found some alternative form of employment soon after moving to Brighton. A few had a regular and modestly well-paid position in 1851, but most had taken a labouring job that may have given them a slightly higher wage than would have been their lot if they had remained in their home parish. Nevertheless, many would have been subject to the periods of unemployment often associated with resort activities or trade recessions. Whether even at this stage some had left their urban employment during the harvest season to work on nearby farms we do not know.[18] But by 1861, years of heavy physical toil would no doubt have taken their toll of some, who then had to find lighter work and possibly supplement their wages by seeking financial help from the Poor Law Union.[19] Perhaps it was this group that responded most readily to the appeals for seasonal harvest workers; such work could be relied on and was relatively well-paid, so the men involved may have come to regard this as their identifying occupation while still taking any other job they could find during the rest of the year. At this time, even the elderly

[17] Colin Pooley and Jean Turnbull, *Migration and mobility in Britain since the eighteenth century* (1998).

[18] W. A. Armstrong, 'Rural labour I: systems of employment', in G. E. Mingay (ed.), *Agrarian History of England and Wales*, VI, *1750–1850* (1989), pp. 677–83.

[19] Pat Thane, *Old age in English history* (2000), p. 26, suggests that it had long been accepted that many men had to switch to lighter tasks after the age of 50.

were expected to work so far as they were capable, and very few of those listed as agricultural workers in 1861 would have been fully retired.

(d) Housing

As Brighton's population grew during the middle decades of the nineteenth century, many new streets of working-class houses appeared. How far did the ready availability of housing help to attract to the town the migrants who became the 1861 agricultural labourers?

The housing need of those identified as heads of households would have varied with their family size and composition. In 1861 there were 29 agricultural workers whose household comprised just two people, the second person usually being a wife, but occasionally it was a sibling or a child. Such small households were content with two or three rooms. In some cases these rooms formed the whole of a tiny cottage, for example John Lyland aged 46 and his wife were living at 4 Oxford Court, and Thomas Burtenshaw aged 67 and his wife were the sole occupants of 9 Elder Row, both three-roomed cottages.[20] It was more common, however, to find such small households sharing a five-or six-roomed house with another household, the whole dwelling sheltering between five and ten persons. Most young couples started their married life in this way and this was how many elderly couples ended their days. Their weekly rent would have been between one and two shillings.[21]

The 41 men with a number of young children might well have needed more rooms, but at this stage in their life-cycle there was only one full-time wage-earner, so they could rarely afford as much space as they needed. Some were living in one of the tiny cottages in the courts or back streets, like Thomas Southon and his wife and five children, aged between six months and 14 years, at 12 Oxford Court. Most were sharing one of the many five- or six-roomed houses with another family, such as William Dunstall at 11 Union Street, which housed seven adults and eight children in 1861. Sometimes the co-resident families appear to have been related or the adults had been were born in the same parish. Weekly rents for the whole house were usually about four shillings.

A third type of household belonged to the 23 men who were not the sole wage-earners of the family. Sometimes the wife was bringing in some income, in the majority of cases from laundry work. More frequently the other wage-earners were older sons or daughters, as in the case of John Leney, living at 5 Jersey Street, with a son aged 21 who was a clerk, a daughter aged 19 who was a milliner and a son aged 16 apprenticed to a printer. Families like this invariably occupied the whole of a five- or six-roomed house, sometimes in one of the slightly better-class streets. There were usually fewer than eight people living in such houses, with rents between four and five shillings a week.

Lodgers, whether young or old, rented one room or shared a room with one or more other lodgers for under a shilling a week. They were most likely to be found in the lowest-rated streets.

In many respects, housing conditions in Brighton differed little from those in the rural areas

[20] Details of the number of rooms are taken from the Field Books of the 1910 'Domesday' Survey, TNA, IR 58/127.

[21] Rents quoted are based on figures in the 1855 Rate Book, ESRO, BH/B/4/42/1.

of Sussex from which the migrants had come, where crowding and sharing were also common.[22] Brighton houses were more closely packed than in most rural parishes and in the 1850s conditions in some streets where agricultural workers were living may have been squalid as a result of little attention being given to sewerage and waste disposal.[23] To set against this, many of the houses were fairly new, and it was probably easier to find a house or rooms to rent than in a rural parish.

III

Using this evidence on birthplaces, ages and dates of migration, occupations and housing conditions, it is now possible to attempt to answer the questions posed in the introduction. A small number of the 1861 agricultural workers who were heads of households seem likely to have been full-time employees on farms either within or close to Brighton's boundaries, living in dwellings that were a little apart from the continuously built-up area. Since farmers often welcomed the cheap labour provided by teenagers, many of the young relatives may also have been employed full-time. Another small group of aged or infirm men are likely to have not worked at all. The vast majority of the 1861 adult agricultural workers, however, seem likely to have worked on farms for only a few weeks each year. During the rest of the year they would no doubt have taken any job available, but probably spent most of the time without paid work and forced to relied on other means of support for survival. To what extent that support came from relatives or friends on the one hand or from the Poor Law Authorities on the other is not known.[24]

Most of the adult agricultural workers had moved to Brighton when in their twenties or early thirties, during the 20 years prior to 1861, with Wealden parishes acting as the main source area. These men had probably been attracted by the prospect of better employment opportunities, housing and services in Brighton than in rural parishes. Like many men involved in heavy physical work, some had become unfit by the time they had reached their fifties and unable to continue with the jobs they had found on arrival in the town. They then became true casual workers, relying heavily on seasonal work on downland farms, hence reverting to describing themselves as agricultural workers. Another smaller group of men, who had continued to work as agricultural labourers while living in the rest of Sussex, moved to Brighton when in their fifties or later and joined the band of seasonal agricultural workers.

Against the background of the social and economic conditions that prevailed during the middle decades of the nineteenth century, the presence of agricultural workers in Brighton at this time becomes understandable. Their numbers were then at their peak; they fell from the 312 of 1861 to 202 in 1871 and 197 in 1881 (in 1873 there was a boundary extension to incorporate part of Preston parish), rose in 1891 to 241, then fell to 169 in 1901. As the century progressed and some agricultural activities were mechanised, the need for seasonal work on downland farms

[22] Dewey, 'Farm labour', pp. 845–7.

[23] E. Cresy, *Report to the General Board of Health on a preliminary inquiry into the sewerage, drainage and supply of water … of Brighton* (1849); Anthony Dale, *Brighton Town and Brighton People* (1976), pp. 194–8; Keith Fossey, 'Slums and tenements, 1840–1900', in Farrant (ed.) *Growth of Brighton*, pp. 53–9. The worst streets were in the older parts of Brighton not included in this analysis.

[24] Thane, *Old age*, p. 11: 'poor relief and family support for older people were complementary'.

diminished but never completely disappeared.[25] Whether other towns experienced a similar decrease remains an open question; it is possible that in less hilly districts the bicycle helped to keep the number of town dwelling workers more stable.[26]

Appendix

Agricultural labourers as a percentage of all males aged 20 and over living in English towns in 1861

Southampton	0.39	Brighton	1.61	Kings Lynn	3.31
Liverpool	0.43	Oxford	1.74	Norwich	3.39
South Shields	0.43	Reading	1.76	Poole	3.47
Plymouth & Devonport	0.51	Huddersfield	1.86	Winchester	3.53
Birmingham	0.55	Bath	1.94	Stockport	3.70
Newcastle-on-Tyne	0.59	Cambridge	1.95	Carlisle	4.05
Bristol	0.65	Northampton	1.99	Lincoln	4.06
Sunderland	0.68	Exeter	2.06	Macclesfield	4.62
Gloucester	0.70	Truro	2.11	Lancaster	4.83
Derby	0.96	Bolton	2.14	Wakefield	4.96
Manchester & Salford	0.97	Bridgewater	2.19	York	5.11
Hull	1.07	Chatham & Rochester	2.24	Ipswich	5.14
Portsmouth	1.13	Worcester	2.33	Boston	5.74
Sheffield	1.16	Dover	2.43	Newark	5.86
Coventry	1.32	Leicester	2.47	Hereford	6.28
Yarmouth	1.35	Wolverhampton	2.51	Chester	6.55
Nottingham	1.35	Blackburn	2.55	Canterbury	6.66
Halifax	1.35	Preston	2.56	Stafford	7.63
Oldham	1.36	Leeds	2.56	Colchester	8.10
Whitehaven	1.37	Salisbury	3.16	Maidstone	8.92
Tynemouth	1.43	Kendal	3.19	Bury St Edmunds	9.45
Dudley	1.44	Durham	3.21	Bedford	9.76
Gateshead	1.48	Shrewsbury	3.29	Dorchester	10.57
Bradford	1.53	Chichester	3.30	Wisbech	10.61

Source: 1861 *Census of Population* II (1863), Cmd. 3221

[25] E. J. T. Collins, 'Harvest technology and labour supply in Britain, 1790–1870', *EcHR* 22 (1969), pp. 453–73; W. A. Armstrong, 'The workfolk', in Mingay (ed.) *Victorian Countryside*, II, pp. 491–505; E. J. T. Collins, 'The rationality of "surplus" agricultural labour: mechanization of English agriculture in the nineteenth century', *AgHR* 35 (1987), pp. 36–46; Dewey, 'Farm labour', pp. 844–5.

[26] P. J. Perry, 'Working-class isolation in Dorset, 1837–1936', *Trans. Institute of British Geographers* 46 (1969), p. 134.

From ideals to reality: The women's smallholding colony at Lingfield, 1920–39*

by Anne Meredith

Abstract

The immediate impetus for the colony at Lingfield in Surrey was the desire by the Women's Farm and Garden Association to enable women who had worked on the land during the First World War to be able to farm on their own account. However the motivation for the colony can also be traced back to late nineteenth-century ideals. The colony soon ran into problems which were exacerbated by the adverse agricultural conditions of the early 1920s. The association responded constructively but the colony was wound down from 1929. At one level the colony could be seen as a failure, yet this article argues that the colony provided a rural community where single women lived in a mutually supportive environment.

In the summer of 1920 the Women's Farm and Garden Association (WFGA) bought a 91-acre estate at Wire Mill Lane, near Lingfield, Surrey.[1] The aim was to establish an agricultural colony where women could farm independently but within a community that provided support and encouragement. The colony was founded with much enthusiasm but by 1938 the last smallholding had been sold to one of the tenants.[2] The colony merits examination for its personnel, operation and dynamics. Its apparent failure provides insights into several gaps in the current literature on smallholdings, women and rural life. First, previous research on smallholdings has concentrated on the smallholdings established by the County Councils.[3] The colony is therefore of interest as it was privately owned and operated without financial support from either central or local government. Secondly, the viability of inter-war smallholdings depended on unpaid family labour – especially the wife's – so it is interesting to explore a situation in which the smallholder did not have family labour to call upon.[4] Thirdly, published research on women

* I would like to thank all the residents of the lane who contributed to the research, especially Peter Fuller and Ernie Borer. I am also grateful to Nicola Verdon and Monica Brewis who commented on earlier drafts of the paper and to the suggestions made by members of the Inter-War Rural History Research Group at a seminar in June 2003.

[1] Museum of English Rural Life, University of Reading (hereafter MERL), Women's Farm and Garden Association (hereafter WFGA), WFGA/A/2/2, Minutes of the Executive Committee, 6 May 1920; WFGA/E/1/4, *J. Women's Farm and Garden Union* 134 (May 1920), p. 4. Unless otherwise noticed, all archive references are to the Association's archives held by MERL.

[2] WFGA/A/1/3, Meeting of Council, 20 Oct. 1938.

[3] For example see N. R. Smith, *Land for small man: English and Welsh experience with publicly-supplied smallholdings, 1860–1937* (1946); B. A. Wood, 'The development of the Nottinghamshire County Council smallholdings estate, 1907–1980', *East Midland Geographer* 8 (1982), pp. 25–35.

[4] E. Thomas, 'County council small-holdings in Dorset and Hampshire: 1. Description and sociological', *J. Ministry of Agriculture* 44 (1937–8), pp. 18–24, 123–9, 214–21, 348–52, at p. 19.

and the land has concentrated on labouring women in the nineteenth century, so this case study brings the study into the inter-war years and introduces middle-class women.[5] Fourth, the colony was directly inspired by women's role on the land in the First World War but its underlying rationale was rooted in such late nineteenth concepts as 'Back to the Land', and the 'Surplus Million of Women', as well as the campaigns for smallholdings.[6] The involvement of Mrs Roland Wilkins (née Louisa Jebb), demonstrates the strong links with late nineteenth-century and pre-war movements. Finally, mainstream women's history has concentrated on the experiences of urban women (both working class and middle class) and has not examined the rural dimensions of the campaigns for suffrage, education and employment.[7]

This article examines two key aspects of the colony at Wire Mill Lane: the rationale and motives that lay behind the establishment of the colony as a key objective for WFGA at the end of the First World War, and secondly, the operation of the colony itself. It explores the responses of WFGA to agricultural conditions and the demands of its tenants. The sources initially used for the case study were the written records of WFGA. Minutes of committee meetings, annual reports and magazine articles were used to construct a history of the colony. Subsequently letters sent to every resident in the lane revealed more material: house deeds, the layout of the smallholdings, and personal accounts from people who had known the lane and its female residents in the 1930s. This oral evidence enabled a vivid image of the lane in the mid- to late 1930s to emerge, although the early years of the colony remain hidden.

I

The First World War provided the immediate impetus for establishment of the colony in Wire Mill Lane, but the colony founded by WFGA was the latest in a line of women's agricultural settlements. King's centenary history shows the involvement of the Association in providing opportunities for women to work on the land during the war. The Women's National Land Service Corps was formed in January 1916 and predates the Women's Land Army by a year.[8] The records of the association show clearly how, even as the war continued, it was considering its options for the post-war world. Suggestions included establishing a training establishment for women wishing to emigrate. The minutes reveal that by November 1917 it had been decided that a women's smallholding colony would form a key element in the association's future activities (although there is no information on how this decision was

[5] For example see N. Verdon, *Rural women workers in nineteenth-century England: gender, work and wages* (2002), P. Horn, *Victorian Countrywoman* (1991) and id., *Ladies of the manor: wives and daughters of the country-house society, 1830–1918* (1991), C. Miller, 'The hidden workforce: women fieldworkers in Gloucestershire, 1870–1901', *Southern Hist.*, 6 (1984), pp. 139–61. For a recent study of women in the inter-war period see S. Todd, 'Young women, work and family in inter-war rural England,' *AgHR* 52 (2003), pp. 83–98.

[6] J. Marsh, *Back to the land: pastoral impulse in England from 1880–1914* (1982).

[7] One example of an introductory text is J. Purvis (ed.), *Women's History: Britain 1850–1945, an introduction* (1995). One important study that includes the role of women in a rural context is J. Gerard, *Country house life: family and servants* (1994). For a discussion of the term 'Surplus million of women', see J. Worsnop, 'A reevaluation of the "the problem of surplus women" in nineteenth-century England: the case of the 1851 census', *Women's Studies International Forum* 13 (1990), pp. 21–31.

[8] P. King, *Women rule the plot. The story of the 100 year fight to establish women's place in farm and garden* (1999), pp. 72, 85.

reached).[9] Undoubtedly one factor was the decision to provide an opportunity for women who had worked on the land during the war. The Chairman, Mrs Norman Grosvenor, is recorded as stating in October 1917 that '... the Union had now come to the dividing of the ways and the choice of two paths lay before them: 1, To go on quietly as before [or] 2, To embark on some constructive scheme which would be of value after the war to women now employed in agriculture'.[10] The association chose to take the latter course and it is interesting to note how the association's minutes frequently note when a woman with war experience on the land was taken on as a tenant. For example Miss Wake Walker, one of the first tenants at Wire Mill Lane, had been a member of the Women's National Land Service Corps.[11]

There are parallels here with the movement – from which women were apparently excluded – to provide ex-servicemen with the opportunity of working on the land. The Land Settlement (Facilities) Act 1919 empowered county councils to purchase and lease land for the provision of smallholdings with central government providing financial support.[12] For example Surrey County Council bought and leased 2,162 acres between 1919 and 1926 and provided smallholdings for a total of 257 ex-servicemen.[13] Sheppard in her research on East Sussex came across no evidence of women being settled on smallholdings in the immediate post war period.[14] Nor is there any evidence of women among the ex-servicemen being given smallholdings in Surrey.[15]

It is Wilkins, chair of the sub-committee responsible for the colony at Wire Mill Lane, who provides the connection between pre-war campaigns to promote smallholdings and post-war developments. Wilkins had studied agriculture at Cambridge and acted as bailiff on her brother's farm. In addition she had studied smallholdings intensively in Great Britain and in Europe. This culminated in the publication in 1907 of *The smallholdings of England: a survey of various existing systems* based on her research for the Co-operative Smallholdings Society.[16] Wilkins was a governor of the Agricultural Organisation Society and this explains why the

[9] WFGA/A/2/1, minutes 4 Oct. 1917 and 30 Nov. 1917.

[10] WFGA/A/2/1, 4 Oct. 1917. At the end of the war A. D. Hall wrote an article on 'The position of women in agriculture' for the *J. Board of Agriculture* 25 (1918–19), pp. 785–96, in which he advocated the establishment of a larger and more complicated scheme than the one chosen by the WFGA. *The Times*, 25 Jan. 1919.

[11] WFGA/E/1/10, Report and Journal of the WFGA, 1920–1, p. 5. For further information on the Women's National Land Service Corps, see King, *Women rule the plot*, pp. 59–97.

[12] C. W. Rowell, 'County council smallholdings, 1908–1958', *Agriculture* 66 (1918–19), p. 110; Smith, 'Land for small man'; A. Howkins, *The death of rural England. A social history of the countryside since 1900* (2003), pp. 88–9.

[13] Surrey History Centre (hereafter SHC), Report of Surrey Agricultural Committee (hereafter SAC) presented to Surrey County Council (hereafter SCC), 29 July 1926, Minutes of SCC 12 June 1928, SAC, 14 May 1928, App. 3, 'Memorandum by County Land Agent on the present position in Surrey' (all cited from the set of County Council minutes in the SHC searchroom).

[14] C. M. Sheppard, 'Smallholdings in East Sussex, 1892–1945' (unpublished MA thesis, University of Sussex, 1999), p. 53.

[15] The records examined make no direct reference to women as tenants and tenants mentioned by name are male.

[16] King, *Women rule the plot*, pp. 47–50; F. M. Wilson, *Rebel daughter of a country house. The life of Eglantyne Jebb, founder of Save the Children Fund* (1967), pp. 54, 149, 160; L. Jebb, *The smallholdings of England. A survey of various existing systems* (1907); id., *The workings of the smallholdings act, with suggestions for its amendment* (1907); *The British year-book of agriculture and agricultural who's who, 1913–1914* (1914); WFGA/F/11, Newspaper Cuttings, *The Times*, 25, 29 Jan. 1929. Louisa Jebb also gave evidence to the Departmental Committee appointed by the Board of Agriculture to inquire into and report upon the subject of smallholdings in Great Britain, 1906 (Cd 3277).

colony was to be run as a co-operative.[17] She was to play a vital role in the planning, choice and operation of the colony until her death in January 1929. Thirsk describes her as a 'tireless advocate' for smallholdings and regards her research as 'much the most informative description of smallholder farming'.[18] Towards the end of the nineteenth century a number of concerns coalesced in the advocacy of smallholdings as the 'sovereign cure for all ills to which the agricultural flesh was heir'.[19] One of the concerns was the implication of rural depopulation for the countryside and the nation's human stock.[20] Another concern was the increasing reliance on imported foodstuffs such as vegetables, eggs and dairy when the country was capable of producing the goods itself.[21] Although the end of the nineteenth century has been described as a period of agricultural depression, more recent research has shown that 'alternative agriculture' did relatively well. So, the smallholding activities of dairying, poultry keeping and market gardening were areas of production from which a smallholder could expect to make a reasonable living.[22] Agriculture generally did well in the war years, and as Howkins describes it 'a warm glow revealed a rural England that was in many ways, prosperous'.[23]

Women's agricultural colonies (or settlements as they were often called) had attracted support since the end of the nineteenth century. WFGA was clearly influenced by the earlier attempts to establish them. The motives behind these settlements was clearly articulated by Frances Evelyn, Countess of Warwick in 'The New Women and the Old Acres', an editorial she wrote for the first issue of *The Woman's Agricultural Times* in July 1899. The rationale presented by Warwick included the suitability of *le petite culture* for women agriculturists, and the attractions of rural life compared to urban life. In addition she wrote of rural depopulation and the role of 'educated' (i.e. middle class) women in revitalizing the countryside. Finally she wrote of the 'surplus million of women' which had concerned society since mid-century.[24] There was also a more pragmatic reason behind the settlements. They were to provide employment opportunities for the women who were being trained in agriculture and horticulture in colleges such as The Lady Warwick Hostel (the forerunner of Studley) and the Horticultural College, Swanley.[25] In 1902 Warwick provided the foreword for a book written by Edith Bradley and Bertha La Mothe (both of whom had worked at the Lady Warwick Hostel) in which she wrote:

[17] E. A. Pratt, *Agricultural organisation. Its rise, principles and practice abroad and at home* (1912), pp. 103–5, 122–7; N. Goddard, 'Agricultural institutions: societies, associations and the press', in E. J. T. Collins (ed.), *The Agrarian History of England and Wales*, VII, *1850–1914* (2 vols, 2000), I, pp. 667, 672.

[18] J. Thirsk, *Alternative Agriculture. A history from the Black Death to the present day* (1997), p. 214. Wilkin's obituary in *The Times*, 25 Jan. 1929, refers to her 'unstinting work' for the Women's Farm Colony at Lingfield.

[19] R. Perren, *Agriculture in depression, 1870–1940* (1995), p. 65; For an overview of the smallholding movement from the late nineteenth century, Thirsk, *Alternative Agriculture*, pp. 207–11.

[20] A. Howkins, *Reshaping rural England: a social history, 1850–1925* (1992), p. 226.

[21] E. A. Pratt, *The transition in agriculture* (1906); MERL, Studley Papers (hereafter SP), WAR 5/8/4, Newspaper Cuttings: Rural Problems, *Bristol Mercury*, early 1905.

[22] Thirsk, *Alternative Agriculture*, pp. 165–98; Pratt, *Transition in agriculture*.

[23] Howkins, *The death of rural England*, p. 36.

[24] Lady Warwick, 'The new woman and the old acres', *The Woman's Agricultural Times* 1 (July 1899), pp. 1–2. *La Petite Culture* was defined as 'taking the direction of flowers, of fruit, of jam-making, of bee-keeping, and especially of poultry-farming'. See also E. Bradley 'Openings for women in the lighter branches of agriculture', *The Woman's Agricultural Times* 3 (Oct. 1901), pp. 49–50.

[25] K. Sanecki, *A short history of Studley College* (1990).

> What I look forward to is the establishment of women's agricultural settlement in the neighbourhood of manufacturing towns and watering places. I think that such settlements might do a flourishing trade in butter, milk and eggs, in vegetables, poultry, fruit and flowers. I believe that they should be run upon co-operative lines.[26]

Nothing came directly from Lady Warwick's efforts at the turn of the century. However *The Woman's Agricultural Times* did inspire Victorian Woodhull Martin and her daughter Zula to establish a woman's agricultural settlement at Bredon's Norton, Worcestershire in 1905. The settlement never really succeeded and seems to have faded away before the First World War.[27] The connection with Studley College can also be seen in the attempts by Dr Hamilton (college principal 1908 to 1922) to establish co-operative market gardens. Despite her efforts it was not until 1913 that land was bought at Ensbury on the outskirts of Bournemouth. No details are available about its operation and by September 1916 the land had been sold, with a large part of it being used as an aerodrome.[28] By contrast the pre-war publications of the Women's Agricultural and Horticultural International Union (as WFGA was then called) did not canvas support for women's settlements.[29]

The principles behind the formation of the colony in Wire Mill Lane echo the words of Lady Warwick:

> … the agricultural settlements, where for those who have small incomes cottages will be built with land attached which the trained woman will know how to cultivate … cottages should be built in pairs … six or eight of these cottages will form a settlement. Co-operative principles will prevail.[30]

The women's smallholding colony may have operated within the agricultural and social context of the inter-war period, yet its rationale was rooted in the late nineteenth century and the years leading up to the First World War. When WFGA came to establish its own colony, the influence of the previous attempts to found agricultural settlements can be seen in the emphasis placed on communal aspects. Yet in 1935, when all but one of the smallholdings had been sold, the Annual Report for 1934–5 reflected on the colony and its history. The account constructed by WFGA stressed the aim of the association had been to provide an opportunity for women to enter farming. 'At that time [it] was almost impossible for a women with experience … to start on their own, to rent any farm or holding'. The account then distanced itself from the material printed at the end of the war by portraying the scheme as being merely one of 'landlord and tenant' and it 'hoped that they (the tenants) would co-operate among themselves as a separate undertaking' with the association fostering 'any leanings' in that direction.[31]

[26] E. Bradley and B. La Mothe, *The lighter branches of agriculture* (1902), pp. xviii–xix. A chapter at the end of the book was devoted to agricultural settlements.

[27] O. Stinchcombe, *American lady of the manor, Bredon's Norton; the later life of Victoria Woodhull Martin, 1901–1927* (rev. edn, 2001).

[28] MERL, SP, WAR 5/14/2, *News about the Guild*, 4 (2) (May 1912), p. 17; 5 (3) (Aug. 1913) p. 79; 8 (4) (Nov. 1916), p. 198.

[29] WFGA/E/4, Monthly Leaflets of the Women's Agricultural and Horticultural International Union, 1909–19.

[30] Lady Warwick, 'The new woman and the old acres', pp. 1–2.

[31] WFGA/E/1/24, *Report and Journal of WFGA*, Report and Balance Sheet, 1934–5, pp. 8–9.

The association may have looked back and decided to see its role as that of landlord, yet its literature and actions (for example the appointment of a resident manager for a period in the early 1920s) contradicted its own evaluation.

Once the decision to establish the colony was taken two aspects of the project had to be finalized: finance and the land itself. It was the financial contribution of women associated with the suffrage campaign that meant that the scheme became viable. Initial attempts in 1918 to buy land failed, as the £10,000 needed to purchase and equip a colony was not forthcoming. An appeal in *The Times* in January 1919 for the loan of £10,000 at 5 per cent 'to start a cooperative small holding company, so that girls who wish to become small-holders may not do so under impossible conditions and lose their money' was apparently unsuccessful.[32] However capital funding was provided by two prominent suffrage campaigners. Miss Margaret Ashton from Manchester (1856–1937) gave £5,000 in return for a life annuity of £125 and Miss Sydney Renee Courtauld made an interest free loan of £4,000.[33] Ashton was a well-known Suffragist in the North of England where she was an independent councillor in Manchester and, between 1906 and 1915, chairman of the North of England Society for Women's Suffrage. Her pacifism meant that she was a founding member of the Women's International League for Peace and Freedom. In the 1930s she was a vice-president for the National Council for Equal Citizenship.[34] In 1926 Ashton joined the council of the WFGA and in 1929 she presented the report that resulted in the association deciding in principle to sell off the smallholdings.[35] (Sydney) Renee Courtauld (1873–1962) was of the textile family, the niece of Samuel Courtauld. She too was active in the pre-war suffrage movement.[36] The relationship between the urban based members of the women's movement and rural issues remains largely unexplored.[37]

In the search for land to buy, the WFGA laid down clear criteria that were obviously based on the professional experience of Wilkins and Miss Katherine M. Courtauld (1856–1936), cousin of Renee Courtauld, and an established farmer at Colne Engraine in Essex.[38] In the August 1919

[32] WFGA/A/1/2, Minutes of Council, 4 July 1918; WFGA/E/4/10, *Monthly Leaflet*, 112 (June 1918), p. 6 and 113 (July 1918), p. 5; *The Times*, 25 Jan. 1919.

[33] WFGA/A/1/2, Minutes of Council, 20 Oct. 1919. See also WFGA/A/2/1, Minute Book of the Executive Committee, 5 Dec. 1918.

[34] E. Crawford, *The Women's Suffrage Movement, a reference guide 1866–1928* (1999), pp. 18–20. Her obituary in *The Times*, 18 Oct. 1937, says that 'Her three chief interests were local government, the woman [sic] suffrage movement and international peace' but makes no mention of her involvement with WFGA.

[35] WFGA/A/1/2, Report of the Annual Meeting, 8 July 1926.

[36] Crawford, *Women's Suffrage Movement*, p. 143. For the Courtauld family, see *Burke's Landed Gentry* (17th edn, 1952). Her will is noted in *The Times*, 28 May 1962: she left money to animal welfare causes and her house and property to the National Trust.

[37] But see E. Crawford, *Enterprising women: The Garretts and their circle* (2002). M. Andrews, *The acceptable face of feminism. The Women's Institute as a social movement* (1997) remarks on the connection between the suffrage campaign and the formation of the WI, pp. 44–5.

[38] Miss Katherine Mina Courtauld (1856–1936) was the daughter of George Courtauld and a grandaughter of the founder of the eponymous textile firm. She farmed at Knights Farm, Colne Engraine, from 1878 and was a member of Essex County Council from about 1914 to 1934. She was involved in the Association from 1900, giving it the financial support it needed to buy its London hostel, Courtauld House in Gower St in 1932 (for which see below, n. 49). For her life, King, *Women rule the plot*, pp. 104, 106–8, Anon, 'Lady Farmeresses: Miss Courtauld at Knight's Farm, Colne Engaine', *The Ladies Field*, 7 Oct. 1890, pp. 182–5 and the short obituary and notice of her 'memorial service' (not funeral), *The Times*, 8, 10 June 1935. There are further press clippings from the time of her death in WFGA/F/12, also WFGA/E/6/14, *Occasional Leaflet* (Sept. 1935), p. 2, and H. R. Haggard, *A Gardener's year* (1905), pp. 128–9.

issue of the *Monthly Journal* the criteria drawn up by a sub-committee chaired by Wilkins were clearly stated. They included: market, soil, aspect, water supply, location in relation to London, roads, size of estate. The tenants were to combine into a co-operative for the buying and selling of produce and for the owning of implements. The co-operative beliefs of Wilkins are evident here. Prospective tenants were required to have agricultural experience and to possess a private income of at least £25 per annum (in addition to the capital sunk into the holding). Some members of the committee argued that the tenants should be required to have a private income of £50 per annum. The minutes of a council meeting in 1921 recorded 'It was never contemplated that the tenants could make an entire living off the holdings themselves, or at any rate not for some years'.[39]

It is possible to view this requirement as reflecting the amateurism of the female tenants yet the situation was far more complex. Contemporary surveys demonstrated the wide range of smallholdings in Britain with the holdings varying in terms of size, ownership, type of holding, location and potential and actual profitability.[40] WFGA, by requiring a small additional income, was responding to the realities of smallholding. Astor and Rowntree, in their review of smallholding, stated that about 15–20 per cent of smallholdings were run on a part-time basis so the 10*s.* a week private income could be viewed as replacing a man's paid employment or pension.[41] In the 1930s Edgar Thomas surveyed county council smallholdings in Dorset and Hampshire and observed that of 215 smallholders, all but eight were married. He recognized the 'great importance of the housewife on the smallholding'.[42] So again the private income was necessary, as the tenants did not have wives and children to provide free labour. Smallholding in the inter-war years were not as profitable as in the years leading up to the First World War and an additional income, whether earned or unearned, provided a buffer against poor harvests and low prices.[43]

Despite the professional expertize of the sub-committee, the *Monthly Journal* for September 1919 provided a rather idealistic impression of how the colony would work. One tenant was to run the farmhouse as a hostel. Another would run indoor dairy premises and make butter and cheese having purchased the liquid milk from other smallholders, while others would keep dairy cattle and run market gardens. Yet another tenant would keep horses that would be hired out to the other tenants. The tenants would buy and sell services and produce among themselves thereby creating an interdependent community.[44] The concept of one tenant undertaking all the horse work for the other tenants was again based on sound economic sense. As Newlin Smith showed in his study of publicly supplied smallholdings, smallholdings that owned under-utilized horses had lower profitability.[45]

[39] WFGA/A/1/2, Minutes of Council, 6 Oct. 1921.

[40] For example see C. S. Orwin and W. F. Darke, *Back to the land* (1935), pp. 40–55. Astor and Rowntree commissioned a series of studies which were published in *Smallholding Studies: Reports of surveys undertaken by some agricultural economists* (1938). Counties such as Lancashire and Yorkshire were included as well as broader studies on Wales and the south-west. Thomas' study of Dorset and Hampshire was one of this series.

[41] Astor and Rowntree, *British Agriculture*, p. 220.

[42] Thomas, 'County council small-holdings', p. 19

[43] Viscount Astor and B. S. Rowntree, *British Agriculture. The principles of future agricultural policy* (1939), pp. 219–29, Orwin and Darke, *Back to the Land*, pp. 40–55.

[44] WFGA/E/2/7, *J. Women's Farm and Garden Union* 127 (Sept. 1919), pp. 6–8.

[45] Smith, *Land for the small man*, pp. 92–3.

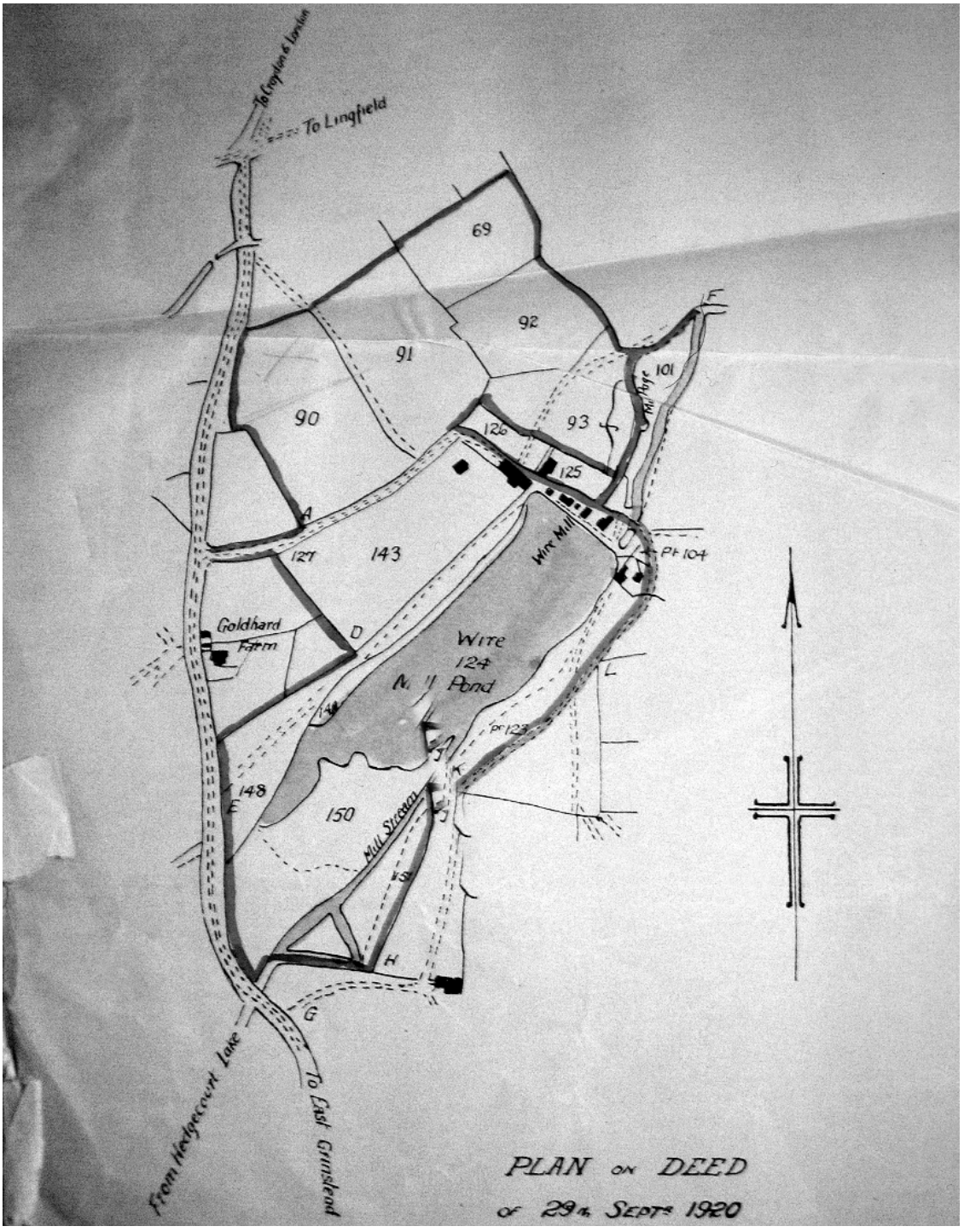


FIGURE 1. Wire Mill Estate *c.* 1920.
See Appendix for an explanation of tenants and owners.

Source: Property deeds in the possession of M. Arnold, Wembury Publication. Photographed 2003.

Wire Mill Estate, near Lingfield was purchased in the summer of 1920 after a considerable number of estates had been inspected and rejected. The association paid £10,000 for the 91-acre estate. Figure 1 shows a plan of some of the estate in 1920 which was used when a field was sold in 1929. The estate included a lake and woodland. Of the cultivated land, 22 acres were down to apple orchard. As the estate fronted onto the A22 (the Eastbourne Road), no additional roads were required and there was water laid on. There was a good house and several cottages. It was envisaged that 12 to 15 smallholdings would be created and be ready for occupation in the autumn of 1920. It was acknowledged that the rent would be high as the estate was in an expensive residential area but that there would be a ready market for produce.[46] Once the estate was bought it was decided that there would be three or four small mixed farm holdings, two or three poultry and several fruit and market garden ones, making a total of about 13 holdings. The main house would be let on a rent that reflected the tenancy condition of offering board and lodging (at approximately 35*s*. a week) to three or four other smallholders.[47]

II

The WFGA had prepared thoroughly yet, from the first day, the colony at Wire Mill Lane was beset with problems of high tenant turnover, a shortage of residential accommodation, unlet smallholdings, drought and falling agricultural and land prices.

The acquisition of the estate had two financial implications for the WFGA. First capital was needed to purchase the estate and later build cottages. This money was lent by members or raised on mortgage.[48] Secondly WFGA had to find the money to operate the colony in terms of servicing the loans and mortgages as well as financing repairs and covering bad debts. The association was a charity reliant on its own members and activities for its financial survival and it was never prosperous. Table 1 shows the financial health of the smallholding colony and the association using figures taken from the published accounts. The first three columns show the profitability or otherwise of the colony. In the years leading up to 1929, the colony only made a profit for the year ending 31 December 1926. The early years of the 1930s saw a small profit but by then the decision had been taken to sell the holdings. The last few years of the accounts do not accurately reflect the financial health of the colony as the reduced rents could not cover the cost of the loans and other expenses. The final two columns show the financial position of the association itself. A hostel provided the vast bulk of its income. From 1927 it was able to put money to one side in readiness for the acquisition of a new London hostel which was achieved in 1932.[49] The association was solvent but it could not allow the colony to run up large losses as this would have jeopardized the operation of the association itself. Unlike the smallholdings established by the county councils, the colony received no

[46] WFGA/E/1/4, *J. Women's Farm and Garden Union*, 134 (May 1920), p. 4.

[47] WFGA/A/2/2, 7 Oct. 1920.

[48] WFGA/A/1/3, Minutes of Council, 12 May 1927; WFGA/A/2/2, 2 Dec. 1920.

[49] After the First World War the association leased three houses in Park Road and a residential club was run for members which also took students from Bedford College. Financial support from Katherine M. Courtauld meant that in 1932 the association was able to purchase freehold premises in Gower St which it retained until 1963. King, *Women Rule the Plot*, pp. 103–105, 112, 129.

TABLE 1. Financial position of the WFGA and the smallholding colony, Wire Mill, 1921–35

	Smallholding Colony				*WFGA*	
Year	Expenditure	Income	Profit	Loss	Balance	Comments
1921					-£688 6*s.* 9*d.*	
1922					£608 17*s.* 4*d.*	
1923	£613 4*s.* 1*d.*	£371 9*s.* 5*d.*		£241 14*s.* 8*d.*	£199 15*s.* 8*d.*	
1924	£509 11*s.* 7½*d.*	£437 5*s.* 0*d.*		£72 6*s.* 7½*d.*	£59 9*s.* 3*d.*	
1925	£664 10*s.* 0½*d.*	£609 1*s.* 9*d.*		£55 8*s.* 3½*d.*	£122 1*s.* 3*d.*	Shed donated
1926	£548 12*s.* 11*d.*	£586 18*s.* 9*d.*	£38 5*s.* 10*d.*		£125 18*s.* 11*d.*	
1927	£660 0*s.* 7*d.*	£559 15*s.* 6*d.*		£100 5*s.* 1*d.*	£58 13*s.* 0*d.*	£400 to dilapidations
1928	£587 3*s.* 9*d.*	£567s 0*s.* 9*d.*		£20 3*s.* 0*d.*	£64 10*s.* 10*d.*	£800 to dilapidations
1929	£629 4*s.* 11*d.*	£537 15*s.* 7*d.*		c. £92	£33 11*s.* 8*d.*	New accounting procedures
1930	£235 4*s.* 10*d.*	£372 4*s.* 6*d.*	c£137		£62 11*s.* 1*d.*	£400 to dilapidations
1931	£286 0*s.* 0*d.*	£370 2*s.* 1*d.*	c. £84		£48 14*s.* 9*d.*	£300 to dilapidations
1932	£300 11*s.* 8*d.*	£326 15*s.* 11*d.*	c. 26		£48 9*s.* 6*d.*	£150 to dilapidations
1933	£268 14*s.* 6*d.*	£242 12s. 11*d.*		c. £26	-£193 10*s.* 8*d.*	New hostel
1934	£268 3*s.* 11*d.*	£162 11*s.* 2*d.*		c. £106	£535 10*s.* 1*d.*	£100 for repairs
1935	£148 14*s.* 6*d.*	£49 0*s.* 0*d.*		c. £99	£288s 2*s.* 2*d.*	£100 for repairs

Note: financial years ran 1 January–31 December.
Source: MERL, WFGA/E/13–25, *Report and Journal of the WFGA*, 1923–4 to 1935–6.

assistance from central government. This was mentioned in a rather pointed fashion in the report of the Annual Meeting in 1926.[50]

> At the same time the chairman said that she thought the association was to be congratulated on the fact that the Colony is practically self supporting, whereas the Government Colonies for ex-service men, started at the same period after the war, have a permanent charge on the country of many hundred of thousands of pounds.

The immediate problems after the acquisition of the estate were the lack of tenants and the unwillingness of the smallholders to live in the main house. The minutes of Council for October 1921 recorded that all but two of the proposed tenants withdrew when the estate was purchased in 1920 and the association had had to find someone to cultivate the land until new tenants could be found – at a cost of £120.[51] The tenants recruited did not wish to live in the main house but have cottages of their own. Wire Mill House was a substantial house built in 1912 that boasted three sitting rooms, eight bedrooms and had central heating.[52] The house had been let to the Misses Williamson for a reduced rent in recognition that they were to provide board and lodging for other tenants.[53] There is a sense that for some unspoken reason the two

[50] WFGA/A/1/3, Minutes of annual meeting, 8 July 1926.

[51] WFGA/A/1/2, 6 Oct. 1921.

[52] WFGA/E/6/1, *Occasional Leaflet of the WFGA* (Oct. 1922), p. 3; Property deeds for Wire Mill House. I am grateful to Mr Ronnie Gordon for permission to use this source.

[53] The Misses Williamson had trained at The Horticultural College, Swanley during the war. Hextable Heritage Centre, Swanley Papers, Annual Report of the

sisters had not worked out as tenants. By October 1922 the house was advertised for sale along with three acres of land, and in 1923 a Mr Creake bought the house and land for £2,850 and its connection with the colony ended.[54]

Housing was an immediate issue. The records indicate that there was, in addition to Wire Mill House, a variety of accommodation, some of which was in need of modernization.[55] There were two semi-detached cottages in the lane. According to house deeds these two cottages were probably built in 1912 and were in relatively good condition.[56] There was also a Mill which was eventually converted into accommodation for a number of smallholders.[57] A rather dilapidated cottage is also mentioned which may be the one sold to Miss Bell in 1926. Although an estate plan does survive, it has been impossible to ascertain exactly what housing came with the estate as minutes and reports provide conflicting information. In the light of the housing shortage a decision was taken by October 1922 to build cottages with the proceedings from the sale of Wire Mill House.[58] The shortage arose not just from the tenants' unwillingness to live in Wire Mill House but more significantly from WFGA's mistake in dividing the land into holdings that were too large. This meant land remained unlet until housing was provided. Housing was an issue that created immediate operational problems but also it was an important element in the structural issues that faced the association.

Secondly the character of the estate purchased led to some major issues for WFGA. The 22 acres of land planted with apples were a liability. The association no doubt divided the orchards up into viable units, however the women did not want smallholdings of that size and indeed could not work them. It seems rather surprising that such an error could occur despite the experience of Katherine M. Courtauld, who had extensive orchards in Essex. Her obituary, written by Caroline Grosvenor (Chairman of the WFGA in 1920) stated that 'she disapproved in some ways of the scheme, considering the locality unfavourable and the purchase price too high'.[59] A review of the colony given at a council meeting in October 1921 admitted that there had been problems finding tenants as over 50 per cent of applicants sought a small house with two to three acres of land for poultry or market gardening at a rent of £15–20, yet a reasonable return on the costs of constructing a construction of a cottage would be a rent of £40 for the cottage alone. The association was caught in a dilemma, for if it let the existing four cottages with two to three acres a piece, then the bulk of the land would be unlet. Another reason given in the review for problems in obtaining tenants was the lack of capital on the part of the experienced workers. The requirement for tenants to have a private income of 10*s.* a week was excluding some women.[60]

Once the association had realized the major problems facing the colony it did respond. Action was taken to increase the housing provision. The Wire Mill was adapted and the

Horticultural College, Swanley, 1916 and *Horticultural College Magazine*, 18 (11) (Nov. 1920), p. 15; WFGA/A/1/2, Minutes of Council meeting, 5 Oct. 1922, Chairman's Report of the Smallholdings Colony for the year Sept. 1921–Sept. 1922.

[54] WFGA/E/6/1, *Occasional Leaflet* (Oct. 1922), p. 3; Property deeds for Wire Mill House (Mr Gordon, Nov. 2003).

[55] WFGA/A/1/2, 2 Dec. 1920.

[56] Property Deeds. I am grateful to Mr Chan for permission to use this source.

[57] WFGA/A/1/2, 4 Oct. 1923.

[58] WFGA/A/1/2, Minutes of Council meeting, 5 Oct. 1922, Chairman's Report of the Smallholdings Colony for the year Sept. 1921–Sept. 1922.

[59] WFGA/E/6/14, *Occasional Leaflet* (Sept. 1935), p. 2.

[60] WFGA/A/1/2, 6 Oct. 1921.

money from the sale of Wire Mill House used to fund the construction of two sets of semi-detached cottages, nos 1 and 2, and 3 and 4 Wire Mill Lane.[61] Two of the cottages were advertised in the September issue of the *Occasional Leaflet*. They were set in 2½ acres of bush apples. The accommodation consisted of three bedrooms, living room, scullery, hot and cold water, and a bathroom and lavatory. The rent was £40 per annum with the tenant paying the rates.[62] The money raised from the sale of Wire Mill House also funded the creation of two flats in the mill and the refurbishment of a bungalow cottage.[63] By 1926 the association had come to the conclusion that the way to improve the profitability of the estate was to build additional cottages and to let them with about 1½ acres of land each.[64] These cottages were built next to the main road as it was thought that a tenant might run a tea hut and help with the produce hut (donated in 1925).[65] The association also reviewed the apple trees. Some of them were grubbed up and sold so that there was more space between the rows enabling other crops to be grown.[66]

Third the agricultural depression of the early 1920s had a major impact on the early years of the colony. Prices fell precipitously in the years 1920 and 1922 and then there was a more gradual decline until 1926, after which there were three years of relative stability. However this stability was destroyed by the worldwide slump in commodity prices. It was not until June 1933 that prices began slowly to recover.[67] Whetham gives the decline in land prices as nearly £40 per acre between 1919 and 1924–5.[68] So the Association was left with an estate that had declined rather than appreciated in value yet the rent receipts needed to reflect the estate's purchase price and not its current value.[69] In addition the early years of the 1920s saw an increase in building costs and this probably meant that the first cottages to be built were relatively expensive compared to the pair erected in 1926.[70] This might explain why numbers 1, 2, 3, and 4 Wire Mill Lane had internal bathrooms but the internal walls were left unplastered.[71] The estate was purchased when there was general optimism for the profitability of English agriculture: yet the early tenants were faced with falling agricultural prices and there was a general feeling of economic instability and uncertainty.[72] The operational difficulties of the smallholders were compounded by a drought in 1921 which led the association to make concessions at the end of the year.[73] Brown

[61] WFGA/A/1/2, 7 June 1923; WFGA/E/1/12, *Report and Journal of the WFGA*, Report and Balance Sheet, 1922–3.

[62] WFGA/E/6/2, *Occasional Leaflet* (Sept. 1923), p. 3.

[63] WFGA/A/1/2, 7 Feb. 1924.

[64] WFGA/A/1/2, Minutes of Annual Meeting, 8 July 1926.

[65] WFGA/A/1/2, 8 Oct. 1925 and 7 Oct. 1926.

[66] WFGA/D/1, Account book of the Lingfield Smallholdings, 1922–34; WFGA/A/1/2, 7 Dec. 1922 and 4 Oct. 1923.

[67] K. A. H. Murray, *Agriculture* (History of the Second World War, United Kingdom Civil Services, 1955), p. 17.

[68] E. H. Whetham, *The Agrarian History of England and Wales*, VIII, *1914–39* (1978), p. 136. See also Howkins, *Death of rural England*, pp. 45–54.

[69] The impact of the decline in farm prices on farmers who had purchased their farms is discussed by J. Brown, *Agriculture in England: a survey of farming, 1870–1947* (1987), pp. 84–7.

[70] The minutes do not directly refer to this, however the records for the smallholdings run by Surrey County Council show delays, increased costs and poor workmanship. SHC, Reports presented to SCC, 12 June 1928, Report of SAC, 14 May 1928, App. 3, Memorandum by the County Land Agent on the present position in Surrey.

[71] Observed by author at 3, Wire Mill Lane. I am also grateful to Peter Fuller for pointing out the wall finish to me.

[72] Perren, *Agriculture in depression*, pp. 41–3.

[73] Whetham, *Agrarian Hist.*, VIII, p. 138; MERL WFGA/A/1/2, 6 Oct., 9 Dec. 1921. The larger smallholding schemes established after the war by Surrey County Council were also adversely affected by the

has suggested, in relation to English agriculture in general, that 'the losses of 1921–23 had a similar effect of those of 1871–81 in weakening agriculture for several years to come'.[74] This can be applied to the colony where the problems surrounding its early years diminished its chances of success. The WFGA could probably have overcome its initial problems with accommodation and smallholding sizes; however the general agricultural conditions meant that the association and its tenants were operating within a hostile economic environment.

The minutes and the electoral registers reveal a constantly changing population in the lane, particularly in the early years. In 1924 married couples were accepted as tenants as long as the women had agricultural experience.[75] This implies that there were problems in finding single women to fill the tenancies. In addition there were some arrears of rent and in 1927 one of the married tenants, Captain Pearcey, had his written off.[76] However, in spite of these difficulties there were many positive aspects to the colony. Women who had worked on the land during the war were taken on as tenants, including the Misses Wake Walker, Bell, Hanson and Mattingley.[77] Wake Walker, who had served in the Women's National Land Service Corps, took a farm smallholding in 1921. She left the colony for Youngs Farm in 1925 and in the 1930s was farming nearby at Cherry Tree Farm.[78] A present resident of the lane, Peter Fuller, recalls a Miss Walker delivering milk to the lane in the 1930s.[79] There is evidence that at least one of the tenants did well. Miss Miller (Reading trained) took no 5 Wire Mill Lane over in 1926–7. During her tenancy she developed a successful market garden and within 2½ years she had recovered her capital and covered all her expenses. However, she did not remain long as the Annual Report for 1928–9 records that she had accepted a post in Africa.[80] There is also evidence of the communal nature of some of the activities. A produce hut was donated and placed next to the A22 in 1925 and this enabled the women to sell their produce to passing trade. Miss Whittington had started selling produce on commission at her tea hut (the sign was a yellow tea pot!) in early 1924. She left in October 1926, taking her tea hut with her and prompting the decision to build a further cottage with a new tea hut. In early 1924 a communal dining room operated in the Mill and the tenants took it in turn to supervise a local woman who provided a cooked lunch for a shilling.[81] From the mid-1920s the lane became more settled. For example Mr and Mrs Gentry moved into no 1 Wire Mill Lane in about

drought and this can be seen in the rent rebates made to smallholders at the Sheep and Wells Farm and the Little Woodcote Estate in 1923. SHC, Reports presented to SCC, 13 Nov. 1923, Report of SAC, 15 Oct. 1923. There were rent rebates for two schemes: Sheep and Wells Farm and Little Woodcote Estate for the two years leading up to Michaelmas 1922.

[74] Brown, *Agriculture in England*, p. 80.

[75] WFGA/A/1/2, 22 May 1924; WFGA/E/1/14, *Report and Journal of the WFGA* (1924), Report and Balance Sheet, 1924–5, p. 7.

[76] WFGA/A/1/2, 12 May 1927.

[77] WFGA/E/1/7, *Journal of the Women's Farm and Garden Union*, 139 (Nov. 1920), pp. 1–2.

[78] WFGA/A/1/2, 6 Oct. 1921, 5 Oct. 1922 (chairman's report for the smallholdings colony for year 1921–22); WFGA/E/1/14, *Report and Journal of the WFGA* (1925), Report and Balance Sheet, 1924–5, p. 7; SHC, CC802/40/2 and CC802/52/2, Electoral Registers, Eastern Division, Spring 1925, 1935.

[79] Interview with Peter Fuller, 14 Oct. 2003.

[80] WFGA/E/1/16, *Report and Journal of the WFGA* (1927), Report and Balance Sheet, 1926–7, p. 5; WFGA/E/1/18, *Report and Journal of the WFGA* (1929), Report and Balance Sheet, 1928–9, p. 5.

[81] WFGA/E/1/13, *Report and Journal of the WFGA* (1924), Report and Balance Sheet, 1923–4, pp. 6–7; SR WFGAF/11, Newspaper Cuttings, *Manchester Guardian*, *c.* 1925; SR WFGA/A/1/2, Minutes of Council, 7 Feb. 1924.

1925–6 and Miss Taylor moved into no 3 Wire Mill Lane in about 1922.[82] However there were some holdings, such as no. 4 Wire Mill Lane, that continued to change tenants frequently. The appendix provides an overview of the main smallholdings with information on tenants and sale dates.

III

In the spring of 1929 the smallholding sub-committee recommended that the land should be sold at auction or privately. The estate had been revalued at £6,750 at the end of 1928 and a report from Margaret Ashton stated '... there had been a steady loss and she felt the time had come for the committee to make some decision in regard to the future'.[83] An extraordinary meeting of the council in April agreed to a resolution recommending the sale at auction of the mill, lake and wood. However the full council did not ratify a second resolution to divide the rest of the property into lots and sell it privately or at auction. Katherine M. Courtauld, who had not been at the smallholding sub-committee meeting, 'felt that several of the tenants were making good and might eventually be able to purchase their holding'. Accordingly the second recommendation was not carried and instead the association decided to sell some pasture fields at auction.[84] Although the council balked at accepting the report's stark recommendations – Katherine M. Courtauld's minority view may have had some bearing on this – the events which followed showed that it accepted that the experiment was over. There was no further investment in the colony and the 1930s was characterized by a gradual decline in the association's involvement with the lane as the smallholdings were sold. By September 1934 Miss Taylor was the only remaining tenant and her smallholding was bought by a Miss Bull (who shared the holding with her) in 1938.[85] It is not stated exactly what led to the decision taken at the extraordinary meeting of the council meeting in April 1929. Table 1 shows how most years the colony made an operating loss. It is impossible to calculate the exact loss due to sales of land and property as well as the investment in housing. There were other considerations. Mrs Wilkins died in January 1929 and Katherine M. Courtauld in 1935. The Association's commitment to the colony may have died with them.

Although the 1930s saw the gradual end of the colony, it is also the decade for which it is possible, through oral evidence, to investigate the communal environment created by the residents of the lane. Peter Fuller knew the lane as a child as he visited his great aunt, Miss Beatrice Taylor.[86] Ernie Borer's father bought no. 4, Wire Mill Lane in September 1932, so he grew up knowing the women living in the lane.[87] What emerges from the evidence is a small group of middle-class women (Misses Bell, Taylor, Bull and Mart, Mrs Rayner and Hill) who met for tea and who bartered their produce. Fuller recalled that 'they were all quite clearly ladies ... they

[82] WFGA/E/1/14, *Report and Journal of the WFGA* (1926), Report and Balance Sheet, 1925–6, p. 7; WFGA/E/1/12, *Report and Journal of the WFGA* (1923), Report and Balance Sheet, 1922–3, p. 5.

[83] WFGA/A/1/3, Minutes of Council, 14 Feb. 1929.

[84] WFGA/A/1/3, Extraordinary meeting of Council, 9 Apr. 1929.

[85] WFGA/A/3/1, General Purposes Committee, 12 July 1924, and 27 Sept. 1934; WFGA/A/1/3, Meeting of Council, 20 Oct. 1938.

[86] Fuller interview, Oct. 2003.

[87] Interview with Ernie Borer, 14 Oct. 2003; WFGA/A/3/2, Minute Books of the General Purposes and Finance Committee, 6 Oct. 1932.

were educated, they were all nicely mannered and so on … you couldn't call them working class in any way'.[88] All the ladies (except Rayner and Hill) were tenants of WFGA who had bought their smallholding.

The evidence suggests that they gardened and kept hens, but it is unclear how financially viable the smallholdings were. For example in Taylor's case she inherited some money in 1928 which meant that her financial position was then comfortable.[89] Mart, at no. 6 Wire Mill Lane, seemingly kept hens. The electoral register from 1932 includes a record for Orchards Poultry Farm with her either registered there or at no. 6 Wire Mill Lane from 1928 to 1938. The electoral rolls record a married couple living at either no. 6 or the poultry farm which suggests that Mart may have employed staff.[90] Taylor's poultry keeping might have been on a reasonably large scale. Yet, as Astor and Rowntree observed in 1939, any flock of less than 400–500 birds did not provide full time employment for a man and did not provide a living.[91] Neither Ernie Borer or Peter Fuller could remember extensive poultry keeping when interviewed in 2003. The evidence is therefore insufficient to draw any conclusions (even tentative ones) about Miss Mart's financial circumstances. Thorne, who lived at no. 2 Wire Mill Lane from 1928, was not a member of the tea party group, and Fuller remembered her as always working. Her garden was not as well-kept as his Great Aunt's. On reflection, Fuller suspects that she too must have had private means.[92] In 1929 the year after she moved to the colony, Thorne bought a field from the association which she sold in 1934 for housing. To purchase the field she was lent the money by Katherine Courtauld and documents indicate that she only paid off the interest on the loan. The land was sold for £500 giving her a profit of about £150. In 1934 she purchased her smallholding.[93]

Peter Fuller's clearest memories are of the small group of women meeting for tea and of his mother's amusement as Aunt Bee 'would toddle up the lane with … two carrots and come back with a parsnip'.[94] When asked if there was a feeling of community among the ladies her replied 'Oh yes, they were always helping each other.[95] Yet neither Fuller or Ernie Borer could recall the women being involved in the wider community through church or the Women's Institute. Thorne may have been an exception as Ernie recalled going to meetings of the Young Britons with her.[96] So what emerges in the 1930s was a lane where single women were able to live in small cottages with a minimum of 2½ acres of land. Their neighbours were of a similar social class and position. It was a mutually supportive rural community where single women were able to lead satisfying and secure lives.

[88] Fuller interview, Oct. 2003.

[89] Fuller interview, Oct. 2003.

[90] SHC, CC802/45/2 and CC802/55/2, Electoral Registers, Eastern Division, 1928–1938; Borer, when interviewed in Oct. 2003, remembered Mart as having a bungalow built in 1936–7. However, when Sheila Rampling (interview, 20 Nov. 2003) knew Mart in the 1950s she was at no. 6 and did not keep hens.

[91] Astor and Rowntree, *British Agriculture*, p. 222.

[92] Fuller interview, Oct. 2003.

[93] SHC, CC802/45/2, Electoral Registers, Eastern Division, 1928; WFGA/A/1/3, Minutes of Council, 10 Oct. 1929; Property deeds, Wembury Park, seen through the kindness of M. Arnold.

[94] Fuller interview, Oct. 2003.

[95] Fuller interview, Oct. 2003.

IV

The smallholding colony at Wire Mill Lane can be examined at a series of levels. Superficially it was a failure. From its earliest days there were both structural and operational problems. However the association responded promptly and positively to the major problems. The demand for smallholdings of about two acres complete with cottages was clearly identified and acted upon.[97] As early as 1923 Wire Mill House was sold so that more cottages could be built. Some of the apple orchards, unpopular with the tenants, were thinned so that other crops could be interplanted. By the mid '20s there is a sense that the colony was establishing itself and in 1926 a decision was taken to build two more cottages. Yet in April 1929 it was decided that there was no long-term future for the colony. The association had nurtured the colony through the early 1920s and probably felt that it had reached its limit in terms of money and effort. Indeed one could argue that the circumstances surrounding the establishment of the colony in 1920–1 meant that its chances of success were very low. Adverse agricultural conditions combined with internal structural problems. The decision taken in 1929 may have been correct as conditions no longer favoured smallholdings.[98] It is unclear how the illness and death of Mrs Wilkins influenced the decision. Perhaps without her advocacy for the colony, the decision was taken to wind it up.[99]

The colony was not some amateur attempt to provide a rural life for middle-class women. The association was professional in its approach to the colony and this can be seen in the two main women associated with the colony: Mrs Wilkins and Katherine M. Courtauld. Both of these women were experienced, with Wilkins being an expert in smallholdings and Courtauld an established farmer in Essex. If a criticism is to be levied at Wilkins then it is perhaps her failure to recognize that the agricultural conditions of the inter-war years were not as favourable for smallholding, but the same criticism could be levied at many farmers and county councils in the 1920s.

From the tenants' perspective the colony did provide an opportunity for middle-class women with a small private income to take a smallholding and work the land in a supportive environment. The WFGA met its aim in providing smallholdings for women who had worked on the land during the First World War. The smallholdings at Wire Mill Lane provided a physical and social environment that enabled women to live contented and purposeful rural lives in the inter-war years.

[96] Borer interview, Oct. 2003.

[97] Darke and Orwin, *Back to the Land*, comments on the popularity of cottage holdings in the home counties.

[98] Astor and Roundtree, *British Agriculture*, p. 356. For example horticulture, a key activity for many smallholders and the residents of the colony, was in the 1930s faced with competition from imports and farmers who were increasingly turning to vegetable production.

[99] Lionel Jebb concurs with this conclusion, letter from L. Jebb to author, 20 Jan. 2005.

Appendix
The tenants and owners of the Wire Mill Lane estate, Lingfield

The exact boundaries of the estate are not known. Some of the houses and buildings along the lane did not belong to the estate when it was purchased in 1920. Furthermore it has proved impossible to establish the exact boundaries for each of the smallholdings. The outline below locates the smallholdings and summarises who lived where using the 1920 plan reproduced in Figure 1 (the plan is not accurate).

1. No. 1, Wire Mill Lane (semi-detached with number 2). Built in 1923 by WFGA in field 90. From 1925–6 Mr and Mrs Gentry lived there. Before her marriage Mrs Gentry had worked in the Association's office. Sold in 1934 to the Gentrys – WFGA hoping for between £600 and £700.
2. No. 2, Wire Mill Lane. Built in 1923 by WFGA. Miss Thorne lived there from 1928 and bought the holding in 1934. In 1929 she bought on a mortgage from Miss K. M. Courtauld 4½ acres of arable land which she sold on in 1934 for building (Wembury Park).
3. No. 3, Wire Mill Lane (semi-detached with no 4). Built in 1923 by the WFGA in field 90 or 91. Miss Taylor lived there from 1922/3?, Miss Bull from 1927. She bought it in 1938. In 1957 Miss Bull left the house to Miss Taylor who died there in 1958.
4. No. 4, Wire Mill Lane, Built in 1923 by WFGA. Let to a Mr and Mrs Allport in *c.* 1930. Mr Borer bought it and *c.* 21 acres in September 1932.
5. No. 5, Wire Mill Lane, built in 1912? Semi-detached with no 6, in the corner of field 143 where the lane turns a corner. Miss Owers was tenant from *c.* 1931. Sold to Mr James Denyer in 1933 for £450 with Miss Owers as tenant.
6. No. 6, Wire Mill Lane, built in 1912? Miss Mart tenant from 1928. Sold to her in 1929 for £550.
7. Cottage in the woods. Miss Bell was an original tenant, bought in 1926.
8. Wire Mill and lake. Sold by WFGA in 1929 to Mr Foster.
9. & 10. Lake View Cottage and Lake Cottage. Built in 1926–7 by the Association (in field 150, fronting onto the main road). Mrs Pyart resident at one (with tea shop) from 1931 and bought both cottages in 1934.
11. Wire Mill House (not on the map from 1920, in field 143), built in 1912 and sold by the WFGA to Mr Creake in 1923.

The development of irrigated agriculture in twentieth-century Spain: a case study of the Ebro basin*

by Vicente Pinilla

Abstract

This paper describes the transformation wrought by irrigated agriculture in the Ebro Basin (Spain's largest river system) during the twentieth century. Irrigation in this area is both relatively large in scale and has been the precursor of changes occurring later in the rest of Spain. We first consider the significant impact of hydrological policy on the expansion of irrigation. We continue by examining the process of intensification which took place throughout the twentieth century and the gradual shift towards specialization, closing this part of the paper with a discussion of the importance of technological change for output growth. Finally, we take account of some impacts of the expansion of irrigated agriculture on the natural environment and the conflict that has emerged in the last few decades over the building of new dams.

At the beginning of the twenty-first century farming represents a bare 2.4 per cent of Spain's gross domestic product and employs just 5.9 per cent of the labour force. Despite the considerable lag that it had to overcome when compared with the most advanced nations, Spain can be viewed as having achieved the status of a developed country since the beginning of the 1970s, with high per capita income and an economy in which industry and services have emerged as leading sectors.

In this context, it may seem surprising that the water question (management, use and infrastructure) should have been such a hot political issue over the last two decades. Whilst the recent conservative government had approved a National Hydrological Plan and secured its ratification by the Spanish parliament, one of the campaign promises of the current socialist

* Earlier versions of this paper were discussed at the XIII International Economic History Congress (2002), Tenth Congress of the Spanish Agricultural History Society (2002), Second History and Environment Meeting (2001) and the University of Zaragoza Seminar on Economic History (2001). The final version has also benefited from the helpful comments and observations of the Editor and two anonymous referees, to whom the author extends his thanks. He is also grateful for the willing collaboration he has received from Paloma Ibarra, Pedro Arrojo, Jorge Bielsa and Julio Sánchez-Chóliz. A significant part of the data on land use and farm production used in this paper are drawn from I. Iriarte and J. M. Lana, 'La agricultura de regadío en Navarra y Alava en la segunda mitad del siglo XX'; J. R. Moreno, 'La Rioja (1920–1990): el desarrollo de la especialización hortícola'; V. Pinilla 'La agricultura de regadío en Aragón en el siglo XX' and J. M. Ramón, 'La agricultura de regadío en Lleida y Tarragona durante el siglo XX', all to appear in V. Pinilla (ed.), *Gestión y usos del agua en la Cuenca del Ebro, 1926–2001* (forthcoming).

prime minister was to suspend and then repeal this plan. This undertaking was quickly implemented by the incoming government. The socialist government of the early 1990s had proposed its own National Hydrological Plan, although it was never brought before parliament. The construction of costly infrastructure to transfer water from the Ebro River, Spain's largest river system, to the Mediterranean coast was the most hotly debated issue in both plans. Debate was strongly influenced by clashes between the territorial interests of the Autonomous Communities (political regions) that opposed the Ebro transfer (Aragon and Catalonia) and those that were in favour (Valencia, Murcia and Andalusia).

From an academic point of view, the most interesting aspect is the growing questioning of the 'classical' policies which aimed at increasing the supply of cheap water, and the emergence of a 'new water culture', which places stress on demand management, water saving measures, and advocates higher prices as an incentive for efficiency. When viewed from this perspective, it is assumed that policies aimed at increasing supply made sense throughout most of the twentieth century, to the extent that they solved either simultaneously or in parallel three key problems faced by underdeveloped, predominantly agricultural countries, with un-regulated rivers and limited deposits of fossil fuel, namely the provision of drinking water, the development of irrigation and the expansion of hydro-electric production. The change in the socio-economic context and the significant increase in the supply of water that had been made possible by the very high levels of hydrological regulation have resulted in a new paradigm being proposed, whose key elements are concern for sustainable development, the integrated management of water and territory and the management of water demand.[1]

If water occupies such an important place in the current political and academic scene in Spain, this may be understood in terms of the importance of irrigation in the history of Spanish agriculture. Descriptions may be found elsewhere of Spain's hydrological management in Roman times, under Arab rule or even during the Enlightenment.[2] At the end of the nineteenth century, the 'Regenerationist' movement led by the prominent Aragonese thinker Joaquin Costa argued that the expansion of irrigation was the key to the modernization of Spanish agriculture and the attainment of productivity akin to British levels.[3]

The Ebro River Basin has played a key role in Spanish water policy and the development of the modern irrigation system since the end of the nineteenth century. This was not only

[1] P. Arrojo, 'Spanish national hydrological plan: reasons for its failure and arguments for the future', *Water International* 28 (2003), pp. 295–302; F. Aguilera, 'Hacia una nueva economía del agua: cuestiones fundamentales', in P. Arrojo and F. J. Martínez-Gil, *El agua a debate desde la Universidad. Hacia una nueva cultura del agua* (1999), pp. 49–66. A recent and very complete description of long term water management models in modern Spain is given in M. T. Pérez-Picazo and G. Lemeunier, 'Formation et mise en crise du modèle de gestion hydraulique espagnol de 1780 à 2000', *Économies et Societés* 37 (2000), pp. 71–98.

[2] See, for example, A. Gil-Olcina and A. Morales-Gil (eds), *Hitos históricos de los regadíos españoles* (1992), and M. T. Pérez Picazo and G. Lemeunier, *Agua y modo de producción* (1990).

[3] A pioneering analysis of Costa's work is to be found in G. J. G. Cheyne, *A bibliographical study of the writings of Joaquín Costa (1846–1911)* (1972). The most complete study of his agricultural thinking is C. Gómez Benito and A. Ortí, *Estudio crítico, reconstrucción y sistematización del Corpus agrario de Joaquín Costa* (1999). A recent view of hydrographic Regenerationism is provided in E. Swyngedouw, 'Modernity and Hybridity: Nature, *Regeneracionismo*, and the Production of the Spanish Waterscape, 1890–1930', *Annals of the Association of American Geographers*, 89 (1999), pp. 443–65.

because the area was Costa's native soil and the center of the Regenerationist movement. Both state intervention in the construction of new water infrastructure and the creation of a centralized system of governance and administration of the Spanish river systems began there. The change from purely public works to a mixed system involving private participation also began there at the end of the twentieth century. It is no wonder, then, that the Ebro Valley should be the key to understanding the development of irrigated agriculture in Spain over the last century. Today, as we find ourselves facing the rejection of policies based on the construction of ever more costly infrastructure to increase the supply of water, the lands of the Ebro have again taken a leading role in the move toward a new hydrological policy which stresses efficiency and water saving.[4]

Throughout the twentieth century, irrigation has played a key role in the process of agricultural transformation in Spain because it allowed new uses for the land and both facilitates and acted as an incentive to the adoption of technologies, providing a stepping stone from traditional to modern agricultural practice. As Hayami and Ruttan have pointed out, the development of water resources forms part of the bloc of biological and chemical innovations that have raised farm output and productivity, as well as allowing savings in the land factor.[5] The expansion of irrigation has a close association with the growth of agro-industry, which has had a significant impact on economic development. Finally, the growth of irrigated agriculture has not been without effect on the rural environment, demography and economy.

I

The Ebro cuts right across the north-east of the Iberian Peninsula (Figure 1). With an area of 85,534 km^2, it is Spain's largest river basin, occupying 17 per cent of its territory. Although the River Ebro runs through nine Autonomous Communities (out of a total of seventeen), the most significant in terms of area are Navarre (10.8 per cent), La Rioja (5.9 per cent) and the Basque Country (3.1 per cent) on the Upper Ebro, Aragon (49.2 per cent) on the Middle Ebro, and Catalonia (18.3 per cent) on the Lower Ebro.[6] At the end of the twentieth century, the area of irrigated farming land in the Ebro Basin totalled 729,000 hectares, representing over one fifth of the total irrigated land in the whole of Spain. Almost a quarter of all the cultivated land in the Ebro Basin is irrigated, which is higher than the figure for Spain as a whole in percentage terms.

Environmental conditions in large parts of Spain have historically set the bounds for farmers. Scarce and irregular rainfall, with seasonal drought, are the factors usually cited to explain the historical development of the country's agriculture.[7] For example, it has been held that

[4] P. Arrojo and E. Bernal, 'El regadío en el Valle del Ebro', in J. López and J. M. Naredo (eds.), *La gestión del agua de riego* (1997), pp. 139–82; Arrojo, 'Spanish national hydrological plan'.

[5] Y. Hayami and V. Ruttan, *Agricultural development: an international perspective* (1971), p. 164.

[6] Data from P. Ibarra, F. Pérez, I. Rabanaque and V. Rodrigo, "El medio natural en la Cuenca del Ebro", in Pinilla (ed.), *Gestión*.

[7] M. González de Molina, 'Condicionamientos ambientales del crecimiento agrario español', in J. Pujol, M. González de Molina, L. Fernández, D. Gallego and R. Garrabou, *El pozo de todos los males. Sobre el atraso en la agricultura española contemporánea* (2001), pp. 43–94.

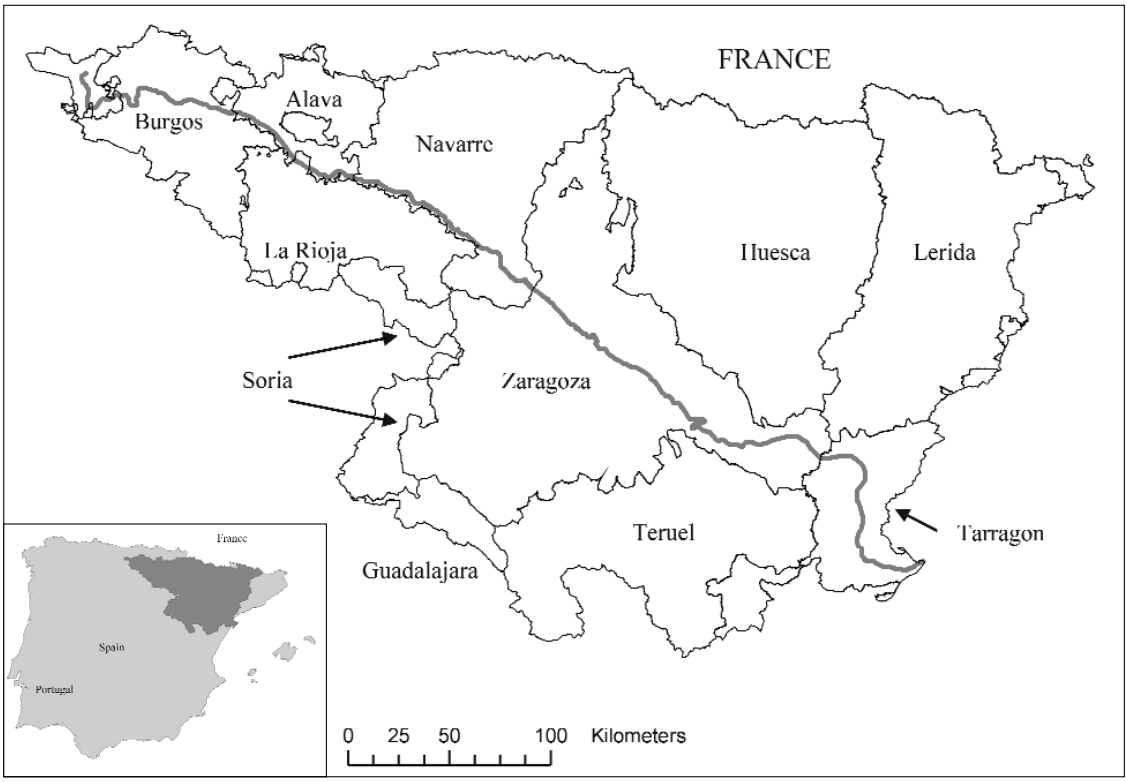


FIGURE 1. The Ebro Basin (provinces). The inset shows the location of the Ebro Basin.

disadvantageous climatic conditions were the main reason why Spain was unable to adopt the technical changes that defined the agrarian revolution in England.[8]

Natural limitations on agriculture are no less severe in the Ebro Basin than in other areas, and in many cases they are actually more severe. Annual precipitation varies significantly. Whilst maximum levels of rainfall are recorded in the highest mountain ranges such as the Pyrenees or the Cantabrian-Basque chain, with an annual average than more than 1500 mm, these levels fall steadily until they reach their minimum in the central areas of the Ebro depression, many of which receive an annual average of just 400 mm. As a result, these latter areas, which offer the best topographical conditions for the development of agricultural activities, are some of the driest areas of Spain, together with the Mediterranean coastal areas of Valencia, Alicante, Murcia and Almeria. However, and as is usual with climates of the Mediterranean type, the problem is not only the scarcity of rainfall, but also its quite dramatic inter-annual irregularity, which implies frequent extremely dry, or indeed drought, years. An added problem is that this rainfall is distributed very irregularly over the year, with maximum levels in

[8] R. Garrabou, 'Revolución o revoluciones agrarias en el siglo XIX: su difusión en el mundo mediterráneo', in *Agriculturas mediterráneas y mundo campesino* (1994), pp. 93–110; G. Tortella, 'Patterns of economic retardation and recovery in south-western Europe in the nineteenth and twentieth centuries', *EcHR* 47 (1994), pp. 1–21.

the spring and autumn and minimum levels in the summer, a season in which the water requirements for some crops are higher than can be met from the available precipitation.[9]

The need to overcome, or at least ameliorate these conditions, has resulted in a very long tradition of harnessing the river system to irrigate arid land.[10] Numerous small-scale hydraulic infrastructures, especially irrigation canals, dikes and water wheels, have been built along the Ebro river and its tributaries, transforming the flatter fields with the highest agricultural potential. In a few isolated cases, such as the Canal Imperial de Aragón (1776–90), a quantum leap was made possible by large-scale works providing the capacity to irrigate considerable areas. The main aim of these efforts to expand the irrigated area was to ensure a harvest rather than raise productivity or change the use of the land.[11]

The profound changes occurring in the Spanish economy in the first half of the nineteenth century pointed the economy in the direction of capitalist development. In the farm sector, this was a time of transformation driven by what has come to be called the liberal agrarian reform, in the sense that it was introduced by a regime that was ideologically liberal and followed economically liberal policies, including the sale of church and publicly owned lands and the abolition of the feudal regime.[12] The shift from unirrigated to irrigated farming provided a perfect fit with the liberal programme, which sought to expand farm output by raising the productivity of the land. Under the classic liberal programme, which tended to limit state intervention in the economy, it was to be private investors who would undertake the works necessary for irrigation.[13]

As a result, scant progress was made with irrigation throughout most of the nineteenth century. This snail's pace development was a consequence of the progressively larger scale and increasing cost of the necessary infrastructure, resulting in higher initial funding requirements and longer depreciation periods. In a under-developed country like Spain, where the shortage of capital seriously hampered the development of agriculture, this made it difficult to set in

[9] Ibarra, Pérez, Rabanaque and Rodrigo, 'El medio natural'.

[10] Various recently published papers have sought to relate the development of irrigation to the limitations imposed by the natural environment in various parts of the Ebro basin. See the following papers in R. Garrabou and J. M. Naredo (eds.), *El agua en los sistemas agrarios. Una perspectiva histórica* (1999); for Navarra, J. M. Lana, 'Desequilibrios hídricos y transformaciones del regadío en la Navarra seca', pp. 365–90; for Aragón, P. Ibarra and V. Pinilla, 'Regadío y transformaciones agrarias en Aragón, 1880–1990', pp. 391–426; and for Catalonia, R. Garrabou, E. Tello. E. Saguer and J. Boixadera, 'El agua como factor limitante en los sistemas agrarios de Cataluña (siglos XIX y XX)', pp. 199–224 and E. Vicedo, J. Boixadera and J. R. Olarieta, 'Sistema hidráulico, organización de los riegos y usos del agua en la huerta de Lleida', pp. 225–54.

[11] For a discussion of the Canal Imperial de Aragón and irrigation in general in a pre-industrial Mediterranean economy, see G. Pérez, *Agua, agricultura y sociedad en el siglo XVIII. El Canal Imperial de Aragón, 1766–1808* (1984).

[12] The classic study of the liberal agrarian reform in Spain is A. García-Sanz, 'Crisis de la agricultura tradicional y revolución liberal (1800–1850)', in A. García-Sanz and R. Garrabou, *Historia agraria de la España contemporánea,* I, *Cambio social y nuevas formas de propiedad (1800–1850)* (1985), pp. 8–99.

[13] See J. Maluquer de Motes, 'La despatrimonialización del agua: movilización de un recurso natural', *Revista de Historia Económica,* 1, (1983), pp. 79–96, J. Melgarejo, 'De la política hidráulica a la planificación hidrológica. Un siglo de intervención del Estado', in C. Barciela and I. López, *El agua en la historia de España* (2000), pp. 275–324, and J. J. Mateu, 'Política hidráulica e intervención estatal en España (1880–1936): una visión interdisciplinaria', *Revista Española de Estudios Agrosociales y Pesqueros*, 197 (2002), pp. 35–61.

motion a programme of hydrological infrastructure construction based entirely on private investment.[14] Perhaps the most significant exception to the general approach was the drilling of wells in the Valencia region to extract water for the expansion of orange growing.

The majority of the development projects proposed came to nothing. The exclusion of the state from developments in water infrastructure is perfectly consistent with the standard pattern of liberal agrarian policy, which was concerned with steering institutional change to foster the creation of the conditions appropriate for productive development but with respect for private property and reliance on the operation of the market to assign resources.[15] If the liberal agrarian reform established the basis for the expansion of production in the case of land, private initiative failed to generate similar outcomes in the case of water for the reasons discussed above.

This situation is illustrated by the results achieved in the Ebro Basin in the nineteenth century. The main initiatives arising in this period focused basically on the construction of irrigation canals and crystallized in a number of large-scale works in the Lower Ebro (provinces of Lerida and Tarragon). There was less success, however, in other areas such as the province of Huesca, where numerous projects were also proposed. Scarcely any dams – the most complex and costly infrastructure – were built. In an overall evaluation of the development of irrigation in this context, we find that the main achievements were the irrigation of land in the province of Tarragona using water from the canal built along the right bank of the Ebro Delta, and in Lerida through the main Urgell canal. In the latter case, progress was quite considerable with an increase of 15,000 hectares in the area under irrigation between 1860 and 1880.[16]

Considering the agro-climatic conditions described above and the failure to develop irrigation as a means of raising farm productivity, we need hardly wonder at the strength with which the Regenerationist movement led by Joaquín Costa emerged in the Ebro Valley and Aragon in the last quarter of the nineteenth century.[17] Since private initiative had proved unable to do much with the opportunities offered by the privatization of water, the Regenerationists openly demanded state support, while irrigation was viewed as the panacea for the grave problems affecting rural areas and, especially, for the poverty reigning in some parts. Costa's ideas broke with the tradition of economic liberalism and instead granted the state a role in encouraging the economic development of the country. Owing to the end-of-century farm depression, the call for state intervention was received in a much more receptive context and the idea that it was the state's responsibility to increase in the supply of water for irrigation became widely accepted.

[14] For a discussion of the key role of capital shortage in Spanish agricultural development, see V. Pinilla, 'Sobre agricultura y crecimiento económico en España, 1800–1935', *Historia Agraria*, 34 (2004), pp. 137–62.

[15] R. Garrabou, 'Crecimiento agrario, atraso y marco institucional', in Pujol, González de Molina, Fernández, Gallego and Garrabou, *El pozo*, pp. 215–51.

[16] J. M. Ramón, 'L'agricultura de regadiu a la Catalunya comperània: els canals d'Urgell, 1860–1960' (Unpublished Ph.D. thesis, Universitat Pompeu Fabra, 1994), p. 381.

[17] For the hydrological policy of Joaquín Costa, see A. Ortí, *En torno a Costa (Populismo agrario y regeneración democrática en la crisis del liberalismo español)*, (1996); E. Fernández-Clemente, *Estudios sobre Joaquín Costa* (1989), pp. 190–215; C. Gómez Benito and A. Ortí, *La fundación de la Cámara Agrícola del Alto Aragón en el proyecto de desarrollo agrario nacional de Joaquín Costa* (1992). Similarities between the hydraulic debates in Spain and the United Status at the end of the nineteenth century have been stressed by J. L. Ramos, 'Paralelismos entre los debates hidráulicos de España y Estados Unidos a finales del siglo XIX', *Historia Agraria*, 32 (2004), pp. 85–112.

Following this turnaround in economic policy, and in view of the agricultural potential of some areas after the change to irrigation and related improvements (e.g. levelling and soil improvements), the Ebro Valley swiftly became a test bed for the new water policy. The starting point was the state's decision to complete the works on the Aragón and Catalonia Canal. This represented an acceptance of the failure of privately-sponsored hydrological works and the beginning of state-sponsored development, which has continued almost to the present day. The continuation of this policy was marked in 1915 when the government adopted the Upper Aragon Irrigation Plan, which had originally been designed by private initiative in 1913 and implied a very significant investment. Another key episode in the state's growing intervention in the Ebro Basin was the construction of a canal along the left bank of the Delta in Tarragona. A further turning point moment was the formation of the *Confederación Hidrográfica del Ebro* (1926), which was the first attempt to achieve integrated management of the whole of a River Basin, including not only the design of irrigation plans but also the management of other water uses, such as urban water supply and hydroelectric generation.[18] The experiment was subsequently extended to the whole of Spain. The *Confederación Hidrográfica del Ebro* definitively established the principle of the state direction of irrigation infrastructure.

The new hydrological policy adopted during the first decades of the twentieth century implied that the state would assume responsibility for a significant part of the financing of the large-scale hydrological works (dams and main and secondary canals), whilst the farmers would bear the cost of levelling the agricultural plots, channeling the water within them and establishing the connections between the irrigation ditches and their plots. Given that the water was made available to the farmers at an extremely low cost, the main investment they had to make was in improving the farms themselves, which led to important returns due to the increase in the production that came with the change to irrigation-based farming. In many cases, the slowness of the farmers in changing the range of crops they grew was mainly determined by their inexperience with irrigated crops, together with the limited interest shown by the state in offering the technical training which would accelerate such changes.

The growing importance of the state as the main source of finance for the hydrological works can be appreciated from the decade on decade increase in the percentage of dams constructed with state finance. Thus, whilst this corresponded to less than 25 per cent in the years prior to 1920, it reached levels of more than 80 per cent in each of the subsequent decades of the twentieth century, save for 1950–59. Indeed, in four decades, 1920–29 and 1960–89, precisely the years when the biggest works were being constructed, all the dams built were erected by the state.[19]

State intervention initially focused on the construction of irrigation canals, but these, whilst making the extension of irrigated farming possible, could not guarantee a regular supply of water. The main limitation of this type of hydrological work came in the form of insecurity of water supply in dry years or insufficiency of supply in normal years to sustain certain types

[18] For a discussion of the creation of the Confederación Hidrográfica del Ebro and its early activities, see M. L. Frutos, 'Las confederaciones sindicales hidrográficas', in A. Gil and A. Morales (eds), *Planificacion hidráulica en España* (1995), pp. 181–256. An analysis of the activities of this institution throughout the twentieth century is provided in E. Fernández Clemente, 'La Confederación Hidrográfica del Ebro: la institución y su capital humano', in Pinilla (ed.), *Gestión*.

[19] Ibarra and Pinilla, 'Regadío', p. 408.

of crops. Because of this limitation, these canals often did not allow any transformation in land use, but only an increase in farm output. For this reason, regulation works would play a key role from the second decade of the twentieth century onwards, although state involvement was still at this time very limited. The dams built by the hydroelectric utilities, which in some cases allowed mixed use (irrigation and electricity generation), to some extent led the field, linked as they were to the electrification of the Basque Country and Catalonia, the main industrial areas of Spain, by drawing on the water resources of the Pyrenees. In the third decade of the twentieth century, however, the state was already dominant in the construction of dams, and it is in this context that the *Confederación Hidrográfica del Ebro* was formed. The 1920s, and especially the years after 1926, marked a turning point, as the speed at which the state constructed a range of hydrological infrastructures came to determine the possibility of developing irrigated farming in the Ebro Basin.[20] In any event, by 1916 Ebro irrigation represented a third of the total for Spain, and its importance had already been consolidated before the Civil War of 1936–39 as the construction of hydrological works gathered pace in the early 1930s, the period in which the area's major irrigation systems were defined.

A comparison of the achievements of water policy in the Ebro Basin compared to Spain as a whole reveals the scale of the regulating works, basically dams, undertaken right up to the Civil War of 1936–39 (Table 1). A disproportionate part of construction nationally was carried out in the Ebro Basin with the result that the volume of water stored in reservoirs for use in irrigation increased from 17.4 per cent of the total for Spain in 1900 to a maximum of 54 per cent in the late 1920s. The completion of major works in other river systems, particularly along the Guadalquivir, reduced this relative share to 30 per cent in the 1930s, but this was still a very high percentage for Spain as a whole. The relative importance of dam construction in the Ebro Basin in comparison with the rest of Spain, together with the building of canals in the nineteenth and the first third of the twentieth century would strengthen the undisputed leading role of the area in the development of water policy over the whole period. Thus, during the First World War, the irrigated land in the Ebro Basin accounted for almost one third of the total for Spain (Table 2).

In the years following the Civil War, water policy formed an important part of the Franco dictatorship's (1939–75) farm policy. This was based on earlier irrigation plans, which required the construction of ever larger dams. The greatest increase in the regulating capacity for irrigation took place between the mid-1950s and the end of the 1960s. A key event here was the state's decision to undertake the work required directly, going a step further with a policy which, as we have seen, had emerged at the beginning of the twentieth century.[21] Water policy was, however, also based on the implementation of far-reaching plans to transform some areas by means of what was called 'integral colonization', which meant not only irrigating the land but the movement of people into development areas as colonists. The implementation of this policy was managed by the *Institutio Nacional de Colonizaci*, founded in 1949 and dissolved in

[20] An overview of twentieth-century hydrological infrastructure construction in Spain is given in E. Fernández-Clemente, *Un siglo de obras hidráulicas en España. De la utopía de Joaquín Costa a la intervención del Estado* (2000). For the general framework, see A. Herranz, *La dotación de infraestructuras en España, 1844–1935* (2004).

[21] C. Barciela, M. I. López and J. Melgarejo, 'La intervención del Estado en la agricultura durante el siglo XX', *Ayer* 21 (1996), pp. 51–96.

TABLE 1. Capacity of dams built to store water for irrigation (classified by river basins)

	North	*Douro*	*Tagus*	*Guadiana*	*Guadalquivir*	*South*	*Segura*	*Jucar*	*Ebro*	*Pyrenees*	*Spain*
(a) in cubic hectometers											
until 1900	0.0	0.0	10.0	12.0	0.0	0.5	28.1	17.4	14.3	0.0	82.2
1901–1910	0.0	0.0	0.0	0.0	0.0	0.2	54.9	0.0	8.1	0.0	63.2
1911–1920	0.0	0.0	3.1	0.7	65.4	0.0	0.0	26.9	237.1	0.0	333.2
1921–1930	0.0	79.9	0.0	0.0	99.1	0.0	6.7	0.0	157.0	4.9	347.5
1931–1940	0.0	108.1	211.5	0.0	425.0	0.0	204.8	0.0	155.0	0.8	1,105.2
1941–1950	2.5	255.0	1.7	0.0	905.0	74.1	0.0	0.6	553.5	0.0	1,792.4
1951–1960	341.5	957.1	1,202.0	1,632.7	534.5	0.0	474.7	1,415.6	747.9	0.0	7,305.9
1961–1970	22.8	809.4	2,593.2	1,647.5	2,182.0	87.0	36.7	132.8	618.6	474.6	8,604.6
1971–1980	0.0	3.9	239.6	100.0	350.4	346.5	251.3	1,041.2	598.4	0.0	2,931.4
1981–1990	0.0	0.8	141.3	3,789.0	1,023.7	569.1	0.0	12.8	179.3	2.4	5,718.4
TOTAL	366.8	2,214.1	4,402.4	7,181.9	5,585.1	1,077.4	1,057.2	2,647.2	3,269.2	482.6	28,283.9
(b) per cent of total for Spain for each period											
until 1900	0.0	0.0	12.1	14.6	0.0	0.6	34.1	21.2	17.4	0.0	100.0
1901–1910	0.0	0.0	0.0	0.0	0.0	0.3	86.9	0.0	12.8	0.0	100.0
1911–1920	0.0	0.0	0.9	0.2	19.6	0.0	0.0	8.1	71.2	0.0	100.0
1921–1930	0.0	23.0	0.0	0.0	28.5	0.0	1.9	0.0	45.2	1.4	100.0
1931–1940	0.0	9.8	19.1	0.0	38.5	0.0	18.5	0.0	14.0	0.1	100.0
1941–1950	0.1	14.2	0.1	0.0	50.5	4.1	0.0	0.0	30.9	0.0	100.0
1951–1960	4.7	13.1	16.5	22.3	7.3	0.0	6.5	19.4	10.2	0.0	100.0
1961–1970	0.3	9.4	30.1	19.1	25.4	1.0	0.4	1.5	7.2	5.5	100.0
1971–1980	0.0	0.1	8.2	3.4	12.0	11.8	8.6	35.5	20.4	0.0	100.0
1981–1990	0.0	0.0	2.5	66.3	17.9	10.0	0.0	0.2	3.1	0.0	100.0
TOTAL	1.3	7.8	15.6	25.4	19.7	3.8	3.7	9.4	11.6	1.7	100.0

Source: author's calculations from data presented in Dirección General de Obras Hidráulicas, *Inventario de presas españolas* (1992).

1971.[22] Integral colonization involved the state financing the conversion to irrigation, in such a way that the former owners received a plot of land whose value was equivalent to the dry lands they had held. The surplus land, that not returned to its former owners, was divided into plots that were given to the new colonists, who were normally land-less labourers. They, in turn, paid the state a rent for a certain number of years, normally around twenty, at the end of which they obtained full title to the land. In a number of areas of newly irrigated land lying in the Ebro Valley, new population centers were also established, with the houses that had been constructed also being handed over to the colonists. The new colonizing policy was of enormous importance in the Ebro Valley with no less than 40 new centers being constructed with a population

[22] C. Barciela and M. I. López, ' La política de colonización del franquismo: un complemento de la política de riegos', in Barciela and Melgarejo, *El agua*, pp. 323–63; for colonization in the Ebro Basin see A. Sabio, 'La colonización agraria en Aragón, 1940–1985', in Pinilla (ed.), *Gestión* and V. Bretón, *Tierra, Estado y Capitalismo. La transformación agraria del occidente catalán, 1940–1990* (2000).

TABLE 2. Area under irrigation, 1916

	Hectares	*per cent Spain*	*per cent Ebro Basin*
Alava	439	0.0	0.1
Navarre	34,402	2.5	7.8
Rioja	36,275	2.7	8.2
UPPER EBRO	71,116	5.2	16.1
Huesca	63,124	4.6	14.3
Teruel	39,679	2.9	9.0
Zaragoza	115,734	8.5	26.2
MIDDLE EBRO (ARAGON)	218,537	16.0	49.5
Lérida	116,852	8.6	26.5
Tarragona	34,622	2.5	7.8
LOWER EBRO (CATALONIA)	151,474	11.1	34.3
EBRO BASIN	441,127	32.3	100.0
TOTAL SPAIN	1,366,441	100.0	

Source: Junta Consultiva Agronómica, *Medios que se utilizan para suministrar el riego a las tierras. Distribución de los cultivos en la zona regable* (1918).

of 18,180 by 1981. Some 56,790 hectares of irrigated land were handed over to the new colonists, representing 29.5 per cent of the total area assigned to colonists under these schemes in Spain as a whole.[23]

The Franco regime's farm policy put an end to the Republican agrarian reforms which involved the redistribution of land and substituted in its place a technical reform with irrigation as one of its pillars. Needless to say, this policy led to a major expansion in the area of irrigated land. The construction of dams to store water for use in irrigation reached its zenith between 1951 and 1970. In the Ebro Basin, the regulating capacity for irrigation in 1980 was five times that of 1940. As a consequence, the area of irrigated farmland grew sharply and by the 1980s it was a third greater than before the Civil War. Despite the significant quantitative increase in the area irrigated, however, the key feature was the improvement in the 'quality' of irrigation. Because there were not enough regulating dams on the headwaters of rivers before the Civil War, irrigation, as we noticed, could be largely intermittent. The expansion of the mid-twentieth century, however, allowed an improvement in the consistency of water supply, making most irrigation permanent, which not only meant an increase in harvests of traditional crops but also allowed farmers to change their crops because of the greater certainty that water would be available during the summer months. This improvement in both the quantity and security of the water supply allowed for important changes to be made in land use, with the introduction of crops with high water requirements.

[23] A. Villanueva and J. Leal, *La planificación del regadío y los pueblos de colonización. Historia y Evolución de la Colonización Agraria en España,* III, (1990). On the integral colonization of the Ebro Valley, see A. Sabio 'La colonización agraria en Aragón' and V. Bretón 'Regadío y colonización agraria en el occidente catalán', both in Pinilla (ed.), *Gestión.* Also see Bretón, *Tierra, Estado y Capitalismo.*

TABLE 3. Evolution of the area under irrigation in the Ebro basin, 1951–95

	1951–55	1956–60	1961–65	1966–70	1971–75	1976–80	1981–85	1986–90	1991–95
(a) Area under irrigation ('000 hectares)									
Alava	2.8	2.8	2.9	2.5	2.3	1.9	1.4	5.8	6.8
Navarre	66.8	66.2	66.6	66.6	66.4	65.6	66.5	67.5	74.5
La Rioja	40.5	39.8	40.5	43.0	46.6	47.4	47.6	47.1	44.4
UPPER EBRO	110.0	108.8	110.0	112.2	115.3	114.9	115.5	120.3	125.7
Huesca	84.7	86.1	104.1	122.9	137.2	152.3	163.6	177.5	180.8
Teruel	32.8	32.3	32.7	34.1	36.5	35.8	36.3	35.6	35.0
Zaragoza	128.4	128.6	138.9	147.8	160.5	161.5	167.5	173.6	182.5
MIDDLE EBRO (Aragon)	245.8	247.0	275.7	304.7	334.2	349.6	367.3	386.7	398.2
Lérida	138.4	139.5	143.9	154.6	150.6	152.6	145.8	139.1	138.2
Tarragona	44.2	43.7	51.5	57.6	53.9	55.6	59.2	65.2	67.2
LOWER EBRO (Catalonia)	182.6	183.2	195.4	212.2	204.5	208.1	205.1	204.4	205.4
Spain	1,656.3	1,770.6	1,957.9	2,175.3	2,532.1	2,739.5	2,939.9	3,132.7	3,188.7
(b) irrigated area as a percentage of total Spanish irrigated area									
Upper Ebro	6.6	6.1	5.6	5.2	4.6	4.2	3.9	3.8	3.9
Middle Ebro (Aragon)	14.8	13.9	14.1	14.0	13.2	12.8	12.5	12.3	12.5
Lower Ebro (Catalonia)	11.0	10.3	10.0	9.8	8.1	7.6	7.0	6.5	6.4
Ebro Basin	32.5	30.4	29.7	28.9	25.8	24.6	23.4	22.7	22.9
Spain	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
(c) irrigated area as percentage of total cultivated land									
Upper Ebro	15.1	16.3	15.7	15.9	16.4	17.4	18.2	19.1	20.5
Middle Ebro (Aragon)	16.7	16.3	16.5	18.0	17.7	18.5	19.3	20.6	22.1
Lower Ebro (Catalonia)	23.3	23.7	25.0	25.9	28.0	28.9	28.2	28.1	29.7
Ebro Basin	18.1	18.3	18.4	19.6	19.7	20.6	21.1	22.0	23.5
Spain	8.2	8.6	9.5	10.8	12.1	13.3	14.3	15.0	16.5

Source: Spanish Ministry of Agriculture, Fisheries and Food, *Anuarios de Estadística Agraria* (1951–90).

Comparison of the rate of construction of regulating infrastructures for irrigation purposes in the Ebro Basin and in the rest of Spain shows a clear pattern of declining importance in relative terms. If, at the end of the 1940s the Ebro dams still represented one third of total Spanish regulation capacity, this figure thereafter fell quickly despite the intensification of construction in the Ebro Valley. By the end of the 1990s, its capacity represented just 12 per cent of the national total. This can easily be explained the enormous works carried out in some of the other river basins such as the Guadiana or Tagus (Table 1).

The construction of regulating works is clearly reflected in the evolution of the area under irrigation. At the beginning of the 1950s, the area irrigated in the Ebro Valley was still almost one third of the total for Spain (Table 3). Nevertheless, the share of Spanish irrigation represented by the Ebro fell in the second half of the twentieth century. Between 1951 and 1995 the share lost was almost ten percentage points, from 32.5 per cent to 22.9 per cent, even though the area occupied by irrigated farming in the Ebro Valley actually increased by 35 per cent. This was

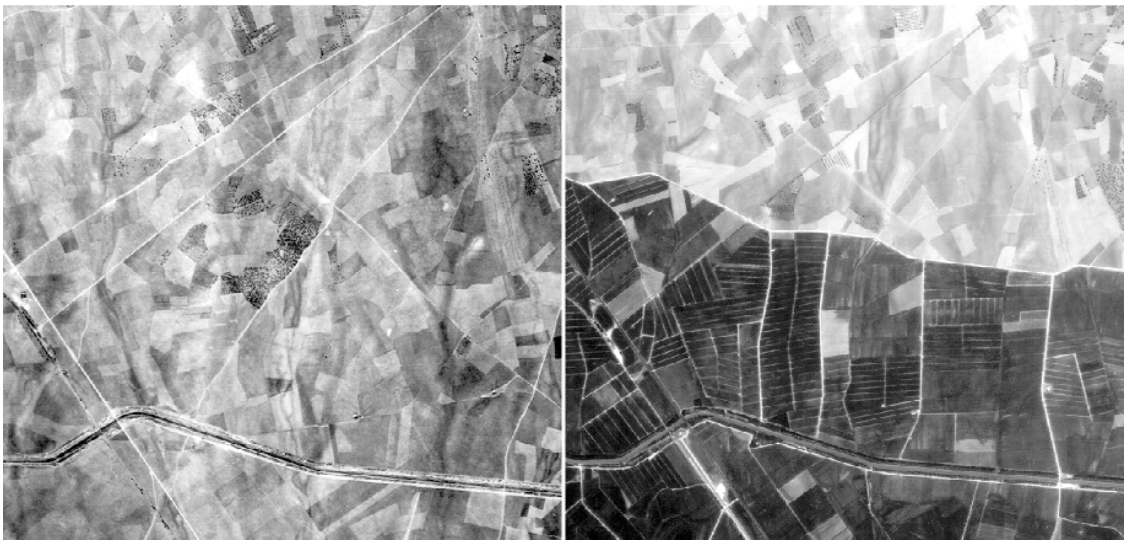


FIGURE 2. Aerial photographs of the irrigation district of Bardenas IV (Zaragoza): Before irrigation, 1957 (left) and after irrigation, 1981 (right)

not, then, due to any decline in irrigation in the Ebro Valley as compared to the rest of Spain. On the contrary, the data show that the percentage of irrigated to total farmland was notably higher in the Ebro Basin throughout the twentieth century. Although the gap has narrowed considerably, there remains a significant difference (Table 3). The explanation for the declining share of Ebro Valley irrigation in the total for Spain is, therefore, connected with the early, indeed pioneering, development of water policy in this region. Logically, the importance of the Ebro declined as the rest of Spain caught up. Even so, over one fifth of Spanish irrigation is still found in the lands along the River Ebro.

The scale of the irrigation works entailed, as may be imagined, large-scale landscape change, with the eradication of old field patterns and their replacement by linear field systems devised around the new irrigation canals. Some indication of the scale of these changes may be gathered from Figure 2, which shows the same area in Zaragoza in its unirrigated state and quarter of a century later, after the implementation of the programme of improvement.

II

The increase in the area under irrigation in Spain throughout the twentieth century was not the only factor behind the increasing importance of irrigation to farming. Its greatest impact has probably been the major change that has taken place in the use of irrigated land. Where irrigation had initially been used with the aim of ensuring more regular harvests of the same crops as were grown on unirrigated land, with productivity gains only as a secondary objective, the emphasis now shifted to the production of crops that could only be grown in a Mediterranean climate when more water was available than fell as rain. This change is associated with possibilities allowed by the number of hours of sunlight enjoyed by the Iberian Peninsula. There was a gradual shift from the crops traditionally grown on both irrigated and unirrigated

land, winter cereals, vines and olives, to those characteristic of irrigated land alone, fruit, vegetables, spring cereals such as maize and rice, forage plants and certain root vegetables and tubers, whose cultivation on unirrigated land is not viable in most of Spain. At a latter stage priority was given to the most intensive of these crops, such as fruit and vegetables.

In the early twentieth century, irrigated crops in the Ebro Basin differed very little from unirrigated crops. These were, however, progressively replaced by other more intensive crops. Initially, the main examples of this change were sugar beet in Zaragoza, vegetables in La Rioja, forage plants in Lerida and fruit (orchards) in Tarragona. The substitution of traditional crops was associated both with the problems caused by the agricultural depression at the end of the nineteenth century, which led to a significant fall in the price of cereals, and to agro-industrial incentives to switch to more intensive crops, not to mention changes in the demand for food products. This transformation in land use was accompanied by the development of industries (sugar refining, fruit and vegetable canning), which added value to basic farm produce and boosted incentives to switch crops, as well as the opportunity to grow intensive crops such as fruit and vegetables to supply city markets or for export.

The switch was well underway by the outbreak of the Civil War. Over half of the sugar produced in Spain came from the Ebro lands, especially the area around Zaragoza, while the main canning industry was located in La Rioja and the Province of Tarragona had become one of the leading Spanish exporters of farm produce.[24] Even so, most irrigated land was still given over to traditional crops. But after the Civil War, the Dictatorship instigated a policy of economic autarky, creating difficulties that not only slowed down intensification, but in some cases reversed the process, an outcome that would only be corrected in the 1950s.

In the second half of the twentieth century, the process of crop change leading to greater intensification in land use has gone ahead throughout the Ebro Basin, though at unequal speed and with differing results (Table 4). It is significant that in those provinces where the area under irrigation has grown fastest (such as Huesca and Zaragoza), this expansion has been compatible with the intensification of land use, with the result that typical irrigated crops had increased their share of total irrigated land by over 20 percentage points by the early 1990s. In Huesca it had more than doubled and in Zaragoza it had risen by almost 80 per cent. The expansion of the most intensive crops was even more spectacular, with a two-fold increase in relative share in Huesca and an six-fold increase in Zaragoza.[25]

The same process of intensification is also evident in those provinces where the expansion of the irrigated area was less significant following the Civil War. In Teruel, the area of irrigated land given over to typical irrigated crops increased to over 50 per cent, while intensive crops tripled their area. Progress was even more spectacular in the Catalan part of the Ebro Basin, where various regulating works ensured higher volumes of water for the Lerida and Tarragona canals. In turn, this allowed the relative share of typical irrigated crops to increase by over

[24] D. Gallego, *La producción agraria de Alava, Navarra y La Rioja desde mediados del siglo XIX a 1935* (1986); J. M. Martínez-Carrión, 'Formación y desarrollo de la industria de conservas vegetales en España, 1850–1935', *Revista de Historia Económica*, 7 (1989), pp. 619–49; J. Pujol, *Les transformacions del sector agrari catala entre la crisi finisecular i la Guerra Civil* (unpublished Ph.D. thesis, Universidad Autónoma de Barcelona, 1988); V. Pinilla, *Entre la inercia y el cambio. El sector agrario aragonés, 1850–1935* (1995).

[25] Ibarra and Pinilla, 'Regadío'.

TABLE 4. Crop patterns for irrigated land in the Ebro basin provinces (per cent)

	1900	*1910*	*1920*	*1930*	*1935*	*1950*	*1960*	*1970*	*1980*	*1990*
ALAVA										
Irrigated and unirrigated crops	n.a.	n.a.	n.a.	n.a.	n.a.	63.9	68.3	43.1	0.9	0.5
Irrigated crops only	n.a.	n.a.	n.a.	n.a.	n.a.	36.1	31.7	56.9	99.1	99.5
NAVARRE										
Irrigated and unirrigated crops	n.a.	75.2	n.a.	n.a.	72.4	67.0	59.2	43.5	38.5	39.8
Irrigated crops only	n.a.	24.8	n.a.	n.a.	27.6	33.0	40.8	56.5	61.5	60.2
Vegetables	n.a.	n.a.	n.a.	n.a.	n.a.	5.3	8.8	20.5	22.2	19.7
HUESCA										
Irrigated and unirrigated crops	53.7	55.0	75.2	73.1	74.0	74.2	58.4	68.6	55.2	54.4
Irrigated crops only	46.3	45.0	24.8	26.9	26.0	25.8	41.6	31.4	44.8	45.6
Forage plants	n.a.	21.0	11.2	12.3	13.1	7.2	10.2	10.5	18.4	12.7
TERUEL										
Irrigated and unirrigated crops	59.8	57.7	60.7	57.6	59.5	65.9	47.3	43.0	45.6	49.3
Irrigated crops only	40.2	42.3	39.3	42.4	40.5	34.1	52.7	57.0	54.4	50.7
ZARAGOZA										
Irrigated and unirrigated crops	78.5	65.3	50.5	50.1	52.9	62.7	56.7	45.6	41.5	38.2
Irrigated crops only	21.5	34.7	49.5	49.9	47.1	37.3	43.3	54.4	58.5	61.8
Maize	4.8	8.9	6.8	3.7	4.6	2.8	10.3	18.2	21.3	20.9
Sugar beet	5.1	7.6	22.9	20.9	14.3	15.8	10.9	4.3	1.0	0.1
LÉRIDA										
Irrigated and unirrigated crops	83.0	66.1	70.9	65.7	62.1	57.8	50.6	38.7	39.6	28.1
Irrigated crops only	17.1	33.9	29.1	34.3	37.9	42.2	49.4	61.3	60.4	71.9
Fruit	0.4	0.4	0.5	0.2	0.2	0.3	1.8	12.9	19.6	27.6
Forage plants	10.9	22.1	19.7	22.7	25.1	29.0	32.7	28.7	16.5	24.1
TARRAGON										
Irrigated and unirrigated crops	69.2	49.8	44.1	41.3	41.4	24.5	14.3	10.1	6.5	9.8
Irrigated crops only	30.8	50.2	56.0	58.7	58.6	75.6	85.7	89.9	93.5	90.3
Fruit	0.1	19.5	10.9	6.5	9.2	18.4	20.4	25.0	34.8	37.5
Spring cereals	20.6	20.0	30.3	25.9	29.1	34.7	38.1	36.4	31.2	31.2

Notes: Irrigated and unirrigated crops = winter cereals, legumes, vines and olives; Irrigated crops only = Maize, rice, tubers, industrial plants, forage plants, fruit and vegetables.
Sources: Alava and Navarre: Iriarte and Lana, 'La agricultura'; Huesca, Teruel and Zaragoza, Ibarra and Pinilla, 'Regadío'; Lérida and Tarragona, Ramon, 'La agricultura de regadío'.

fifteen percentage points in the latter case, representing 90 per cent of irrigated land use by the beginning of the 1990s. In Lerida, growth in the relative share given over to typical irrigated crops represented almost 30 percentage points, while intensive crops expanded from less than 6 per cent of total irrigation to over 30 per cent by the early 1990s.[26] Progress on the Upper

[26] Ramón, 'La agricultura de regadío'.

Ebro was also significant. Thus, in Alava, Navarre and La Rioja the area sown with typical irrigated crops grew by 68, 27 and around 20 percentage points respectively. In all of these cases, the growth in the relative share of intensive crops was also very significant, especially in Navarre and La Rioja.[27]

III

If all of the Ebro lands have enjoyed considerable progress in the substitution of traditional by typical irrigated crops, or by intensive crops, diversity has remained a notable feature, with different areas specializing in very different crops.

This diversity in specialization was conditioned by a range of factors. The moment at which the change in crops began in each area and the options chosen have been decisive. On the one hand path dependence and on the other the evolution of demand threw up different alternatives depending on the prevailing situation. This evolution and changes in the demand for food products have also conditioned the various production options due to variations in relative prices. Ecological conditions and the availability of water have also had a decisive impact. Finally, the relationship between irrigated agriculture and the rest of the economy has also had a considerable influence on this trajectory, as a result of integration with agro-industry and the availability and cost of labour as determining factors for certain production options. The structure of ownership may also have played a significant role.

One example of specialization is the introduction of sugar beet which played a decisive role in the change of irrigated crops, especially in Zaragoza, some districts of Huesca, Navarre and Teruel. The adoption of sugar beet, which was clearly centered on Zaragoza, received a decisive boost at the end of the nineteenth century and, in the depths of the agricultural depression, from the state-financed Zaragoza Experimental Farm, which sought to foster the development of sugar factories and encouraged a model of irrigation in small and medium-sized owner occupier farms that was very intensive in both labour and capital.[28] The beet cycle began to run out of steam in the mid-1920s although actual decline did not set in until the 1960s. Thereafter, it disappeared almost completely from many irrigated areas along the Ebro as production shifted to other areas of Spain (the Duero Valley and Jerez) due to the higher returns obtained from the crop on these new lands.[29] Though sugar beet yielded very good results, exceptional even in Zaragoza, at the time of its decline farmers specializing in the crop found themselves at a relative disadvantage when they sought to switch to more intensive crops requiring specialist skills and agro-industrial inputs to boost expansion. Because of this, the available options tended to reaffirm those specializations that had begun to emerge from the beginning of the 1960s, especially maize, and even as far back as the turn of the century, such as forage plants. The main advantage here was the possibility of mechanization in areas where labour was relatively scarce due to the strong pull of urban and industrial employment in cities such as

[27] Iriarte and Lana, 'La agricultura'; Moreno, 'La Rioja'.

[28] L. Germán, 'Características del desarrollo del complejo remolachero-azucarero en España, 1882–2000', in C. Barciela and A. Di Vittorio (eds.), *Las industrias agroalimentarias en Italia y España durante los siglos XIX y XX* (2003), pp. 335–56; Pinilla, *Entre la inercia*.

[29] F. Asín *et al.*, *El cultivo de la remolacha y la industria azucarera en la economía aragonesa* (1981).

Barcelona, Bilbao, Valencia, Zaragoza and Pamplona, as well as the demand for feed from the expanding intensive livestock farming industry, since Spain suffered a chronic shortage of forage. Specialization of this kind was, however, interspersed by districts where crops were grown (especially fruit trees), which in the 1950s had still not spread significantly.

A different trend is evident in large parts of the Upper Ebro. In this area, there was a clear initial option for market gardening, associated with the local canning industry, which fed back into further specialization.[30] Potatoes also offered an alternative, because they were already established as a crop of the wettest unirrigated land, which favoured their continuation when the land was converted to irrigation. Market garden specialization of this kind was particularly evident in La Rioja, Alava and Navarre.[31] While it was already strongly entrenched in Alava and La Rioja before the Civil War, in Navarre such specialization benefited from a combination of proximity to these areas and the sugar beet crisis, which would drive the switch to new crops in the province.

In the Catalan part of the Ebro, the provinces of Lerida and Tarragona today both have a specialization in fruit growing, which occupies 27 per cent and 37 per cent respectively of irrigated land. Nevertheless, the timing of the adoption of fruit growing differed considerably between the two provinces. Tarragona opted for orchards much earlier, and fruit trees already occupied a significant part of irrigated area in the province before the Civil War, although the leading crop was rice, which had a long tradition in the Ebro Delta, and still shares this position with fruit. From at least 1900, Tarragona specialized in almonds and oranges, and there has been relatively little change in this configuration over the twentieth century. Together with these two products, vegetables represent the third pillar of highly intensive irrigation specialization in Tarragona, based on the availability of water and abundant labour and capital. In Lerida, specialization in fruit took place rather later and, indeed, its share of irrigated land was marginal until the 1960s.[32] Until that time, forage plants had been the predominant option for irrigation in Lerida, together with traditional crops. The increasing importance of fruit, accompanied by maize, only became possible with the completion of major regulating works in the 1950s and '60s which ensured the supply of water to irrigate orchards and provided the opportunity to break with the traditional crops. In addition to this basic requirement, changes in demand and the development of a strong canning industry around the city of Lerida provided a boost for specialization, which mainly centered on apples, pears and peaches.[33] In this instance, the trend was towards a combination of crops similar to the Aragonese in certain areas, which were highly mechanized and needed only limited labour, while orchards required not only technical change but also good distribution and an outlet through canning industries, as well as demanding intensive seasonal labour and offering the possibility of mechanization.

[30] J. R. Moreno, 'La Rioja: las otras caras del éxito', in L. Germán, E. Llopis, J. Maluquer and S. Zapata, *Historia económica regional de España, siglos XIX y XX* (2001), pp. 153–81.

[31] Gallego, *La producción*.

[32] Pujol, *Les transformacions*; Ramón, 'La agricultura de regadío'.

[33] E. Lluch and R. Seró, *La regió fruitera de Lleida* (1970); J. M. Sabartés, 'La "Regió fruitera de Lleida" vint anys després', in F. López (ed.), *La Regió agraria de Lleida* (1993), pp. 177–207; Bretón, *Tierra*.

IV

The changes brought about by irrigated agriculture go much deeper than merely the substitution of traditional for other, more intensive, crops. Throughout the twentieth century there were profound changes in production methods, resulting in a shift from traditional farming, where sunlight was the main source of energy, to modern agricultural systems based on high levels of capitalization and which were enormously dependent on power generated by burning fossils fuels and inputs from other sectors. Thus, there has been a move away from agricultural methods that are well integrated with the environment, but at the same time relatively unproductive, to systems involving much more environmental pressure and inefficient energy use, but which provide far higher yields per unit of cultivated land and capital. In both physical and financial terms, one of the most striking results of this process has been the rapid growth in output, which has been much more pronounced in irrigated than unirrigated land. Both have seen a formidable process of technical change, in which new technologies have often been applied first in irrigated areas and then transferred to unirrigated areas.

This intensive use of new technologies in irrigated land is directly reflected in the rise in irrigated output per hectare, and the productivity gap with unirrigated farming. We may consider the case of Aragon, which, as we have seen, accounts for half of the area of the Ebro Basin, to examine the evolution of this gap. Thus, the difference in total farm output per hectare for unirrigated and irrigated land increased from 6.3 to 6.8 times between 1950 and 1990 (at 1975 constant prices). In absolute terms, the gap also widened considerably. In this case, the extra €161.60 earned per hectare on total irrigated farm output in 1950 had swelled €358.50 by 1990.[34] If the same calculation is performed at current prices, the better performance of typical irrigated produce further increases the difference. Thus, total output per irrigated hectare in 1950 was 4.5 times that of unirrigated land, but had risen to 5.5 times by 1990.[35]

This widening of the gap in output per hectare between unirrigated and irrigated land has taken place in a period when both forms of agriculture have achieved very significant productivity gains. In the case of irrigated agriculture, output per hectare more than doubled between 1950 and 1990 (Table 5). As explained previously, the rapid growth in irrigated farm output is also explained by the expansion of the irrigated area and the reorientation of production toward those crops which command higher prices (i.e. typical irrigated crops in general, and especially the most intensive crops). However, the importance of these two factors varies in the different lands of the Ebro Basin.

The expansion of irrigation has logically provided a major boost for output in those areas where it has been most intense. In general, the expansion of irrigation in the Ebro Valley as a whole over the twentieth century may be put at almost 300,000 hectares, which in itself explains a large part of the increment in output. Furthermore, the improvement of irrigation, in particular to ensure regular water supplies during the more drought prone summer months, has allowed output to increase. Changes in crops have been another key factor. Better quality irrigation and above all demand-side factors such as higher incomes and changes in diet have

[34] Ibarra and Pinilla, 'Regadío', pp. 15–16.

[35] V. Pinilla, *Evolución histórica del regadío en Aragón en el siglo XX* (1996), mimeo.

TABLE 5. Change in area, output and output per hectare of irrigated land in the Ebro basin, 1950–90 (100=1950)

	Alava	*Navarre*	*Rioja*	*Huesca*	*Teruel*	*Zaragoza*	*Lerida*	*Tarragon*	*EBRO B*
Output 1990	1,590	308	384	624	214	387	371	178	348
Area 1990	691	127	154	270	106	171	125	127	160
Output/Hect. 1990	230	243	249	231	201	226	298	140	217

Source: As Table 4 and Moreno, 'La Rioja'.

progressively encouraged concentration on higher earning crops that can only be grown on irrigated land in a Mediterranean climate. This has also had a considerable impact on the rise in output measured in cash terms.

The result of faster growth in irrigated than unirrigated farm output has been a marked trend to concentrate production on irrigated land, and in the Ebro Valley this has meant that a minority of the total farmland has come to represent a very significant percentage of total output. The case of Aragon once again illustrates the situation. In 1990, irrigation represented only 21.7 per cent of cultivated farmland in the Region, but nevertheless accounted for 65.3 per cent of total farm output.

The relative contribution made by the expansion of irrigation and technical change to growth in irrigated farm output can be estimated using a simple formula which reflects the extent to which the increase in irrigated output is due to one of these causes or the interaction between them. On the one hand, it is possible that the increase in the area irrigated alone explains a parallel increase in output. On the other, the rise in output per hectare may also be significantly affected either by the impact of technical change or by the switch to higher earning crops, which would also imply a trend toward rising output. The formula applied is:

$$Y_n - Y_1 = P_1 \,.\, (S_n - S_1) + S_1 \,.\, (P_n - P_1) + (P_n - P_1) \,.\, (S_n - S_1)$$

Where:

Y_n is total irrigated farm output in 1990 (at 1975 prices).
Y_1 is total irrigated farm output in 1950 (at 1975 prices).
S_n is the cultivated area under irrigation in 1990.
S_1 is the cultivated area under irrigation in 1950.
P_n is total output per hectare irrigated in 1990 (at 1975 prices).
P_1 is total output per hectare irrigated in 1950 (at 1975 prices).

The first term, $P_1 (S_n - S_1)$ represents growth in output due to changes in the area irrigated, assuming output per hectare remains constant. The second, $S_1 (P_n - P_1)$, represents changes in production where the area remains constant, reflecting changes in output per hectare. Finally, the third term, $(P_n - P_1) (S_n - S_1)$ represents growth in output resulting from a simultaneous increase in area and in production per hectare.

The results presented in Table 6 clearly show that both the increase in the area irrigated and the change in output per hectare (in euros) were very significant in the Ebro Basin as a whole, but that the latter effect was in fact considerably more important. There are significant

TABLE 6. Reasons for growth in total irrigated farm output in the Ebro basin, 1950–90 (per cent)

	Alava	*Navarre*	*Rioja*	*Huesca*	*Teruel*	*Zaragoza*	*Lerida*	*Tarragon*	*EBRO B.*
$P_1 (S_n - S_1)$	39.7	12.9	19.0	32.4	5.7	24.8	9.1	34.2	24.3
$S_1 (P_n - P_1)$	8.7	68.7	52.5	25.1	88.6	43.9	72.9	52.0	47.2
$(S_n - S_1) \times (P_n - P_1)$	51.6	18.4	28.4	42.5	5.7	31.3	18.0	13.8	28.4
$Y_n - Y_1$	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: calculated from Table 5 as explained in text.

differences at the level of individual provinces. In those provinces where growth in the area irrigated has been significant, such as Alava, Huesca and Zaragoza, the contribution of this factor to growth in output was also substantial, while in the remaining provinces it tended to be slight, with the exception of Tarragona – possibly as a result of the already high starting level of output per hectare. Technical and crop changes have played a key role in the Ebro Basin as a whole, and the contribution of these factors was in fact higher than that of the expansion of irrigation in almost all cases. Finally, we should remind ourselves that the increases in output explained were far from negligible, with output increasing 3.5 times, measured at constant prices, over the period analyzed in the Ebro Basin as a whole (Table 5).

V

Irrigated agriculture currently accounts for over half of Spanish farm output, although it occupies a proportionally much smaller share of cultivated land. Furthermore, the crops grown are generally less dependent on subsidies under the Common Agricultural Policy (CAP) and have a greater presence in international markets. This aspect takes on particular importance at a time a substantial reduction in these subsidies is foreseen. Unquestionably, this is the most dynamic sector of Spanish agriculture, and its future prospects are excellent.

This record of growth in agricultural productivity has not been without its costs. It is necessary to acknowledge to the impact that the increase in irrigated agriculture has had on the natural environment. This has been particularly marked in the last 25 years.[36]

One problem that has emerged is the salinity of the agricultural land. Whilst this is a common phenomenon in large areas lying in the central section of the Ebro Basin, it has nevertheless been significantly increased by irrigation. This has had a negative effect on crop productivity, on the range of crops that can be grown and on the ecological system itself. Indeed, in extreme cases, it has led to the abandonment of land. The surface area affected by problems of salinity within the Ebro Basin is now more than 300,000 hectares which, when consideration is given to the large-scale irrigation systems, represents more than 50 per cent of the cultivated land.[37] A second problem is that the intensive use of chemical fertilizers

[36] For a synthetic vision of these ecological impacts, see P. Ibarra, J. de la Riva, I. Iriarte, V. Rodrigo and I. Rabanaque, 'Gestión del agua y medio natural', in Pinilla (ed.), *Gestión*.

[37] F. Alberto, 'La desertización por salinización en el Valle del Ebro', *Azara*, 1, (1989), L. Pinilla, *Informe técnico sobre los problemas de salinidad en los grandes polígonos de riego de la Cuenca del Ebro* (1990).

and phytosanitary products in the irrigated areas since the end of the 1960s has made an important contribution to the widespread pollution of water by nitrates and phosphates.[38]

In addition, there is the threat posed to the preservation of the Ebro Delta as a result of the decline in the volume of water flowing down the River Ebro. This has been particularly noticeable since the 1960s and is at least partially the consequence of the increase in water consumption for which irrigated agriculture has been responsible in no small part.[39] The high level of water regulation has also had a negative influence on the Delta by reducing the volume of sediments being laid down. It has been estimated that there has been a fall in the volume of solid sediments from more than 22 million tonnes/year in the 1940s to a current level of just 0.10 tonnes/year. As a result, the encroachment of sea water into the Delta, coupled with the increase in the salinity of the River Ebro in its final stretch as a result of the decline in the volumes of fresh water, represents a serious threat to the sustainability of the Delta.

From a social point of view, it is also important to acknowledge the popular opposition which has emerged since the beginning of the 1990s to the building of further dams in the Pyrenees. This has taken the form of a new unwillingness amongst the inhabitants of the affected areas to having their land or houses expropriated. As a result, there has been a clash between their interests and those of farmers lower down the river who have anticipated that additional regulatory works would result in a further expansion of the irrigated areas or an improvement in the supply to those already in existence. It is the view of those who oppose these large-scale projects that the mountain areas paid a very high price throughout the twentieth century in terms of the flooding of population centers and cultivated lands, and the enforced movement of whole populations as a consequence of reservoir construction.[40] It is in Aragon where this movement has become most important and where the arguments raised by the proponents of the new water culture, who reject the continuance of policies that increase the supply of water and, instead, place emphasis on the management of demand and on efficiency, have enjoyed the greatest acceptance.[41]

[38] J. Sánchez-Chóliz and R. Duarte, 'Analysing pollution by way of vertically integrated coefficients, with an application to the water sector in Aragon', *Cambridge J. Economics*, 27 (2003), pp. 433–48.

[39] Irrigated agriculture is responsible for 95% of water consumption on the Ebro Basin. However, a substantial part of this water corresponds to inputs supplied to other sectors (livestock rearing, the food industry, etc.). When the water included in these activities is discounted, direct consumption falls to 20%. See J. Bielsa, *Gestión integrada del agua en el territorio desde una perspectiva económica* (1998); R. Duarte, J. Sánchez-Chóliz and J. Bielsa, 'Water use in the Spanish economy: an input-output approach', *Ecological Economics* 43 (2002), pp. 71–85.

[40] For an estimate of the population expelled from their villages as a result of the construction of dams and reservoirs in the Aragonese Pyrenees, see A. Herranz, 'La construcción de pantanos y su impacto sobre la economía y población del Pirineo aragonés', in J. L. Acín and V. Pinilla (eds.), *Pueblos abandonados¨ Un mundo perdido?* (1995), pp. 79–102.

[41] For an anthropological perspective, see G. Mairal, J. A. Bergua and E. Puyal, *Agua, tierra, riesgo y supervivencia* (1997); G. Mairal and J. A. Bergua, *De Joaquín Costa al Pacto del Agua. Los aragoneses y el agua* (2000).

Annual list of publications on Agrarian History, 2004*

Compiled by Peter McShane
Museum of English Rural Life, University of Reading

JOURNALS AND BOOK ARTICLES

ADAMS, DAVID G., 'The cottar-house pig in Angus and the Mearns', *Rev. Scottish Culture*, 16, pp. 155–8.

ADOLPH, ANTHONY, 'The squeeze on sheep', *Ancestors*, 24, pp. 50–5.

ALBRITTON, ROBERT, 'Clarifying the root differences: considerations on the debate with Zmolek', *J. Peasant Stud.*, 31, pp. 306–12.

ALCOCK, N. W., (ed.), 'Tree-ring date lists, 2004', *Vernacular Arch.*, 35, pp. 73–113.

ALEXANDER, DEREK, ADDYMAN, TOM and ROBERTS, JULIE, 'Life's rich tapestry: excavating the Kilbarchan weavers', *Hist. Scotland*, 4, pp. 48–53.

ALLEN, ROBERT C., 'Agriculture during the industrial revolution, 1700–1850', in FLOUD and JOHNSON (eds), *Cambridge economic history of modern Britain*, I, *industrialisation, 1700–1860*, pp. 96–116.

ALLEN, TIM, 'Swine, salt and seafood: a case study of Anglo-Saxon and early medieval settlement in North-east Kent', *Archaeologia Cantiana*, 124, pp. 117–35.

AMOR, NICHOLAS R., 'Merchant adventurer or jack of all trades? The Suffolk clothier in the 1460s', *Proc. Suffolk Inst. Arch. and Hist.*, 40, pp. 414–36.

ANDERTON, PAUL, 'Milking the sources', *Local Hist.*, 34, pp. 2–16.

ARNOLD, ALISON and MCMILLAN, VICTORIA, 'The development of Newark-on-Trent, 1100–1750, as demonstrated through its tree-ring dates', V*ernacular Arch.*, 35, pp. 50–62.

ASTON, TREVOR, 'The ancestry of English feudalism', in Evans (ed.), *Lordship and learning*, pp. 79–93.

ATHERDEN, M., 'Ecological changes on the North York Moors during the last millennium and their impact on the landscape', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 1–10.

ATKINS, P. J., 'The Glasgow case: meat, disease and regulation, 1889–1924', *AgHR*, 52, pp. 161–82.

AUER, CHRISTIAN, 'Les Amazones des Hautes-Terres d'Écosse: la résistance des femmes aux *Highland Clearances* du XIXe siècle' ['The Amazons of the Scottish Highlands: the resistance of women to the Highland Clearances in the nineteenth century'], *Études Écossaises*, 9, pp. 59–71.

AUSTIN, P., 'The Hertfordshire Lay Subsidy of 1307: topography, soils and taxable wealth', *Herts. Past and Present*, third ser., 2 (2003), pp. 3–11.

BAGGS, TONY, 'The Hearth Tax and the country house in "old" Cambridgeshire', *Proc. Cambs. Antiquarian Soc.*, 93, pp. 151–8.

BAILEY, KEITH, 'Aston Sandford: some reflections on its early history', *Records of Bucks.*, 44, pp. 134–6.

—, 'Buckinghamshire field-names 2: the dead', *Records of Bucks.*, 44, pp. 137–9.

—, 'Who was who and who became whom: Buckinghamshire landowners, 1066 and 1086', *Records of Bucks.*, 44, pp. 51–66.

BAINES, DUDLEY E. and WOODS, ROBERT, 'Population and regional development', in Floud and Johnson (eds), *Cambridge economic history of modern Britain*, II*: economic maturity, 1860–1939*, pp. 25–55.

BAKER, ANNE, 'A study of north-eastern King's Norton: ancient settlement in a woodland manor', *Trans. Birmingham and Warwickshire Arch. Soc.*, 107, pp. 131–49.

* Publications are normally of 2004 unless stated. The following short titles are used: *AgHR, Agricultural History Rev.; EcHR, Economic History Rev.*

BALLANTYNE, RACHEL, 'Islands in wilderness: the changing medieval use of the East Anglian peat fens, England', *Environmental Arch*., 9, pp. 189–98.

BARNATT, JOHN and DICKSON, ANTONY, 'Survey and interpretation of a limekiln complex at Peak Forest, Derbyshire; and a review of early limeburning in the Northwest Peak', *Derbyshire Arch. J*., 124, pp. 141–215.

BARRETT, J. H., LOCKER, A. M. and ROBERTS, C. M., '"Dark Age Economics" revisited: the English fish bone evidence, AD 600–1600, *Antiquity*, 78, pp. 618–36.

BECKETT, JOHN V. and TURNER, MICHAEL E., 'Freehold from copyhold and leasehold: tenurial transition in England between the sixteenth and nineteenth centuries', in Van Bavel and Hoppenbrouwers (eds), *Landholding and land transfer*, pp. 282–92.

BEINER, GUY, 'Rethinking "footnotes" to British/Irish history: vernacular historiographies, folk commemoration and "porous meta-narratives"', in Brocklehurst and Phillips, *History, nationhood and the question of Britain*, (2003), pp. 342–55.

—'Who were "The Men of the West"? Folk historiographies and the reconstruction of democratic histories', *Folklore*, 115, pp. 201–21.

BELLINGHAM, ROGER, 'Dade parish registers', *Local Population Stud*., 73, pp. 51–60.

BENNETT, KATY and PHILLIPSON, JEREMY, 'A plague upon their houses: revelations of the foot and mouth disease epidemic for business households', *Sociologia Ruralis*, 44, pp. 261–84.

BERBERICH, CHRISTINE, '"I was meditating about England": the importance of rural England for the construction of "Englishness"', in Brocklehurst and Phillips (eds), *History, nationhood and the question of Britain*, pp. 375–85.

BETTEY, J. H., 'The production of rabbits in Wiltshire during the seventeenth century', *Antiquaries J*., 84, pp. 380–93.

—, 'West-Country markets and fairs in the seventeenth century: some documentary evidence', *Local Hist*., 34, pp. 227–34.

BEVAN, BILL, *et al.* ' Medieval rural lead working excavations at Linch Clough, Upper Derwent Valley', *Derbyshire Arch. J*., 124, pp. 113–40.

BIDGOOD, RUTH, 'After Mr Jones: the Roberts family of Llwynderw, Llanddewi Abergwesyn', *Brycheiniog*, 36, pp. 51–62.

—, 'After Mr Jones: the Williams family', *Brycheiniog*, 36, pp. 63–8.

BOLTON, PETER, 'What became of the labourers? Wellesbourne's agricultural labourers after the strike of 1872', *Warwickshire Hist*., 12, pp. 200–7.

BOSS, T. W., 'Reminiscences of old Banbury (in 1903)', *Cake and Cockhorse*, 16, pp. 50–77.

BOYLE, J. W., 'Lest the lowliest be forgotten: locating the impoverished in early medieval Ireland', *Int. J. Historical Arch*., 8, pp. 85–99.

BRANIGAN, KEITH, 'With the crofters to Canada: clues revealing the patterns of emigration from the Isle of Barra to British North America, from 1770 to 1850', *Hist. Today*, 54, pp. 42–4.

BRASS, TOM, '"Medieval working practices?": British agriculture and the return of the gangmaster', *J. Peasant Stud*., 31, pp. 313–40.

BRASSLEY, PAUL, 'Industries in the early twentieth-century countryside: the Oxford Rural Industries Survey of 1926/7', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 133–48.

BRAYSHAY, MARK and ANDREW WILLIAMS, 'North Snowdonia: an upland landscape under pressure', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 125–139.

BRETT, COLIN, 'Thomas Kytson and Wiltshire clothmen, 1529–1539', *Wilts. Arch. and Natural Hist. Mag*., 97, pp. 35–62.

BRIGDEN, ROY, 'Rural museums and the National Lottery', *Soc. Hist. in Museums*, 29, pp. 33–6.

BRITNELL, RICHARD, 'Fields, farms and sub-division in a moorland region, 1100–1400', *AgHR*, 52, pp. 20–37.

BROAD, JOHN, 'Regional perspectives and variations in English dairying, 1650–1850', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 93–112.

BROADWAY, JAN, '"To equall their virtues": Thomas Habington, recusancy and the gentry of early Stuart Worcestershire', *Midland Hist*., 29, pp. 1–24.

BROWN, R., 'Middens and miasma: a portrait of seventeenth century life in Banburyshire', *Cake and Cockhorse*, 16, pp. 2–8.

BRUNT, LIAM, 'Nature or nurture?: explaining English wheat yields in the industrial revolution, *c*. 1770', *J. Econ Hist*., 64, pp. 193–225.

BRUNT, LIAM and CANNON, EDMUND, 'The Irish grain trade from the Famine to the First World War', *EcHR*, 57, pp. 33–79.

BUKACH, DAVID, 'The mesolithic-neolithic transition on the Channel Islands: adapting agriculture in an emerging island landscape', *Environmental Arch*., 9, pp. 155–62.

BURKE, PETER, 'History and folklore: a historiographical survey', *Folklore*, 115, pp. 133–9.

BURNETT, JOHN, 'Material culture in Scottish and European festivity', *Rev. Scottish Culture*, 16, pp. 58–75.

—, 'Small showmen and large firms: the development of Glasgow Fair in the nineteenth century', *Rev. Scottish Culture*, 17, pp. 72–89.

BURNETT, JOHN, MERCER, KATHERINE and QUYE, ANITA, 'The practice of dyeing wool in Scotland, *c.* 1790–1840', *Folk Life*, 42, pp. 7–31.

BURNETTE, JOYCE, 'The wages and employment of female day-labourers in English agriculture, 1740–1850', *EcHR*, 57, pp. 664–90.

CAMP, A., 'The Irish in England', *Family Tree Mag.*, 19, pp. 8–10.

CANNON, JON and CONSTANTINE, MARY-ANN, 'A Welsh bard in Wiltshire: Iolo Morganwg, Silbury and the sarsens', *Wilts. Arch. and Natural Hist. Mag.*, 97, pp. 78–88.

CANT, DAVID and LLOYD, CLIVE R., 'A springtime saunter: continuity and change in the Pennines, 1913–2003', *Trans. Halifax Antiquarian. Soc.*, 12, pp. 122–48.

CAPP, BERNARD, 'Life, love and litigation: Sileby in the 1630s', *Past and Present*, 182, pp. 55–83.

CAUNCE, STEPHEN, '"Does tha want hiring?" Hiring fairs in northern England, 1870–1930', *Ancestors*, 27, pp. 15–21.

CHADWICK, ADRIAN, '"Heavier burdens for willing shoulders?" Writing different histories, humanities and social practices for the Romano-British countryside', in Croxford *et al* (eds), *TRAC 2003*, pp. 90–110.

CHAMBERLAIN, DAVEN, 'Paper mills in Berkshire: a preliminary survey', *Berks. Old and New*, 21, pp. 13–25.

CHAMBERS, JILL, 'Swing riots in Staffordshire', *Machine Breakers' News*, 10, pp. 11–14.

CHAPMAN, JOHN, 'Parliamentary enclosure in the uplands', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 79–88.

CHAPMAN, PAT *et al.*, 'Iron Age settlement and Romano-British enclosures at Coventry Road, Hinckley, Leicestershire', *Trans. Leics. Arch. and Hist. Soc.*, 78, pp. 35–82.

CHARTRES, JOHN, 'A special crop and its markets in the eighteenth century: the case of Pontefract's liquorice', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 113–32.

CHEAPE, HUGH, '"Fruitful in corn and grass": Martin Martin's account of material culture reconsidered, 1703–2003', *Rev. Scottish Culture*, 16, pp. 85–100.

—, 'The graddan mill of John Grant', *Rev. Scottish Culture*, 16, pp. 158–161.

CIOSAIN, NIALL, 'Approaching a folklore archive: the Irish Folklore Commission and the memory of the Great Famine', *Folklore*, 115, pp. 222–32.

CLARK, ANN, 'Compliance with infant smallpox vaccination legislation in nineteenth-century rural England: Hollingbourne, 1876–88', *Soc. Hist. of Medicine*, 17, pp. 175–98.

CLARK, COLIN, 'The heatwave over England and the great hailstorm in Somerset, July 1808', *Weather*, 59, pp. 172–6.

CLARK, GREGORY, 'The price history of English agriculture, 1209–1914', *Res. in Econ. Hist.*, 22, pp. 41–123.

CLARKE, J. N., 'Horncastle horse fairs', *Lincs. Past and Present*, 55, pp. 17–20.

COLLINI, STEFAN, 'The literary critic and the village labourer: "culture" in twentieth-century Britain', *Trans. Royal Hist. Soc.*, 14, pp. 93–116.

COLLINS, E. J. T., 'Agricultural education in England from the establishment of the Board of Agriculture to the First World War (1793–1914)', in Biagioli and Pazzagli (eds), *Agricoltura come manifattura*, pp. 127–56.

COMBS, MARY BETH, 'Wives and household wealth: the impact of the 1870 British Married Women's Property Act on wealth-holding and share of household resources', *Continuity and Change*, 19, pp. 141–63.

CORRSIN, STEPHEN D., 'The founding of English ritual dance studies before the First World War: human sacrifice in India … and in Oxfordshire?', *Folklore*, 115, pp. 321–31.

COSS, PETER, 'What's in a construct? The "gentry" in Anglo-Saxon England', in Evans (ed.), *Lordship and learning*, pp. 95–107.

COULL, JAMES, 'The herring brand in Scotland, 1809–1938: a controversial but necessary measure of quality control?', *Rev. Scottish Culture*, 17, pp. 90–102.

COUSINS, STEPHEN, 'Why hedge dating doesn't work', *Landscape Hist.*, 26, pp. 77–85.

COX, ADRIAN, 'Medieval fairs and markets in Angus and Fife: a discussion of the documentary and artefactual evidence', *Rev. Scottish Culture*, 17, pp. 1–9.

CREDLAND, ARTHUR G., 'Archery in eighteenth-century Kent', *Bygone Kent*, 25, pp. 231–8.

CROCKER, ALAN, 'William Cobbett and his corn-husk paper', *Surrey Hist.*, 7, pp. 2–13.

CROFT, TREVOR A., 'Conservation charity land ownership in Scotland', *Scottish Geog. J.*, 120, pp. 71–82.

D'ARCY, JOAN, 'The manor and prebendal lands of Little Chester, Derby', *Derbyshire Arch. J.*, 124, pp. 285–303.

DAVEY, JOHN, 'The environs of South Cadbury in the late antique and early medieval periods', in Collins and James (eds), *Debating late antiquity in Britain, AD 300–700*, pp. 43–54.

DAVIDSON, NEIL, 'The Scottish path to capitalist agriculture, 1: from the crisis of feudalism to the origins of agrarian transformation (1688–1746)', *J. of Agrarian Change*, 4, pp. 227–68.

—, 'The Scottish path to capitalist agriculture, 2: the capitalist offensive (1747–1815)', *J. of Agrarian Change*, 4, pp. 411–60.

DAVIES, J., 'The landed families of Breconshire', *Brycheiniog*, 36, pp. 69–82.

DAVIES, MIKE and KISSOCK, JONATHAN, 'The feet of fines, the land market and the English agricultural crisis of 1315 to 1322', *J. Hist. Geog.*, 30, pp. 215–30.

DAVIS, JAMES, 'Baking for the common good: a reassessment of the assize of bread in medieval England', *EcHR*, 57, pp. 465–502.

DEMIDOWICZ, GEORGE, 'The lost Lint Brook: a solution to the *Hellerelege* Anglo-Saxon charter and other explorations of King's Norton history', *Trans. Birmingham and Warwickshire Arch. Soc.*, 107, pp. 111–29.

DODDS, BEN, 'Estimating arable output using Durham Priory tithe receipts, 1341–1450', *EcHR*, 57, pp. 245–85.

DODGSHON, ROBERT A., 'Coping with risk: subsistence crisis in the Scottish Highlands and Islands, 1600–1800', *Rural Hist.*, 15, pp. 1–26.

—, 'Researching Britain's remote spaces: some themes in the history of upland landscapes', in Baker (ed.), *Home and colonial*, pp. 29–38.

—, 'The Scottish Highlands before and after the Clearances: an ecological perspective', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 67–78.

DORAN, LINDA, 'Medieval communication routes through Longford and Roscommon and their associated settlements', *Proc. of the Royal Irish Academy*, 104, pp. 3–80.

DRENDEL, JOHN, 'Commodities, credit and land on the local market and on the urban market: the role of secondary agglomerations in the economy: comparison of Anglo-Saxon and French historiography', in Cavaciocchi (ed.), *Il mercato della terra, secc. XIII-XVIII*, pp. 687–702.

DRIVER, J. T., 'The careers of Sir Ralph Hastings and Sir Guy Wolston: two Northamptonshire gentry as knights of the shire in the parliament of 1472–5 and servants of the crown', *Northants. Past and Present*, 57, pp. 7–20.

DUFFY, PATRICK J., 'Unwritten landscapes: reflections on minor place-names and sense of place in the Irish countryside' in Clarke, Prunty and Hennessy (eds), *Surveying Ireland's past*, pp. 689–712.

DUNN, ALASTAIR, 'Inheritance and lordship in pre-Reformation England: George Neville, Lord Bergavenny (*c.* 1470–1535)', *Nottingham Med. Stud.*, 48, pp. 116–40.

DUNN, RICHARD, 'The geography of Regilbury Manor, 1730', *Somerset Arch. and Natural Hist.*, 147, pp. 129–42.

DURRANT, PETER, 'Enclosure in Berkshire, 1738–1883: the Berkshire enclosure project', *Berks. Old and New*, 21, pp. 47–54.

DYER, CHRISTOPHER, 'Alternative agriculture: goats in medieval England', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 20–38.

—, 'Markets and consumers in the later middle ages', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 29–33.

—, 'Salt-making at Droitwich, Worcestershire, in the fourteenth century', *Trans. Worcs. Arch. Soc., third ser.*, 19, pp. 133–9.

EBURNE, ANDREW, 'Charles Bridgeman and the gardens of the Robinocracy', *Garden Hist.*, 31 (2003), pp. 193–208.

EDMONDS, JOHN H., 'Textile dyeing through the ages', *Folk Life*, 42, pp. 61–72.

EDWARDS, PETER, 'Competition for land, common rights and drainage in the Weald Moors (Shropshire): the Cherrington and Meeson disputes, 1576–1612', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 39–55.

ELLABY, ROGER, 'Erbridge and the Merstham denns in Horley', *Surrey Arch. Coll.*, 91, pp. 71–92.

ELLIOTT, BRENT, 'A brief history of the Society', *The Garden*, 129, pp. 126–31.

—, 'In the beginning . . .', *The Garden*, 129, pp. 92–5.

EVANS, NESTA, 'The Hearth Tax returns as a source for population size and the incidence of poverty in Suffolk during the reign of Charles II', *Proc. Suffolk Inst. Arch. and Hist.*, 40, pp. 455–9.

EVANS, RALPH, 'Whose was the manorial court?', in Evans (ed.), *Lordship and learning*, pp. 155–68.

EVERITT, ALAN, 'Founders: W. G. Hoskins', *Landscapes*, 5, pp. 5–17.

—, 'Markets: my experience', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 57–65.

—, 'The railway and rural tradition, 1840–1940', in Evans and Gough, *The impact of the railway on society in Britain*, pp. 181–98.

EWING, MARY, 'Hill farm, Kingston St Mary', *Somerset Arch. and Natural Hist.*, 147, pp. 67–72.

FAITH, ROSAMUND, 'Cola's tun: rural social structure in late Anglo-Saxon Devon', in Evans (ed.), *Lordship and learning*, pp. 63–78.

—, 'Estates and income, 1066–1540', in Keene, Burns and Saint (eds), *St Paul's: the cathedral church of London 604–2004*, pp. 143–50.

FENTON, ALEXANDER, 'The Easter Ross Farmers' Club, 1811–1898', *Rev. Scottish Culture*, 16, pp. 115–30.

—, 'The Lesmahagow Farmers' Club', *Rev. Scottish Culture*, 17, pp. 15, pp. 110–13.

FINCH, JONATHAN, '"Grass, grass, grass": fox-hunting and the creation of the modern landscape', *Landscapes*, 5, pp. 41–52.

FLATHER, AMANDA, 'Women in the marketplace in early modern Essex', *Essex Arch. and Hist.*, third ser., 34, pp. 188–99.

FLEMING, ROBIN and LOWERRE, ANDREW, 'Mac-Domesday book' [review article], *Past and Present*, 182, pp. 209–32.

FOARD, G., HALL, D., and BRITNELL, T., 'The historic landscape of Rockingham Forest', *Northants. Past and Present*, 57, pp. 83–90.

FOSSIER, ROBERT, 'The rural economy and demographic growth', in Luscombe and Riley-Smith (eds), *New Cambridge medieval history*, IV, *c. 1024–1198*, pp. 11–46.

FREDENGREN, CHRISTINA, MCCATCHIE, MERIEL and STUIJTS, INGELISE, 'Connections and distance: investigating social and agricultural issues relating to early medieval crannogs in Ireland', *Environmental Arch.*, 9, pp. 173–8.

FRENCH, MICHAEL and PHILLIPS, JIM, 'Windows and barriers in policy-making: food poisoning in Britain, 1945–56', *Social Hist. of Medicine*, 17, pp. 269–84.

FULTON, HELEN, 'George Borrow and the oldest animals in *Wild Wales*', *Trans. Honourable Soc. of Cymmrodorion*, new ser., 10, pp. 23–40.

FYFE, RALPH M., BROWN, ANTHONY G. and RIPPON, STEPHEN J., 'Characterising the late prehistoric "Romano-British" and medieval landscape, and dating the emergence of a regionally distinct agricultural system in Southwest Britain', *J. Arch. Science*, 31, pp. 1694–1714.

FYFE, RALPH M. and RIPPON, STEPHEN J., 'A landscape in transition? Palaeoenvironmental evidence for the end of the "Romano-British" period in Southwest England', in Collins and James (eds), *Debating late antiquity in Britain, AD 300–700*, pp. 33–42.

GEARY, FRANK, and STARK, TOM, 'Trends in real wages during the industrial revolution: a view from across the Irish Sea', *EcHR*, 57, pp. 362–95.

GEDDES-BROWN, LESLIE, 'Royal Horticultural Society bicentenary', *Country Life*, 198, pp. 50–5.

GIBBON, MICHAEL, 'Towards a census for Machynlleth for 1686/1687', *Montgomeryshire Coll.*, 91 (2003), pp. 15–28.

GILMOUR, NIGEL, 'The medieval manor at Stanton St John: a 700th anniversary?', *Oxoniensia*, 69, pp. 51–91.

GLADWISH, PAUL, 'The sale of royalist lands after the English Civil War: two case studies from the West Midlands', *Midland Hist.*, 29, pp. 25–60.

GOODARE, JULIAN, (ed.), 'Fiscal feudalism in early seventeenth-century Scotland', *Misc. Scottish Hist. Soc.*, fifth ser., pp. 189–222.

GOOSE, NIGEL, 'Farm service in Southern England in the mid-nineteenth century', *Local Population Stud.*, 72, pp. 77–82.

GRAHAM, ALAN, 'A medieval packhorse bridge at Dowlish Wake, near Ilminster', *Somerset Arch. and Natural Hist.*, 147, pp. 165–72.

GRANT, ANNIE, 'Domestic animals and their uses', in Todd (ed.), *A companion to Roman Britain*, pp. 371–92.

GRAY, PETER, 'Memory and commemoration of the Great Irish Famine', in Gray and Oliver (eds), *The memory of catastrophe*, pp. 46–64.

GRIEVES, KEITH, 'The quiet of the country and the restless excitement of towns: rural perspectives on the home front, 1914–1918', in CORAL, *Rural and urban encounters*, pp. 79–98.

GRIFFIN, CARL J., '"Policy on the hoof": Sir Robert Peel, Sir Edward Knatchbull and the trial of the Elham machine breakers, 1830', *Rural Hist.*, 15, pp. 127–48.

GRIFFITHS, ELIZABETH, 'Responses to adversity: the changing strategies of two Norfolk landowning families, *c.* 1665–1700', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 74–92.

GUTTMAN, E. B. A., DOCKERILL, S. J., and SIMPSON, I. A., 'Arable agriculture in prehistory: new evidence from soils in the Northern Isles', *Proc. Soc. of Antiquaries of Scotland*, 134, pp. 53–64.

HALL, M. A., 'Some Perthshire fairs and markets, AD 700–900', *Rev. Scottish Culture*, 16, pp. 44–57.

HANN, ANDREW, 'Modernity and the marketplace', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 67–88.

HARE, JOHN, 'Pensford and the growth of the cloth industry in late medieval Somerset', *Somerset Arch. and Natural Hist.*, 147, pp. 67–72.

HARPER, MARJORY, 'Enticing the emigrant: Canadian agents in Ireland and Scotland, *c.* 1870–1920', *Scottish Hist. Rev.*, 83, pp. 41–58.

— 'Pressure and persuasion: Canadian agents and Scottish emigration, *c.* 1870- 1930', *Historian*, 81, pp. 17–23.

HARRISON, DAVID, 'Medieval bridges', *Hist. Today*, 54, pp. 22–9.

HART, EDWARD, 'The Hackney Horse', *Ark*, 32, pp. 20–1.

HARVEY, I. M. W., 'Poaching and sedition in fifteenth-century England', in Evans (ed.), *Lordship and learning*, pp. 169–82.

HARVEY, P. D. A., 'The manorial reeve in twelfth-century England', in Evans (ed.), *Lordship and learning*, pp. 125–38.

HATTON, TIMOTHY J., 'Emigration from the UK, 1870–1913 and 1950–1998', *European Rev. of Econ. Hist.* 8, pp. 149–71.

HAYNES, BARBARA, 'The Society at war: remembering the wartime role of the RHS', *Garden*, 129, pp. 864–7.

HEATON, MICHAEL and MOFFATT, WILLIAM, 'Recent work at Barton Grange Farm, Bradford-on-Avon, Wiltshire, 1998–2003', *Wilts. Arch. and Natural Hist. Mag.*, 97, pp. 211–17.

HENNESSY, MARK, 'Manorial agriculture and settlement in early fourteenth-century Co. Tipperary', in Clarke, Prunty and Hennessy (eds), *Surveying Ireland's past*, pp. 99–118.

HEPPLE, LESLIE W., 'Reconstructing a medieval charter boundary: Stanton Grange, Northumberland', *Archaeologia Aeliana*, fifth ser., 33, pp. 89–115.

HERRING, PETER, 'Cornish uplands: medieval, post-medieval and modern extents', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 37–50.

HEY, DAVID, 'Barlow: the landscape history of a Peak District township', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 1–19.

—, 'Sons of toil', *Ancestors*, 23, pp. 23–7.

HEYWOOD, SIMON, 'Informant disavowal and the interpretation of storytelling revival', *Folklore*, 115, pp. 45–63.

HIGGINS, DAVID M., '"Mutton dressed as lamb?" The misrepresentation of Australian and New Zealand meat in the British market, *c.* 1890–1914', *Australian Econ. Hist. Rev.*, 44, pp. 161–84.

HILL, JUDY, 'The Dorking emigration scheme of 1832', *Family and Community Hist.*, 7, pp. 115–28.

HILL, KEITH, 'Farming's line of vision: railways and agriculture', *Back Track*, 18, pp. 228–35.

HINDE, ANDREW, 'The use of nineteenth-century census data to investigate local migration', *Local Population Stud.*, 73, pp. 8–28.

HINDLE, STEVE, 'Civility, honesty and the identification of the deserving poor in seventeenth-century England', in French and Barry (eds), *Identity and agency in England, 1500–1800*, pp. 38–59.

—, 'Dependency, shame and belonging: badging the deserving poor, *c.* 1550–1750', *Cultural and Soc. Hist.*, 1, pp. 6–35.

—, '"Good, Godly and Charitable Uses": endowed charity and the relief of poverty in rural England, *c.* 1550–1750', in Goldgar and Frost (eds), *Institutional culture in early modern society*, pp. 164–88.

—, 'Pauper apprenticeship under the Elizabethan poor laws, *c.* 1598–1697', in Lane, Raven and Snell (eds), *Women, work and wages in England, 1600–1850*, pp. 15–46.

HINGLEY, RICHARD, 'Rural settlement in Northern Britain', in Todd (ed.), *A companion to Roman Britain*, pp. 327–48.

HOLLAND, MICHAEL, 'Swing revisited: the Swing project', *Family and Community Hist.*, 7, pp. 87–100.

HOLLOWAY, S. L., 'Rural roots, rural routes: discourses of rural self and travelling other in debates about the future of Appleby New Fair, 1945–1969', *J. Rural Stud.*, 20, pp. 143–56.

HOLMES, HEATHER, 'For the encouragement of agricultural improvement in Scotland in the 1780s: subscribers to the agricultural books of David Young', *Rev. Scottish Culture*, 17, pp. 22–56.

HOUGH, CAROLE, 'Melksham (Wiltshire)', *Notes and Queries*, 51, pp. 231–33.

—, 'Pinch Park and Pinch Croft', *Notes and Queries*, 51, pp. 228–31.

HOYLE, R. W., 'Redefining copyhold in the 16th century: the case of timber rights', in Van Bavel and Hoppenbrouwers (eds), *Landholding and land*, pp. 250–64.

—, 'Rural economy and society', in Tittler and Jones (eds), *A companion to Tudor Britain*, pp. 311–29.

—, 'Woad in the 1580s: alternative agriculture in England and Ireland', in Hoyle (ed.), *People, landscape and alternative agriculture*, pp. 56–73.

HUGHES, RAYMOND, 'Llanrhaeadr smithy', *Trans Denbighshire Hist. Soc.*, 53, pp. 177–85.

HUMPHREY, RON, 'The Oxford Road Watermill, Aylesbury', *Records of Bucks.*, 44, pp. 67–103.

HUMPHRIES, JANE, 'Standard of living, quality of life', in Williams (ed.), *A companion to nineteenth-century Britain*, pp. 287–304.

HURST, J. D., 'Fuel supply and the medieval salt industry in Droitwich', *Trans. Worcs. Arch. Soc.*, third ser., 19, pp. 111–32.

INGLIS, BILL, 'Scottish testamentary inventories: a neglected source for the study of Scottish agriculture – Dunblane, 1660–1740', *Scottish Archives*, 10, pp. 55–68.

JACK, SYBIL M., 'The "debatable lands", terra nullius, and natural law in the sixteenth-century', *Northern Hist.*, 41, pp. 289–300.

JACKSON, ANDREW J. H., 'Investigating the break-up of the great landed estates of Devon: the use of commercial directories, 1883–1939', *Devonshire Assoc. Rep. and Trans.*, 136, pp. 165–74.

JAMES, KEVIN J., 'The hand-loom in Ulster's post-famine linen industry: the limits of mechanization in textiles' "factory age"', *Textile Hist.*, 35, pp. 178–91.

JENKINS, T. A., 'Political life in late Victorian Britain: the Conservatives in Thornbury', *Parliamentary Hist.*, 23, pp. 198–224.

JOHNSON, DAVID, 'Estates and income, 1540–1714', in Keene, Burns and Saint, *St Paul's: the cathedral church of London, 604–2004*, pp. 304–11.

JONES, BARRY, 'Leigh Barton Farm, Old Cleeve, Somerset', *Historic Farm Buildings Group Rev.*, 1, pp. 30–8.

JONES, BRENDA, 'Hartley Court Farm, 1953–2003', *Berks. Old and New*, 21, pp. 39–46.

JONES, GRAHAM, 'The market place: form, location and antecedents', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 1–27.

JONES, RICHARD, 'The strange case of a wartime pig and a judicial enquiry into the conduct of a Cardiganshire bench', *Ceredigion*, 14, pp. 123–41.

JONKER, M. A., 'Estimation of life expectancy in the Middle Ages', *J. Royal Stat. Soc.*, ser. A, 166, pp. 105–17.

KARAKACILI, EONA, 'English agrarian labor productivity rates before the Black Death: a case study', *J. Econ. Hist.*, 64, pp. 24–60.

KILLINGRAY, DAVID, 'A London city church estate in Kent: St. Botolph's Sevenoaks, 1646–2002'. *Archaeologia Cantiana*, 124, pp. 291–307.

KING, ANTHONY, 'Rural settlement in Southern Britain: a regional survey', in Todd (ed.), *A companion to Roman Britain*, pp. 349–70.

KING, PETER, 'Social inequality, identity and the labouring poor in eighteenth-century England', in French and Barry (eds), *Identity and agency in England, 1500–1800*, pp. 60–86.

—'The summary courts and social relations in eighteenth-century England', *Past and Present*, 183, pp. 125–72.

KING, STEVEN, '"Meer pennies for my baskitt will be enough": women, work and welfare, 1770–1830', in Lane, Raven and Snell (eds), *Women, work and wages in England, 1600–1850*, pp. 119–40.

—, '"We might be trusted": female Poor Law Guardians and the development of the New Poor Law: the case of Bolton, England', *Int. Rev. of Soc. Hist.*, 49, pp. 27–46.

KINSMAN, DAVID J. J., 'Interpretation of PrP (scrapie) genotype data for primitive short-tailed sheep', part 1, *Ark*, 32, pp. 27–28.

—, part 2, *Ark*, 32, pp. 38–42.

KIRK, J. C., 'Butts Cottage, Kirdford: the conversion of trees to timber in the rural Sussex Weald', *Vernacular Arch.*, 35, pp. 12–20.

KIRKE, ROY, 'Witches, wrecks and windmills: law and order in Shipsea parish up to the twentieth century', *East Yorks. Historian*, 5, pp. 26–63.

KITSIKOPOULOS, HARRY, 'Convertible husbandry vs. regular common fields: a model on the relative efficiency of medieval field systems', *J. Econ. Hist.*, 64, pp. 462–99.

KNIGHT, PAUL, 'The Macclesfield horse fair toll book, 1619–1675', *Trans. Historic Soc. Lancs. and Cheshire*, 153, pp. 33–61.

KOMLOS, JOHN, 'The size of horses during the Industrial Revolution', *Historical Methods*, 37, pp. 45–53.

LANE, PENELOPE, 'A customary or market wage? Women and work in the East Midlands, *c.* 1700–1840', in Lane, Raven and Snell (eds), *Women, work and wages in England, 1600–1850*, pp. 102–18.

LANGFIELD, MICHELE, 'British juvenile migration to Australia and Canada, 1890–1939', *J. of Imperial and Commonwealth Hist.*, 32, pp. 86–114.

LANGLEY, ANNE, 'Brandon silk mill and child labour during the industrial revolution in nineteenth-century Warwickshire', *Midland Hist.*, 28, pp. 71–87.

LAUGHTON, JANE, 'Catesby Priory as consumer in the first half of the fifteenth-century', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 35–43.

LAURIE, TIM, 'Springs, woods and prehistoric people: reconstructing a Pennine landscape during later Prehistory', *Landscapes*, 5, pp. 73–102.

LAVELLE, RYAN, 'All the King's men? Land and royal service in eleventh-century Wessex', *Southern Hist.*, 26, pp. 1–37.

LAWES, AIDAN, 'The harsh face of Irish feudalism', *Ancestors*, 25, pp. 21–7.

LEACH, PETER, and ELLIS, PETER, 'Roman and medieval remains at Manor Farm, Castle Cary', *Somerset Arch. and Natural Hist.*, 147, pp. 80–128.

LEHANE, SHANE, 'Sléan turf in North Cork', *Folk Life*, 42, pp. 73–90.

LEIGHTON, DAVID, 'The demesne manor of Pennard in the lordship of Gower: a fourteenth-century court roll', *Studia Celtica*, 37, pp. 183–220.

—, 'Some aspects of life and economy in medieval Pennard: the evidence of a fourteenth-century manor court roll', *Gower*, 55, pp. 29–49.

LINEHAN, DENIS and GRUFFUDD, PYRS, 'Unruly topographies: unemployment, citizenship and land settlement in inter-war Wales', *Trans. of the Inst. of British Geographers*, 29, pp. 46–63.

LLOYD, SARAH, 'Cottage conversations: poverty and manly independence in eighteenth-century England', *Past and Present*, 184, pp. 69–108.

LOWENTHAL, DAVID, 'The island garden: English landscape and British identity', in Brocklehurst and Phillips, *History, nationhood and the question of Britain*, pp. 137–48.

LUDLOW, BARBARA, 'John De Morgan and the battle for Plumstead Common', *Bygone Kent*, 25, pp. 345–52.

LUKE, MIKE, 'The investigation of an early-middle Iron Age settlement and field system at Topler's Hill, Bedfordshire', *Archaeology*, 25, pp. 23–54.

LUKE, MIKE and SHOTLIFF, DREW, 'Evidence for Iron Age, Roman and early medieval occupation on the Greensand Ridge at Haynes Park, Bedfordshire', *Bedfordshire Arch.*, 25, pp. 55–135.

MACLACHLAN, IAN, '"The greatest and most offensive nuisance that ever disgraced the capital of a kingdom": the slaughterhouses and shambles of modern Edinburgh', *Rev. Scottish Culture*, 17, pp. 57–71.

MAKIN, JOHN, 'Pacifist farming communities in Lincolnshire in World War Two', *East Midland Hist.*, 14, pp. 49–63.

MANSFIELD, NICK, 'Farmworkers, the Marches and the impact of the Great War', in CORAL, *Rural and urban encounters*, pp. 99–114.

—, 'The National Federation of Discharged and Demobilized Soldiers, 1917–1921: a view from the Marches', *Family and Community Hist.*, 7, pp. 19–31.

MAREN, LUCY, 'The impact of rebellion on Little Domesday', *Anglo-Norman Stud.*, 27, pp. 132–50.

MARTIN, STEPHEN R., 'The long meadow', *Landscapes*, 4 (2003), pp. 90–110.

MATHER, A. S., 'Forest transition theory and the reforesting of Scotland', *Scottish Geog. J.*, 120, pp. 83–98.

MATHEWS, M. D., 'Coastal communities: aspects of the economic and social impact of coastal shipping in Southwest Wales', *Maritime Wales*, 25, pp. 56–71.

MAUDLIN, DANIEL, 'Regulating the vernacular: the impact of building regulations in the eighteenth-century Highland planned village', *Vernacular Arch.*, 35, pp. 40–9.

MCCANN, JOHN, 'Two more dovecotes in Suffolk', *Proc. Suffolk Inst. Arch. and Hist.*, 40, pp. 460–5.

MCCARTHY, ANGELA, 'Personal accounts of leaving Scotland, 1921–1954', *Scottish Hist. Rev.*, 83, pp. 196–215.

MCCORMACK, ANTHONY M., 'The social and economic consequences of the Desmond rebellion of 1579–83', *Irish Hist. Stud.*, 34, pp. 1–15.

MCDONAGH, BRIONY, 'Church/manor/settlement relationships in the Yorkshire Wolds', *Medieval Settlement Res. Group Ann. Rep.* 18 (2003), pp. 16–22.

MCGILLIVERY, ANGUS R., 'Convict settlers, seamen's greens, and imperial designs at Port Jackson: a maritime perspective of British settler agriculture', *Agricultural Hist.*, 78, pp. 261–88.

MCGREGOR, P., '"Insufficient for the support of a family". Wages on the public works during the Great Irish Famine', *Econ. and Soc. Rev.*, 35, pp. 219–39.

MCINTOSH, MARJORIE K., 'Poverty, charity and coercion in Elizabethan England', *J. Interdisciplinary Hist.*, 35, pp. 457–80.

MCKEAN, CHARLES, 'Galleries, girnels, yards and the women house: the ancillary structures of the Renaissance country house in Scotland', *Rev. Scottish Culture*, 16, pp. 19–34.

—, 'The Scottish Renaissance country seat in its setting', *Garden Hist.*, 31 (2003), pp. 141–62.

MEADE, JUDY, 'Prehistoric landscapes of the Ouse valley and their use in late Iron Age and Romano-British period', in Croxford *et al* (eds), *TRAC 2003*, pp. 78–89.

MECK, JAMES, SHORE, MARTIN and CLAY, PATRICK, 'Iron Age enclosures at Enderby and Huncote, Leicestershire', *Trans, Leics. Arch. and Hist. Soc.*, 78, pp. 1–34.

MILLS, CORALIE, M. *et al.*, ' Neolithic land-use and environmental degradation: a study from the Western Isles of Scotland', *Antiquity*, 78, pp. 886–95.

MOORE-COLYER, RICHARD, 'Kids in the corn: school harvest camps and farm labour supply in England, 1940–1950', *AgHR*, 52, pp. 183–206.

—, 'Towards "Mother Earth": Jorian Jenks, organicism, the right and the British Union of Fascists', *J. Contemporary Hist.*, 39, pp. 353–71.

MOORE-COLYER, RICHARD and CONFORD, PHILIP, 'A "secret society"?: the internal and external relations of the Kinship in Husbandry', *Rural Hist.*, 15, pp. 189–206.

MORRISSEY, JOHN, 'Contours of colonialism: Gaelic Ireland and the early colonial subject', *Irish Geog.*, 37, pp. 88–102.

MURRAY, EMILY, MCCORMICK, FINBAR and PLUNKETT, GILL, 'The food economies of Atlantic Island monasteries: the documentary and archaeo-environmental evidence', *Environmental Arch.*, 9, pp. 179–88.

NEAL, PHILIP and FRASER, RICHARD, 'A Romano-British enclosed farmstead at Billingley Drive, Thurnscoe, South Yorkshire', *Yorks. Arch. J.*, 76, pp. 7–92.

NEWBY, ANDREW, 'Landlordism is soon going Skye-high: Michael Davitt and Scotland 1882–1887', *Hist. Scotland*, 3, (2003), pp. 45–52.

—, '"Scotia Major and Scotia Minor": Ireland and the birth of the Scottish land agitation, 1878–82', *Irish Econ. and Soc. Hist.*, 31, pp. 23–40.

NEWELL, BECKY, '"Much different to what it is today": a review of the Dartmoor National Park Authority's "Moor Memories" Oral History Project', *Devonshire Assoc. Rep. and Trans.*, 136, pp. 225–42.

NICOLINI, ESTEBAN A., 'Mortality, interest rates, investment, and agricultural production in eighteenth-century England', *Explorations in Econ. Hist.*, 41, pp. 130–55.

NIGHTINGALE, PAMELA, 'The lay subsidies and the distribution of wealth in medieval England, 1275–1334', *EcHR*, 57, pp. 1–32.

O'GRADA, CORMAC, 'Irish agriculture after the Land War', in Engerman and Metzer (eds), *Land rights, ethno-nationality, and sovereignty in history*, pp. 131–52.

O'KEEFFE, TADHG, 'Space, place, habitus: geographies of practice in an Anglo-Norman landscape', in Clarke, Prunty and Hennessy (eds), *Surveying Ireland's past*, pp. 73–98.

—, 'Were there designed landscapes in medieval Ireland?', *Landscapes*, 5, pp. 52–68.

OLSON, IAN A., 'The Greig-Duncan folk song collection', *Rev. Scottish Culture*, 16, pp. 161–6.

ORDE, ANNE, 'The Culleys and farm management', *Northern Hist.*, 41, pp. 327–38.

OTTEWILL, ROGER, 'Redrawing the boundaries: the politics and outcome of the county review process in Surrey, 1929–1933', *Southern Hist.*, 26, pp. 1–37.

OXLEY, DEBORAH, 'Living standards of women in prefamine Ireland', *Soc. Science Hist.*, 28, pp. 271–96.

PAGE, MARK, 'William Wykeham and the management of the Winchester estate, 1366–1404', in Ormrod (ed.), *Fourteenth-century England*, III, pp. 99–119.

PAGE, MARK and JONES, RICHARD, 'Medieval settlements and landscapes in the Whittlewood area: interim reports [2002–4]', *Medieval Settlement Res. Group Ann. Rep.*, 18 (2003), pp. 27–45.

PALMER, MARILYN, '"We have no factory bell": domestic textile workers in the nineteenth century', *Local Hist.*, 34, pp. 198–213.

PALMER, MARILYN, and NEAVERSON, PETER, 'Home as workplace in nineteenth-century Wiltshire and Gloucestershire', *Textile Hist.*, 35, pp. 1–26.

PARK, PETER, 'Grim South to grimy North', *Ancestors*, 29, pp. 36–41.

PATTISON, GARY, 'Planning for decline: the "D"-village policy of County Durham, UK', *Planning Perspectives*, 19, pp. 311–32.

PEGG, ANNE and DEBELIN, MANDY, 'Horse trading', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 89–102.

PERSSON, HELEN, 'Straw – the blond goddess: the adaptation of a folk tradition to fashion', *Costume*, 38, pp. 50–62.

PETIT, SANDRINE and WATKINS, CHARLES, 'Pratiques paysannes oubliées: l'étêtage et l'émondage des arbres en Grand-Bretagne (1600–1900)', [Forgotten practices of the peasantry: topping and trimming trees in Great Britain], *Études Rurales*, 169–70, pp. 197–214.

PHIBBS, JOHN, 'The Englishness of Lancelot "Capability" Brown', *Garden Hist.*, 31, pp. 122–40.

PHILLIPS, A. D. M., 'Rebuilding rural England: farm building provision, 1850–1900', in Baker (ed.), *Home and colonial*, pp. 39–51.

PHILLIPSON, JEREMY *et al.*, 'Adaptive responses and asset strategies: the experience of rural micro-firms and foot and mouth disease', *J. Rural Stud.*, 20, pp. 227–43.

PHILP, BRIAN, 'Medieval site at Nash Farm, West Wickham', *Kent Arch. Rev.*, 155, pp. 98–101.

PIKE, W. S., 'Rainfall records of the East Anglian Blooms, 1911–88', *Weather*, 59, pp. 103–6.

PINE, JO and PRESTON, STEVE, 'Early medieval settlement on land adjoining Froman's, Cow Drove Hill, King's Somborne, Hampshire', *Hampshire Stud.*, 59, pp. 139–62.

PITMAN, JAN, 'Tradition and exclusion: parochial officeholding in Early Modern England: a case study from North Norfolk, 1580–1640', *Rural Hist.*, 15, pp. 27–46.

PLAKANS, ANDREJS and WETHERELL, C., 'Households and kinship networks: the costs and benefits of contextualization', *Continuity and change*, 18, pp. 49–76.

POSTLES, DAVE, 'The market place as space in early modern England', *Soc. Hist.*, 29, pp. 41–58.

—, 'Re-constituting the early-modern market place', in Pinches, Whalley and Postles (eds), *The market place and the place of the market*, pp. 45–56.

POWELL, BOB, 'The Fenland 'osskeeper', *Folk Life*, 42, pp. 91–112.

RACKHAM, OLIVER, 'Pre-existing trees and woods in country-house parks', *Landscapes*, 5, pp. 1–16.

RANSOM, BILL, 'Domesday Ilsington', *Devon Hist.*, 68, pp. 7–12.

—, 'The manors of Sigford and Staplehill, Ilsington', *Devon Historian*, 70, pp. 6–8.

REDWOOD, P., and REDWOOD, N. 'Beating the bounds: perambulations of the manors of Tretower and Crickhowell in 1863 and 1864', *Brycheiniog*, 36, pp. 83–120.

RICHARDSON, A., 'Granaries and garrisons in Roman forts', *Oxford J. of Arch.*, 23, pp. 429–42.

RILEY, MARK, 'Ask the fellows who cut the hay: farm practices, oral history and nature conservation', *Oral Hist.*, 32, pp. 45–53.

ROBERTS, EDWARD, 'Medieval Hambledon Manor: chambers for bishops and their stewards', *Hampshire Stud.*, 59, pp. 180–95.

ROBERTS, MICHAEL, 'Sickles and scythes revisited: harvest work, wages and symbolic meanings', in Lane, Raven and Snell (eds), *Women, work and wages in England, 1600–1850*, pp. 68–101.

ROBINSON, GUY M., 'A kind of national property [upland landscapes]', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 149–161.

ROBERTSON, FORBES W., 'William Gibbs, Lord Seaforth's gardener, 1787–1812', *Rev. Scottish Culture*, 17, pp. 10–21.

ROTHERHAM, IAN D., D. EGAN and P. A. ARDRON, 'Fuel economy and the uplands: the effects of peat and turf utilisation on upland landscapes', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 99–109.

ROWLEY-CONWY, P., 'How the West was lost: a reconsideration of agricultural origins in Britain, Ireland, and Southern Scandinavia', *Current Anthropology*, 45, pp. S83–S113.

ROYLE, STEPHEN A., 'Small towns in Ireland, 1841–1951', in Clarke, Prunty and Hennessy (eds), *Surveying Ireland's past*, pp. 535–64.

RUSSELL, REX C., 'Deserted medieval villages. How do we know about them? Where are their sites?', *Lincs. Past and Present*, 54, pp. 14–18.

SANTESSO, AARON, 'The conscious swain: political pastoral in Pope's Epic', *Eighteenth-Cent. Stud.*, 37, pp. 253–72.

SCHAEFER, M., 'Design and implementation of a proposed standard for digital storage and Internet-based retrieval of data from the Tithe Survey of England and Wales', *Historical Methods*, 37, pp. 61–72.

SCHOFIELD, PHILIP, 'Credit and the peasant land market in the medieval English countryside', in Cavaciocchi (ed.), *Il mercato della terra, secc. XIII–XVII*, pp. 785–96.

SCHULTING, RICK J., 'An Irish Sea change: some implications for the Mesolithic-Neolithic transition', in Cummings, Vicki and Fowler, Chris, *The Neolithic of the Irish Sea: materiality and traditions of practice*, pp. 22–8.

SCHUMER, BERYL, 'The 1298/1300 perambulations of Wychwood Forest – and after', *Oxoniensia*, 69, pp. 3–28.

SCOTT, ALISTER, CHRISTIE, MICHAEL and MIDMORE, PETER, 'Impact of the 2001 foot and mouth disease outbreak in Britain: implications for rural studies', *J. Rural Stud.*, 20, pp. 1–14.

SEARBY, PETER, 'Creating paradise: the Chartist land scheme and its cottages, 1843–1849', *Local Hist.*, 34, pp. 214–26.

SHARMAN, GEOFF, 'Campbell town's convict brick trail', *Machine Breakers' News*, 10, pp. 3–10.

SHAW, GARETH, CURTH, LOUISE and ALEXANDER, ANDREW, 'Selling self-service and the supermarket: the Americanisation of food retailing in Britain, 1945–60', *Business Hist.*, 46, pp. 568–82.

SHAW-TAYLOR, LEIGH, 'Access to land by labourers and tradesmen in eighteenth-century England', in Van Bavel and Hoppenbrouwers (eds), *Landholding and land transfer*, pp. 265–81.

SHEAIL, JOHN, 'The mink menace: the politics of vertebrate pest control', *Rural Hist.*, 15, pp. 207–22.

SHEERAN, GEORGE, 'Conficting images: portrayals of the factory and the country in the nineteenth century', in CORAL, *Rural and urban encounters*, pp. 23–40.

SHERMAN, SANDRA, '"The Whole Art and Mystery of Cooking": what cookbooks taught readers in the eighteenth-century', *Eighteenth Cent. Life*, 28, pp. 115–35.

SHINWELL, SUE, 'The development of the Shropshire Down', *Ark*, 32, pp. 28–30.

SHORT, BRIAN, 'Environmental politics, custom and personal testimony: memory and lifespace on the late Victorian Ashdown Forest, Sussex', *J. Hist. Geog.*, 30, pp. 470–95.

SILVESTER, R. J., 'The Commons and waste: use and misuse in mid-Wales', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 53–66.

SIMMS, ANNGRET, 'Understanding small Irish country towns: contested identity in historical perspective', in BAKER (ed.), *Home and colonial*, pp. 66–76.

SIMPSON, JAMES, 'European farmers and the British "agricultural revolution"', in Prados de la Escosura (ed.), *Exceptionalism and industrialisation: Britain and its European rivals, 1688–1815*, pp. 69–85.

—, 'Selling to reluctant drinkers: the British wine market, 1860–1914', *EcHR*, 57, pp. 80–108.

SLACK, PAUL, 'Measuring the national wealth in seventeenth-century England', *EcHR*, 57, pp. 607–35.

SMITH, ADAM, 'A valued asset? The Sheffield family and their Lincolnshire estates, 1702–1774', *East Midland Historian*, 14, pp. 39–48.

SMITH, DAVID F. and BUFTON, MARK W., 'A case of parturiunt montes, nascetur ridiculus mus? The BMA Nutrition Committee 1947–1950 and the political disengagement of nutrition science', *J. Hist. Medicine and Allied Sciences*, 59, pp. 240–72.

SMITH, J. B., 'Lying for the whetstone: a saying and its links with folk life and tradition', *Folk Life*, 42, pp. 54–60.

STACY, N. E., 'The state of the demesne manors of Glastonbury Abbey in the twelfth-century', in Evans (ed.), *Lordship and learning*,, pp. 109–23.

STANSBIE, DAN, and LAWS, GRANVILLE, 'Prehistoric settlement and medieval to post-medieval field systems at Latton Lands', *Wilts. Arch. and Natural. Hist. Mag.*, 97, pp. 106–43.

STEAD, DAVID R., 'Risk and risk management in English agriculture, *c*. 1750–1850', *EcHR*, 57, pp. 334–61.

STEVENSON, JOHN, 'The countryside, planning, and civil society in Britain, 1926–1947', in Harris (ed.), *Civil society in British history*, pp. 191–212.

STEWART, JOHN, and KING, STEVE, 'Death in Llantrisant: Henry Williams and the New Poor Law in Wales', *Rural Hist*., 15, pp. 69–88.

STOBART, JON, 'The economic and social worlds of rural craftsmen-retailers in eighteenth-century Cheshire', *AgHR*, 52, pp 141–60.

STOKES, WINIFRED, 'Agricutural improvement and industrial revolution in south Durham in the early nineteenth century', in CORAL, *Rural and urban encounters*, pp. 13–22.

STONE, DAN, 'The Far Right and the Back-to-the-Land Movement', in Gottlieb and Linehan (eds), *The culture of fascism*, pp. 182–98.

STRAUGHTON, ELEANOR A., 'Beyond enclosure: upland common land in England and Wales since 1800', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 89–98.

TARVER, ANNE, 'The due tenth: problems of the Leicestershire tithing process', *Trans. Leics. Arch. and Hist. Soc*., 78, pp. 97–107.

TAYLOR, A., 'Pig-sticking princes: royal hunting, moral outrage, and the republican opposition to animal abuse in nineteenth- and early twentieth-century Britain', *History*, 89, pp. 30–48.

TAYLOR, BECKY, 'Travellers in Britain: a minority and the state', *Hist. Res*., 77, pp. 575–96.

TAYLOR, J. P. G., '"To Mr Merry for black stockings": eighteenth century town and village life revealed in an estate account book', *East Yorks. Historian*, 5, pp. 16–25.

TAYLOR, PAUL NEWTON, '"Very active in the riot": a disturbance on Romney Marsh in 1821', *Family and Community Hist*., 7, pp. 101–13.

TEBBUTT, MELANIE, 'Gendering an upland landscape: masculinity and place identity in the Peak District, 1880s–1920s', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 141–8.

—, 'Landscapes of loss: moorlands, manliness and the First World War', *Landscapes*, 5, pp. 114–27.

—, '"Men of the hills and street corner boys". Northern uplands and the urban imagination: Derbyshire's Dark Peak, 1880s–1920s', in CORAL, *Rural and urban encounters*, pp. 59–78.

THOMAS, HELENA, 'Hops in Kent', *Bygone Kent*, 25, pp. 187–93.

THORLEY, JOHN, 'The estates of Calder Abbey', *Trans. Cumberland and Westmoreland Antiquarian and Arch. Soc., third ser*., 4, pp. 133–62.

THORP, MALCOLM R., '"No pogroms here": the Wickham Market riots, 1810', *Baptist Quar*., 40, pp. 284–301.

TICHELAR, MICHAEL, 'The Scott report and the Labour Party: the protection of the countryside during the Second World War', *Rural Hist*., 15, pp. 167–87.

TIPPING, RICHARD, 'Palaeoecology and political history: evaluating driving forces in historic landscape change in southern Scotland', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 11–20.

TODD, SELINA, 'Poverty and aspiration: young women's entry to employment in inter-war England', *Twentieth Cent. Brit. Hist*., 15, pp. 119–42.

—, 'Young women, work and family in inter-war rural England', *AgHR*, 52, pp. 83–98.

TRAN, TRI, 'L'emigration forcee des enfants britanniques au XIXe siecle [Forced emigration of pauper children in the nineteenth century], *Cahiers Victoriens et Edouardiens*, 59, pp. 323–37.

TROTT, KEVIN, 'A prehistoric and Roman coastal settlement at Barnes Chine, Brighstone, Isle of Wight', *Hampshire Stud*., 59, pp. 65–76.

TURNER, MICHAEL E., 'Agriculture, 1860–1914', in Floud and Johnson (eds), *Cambridge economic history of modern Britain*, II, *economic maturity, 1860–1939*, pp. 133–60.

TURNER, SAM, 'The changing ancient landscape: Southwest England, *c*. 1700–1900', *Landscapes*, 5, pp. 18–34.

—, 'Coast and countryside in "late antique" Southwest England, *c*. AD 400–600', in Collins and James (eds), *Debating late antiquity in Britain, AD 300–700*, pp. 25–32.

TURVEY, R. K., 'Household, court and localities: Sir Thomas Jones and the rise of "that great family of Jones of Abermarlais"', *Welsh Hist. Rev*., 22, pp. 29–51.

ULLATHORNE, GRAHAM, 'Migration from Derbyshire to Hallamshire: the evidence of the Cutlers' Company records, 1624 to 1814', *Northern Hist*., 41, pp. 81–109.

UPEX, STEPHEN G., 'A classification of ridge and furrow by an analysis of cross-profiles', *Landscape Hist*., 26, pp. 59–75.

—, 'Surface scatterers, rates of destruction and problems of ploughing and weathering', *Proc. Cambs. Antiquarian Soc*., 93, pp. 161–78.

—, 'The uses and functions of ponds within early landscapes in the East Midlands', *AgHR*, 52, pp. 125–40.

VERDON, NICOLA, 'A diminishing force? Reassessing the employment of female day labourers in English agriculture, *c*. 1790–1850', in Lane, Raven and Snell (eds), *Women, work and wages in England, 1600–1850*, pp. 190–211.

WADDINGTON, KEIR, 'To stamp out "so terrible a malady": bovine tuberculosis and tuberculin testing in Britain 1890–1939', *Medical Hist*., 48, pp. 29–48.

WADLEY, DAVID, WADLEY, JANE and BARTON, PETER, 'Pontysgawrhyd Mill: a late Tudor corn mill in Montgomeryshire', *Montgomeryshire Coll*., 92, pp. 57–68.

WALKER, ANDREW, 'The Lincolnshire show at Lincoln, 1869–1913: rural and urban encounters on the showground', in CORAL, *Rural and urban encounters*, pp. 41–58.

WAKEHAM, COLIN, 'Maristow Estate farmhouses, 1800–1913: a chronological development', *Devonshire Assoc. Rep. and Trans*., 135, pp. 111–71.

WALL, RICHARD, 'English population statistics before 1800', *Hist. of the Family*, 9, pp. 81–95.

WALTON, JOHN [K.], 'National parks and rural identities: the North York moors', in COARL, *Rural and urban encounters*, pp. 115–131.

WARR, ROGER, 'Education in Dunnington from the seventeenth century to the present time', *East Yorks. Hist*., 5, pp. 3–15.

WATKINS, CARL, '"Folklore" and "popular religion" in Britain during the Middle Ages', *Folklore*, 115, pp. 140–50.

WATTS, GEORGE, 'Types of drove road', *Hants. Field Club and Arch. Soc. Newsletter*, 41, pp. 9–11.

WAYNE, JOAN, 'A score of plait', *Guild of Straw Craftsmen News*, 31, pp. 3–6.

WEEKS, ROBERT, 'Making sense of the censarii: licensed traders in medieval sources', *Local Hist*., 34, pp. 113–17.

WHELAN, KEVIN, 'Reading the ruins: the presence of absence in the Irish landscape', in Clarke, Prunty and Hennessy (eds), *Surveying Ireland's past*, pp. 297–328.

WHITTLE, JANE, 'Tenure and landholding in England 1440–1580: a crucial period for the development of agrarian capitalism?', in Van Bavel and Hoppenbrouwers (eds), *Landholding and land transfer*, pp. 237–49.

WHYTE, IAN D., 'The landscape and environmental impact of mining and quarrying in upland Britain', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 111–121.

—, 'Migration and settlement', in Williams (ed.), *A companion to nineteenth-century Britain*, pp. 273–86.

WHYTE, NICOLA, 'The deviant dead in the Norfolk landscape', *Landscapes*, 4, (2003), pp. 24–39.

WIDDOWSON, JOHN, 'Mitchell and Kenyon: ceremonial processions and folk traditions', in Toulmin, Russell and Popple (eds), *The lost world of Mitchell and Kenyon: Edwardian Britain on film*, pp. 137–49.

WILCOCK, RUTH, 'Local disorder in the Honour of Knaresborough, *c*. 1438–1461 and the national context', *Northern Hist*., 41, pp. 39–80.

WINCHESTER, A. J. L., 'Moorland forests of medieval England', in Whyte and Winchester (eds), *Society, landscape and environment in upland Britain*, pp. 21–34.

WILLIAMS, FIONNUALA CARSON, 'A fire of stones curse rekindled', *Folk Life*, 42, pp. 113–20.

WILLIAMS, H. G., 'Nantucha, Llanberis 1851: portrait of a changing community', *Welsh Hist. Rev*., 22, pp. 52–79.

WILLIAMS, SAMANTHA, 'Caring for the sick poor: poor law nurses in Bedfordshire, *c*. 1770–1834', in Lane, Raven and Snell (eds), *Women, work and wages in England, 1660–1850*, pp. 141–69.

—, 'Malthus, marriage and poor law allowances revisited: a Bedfordshire case study, 1770–1834', *AgHR*, 52, pp. 56–82.

WILLIAMSON, TOM, 'Designed landscapes: the regional dimension', *Landscapes*, 5, pp. 16–25.

WILMOT, SARAH, 'Farmers and farming practice in Devon, 1800–1914', *Historic Farm Buildings Group Newsletter and J*., 1, pp. 10–23.

WINSTANLEY, MICHAEL, 'Agriculture and rural society', in Williams (ed.), A *companion to nineteenth-century Britain*, pp. 205–22.

WITTERING, SHIRLEY, '"This enclosure business": enclosure commissioners' papers as an historical source', *Local Hist*. 34, pp. 104–112.

WOODBRIDGE, LINDA, 'The peddler and the pawn: why did Tudor England consider peddlers to be rogues?', in Craig and Mentz (eds), *Rogues and early modern English culture*' pp. 143–70.

WOODS, ABIGAIL, 'The construction of an animal plague: foot and mouth disease in nineteenth-century Britain', *Social Hist. of Medicine*, 17, pp. 23–39.

—, '"Flames and fear on the farms": controlling foot and mouth disease in Britain, 1892–2001', *Hist. Res*., 77, pp. 520–42.

WORTLEY, LAURA, 'City merchants' landownership around Henley-on-Thames and the paintings of Jan Siberechts', in Galinou (ed.), *City merchants and the arts, 1670–1720*, pp. 93–102.

WRIGHT, NEIL R., 'Tuxford and Sons of Boston, a family business', *Lincs. Hist. and Arch*., 38 (2003), pp. 45–62.

WYKES, DAVID L., 'Robert Bakewell (1725–1795) of Dishley: farmer and livestock improver', *AgHR*, 52, pp. 38–55.

YAMAMOTO, CHIAKI, 'Two labour markets in nineteenth-century English agriculture: the Trentham Home Farm, Staffordshire', *Rural Hist*., 15, pp. 89–116.

YOUNG, CRAIG, 'Geography, law and the centralizing state: wages arrestment in nineteenth- and twentieth-century Scotland', *Area*, 36, pp. 287–97.

ZMOLEK, MIKE, 'Debating agrarian capitalism: a rejoinder to Albritton', *J. Peasant Stud.*, 31, pp. 276–305.

BOOKS CITED

BAKER, A. R. H. (ed.), *Home and colonial: essays on landscape, Ireland, environment and empire in celebration of Robin Butlin's contribution to historical geography* (Historical Geography Research Ser., 39)

BIAGIOLI, G. and PAZZAGLI, R. (eds), *Agricoltura come manifattura. Instruzione agraria, professionalizzazione e sviluppo aricolo null'Ottocento*.

BROCKLEHURST, H and PHILLIPS, R. *History, nationhood and the question of Britain*.

CAVACIOCCHI, S. (ed.), *Il mercato della terra, secc. XIII-XVIII*.

CLARKE, H. B., PRUNTY, J. and HENNESSY, M. (eds), *Surveying Ireland's past. Multi-disciplinary essays in honour of Anngret Simms*.

COLLINS, R. and GERRARD, J. (eds), *Debating late antiquity in Britain, AD 300–700*.

CONFERENCE OF REGIONAL AND LOCAL HISTORIANS (CORAL), *Rural and urban encounters in the nineteenth and twentieth centuries: regional perspectives: proceedings of the CORAL conference, September 2002*.

CROXFORD, B., ECKHARDT, H., MEADE J. and WEEKS J. (eds), *TRAC 2003. Proc. of the thirteenth annual theoretical Roman archaeology conference*.

CUMMINGS, V. and FOWLER, C. (eds), *The Neolithic of the Irish Sea: materiality and traditions of practice*.

DONNE, C. and MENTZ, S. (eds), *Rogues and early modern English culture*.

ENGERMAN S. and METZER, J. (eds), *Land rights, ethnonationality and sovereignty in history*.

EVANS, R. (ed.), *Lordship and learning: studies in memory of Trevor Aston*.

EVANS, A. K. B. and GOUGH, J. V., *The impact of the railway on society in Britain: essays in honour of Jack Simmons* (2003).

FLOUD, R. and JOHNSON, P. (eds), *The Cambridge economic history of modern Britain*, I, *industrialisation, 1700–1860;* II, *economic maturity, 1860–1939*.

FRENCH, H. and BARRY, J. (eds), *Identity and agency in England, 1500–1800*.

GALINOU M. (ed.), *City merchants and the arts, 1670–1720*.

GOLDGAR, A. and FROST R. (eds), *Institutional culture in early modern society*.

GOTTLIEB J. V. and LINEHAN, T. P. (eds), *The culture of fascism: visions of the Far Right in Britain*.

GRAY P. and OLIVER K. (eds), *The memory of catastrophe*.

HARRIS F. (ed.), *Civil society in British history: ideas, identities, institutions*.

HOYLE (ed.), *People, landscape and alternative agriculture: essays for Joan Thirsk* (Agricultural History Rev., Supp. III).

KEENE, D., BURNS, A. and SAINT A. (eds), *St Paul's: the cathedral church of London, 604–2004*.

LANE, P., RAVEN N. and SNELL K. D. M. (eds), *Women, work and wages in England, 1600–1850*.

LUSCOMBE, D. and RILEY-SMITH, J. (eds), *The new Cambridge medieval history*, IV, *c. 1024–1198*.

ORMROD, M. (ed.), *Fourteenth-century England*, III.

PINCHES, S., WHALLEY M. and POSTLES D. (eds), *The market place and the place of the market*.

PRADOS DE LA ESCOSURA, L. (ed.), *Exceptionalism and industrialisation: Britain and its European rivals, 1688–1815*.

TITTLER, R., and JONES N. (eds), *A companion to Tudor Britain*.

TODD, M. (ed.), *A companion to Roman Britain*.

TOULMIN, V., RUSSELL, P. and POPPLE S. (eds), *The lost world of Mitchell and Kenyon: Edwardian Britain on film*.

VAN BAVEL, B. and HOPPENBROUWERS, P. (eds), *Landholding and land transfer in the North Sea area (late Middle Ages–19th century)*.

WILLIAMS, C. (ed.), *A companion to nineteenth-century Britain, 1815–1900*.

WHYTE, IAN D., and WINCHESTER, ANGUS J. L. (eds), *Society, landscape and environment in upland Britain* (Society for Landscape Studies, supp. ser. 2).

OTHER BOOKS AND PAMPHLETS PUBLISHED DURING 2004

ABDY, CHARLES, *Ewell: the development of a Surrey village that became a town*.

ALLEN, DAVID E., and HATFIELD, GABRIELLE, *Medicinal plants in folk tradition: an ethnobotany of Britain and Ireland*.

ASHBRIDGE, PAULINE, *Village chapels: some aspects of rural Methodism in the East Cotswolds and South Midlands, 1800–2000*.

ASHWORTH, NANCY, *Voices from the peat: an oral history of the Avalon Marshes*.

BAKER, ALAN R. H. and BILLINGE, MARK (eds), *Geographies of England: the North-South divide, imagined and material*.

BARNATT, JOHN and SMITH, KEN, *The Peak District: landscapes through time*.

BATES, ELIZABETH (ed.), *Farming in Lincolnshire, 3000 BC to 2000 AD: a celebration of Lincolnshire's agricultural heritage for Lincolnshire's Heritage Open Days, 2004*.

BEVAN, BILL, *The Upper Derwent: 10,000 years in a Peak District valley*.

BEVAN-JONES, ROBERT, *The ancient yew: a history of taxus baccata*.

BINFIELD, KEVIN, *Writings of the Luddites*.

BINNEY, RUTH, *Wise words and country ways*.

BIRD, DAVID G., *Roman Surrey*.

BLATCHLY, JOHN and JAMES, JENNY (eds), *John Kirby's Suffolk: his maps and roadbooks with a facsimile of* The Suffolk Traveller, *1735* (Suffolk Rec. Ser., 47)

BOCHEL, MARGARET M., *Salt herring on Saturday: the fishertown of Nairn last century*.

BOGLE, KENNETH, *Scotland's common ridings*.

BOND, JAMES, *Monastic landscapes*.

BOTELHO, L. A., *Old Age and the English Poor Law, 1500–1700*.

BOWERBANK, SYLVIA, *Speaking for nature: women and ecologies of early modern England*.

BRITNELL, RICHARD, *Britain and Ireland, 1050–1530: economy and society*.

BROAD, JOHN, *Transforming English rural society: the Verneys and the Claydons, 1600–1820*.

BROWN, IAN, *Discovering a Welsh landscape: archaeology in the Clwydian Range*.

BROWN, N. A., *Doocots of Scotland: Moray*.

BROWN, R. J., *English village architecture*.

BUCKTON, JENNY, *The best of breeds: a history of Welsh Black cattle*.

BURTON, JANET E., *The cartulary of Byland Abbey*. (Surtees Soc., 208).

BYRNE, JOSEPH, *Dictionary of Irish local history*.

CARBIS, J. C., *Casawes Barton, Ponsanooth, Cornwall: a short history of the farm and something of its occupiers c. 1066–2004*.

CHAMBERS, JILL, *Essex machine breakers*.

CLARE, LIAM, *Enclosing the commons: Dalkey, the Sugar Loaves and Bray, 1820–70*.

CLARK, JO, DARLINGTON, JOHN and FAIRCLOUGH, GRAHAM, *Using historic landscape characterisation*.

CLARKE, PATRICIA A., *A history of Pinner*.

CLAYTON, MICHAEL, *Endangered species: foxhunting – the history, the passion and the fight for survival*.

CLEAL, ROSAMUND and POLLARD, JOSHUA (eds), *Monuments and material culture*.

COLDICOTT, DIANA, *Elizabethan Andover*.

COTTON, JONATHAN, CROCKER, GLENYS and GRAHAM, AUDREY, *Aspects of archaeology and history in Surrey: towards a research framework for the county*.

DILS, JOAN and SCHWARTZ, DEIRDRE, *Tudor and Stuart Shrivenham*.

DOHERTY, CHARLES, FITZPATRICK, ELIZABETH and GILLESPIE, RAYMOND (eds), *The parish in medieval and early modern Ireland*.

DRY STONE WALLING ASSOCIATION, *Dry stone walling: techniques and traditions*.

DUNN, ALISTAIR, *The Peasants' Revolt: England's failed revolution of 1381*.

EDELSTEN, DAVID, *Dorset diaries: a dog's life and other jottings*.

EDMONDS, MARK, *The Langdales: landscape and prehistory in Lakeland valley*.

ELLIOTT, BRENT, *The Royal Horticultural Society: a history, 1804–2004*.

EVANS, SIMON, *Stopping places: a Gypsy history of South London and Kent*.

FOSTER, CHARLES F., *Capital and innovation: how Britain became the first industrial nation. A study of the Warrington, Knutsford, Northwich and Frodsham area, 1500–1780*.

FOWKES, DUDLEY *et al.*, *Bonsall: a thousand years of growth*.

GETZLER, JOSHUA, *A history of water rights at common law*.

GIBBONS, STEPHEN, *Captain Rock, night errant: the threatening letters of pre-Famine Ireland*.

GREEN, GERALD, *Farmhouse arches, workhouse pains*.

GRIEVES, KEITH, *Sussex in the First World War*.

GRITT, A. J., VIRGOE, J. M. and BROWNRIGG, C. P., (eds), *The memoranda books of Basil Thomas Eccleston, 1757–1789* (Record Soc. of Lancashire and Cheshire, 139).

HALFORD, MICHAEL, *Pens to ploughshares …*

HANDS, JOAN I., *Royalty to commoners: four hundred years of the Box Moor Trust, 1594–2004*.

HARPER, MARJORY, *Adventurers and exiles: the great Scottish exodus*.

HARRISON, DAVID, *The bridges of medieval England: transport and society, 400–1800*.

HARWOOD, DOUG (ed.), *The history of Ratby*, I.

HASTINGS, R. P., *Chartism in the North Riding of Yorkshire and South Durham, 1838–1848* (Borthwick P., 105).

HAYNES, ROBERT and SLOCOMBE, IVOR, *Wiltshire toll houses*.

HEINEY, PAUL, *The traditional farming year*.

HIGHAM, N. J., *A frontier landscape: the North West in the Middle Ages*.

HINDLE, STEVE, *On the parish?: the micro-politics of poor relief in rural England, c. 1550–1750*.

HOPPER, PETER, *Suffolk's historic farms*.

HUME, JOHN, *Vernacular building in Ayrshire*.

HUNT, ROGER, *Rural life: then and now: a celebration of the British countryside featuring photographs from the Francis Frith collection*.

JOY, DAVID (ed.), *Yorkshire Dales: a 50th anniversary celebration of the National Park*.

KAIN, ROGER J. P., CHAPMAN, JOHN and OLIVER, RICHARD R., *The enclosure maps of England and Wales, 1595–1918. A cartographic analysis and electronic catalogue*.

KELLY, MARIA, *A history of the Black Death in Ireland*.

KENNEDY, EDWARD, *The land movement in Tullaroan, Co. Kilkenny, 1879–91*.

LANGDON, JOHN, *Mills in the medieval economy*.

LANGLEY, ANN, *Victorian village life: a Warwickshire schoolmaster's record*.

LAWSON, TERENCE and KILLINGRAY, DAVID (eds), *An historical atlas of Kent*.

LEECH, JOSEPH, *Rural rides of the Bristol churchgoer*.

LEGG, MARIE-LOUISE, (ed.), *The census of Elphin, 1749*.

LOXTON, GEOFFREY A. J., *Farming the hungry fifties: memories of Old Hardington Farm*.

LYTTLETON, JAMES and O'KEEFFE, TADHG (eds), *The manor in medieval and early modern Ireland*.

MACLEAN, MURRAY, *Farming and forestry on the Western Front, 1915–1919*.

MALCOLMSON, ROBERT and SEARBY, PETER (eds), *Wartime Norfolk: the diary of Rachel Dhonau 1941–1942* (Norfolk Record Soc., 68).

MCCANN, JOHN, *Clay and cob buildings* (third edn).

MCCANN, JOHN and MCCANN, PAMELA, *The dovecotes of historical Somerset*.

MCMANUS, ANTONIA, *The Irish hedge school and its books, 1695–1831*.

MEERES, FRANK, *Norfolk in the First World War*.

MOFFAT, BILL, *Jack's lad: the life of a Westmoreland agricultural contractor, 1953–2000*.

MORAN, GERARD, *Sending out Ireland's poor: assisted emigration to North America in the nineteenth-century*.

MORRIS, RICHARD, *The verderers and courts of Waltham Forest in the county of Essex, 1250–2000*.

NEWBURY, DON, *Memories of Maiden Bradley*.

NORMAND, IVOR (ed.), *Causey (1853–1946); the life of George Alexander and his family at Causeyport farm, Portlethen*.

O'GRADA, *Irish agriculture after the Land War*.

O'REILLY, BARRY, *Living under thatch*. Cork.

ORD, C., *Dyce: a historical miscellany of an Aberdeenshire parish*.

OTTAWAY, SUSANNAH R., *The decline of life: old age in eighteenth-century England*.

OVERTON, MARK, *et al., Production and consumption in English households, 1600–1750*.

PAGE, ROBIN, *The decline of an English village* (new edn).

PALMER, ROY, *Folklore of Warwickshire* (rev. edn).

—, *The folklore of (Old) Monmouthshire*.

—, *The folklore of Shropshire*.

PARSLEW, PAT, *Beckhampton: time present and time past*.

PEARSE, COLIN, *The Whitefaced drift of Dartmoor's 'prapper' sheep: a story as olde as them hills; commemorating the 50th anniversary of the Whitefaced Dartmoor Sheep Breeders Association*.

PEARSON, MIKE PARKER *et al., South Uist: archaeology and history of a Hebridean island*.

PIERCE, MARY, *Coming of age in Anna Valley*.

PINCHBECK, JOHN (ed.), *The changing face of Grantham*.

QUINAULT, R. E., *Landlords and labourers in Warwickshire c. 1870–1920* (Dugdale Society occ. paper 44).

QUINN, TOM and FELIX, PAUL, *The art of the traditional craftsmen*.

RABAN, SANDRA, *A second Domesday? The Hundred Rolls of 1279–80*.

RAHTZ, PHILIP A., [*Wharram Percy*], *The north manor area and Northwest enclosure* (Wharram, a study of settlement on the Yorkshire Wolds, IX)

REAY, BARRY, *Rural Englands: labouring lives in the nineteenth century*.

RICCALL LOCAL HISTORY GROUP, *Riccall in World War II: life in a Yorkshire rural community*.

RICHARDS, ERIC, *Britannia's children: emigration from England, Scotland, Wales and Ireland since 1600*.

RIPPON, STEPHEN, CLARK, JO and REA, PETER, *Historic landscape analysis: deciphering the countryside*.

ROBERTS, PETER, *Minstead: life in a 17th-century New Forest community*.

SARSBY, JACQUELINE, *Sweetstone: life on a Devon farm*.

SATHERLY, JEREMY, *A neat little town: the history of Holbeach*.

SAWYER, REX, *Collett's farthing newspaper: the Bowerchalke village newspaper, 1878–1924*.

SCHUMER, BERYL (ed.), *Oxfordshire forests, 1246–1609* (Oxfordshire Record Soc., 64).

SEYMOUR, ALAN J., *Long life and success to the farmer: a history of the agricultural societies of Bury*.

SMITH, LEN, *Romany Nevi-Wesh: an informal history of the New Forest Gypsies*.

SMOUT, T. C., MACDONALD, ALAN R., and WATSON, FIONA, *A history of the native woodlands of Scotland*.

SNELLING, JOAN, *A Land Girl's war*.

STAFFORDSHIRE WILDLIFE TRUST, *Loynton Moss: a natural and social history of a Staffordshire nature reserve*.

STANIER, PETER, *Dorset's archaeology: archaeology in the landscape, 4000 BC to AD 1700*.

STEPHENS, HOWARD, comp., *Norfolk and Suffolk in the age of steam*.

STOBART, JON, *The first industrial region: Northwest England, c. 1700–60*.

SWEETMAN, JOHN, *A history of poor law and charity relief in Banstead*.

TANKARD, JUDITH, *Gardens of the Arts and Crafts Movement*.

TAYLOR, ANTONY, *The lords of misrule: hostility to aristocracy in late nineteenth and early twentieth century Britain*.

TIPPETT, BRIAN, *W. H. Hudson in Hampshire*.

TOWNLEY, SIMON (ed.), *Victoria County History, A history of the county of Oxford, XIV, Witney and its townships (Bampton Hundred part two)*.

TUER, BILL, *A prince among poachers*.

TWIST, MICHAEL F., *Ireland: the ducal days*.

UGLOW, JENNY, *A little history of British gardening*.

ULCOMBE HISTORY SOCIETY, *Ulcombe's story: a millennium history of our village*.

VAN DE NOORT, ROBERT, *The Humber wetlands: the archaeology of a dynamic landscape*.

VIALLS, CHRISTINE and COLLINS, KAY (eds), *A Georgian country parson: The Rev. John Mastin of Naseby*.

WADE MARTINS, SUSANNA, *Farmers, landlords and landscapes: rural Britain, 1720 to 1870*.

WHITE, R. F., and WILSON, P. R. (eds), *Archaeology and historic landscapes of the Yorkshire Dales*.

WILD, MARTIN TREVOR, *Village England: a social history of the countryside*.

WOODS, ABIGAIL, *A manufactured plague: the history of foot and mouth disease in Britain*.

WRIGHT, GWEN *et al.*, *Trackways, trails, transport and trade*.

WRIGLEY, E. A., *Poverty, progress and population*.

WROTHAM HISTORICAL SOCIETY, *Farming in Wrotham through the ages*.

Book Reviews

Britain and Ireland

DAVID STONE, *Decision-making in medieval agriculture* (OUP, 2005). xvii + 303 pp. 20 tables; 27 figs; 2 maps. £55.

About few periods of British agricultural history has thinking changed more in recent years than the middle ages. Comparison of the final chapter of David Stone's *Decision-making in medieval agriculture* with M. M. Postan's classic essay in the second edition of Volume I of the *Cambridge economic history of Europe* (1966) highlights how far this revisionism has now progressed. No longer are medieval husbandmen portrayed as handicapped by inadequate technology, hamstrung by communal regulations, careless and ignorant in their utilization of resources, indifferent to market opportunities, and incapable of obtaining and sustaining satisfactory returns from the land. Instead, they look remarkably similar to their enterprising and commercialized early-modern successors and under the right circumstances appear to have been capable of obtaining productivity results that were by no means inferior. On this reinterpretation it is the continuities rather than the contrasts between medieval and early modern agriculture that are most striking. Seemingly, since at least the thirteenth century, market-determined prices, costs, and rents influenced how the land was occupied, used, and worked; likewise, the decisions made by agricultural producers shaped economic outcomes. Thus, as Stone is at pains to demonstrate in this fresh and meticulously crafted book, it was because medieval owners and managers of seigniorial demesnes were efficiency maximisers that they often opted to produce less than the maximum attainable using existing technology. On this analysis, if crop yields per acre were not high it was usually because it did not pay to raise them; if they fell it was because it paid to invest less in production. In his view demesne managers should therefore be judged by their ability to maintain profits rather than physical productivity, especially when, as over the course of the fourteenth century, environmental and economic conditions were both becoming less favourable. He clearly thinks that much of the time they did a remarkably good job.

At the core of the book, and comprising five of its eight chapters, is a detailed analysis of the wealthy bishop of Ely's huge demesne at Wisbech Barton situated deep in the Cambridgeshire fens, in one of the most economically advantaged and dynamic of agricultural regions but one also unusually susceptible to tempest and flood. Its heroes are the servile tenants who served as reeve and supervised the day-to-day and year-by-year running of the demesne and the bailiffs who oversaw them. In Stone's judgement they maintained operation of this demesne at a remarkably high pitch of efficiency for the better part of a century and successfully surmounted some of the greatest environmental set-backs and economic challenges ever faced by English farmers. It is a story rich in detail and well worth the telling and offers many rewarding insights, both particular and general.

The crucial first and longest episode in this saga – the 'springtide of success' – when the demesne and dependent tenant holdings were reclaimed from the fens, the manor of Wisbech Barton created as an operational unit, and rising prices and falling wages guaranteed easy profits to those who managed the demesne, is largely undocumented. In fact, Wisbech Barton's impressive run of manorial accounts does not start until 1313, which obliges Stone to commence his narrative after the economic tide had turned and with the crisis-ridden period from the agrarian crisis of 1315–22 to the Black Death of 1348–9. He then considers the changing fortunes of this demesne during, successively, the so-called 'Indian summer' for demesne producers that followed the plague; the period of deepening agricultural depression to which this gave way after *c.* 1375, when producers were squeezed by lower prices and higher wages; and, last, the twilight of direct cultivation between *c.* 1410 and 1429, when, after almost two hundred years of direct management and unable any longer to recruit loyal and able men as reeves, the bishops finally resorted to a policy of leasing. Each episode is scrutinized and discussed in its own terms while a common framework of analysis ('the sale and consumption of produce', 'cereal-cropping strategies', 'crop rotation and field management', 'agrarian techniques and the maintenance of soil fertility', and 'livestock husbandry') makes it possible to track developments over time. What

unfolds is a story in which yields of crops and, to some extent, of animals and their products, were positively related to product prices but inversely related to the cost of labour. It is a story, too, in which initiative was able to counteract adversity for as long as it was possible to maintain the quality of labour and, above all, the quality of management. When the latter eventually failed, direct management ceased to be tenable.

Three further chapters frame and contextualize the case-study of Wisbech Barton and elaborate upon the role of the market in shaping the decisions made by medieval agricultural producers. Decision-making, it is shown, was typically tightened as profits were squeezed and was often tightest of all when and where profits were narrowest. Almost everywhere, the colder economic climate that set in from the 1290s was followed by managerial reform and retrenchment. Nevertheless, efficient as demesne management necessarily became, Stone believes that land productivity was consistently higher by a margin of at least 10 to 25 per cent on peasant holdings, since how else could a national population at peak of five to six million have been fed from domestic agriculture? This runs counter to the received view of a generation of influential Cambridge historians and challenges the pessimistic Marxist verdict advanced by Robert Brenner and others that peasant yields were inferior to demesne yields because proportionally more of the land cultivated by peasants was of inferior quality and for various reasons many peasants were deficient in capital. Certainly, it would be surprising if the highest medieval yields were not obtained on peasant holdings but it will require more than the handful of examples assembled by Stone to establish that mean yields across the entire peasant sector of more than half a million holdings were better than those obtained on demesnes. Indeed, if such a productivity differential existed why did managerially-efficient lords not prefer to lease their demesnes? In more ways than one *Decision-making in medieval agriculture* consequently looks set to stoke renewed debate of this most critical and controversial of issues.

BRUCE M. S. CAMPBELL
Queen's University, Belfast

JAMES BOND, *Monastic landscapes* (Tempus Publishing, 2004). 304 pp. 33 plates; 115 figs. £25.

It is a commonplace to state that monasteries and nunneries were a familiar part of the medieval landscape. Yet visitors to sites such as the Cistercian abbeys of Fountains in Yorkshire and Tintern in south Wales, or Benedictine Glastonbury, or the former Augustinian church at Osney in Oxford may not immediately consider the impact that religious houses had on the wider environment in which they were constructed. It may be easy to envisage medieval monks following the timetable laid down by the *Rule of St Benedict*, worshipping in the church that lay at the heart of the monastic complex, reading in the cloister walk, or working in the day room. More recently, however, monastic archaeologists have encouraged us to think beyond the church, cloister, infirmary and abbot's lodgings, and place them at the centre of a much larger complex. In this book, James Bond looks more broadly still at monasteries in the landscape, and his study of the impact of medieval religious houses is wide-ranging and comprehensive. Taking account of documentary, landscape and archaeological evidence, he has produced a book aimed at 'the interested general reader rather than the academic' that is informative and immensely readable.

The book begins with an examination of the acquisition and exploitation of monastic estates, and the reconstruction of the estates of abbeys such as Pershore, Evesham and Shaftesbury, are accompanied by helpful maps. The author is careful to distinguish between the characteristics of the estates of different orders, and to emphasize regional variation and chronological change. Bond then moves on to discuss the evidence for different methods of land exploitation: arable farming and the production of cereal crops; the rearing of livestock, and the management of sheep flocks and the export of wool. It is the Cistercians who are most often associated with the clearance of land, but Bond shows, with case studies of reclamation in the Somerset Moors, Romney Marsh and the Sussex coast, Essex and Kent, and Yorkshire, how monasteries of all orders contributed to the opening up of the landscape. Bond also considers the buildings that were key to the agricultural estates of monasteries, the domestic buildings of monastic manors and granges, through the evidence of their surviving earthworks, documentary evidence, and extant buildings (as at Minster Court, Kent (St Augustine's Abbey) and Meare (Glastonbury Abbey)). His discussion demonstrates the diversity of the setting of granges, from a simple layout of two ranges, to more complex arrangements suggested at Neath Abbey's granges at Marcross, Gelligarn, and Monknash. Monastic gardens, orchards and vineyards also receive attention, and Bond draws on sources such as the gardeners' rolls from Benedictine Norwich, Abingdon, Glastonbury, and Augustinian Maxstoke. Other sources of food – sea and estuarine fisheries, lakes and marshland, river fisheries and fishponds – are discussed in detail, as are monastic deer parks and rabbit warrens.

Churches might also feature prominently in the economic assets of religious houses, and could be both a source of revenue and a pastoral responsibility. The

chapels and churches on monastic estates can provide evidence for their relationship with a monastic patron or rector, and for expenditure by monks on their churches. Physical reminders of the connections with monasteries and their abbot can be found, for instance, in the initials of Abbot John Selwood of Glastonbury which appear in the churches of Meare, Ashcott and East Brent which he rebuilt. More broadly, Bond investigates the impact of monastic houses on rural settlement in both planning new villages and relocating others, and on urban centres and boroughs, where religious houses were major landlords (a quarter of the tenements of Oxford in 1300 being in the hands of monastic or religion orders). Finally we see the importance of medieval monasteries in the construction of roads and bridges, mills, and in industrial workings, quarrying, mining, and the production of pottery and tiles.

Bond does exactly what he aims to do. He has produced a wide ranging book, which sets out the evidence clearly. Whereas the Benedictine houses that had their origins in Anglo-Saxon England are among the best documented monasteries, he also focuses attention on smaller and less well-known houses, and on Wales as well as England. The conclusion raises some important questions. As Bond reminds us, the rich documentary legacy bequeathed by medieval religious houses may lead us to overestimate their importance relative to secular landlords, and this, he argues, is why it is important to combine documentary with archaeological evidence and the evidence of the landscape. It may well be that the traditional picture of pioneer monks bringing land into cultivation and introducing innovation in farming techniques and management may have to be modified. However Bond leaves his readers in no doubt as to the importance of medieval monasteries in the shaping of the landscape.

JANET BURTON
University of Wales, Lampeter

AMANDA RICHARDSON, *The forest, park and palace of Clarendon, c. 1200–c. 1650. Reconstructing an actual, conceptual and documented Wiltshire landscape* (British Archaeological Reports, British Series 387, 2005). 8 tables; 85 figs. £38.

Medieval Clarendon was an illustrious place. Outside the new town of Salisbury, it had the grandest palace away from London, the biggest park in England, and a small royal Forest. It is a famous site; the author builds on many previous scholars' work, notably the excavation of the palace in the 1930s which lay unpublished for fifty years.

Some sort of palace goes back at least to the twelfth century; the park is first documented in 1223. The Forest is first heard of in 1214 – one of the latest royal Forests, though it was probably split off from the New Forest. They were raised to magnificence by Henry III in the mid-thirteenth century. The palace attracted royalty for 150 years, passing thereafter through phases of decline and revival; occasional royal visits continued until James I.

Dr Richardson's work is based mainly on written records. She has extracted a gigantic body of data from the official files in the Public Record Office. She has, properly, left archaeological excavation to others, and herself regrets that not more has been done with fieldwork.

A park was where a landowner kept deer confined within a deer-proof fence called a pale, which was difficult to maintain as the pales rotted or trees fell on it. A Forest was a tract of land, arbitrarily defined, whereon the king (or other magnate) asserted the right to keep deer; it was not fenced, and the deer stayed by force of habit. This particular Forest may have contained little more than deer that escaped from the park; were the many 'deer-leaps' devices to let them get back in? As usual, there is no record of where the deer came from: most of them were fallow deer, an exotic species which someone must have put there.

Forest historians, including Dr Richardson, claim that Forests were 'reserved for the king's hunting' to the restriction, if not exclusion, of other people's interests. However, Forests (in the legal sense) covered nearly all Hampshire and half Wiltshire, and were hardly a restraint on the towns, villages, agriculture, sheep-farming, and commerce of those counties. Clarendon itself included ten ordinary settlements, whose inhabitants seem to have done well out of jobs created by the palace and Salisbury city and cathedral.

Even in this very well-documented place, there is far more evidence for deer on the table than in the hunt. Medieval kings commonly feasted on salt venison, much of it brought from other Forests and processed at Clarendon. The only actual record of a royal hunt is by Edward II, the playboy king, in the 1320s. (There is at least as much evidence for dancing!) As elsewhere, deer were ordinarily 'farmed' or else caught by professional hunters.

Not even Dr Richardson answers the perennial question about medieval deer: why were there so few? Henry III is known to have eaten 400 fallow deer out of Clarendon in 49 years, which would have been in equilibrium with a population of about 40 animals, by modern standards an absurdly small number for the area. How could people with mere bows and hounds have held down the numbers, whereas today the utmost efforts with guns (and cars to run them over) cannot stop deer from proliferating?

By 1500 numbers of deer had increased into thousands, and hunting becomes more evident and more formal. The 'Pady Course' was like a modern greyhound track, with a live deer instead of an electric hare. As a climax, Elizabeth I – that mightiest hunter among sovereigns – slew 340 deer in one day in 1574. By 1661, it was said, all the deer had been exterminated: the mind boggles at how this could have been done.

Both park and Forest contained woodland, mostly belonging to the king. The woods were compartmentalized into coppices, fenced periodically after each felling to keep the deer from eating the regrowth. Clarendon was also a modest if curiously intermittent supplier of timber. The woods suffered badly from the twentieth-century replanting craze, and little is known of woodbanks or surviving coppice stools.

What did the deer eat? They might have lived in woodland, but (like their present successors) would need grassland or savanna to feed. The Forest seems to have been largely either woodland or farmland, without the common pasture on which deer fed in other Forests; they seem, nevertheless, to have been too few to cause trouble by eating farmers' crops. In the sixteenth century the huge numbers of deer in the park would have conflicted with trees. They went through hungry times in late winter.

I commend this illuminating study, full of curious detail. However, a book costing £38 deserves legible illustrations and an index. Dr Richardson's fascinating particulars of fish, rabbits, ferrets, and hermits ought not to be irretrievably buried in the text.

OLIVER RACKHAM
Corpus Christi College, Cambridge

CHRISTIAN D. LIDDY and RICHARD H. BRITNELL (eds), *North-east England in the later middle ages* (Boydell Press, 2005). xiii + 250 pp. 7 tables; 1 plate; 13 figs; 12 maps. £50.

This book is concerned with the later middle ages in the north-east, essentially Northumberland and Durham, and ranges over the political, social, economic and landscape history of the region. There are some references to the pursuit of the elusive concept of 'regional history', notably in an introduction by A. J. Pollard, but most of the fifteen authors of these essays are content to discuss places and themes under the umbrella of the 'north-east' without attempting to define more generally the character of the lands between the Tees and the Tweed. Readers can see for themselves some unifying forces, such as the bishopric and priory at Durham, and the major town at Newcastle, but can also recognize the great divide between peaceful and productive lowlands in county Durham and the more dangerous and pastoral uplands of the Pennines and the Cheviots. One abiding impression from the number of essays, and their many references to other works, is of the region's wealth in historical research that has been done, and is being done.

Historians of agriculture and rural society will find some useful essays on estates and landholding, notably Richard Lomas's definition of the territory controlled by the bishopric and priory of Durham straddling the Scottish border, including the monastic outpost of Coldingham. The Durham monks and bishopric gained much income from these lands before 1300, but the Anglo-Scottish wars reduced their revenues drastically. In the same border area the Grays of Heaton are shown by Andy King to have done well in the fourteenth century from soldiering. Christian Liddy investigates the rise of a branch of the Pollard family, who were minor gentry serving the bishops of Durham. They were able in the fourteenth century to enlarge a small estate in the parish of Auckland St Andrew. Two essays deal with towns: the market towns of Darlington and Northallerton are analyzed by Christine Newman, and Miranda Threlfall-Holmes's study of Newcastle shows it emerging as a regional capital at the end of the middle ages, and providing the monks of Durham with wine. Both essays reveal aspects of the rural economy, such as the busy fifteenth-century cattle trade at Darlington, and the commercial agents who supplied Durham Priory with agricultural produce, including people based in villages such as Kirk Merrington.

Two essays are especially welcome contributions on the fluctuations in agricultural production after the Black Death. Ben Dodds has already published aspects of his work on tithe receipts, which reflect the fall in grain output. Here he compares the evidence of tithe with other documents, such as rentals and demesne accounts, and shows that together they demonstrate an initial recovery of the arable economy in the 1350s, followed later in the fourteenth century by setbacks, but then some recovery around 1410–30 before the dismal experience of the late 1430s. In parallel with Dodds's agrarian work, another research team at Durham has been looking at the colonization of the waste in county Durham, and Simon Harris presents the evidence for a contraction of arable and the abandonment of farms on the uplands between the Black Death and the late fifteenth century. A final essay, in which Harris is joined by Helen Dunsford and Brian Roberts, muses more philosophically on the landscape history of Durham, and reminds us that the ups and downs in cultivation which excite our interest in the period between 1200 and 1500 mark merely one episode in long-term settlement history – the uplands were cultivated in the Roman period as extensively as they were to be in the thirteenth century.

There are moments when these separate essays interconnect with one another. Harris notes the evidence from the tithe receipts for the abandonment of hamlets, and Liddy's gentry family, the Pollards, held a moorland farm of the type investigated by Harris. The possibility of research being illuminated by such points of contact is one of the justifications of regional history, and one hopes that more will emerge from future work. Another way of advancing understanding of regions is the use of comparison, and one appreciates that Dodds, Harris and Liddy are able to make more of their material because they are prepared to search out parallels and contrasts beyond the north-east.

CHRISTOPHER DYER
University of Leicester

CHRISTOPHER DYER, *An age of transition? Economy and society in England in the later middle ages* (OUP, 2005). x + 293 pp. 6 tables; 16 maps and figs. £35.

The chapters of this book formed the basis of the Ford lectures delivered by Christopher Dyer in the University of Oxford in Hilary Term 2001. Unbeknown to the audience at the time, sections of the chapters were being condensed into lectures at the point of delivery; a mark of Dyer's skills as an author and lecturer, and testimony to a cool head and nerves of steel. This is a book to be read by anyone with an interest in the later middle ages. The medievalist will be stimulated by the novel interpretation of the social forces for change, the modern historian will find the roots of familiar patterns, and the non-specialist will be guided through the events of this period and their significance. The language is self-consciously accessible, jargon is avoided, and technicalities are explained.

The 'age of transition' in the title provides the vehicle for an exploration of the social and economic tendencies of the period between 1250 and 1550. Dyer argues convincingly for the continuing validity of the concept of a 'transition from feudalism to capitalism' as important shifts occurred in the relationship between lords and tenants, state and subject, agriculture and industry, public and private spheres. These changes were not cyclical as the English society and economy were never the same again. Many of the trends had their roots in a much earlier period, whilst there were also links with the society and economy in the centuries after 1500. He places more emphasis than is customary on the ability of medieval people, especially the peasantry, to bring about change and overcome their problems. There is a conscious move to modify the traditional belief that decisions were made by a powerful elite and change was directed from above.

The book is firmly underpinned by research into a diverse range of different manuscript sources from over thirty archives, printed sources, and a wealth of case studies and monographs. The emphasis is upon sources that relate to the lower sectors of society, providing us with a perspective 'from the bottom-up'. The research is not confined to documents as it utilizes the evidence from archaeological investigations including a study of existing buildings. All are handled with assurance and employed as detailed examples to illustrate complex patterns and illuminate difficult conceptual themes and theoretical hypotheses.

The Introduction places the book within its broad historical context and outlines the general line of argument and interpretation which are developed in the following six chapters that formed the basis of the lectures. Chapter One presents a particular view of the period which is characterized as being flexible and varied. This 'new middle ages' went through a period of commercialization in the thirteenth century, emerged from the shocks of the fourteenth century with an enhanced capacity for change, a weakened aristocracy, a mobile and less restricted peasantry and a lively industrial and urban sector. Moreover, many features of the period, from family structures to farming methods, resembled those prevailing in the sixteenth and seventeenth centuries.

Chapter Two, 'Community and privacy', engages with the conflicting interpretations of medieval rural life as either one of individualism and private property, or of community and collective welfare and interests. Dyer argues that these could coexist, albeit with different levels of harmony, and examines the problem from the very different situations around 1300 and 1500. Various themes are explored, such as the management of common-field agriculture, enclosure, the role of lords and gentry. It is argued that many of the initiatives came from the peasants themselves.

Chapter Three, 'Authority and freedom', is concerned with the impact of lordship and the state on economic productivity. It argues that aristocratic lords were not as influential as they would have wished and the actions of the gentry did not change the economy. The role of legislation and taxation in shaping economic activity is examined. The significance of the state lay in providing a stable context for economic life to prosper. The final section examines the actions of those in social groups just below the gentry and concludes that they were independent-minded, economically-active, related to their community, affluent, and played an important part in bringing about change.

Chapter Four engages with the arguments for a consumer revolution of the eighteenth century to dispel the myth of the 'medieval void' in the history of

consumption. In doing so it demonstrates that consumption changed significantly between 1375 and 1520 with new patterns emerging in the acquisition and use of material goods which had an impact on the economy. Increased expenditure on consumer goods did not prevent investment. Emphasis is placed on the actions of farmers, artisans and entrepreneurs who financed productive enterprises, peasant investment, and general expenditure on the transport infrastructure of roads and bridges to facilitate trade.

Dyer develops the theme of participation in the market in Chapter Five. He draws our attention to the apparent paradox that in a period of recession, particularly the fifteenth century, individuals may have opportunities despite contraction in the volume of economic activity. Towns retained their relative position in the commercial system, although their populations fell. It was a mature urban system developing in sophistication and adjusting to new economic influences. Dyer warns that if historians are too preoccupied with the old institutions of charters and boroughs, which give the impression of decline, they will miss much of this new growth. In this chapter a key role is ascribed to farmers of the demesne for adapting and responding to the vagaries of the fifteenth-century market and making a success. Their activities were decisive in reorganizing agricultural production and changing the shape of the landscape.

Chapter Six, 'Work and leisure', investigates the existence of a proletariat at the end of the middle ages, and considers the nature of work and employment at this time. The author concludes that working for wages was an integral part of the medieval economy, that there was much flexibility in the manner of employment, and neither employers nor employees came from a homogeneous class. Attitudes towards employment did change as a 'work ethic' can be identified amongst wage earners who hoped to better themselves. Concepts of leisure and social security, previously considered an early modern phenomenon, were emerging in the later middle ages.

Overall, this is a book that is enjoyable to read, scholarly in its approach, and provides a view of the later middle ages from the bottom up.

MARGARET YATES
University of Reading

JOHN S. LEE, *Cambridge and its economic region, 1450–1560* (University of Hertfordshire Press, 2005). xviii + 238 pp. 31 tables; 39 figs. £35 (hbk); £18.99 (pbk).

Much has now been discovered about the hierarchies of medieval towns, and their hinterlands. The work on London's grain and fuel supply is best known, but there are a number of regional studies of towns, and on the 'spheres of influence' of market towns. John Lee's book on Cambridge expands greatly our understanding of town-country relations by taking as its example a provincial town with a population of four to five thousand in the period 1450–1560, which can be set beside published studies of Exeter in an earlier period, and of Worcester a little later. Cambridge exercised commercial domination over Cambridgeshire, and its marketing zone extended to a ring of smaller towns which lay near to the edge of the county, or even straddled the boundary, at such places at Royston, Linton and Newmarket. The pattern of towns of Cambridgeshire seems to accord with central place theory, resembling in this respect Leicestershire and western Suffolk. The pattern of marketing has persisted, as is revealed by a study cited by Lee of shopping in Cambridge in 1965.

Cambridge was not a conventional provincial town, however, because it contained a large body of clergy living in rich institutions, which demanded quantities of basic supplies of food, fuel and building materials; the wealthiest, such as King's College, consumed luxuries on a considerable scale. Other towns would occasionally be visited by a great lord's household, but at Cambridge a number of large households were permanently resident. Accordingly a proportion of the goods brought into Cambridge came from a distance, from London, the cloth making centres of the south-west, and other sources well beyond Cambridgeshire. Some of the town's everyday trade also involved contacts outside the county, particularly with Lynn, which was easily accessible by water, and with the wooded countryside of north-west Essex, as Cambridge was not well supplied with wood fuel and building timber in its immediate vicinity. By the end of the period coal was being shipped in quantity from the Tyne. The town was also associated with a peculiar institution, the Stourbridge Fair, which attracted sellers from London and overseas, and customers from the whole of eastern England. Lee gives a fascinating account of the event, and shows that unlike other great medieval fairs, Stourbridge continued until the railway age.

The town and its trade have been researched using a wide range of sources, and the results are illustrated in a series of maps. We learn about the urban social structure and occupations, the regulation of trade (which led to disputes between the town and the university), the building industry, and the flow of commodities. The ups and downs of the economy were partly influenced by the presence of the university, which was growing in size in the fifteenth century, and spending much on buildings soon after 1500. Agrarian history is not at the

forefront of Lee's agenda, but his analysis is helpful to agrarian historians in a number of ways. He shows how the town became a centre for the malt trade supplying London in the sixteenth century, and he explores the spread of saffron cultivation to the south of Cambridge. He also sheds light on the grain market, for example examining the effects of the bad harvest of 1556–7. He studies the mechanics of supply of agricultural produce, in which private treaties between farmers and large consumers tended to replace transaction in the open market.

This book began life as a thesis, and still bears some of the marks of that origin, but it is a very welcome addition to the literature which deserves to be well known and widely read. The publisher should be complimented on producing a book of this quality at such a reasonable price.

CHRISTOPHER DYER
University of Leicester

MICHAEL A. FARADAY (ed.), *Worcestershire taxes in the 1520s. The military survey and forced loans of 1522–3 and the lay subsidy of 1524–7* (Worcestershire Historical Society, New Series 19, 2003). xliv + 297 pp. £25 from Robin Whittaker, Worcestershire Record Office, County Hall, Spetchley Road, Worcester WR5 2NP.

Gradually the surviving records of the military survey of 1522 and the lay subsidy tax of 1524–5 are being made available in print, aided by the National Archives' ongoing 'E179' project designed to list fully and restore to order all the voluminous records of lay taxation in that class. Mr Faraday is a notable local historian who has worked on early Hereford probate records, written a good history of Ludlow and has previously edited the Shropshire lay subsidy returns for 1524–5, so that one approaches this volume with high expectations.

So far as the text of the documents is concerned Mr Faraday has provided what appears to be a trustworthy transcript of the originals with exhaustive indexes of surnames and places: but his subject index of eleven entries is ludicrously inadequate. There should have been full coverage of such matters as lords, stewards and parsons in the military survey and of occupational labels such as 'retainers', 'servants' and 'labourers' throughout the volume. The volume should have had a map to illustrate the coverage of both the military survey and the lay survey and, given modern methods of reproduction, I am not persuaded that 'the cost … is such … that it would be uneconomic to attempt it' (p. xl). But it is the content of the Introduction that is the most unsatisfactory feature of this volume. I accept that 'in choosing the topics to be discussed in an Introduction … an editor cannot please everyone' (p. ix). Nevertheless, members of a county history society are entitled to expect an editor to provide guidance not only on the origin and nature of the records being treated but also on how they can be used to throw light on the historical development of their own county. This fairly obviously ought to include some reference to earlier authoritative editions and studies of the records being edited, but the reader will search this volume in vain for mention of Julian Cornwall, W. G. Hoskins (apart from one footnote reference on p. xxxvi) or John Sheail, or for any reference to previous editions of the military survey and 1524–5 lay subsidy. Presumably Mr Faraday does not think their work is worthy of mention alongside his own: others may venture to differ.

What is certain is that readers will have to find out for themselves how to apply these records to their own localities, a task in which they will obtain little help from an editor whose interests, to judge from his Introduction, are mainly in constitutional history. Thus he rightly observes that 'many of the larger valuations were understated' (p. xxvii) but does not really take on board the implications of his Table 5 (p. xxiii) that the wage-earners and labourers who were supposed to be taxed in 1524–5 (and who in the view of most competent historians of Tudor England comprised at least a quarter of the population) were clearly not fully covered in Blackenhurst, Oswaldslow and Pershore hundreds (8.2 per cent, 11.7 per cent and 14.8 per cent respectively). These figures are clearly far too low, compared to Worcester City (46.0 per cent), Halfshire (24.8 – 28.9 per cent) and Doddingtree (36.1 – 40.3 per cent). To take another matter, Mr Faraday's treatment of population (p. xxxi) utterly ignores muster records, later subsidy returns (especially those of 1543–5), parish registers starting in 1538 or the 1563 diocesan census which exists for Worcester diocese and thus covers all Worcestershire apart from the far west which was in Hereford diocese.

In conclusion, Mr Faraday must be thanked for providing a reliable text of the records he has edited, but the fulfilment of his other editorial duties leaves much to be desired.

JOHN S. MOORE
Bristol

T. C. SMOUT, ALAN R. MACDONALD and FIONA WATSON, *A history of the native woodlands of Scotland, 1500–1920* (Edinburgh UP, 2004). xiii + 434 pp. 16 tables; 16 plates; 16 maps; 37 figs. £60.

Scottish woodland history is a difficult field of study. First, it is difficult to know what is or is not a wood.

Many Scots woods do not have the nice sharp edges that help the English woodland historian: they shade off into wood-pasture and grassland with trees. The written record begins late; this is why this book starts at 1500, the equivalent of beginning a play in Act IV. Detailed maps of woods are few. Many lines of evidence – ancient coppice stools and pollards, timber and underwood in ancient buildings, archaeology, woodbanks, woodland vegetation – either seldom survive or have not been investigated.

Happy the land that has a woodland historian as its Historiographer Royal! Professor Smout and his colleagues, with remarkable enterprise, have traced and interpreted the apparently meagre source material. They have used the now famous maps of Timothy Pont and the archives of noble highland families; unexpectedly, the lowlands and southern uplands seem to be less well documented. Unlike most documentary historians, they are not bound by the written record, but appreciate the critical importance of archaeological and botanical fieldwork and of understanding the properties of different trees. It is a pity that they have not made more use of pollen analysis.

The woods of Scotland have a peculiar character, driven first by the peculiar behaviour of the principal trees (especially pine and birch), second by the climate, and third by Scotland's cultural, tenurial, and economic peculiarities.

The Great Caledonian Wood, once supposed to have covered much of the highlands well into historic times, is a myth. In reality, as the authors show, woodland covered at most ten per cent of Scotland in 1600 – and even this is a stretched figure, including even sparsely tree'd grassland. By 1900 native woodland was reduced to about three per cent. This was a lower survival rate than for England but higher than for Ireland. Much of the decline, they argue, was a purely natural phenomenon: the climate and soils of the Scottish highlands, especially during the little ice age, did not allow woodland to survive for ever. Aggravating factors were steadily increasing numbers of livestock, sheep replacing cattle, and the practice of burning grouse moors, all of which hindered new trees from arising. Late in the period natural woods began to be destroyed by modern forestry.

Scottish woods were used by local people for regular supplies of timber and wood; but these were less important in a land with abundant peat and coal for fuel and access to Scandinavian timber. Better documented, and forming much of the material of the book, are commercial and industrial uses of woodland. From 1600 onwards poor or greedy lairds invited Irish and English entrepreneurs to export pine timber for houses and ships' masts, leather tanned with oak bark, iron made using oak charcoal, and that mysterious stuff of school chemistry lessons, pyroligneous acid. Time after time such people, beginning with 'the eternal optimism of half-informed outsiders', ran into unforeseen difficulties and went bankrupt after a few years – a lesson that was lost on those who, in recent times, have filled the Highlands with conifer plantations to little purpose.

Contrary to popular belief, these enterprises, during their tenure, conserved the woods and did not destroy them. Woods that were exploited are still on the map today; those not known to have been exploited are the ones that disappeared. As the authors remark of the longest-lived of the ironworks: 'Despite the immense size of the charcoal store, there was at least as much land under oakwood in Argyll when they ceased operations in 1876 as when they commenced in 1753'.

Relations with grazing are less clear. The authors claim that banks and walls around woods are no earlier than the seventeenth century, but is this merely because earlier ones are not recorded in writing? However, in the period covered by this book most woods appear to have been used as pasture, which must mean that they were sparse enough to contain edible ground vegetation. Regular encoppicement of woods on the ancient English model, keeping out cattle and sheep to allow felled trees to regenerate, was (so far as written records reveal) a late and often short-lived practice.

The prevalence of pasturage in woods invites further investigation. How effectively did different trees grow again after each felling, as they must have done, despite the presence of browsing animals? Did the preferences of cattle, sheep, or goats encourage one tree species versus another, as they do in the Mediterranean? Did attrition by browsing animals subtract the woodland herbaceous plants? Did it prevent the emergence of a distinctive, coppicing-related ground flora, like the flora of English woods before the recent proliferation of deer? Does a history of browsing explain why Highland woods are so noted for inedible mosses and liverworts, rather than flowering-plants? Historical ecology should be an experimental science, and maybe the authors or their successors will one day answer these questions.

The book is written with clarity, style, and wit (though present technology, in quite an expensive book, should have produced better illustrations). It is full of curious information. I thoroughly recommend it to ecologists, historians, and anyone liking a good story.

OLIVER RACKHAM
Corpus Christi College, Cambridge

JOHN BARNATT and TOM WILLIAMSON, *Chatsworth. A landscape history* (Windgather Press, 2005). 240 pp. 99 figs. £19.99.

This is a splendid example of what can be achieved through a combination of a systematic archaeological survey of a designed landscape and thorough documentary research into its creation and adaptation over the centuries. The beautiful and accessible setting of Chatsworth has made it the best-loved country house, grounds and park in the land and much of its story is already well-known. Indeed, members of this Society explored part of the park at our annual conference in 1995. What more, it may be wondered, is there to be discovered about its history?

In the first place – as a series of detailed maps, drawings and photographs make clear – it is now obvious that the park contains 'wall-to-wall archaeology'. As Capability Brown's park has not been ploughed for the last 250 years, the preservation of earlier features is exceptional. They range from prehistoric round barrows to holloways, rabbit warrens and extensive medieval field systems. They throw considerable light on the wider landscape history of Derbyshire, for earthworks in the surrounding countryside have been largely obliterated by subsequent phases of farming and settlement. Another major feature of Chatsworth park is the enormous number of ancient oak pollards which remain from the medieval and early post-medieval era. These 'veteran trees' rank amongst the most important groups in England.

The archaeological finds have also helped our understanding of how the landscape on both sides of the River Derwent was gradually encompassed within the grounds and park by successive generations of the Cavendish family. All the numerous earthworks and standing structures, including buildings, field boundaries and woodlands, have been plotted by detailed sketches. One can only marvel at the sheer amount of detail in the maps of the 'main historical and archaeological features' in the various divisions of the park and wonder what such a map would have been like if it had also included the 'minor' features. No-one at Chatsworth was expecting such detailed finds as these.

Much of the archaeological survey was done after consulting aerial photographs and the rich and varied collection of historical maps, paintings, prints and documents in the Chatsworth archives. The Chatsworth documents include very detailed estate accounts that recorded payments for work carried out on the house and grounds and for items purchased for them. They often reveal the exact month or year of a particular feature, but of course they are more complete and detailed for some periods than for others. The authors take care to highlight the shortcomings of their evidence and the problems of interpretation, but they provide a detailed, persuasive account of how the park and grounds developed from the modest beginnings depicted on William Senior's maps of 1617 to the classic Capability Brown landscape whose carefully-contrived views are largely intact. The overall structure of the park is much as Brown left it, though the rebuilding of Edensor as Britain's finest estate village and much of the planting on the hillside behind the house and the present network of paths and drives was largely the work of Joseph Paxton and the sixth duke in the nineteenth century.

The story of the house and grounds from Elizabethan times onwards is well-known and some of the greatest architects of their time – William Talman, Thomas Archer, James Paine and Jeffry Wyatville – made major contributions. The most important addition to our understanding of how the park and grounds were changed from the formal, French or Dutch style, shown on Kip and Knyff 's view of 1699 into the landscaped park of today is contained in Chapter Four, where evidence is gathered to argue that substantial changes were made long before Brown by William Kent. It has always been thought that the designs for improvements that Kent made while staying at Chatsworth in the 1730s were never implemented, but the estate accounts note a large amount of planting at that time and a painting of the Chatsworth landscape by Thomas Smith *c.* 1743 shows that the gardens around the house had already been much altered. In particular, Smith's painting makes clear that the smooth expanse of lawn immediately behind the house, which has always been attributed to Brown in the 1760s, was already there by about 1743, as were the winding paths and casual groupings of trees.

The authors conclude, rightly, that 'this complex, many-layered landscape works in both aesthetic and visual terms. Little seems out of place … The result is an almost unparalleled collection of features and layouts from which … one could almost tell the whole story of English, if not European, garden design'. Most of this landscape can be walked over, freely, at all times of the year. The book will add greatly to everyone's enjoyment and understanding of what they see.

DAVID HEY
University of Sheffield

A. J. GRITT and J. M. VIRGOE with C. P. BROWNRIGG (eds), *The memoranda books of Basil Thomas Eccleston, 1757–1789* (Record Society of Lancashire and Cheshire, 139 for 2001, 2004). xli + 214 pp. 11 figs. £30.

This transcription of Eccleston's memoranda books held in Lancashire Record Office at Preston provides an insight into the management of a relatively small (986

acres) estate and the life of its improving owner. Gritt and Virgoe's thoroughly competent introduction provides the necessary biographical and topographical information needed to appreciate the background of its compiler, and the local and regional contexts of south-west Lancashire. They also offer thoughts on the potential importance of some of the issues and topics which the books cover. Two detailed indexes on people and subjects allow for easy identification of relevant passages within the text. It is a job well done.

As with all sources, however, the value of these books depends on what an individual researcher wishes to study. Not surprisingly, the majority of the entries are to do with Eccleston's management of his agricultural land: relationships with tenants; the hiring of workers, including live-in servants; the nature of crops grown; the manuring and improvement of fields; crops, animals and produce. Gritt and Virgoe suggest (p. xii) that they are primarily important 'because of the amount of quantitative data that they contain on agricultural affairs'. There is certainly a lot of detail on aspects which are rarely recorded otherwise such as the weight of individual animals and the prices obtained for specific parts of the carcass; prices obtained for produce sold off estate and the amounts retained for home consumption; and the amount of seed sown on individual fields. Sales of cheese and its purchasers, for example, are recorded almost every year, allowing for the construction of a fairly comprehensive picture of conditions and prices over a thirty-year period, demonstrating a rise from around 26*s*. a hundredweight in the 1760s to nearly 38–40*s*. by the late 1780s. But, as the editors also acknowledge, the books do not systematically record everything which occurred on the estate, while the lack of specific details about the weights or ages of animals sold, or the size of fields sown or harvested, makes it difficult to assess the importance of some of the data, and in particular Eccleston's success as an improver. Eccleston's assiduity and interests also varied considerably over the period making it difficult to piece together comprehensive indices of prices or yields. In some respects, therefore, the books' value lies in illustrative detail of what was possible or what happened on specific dates or in specific places. Not all of these are strictly agricultural, but relate to matters as diverse as the rebuilding of the hall with its imported Riga timber door, the delays to mail caused by bad weather (1776), medicinal cures, the number of carol singers and Easter peace-eggers visiting in specific years – no fewer than 209 of the latter in 1767 –, and information on early methods of prospecting for coal in the area.

This, then, is not a book which can easily be assimilated or assessed at one reading. Its value lies in the diversity and eccentricity of its entries rather than its systematic analysis of agricultural trends, but it is no less important because of this.

MICHAEL WINSTANLEY
Lancaster University

STEPHEN RANDOLPH GIBBONS, *Captain Rock, night errant. The threatening letters of pre-famine Ireland, 1801–1845* (Four Courts Press, 2004). 282 pp. €75.

Ireland in the early nineteenth century was frequently characterized by contemporaries (especially those who resided in Britain) as underdeveloped, impoverished and lawless. Crime, especially agrarian crime (referred to in Ireland as 'outrages') was regarded as being especially prevalent, with landlords as the target. Many of these stereotypes have persisted and, even today, they appear in general accounts of Irish history. This fascinating book, which contains the texts of over 500 threatening letters unearthed by Stephen Randolph Gibbons mostly in the National Archives of Ireland, throws new light on Irish agrarian crime. It also provides many counterpoints to such facile generalizations. At the same time, though, what was widely referred to as the 'state of Ireland' question – in contemporary newspapers, parliamentary reports and political debates – was justifiably a source for concern, with the letters providing ample testimony of poverty, estate mismanagement, landlord indifference, and tenant resentment. The title of the book, 'Captain Rock', refers to the signature that most often appeared on the end of the letters (Gibbons identifies over 100 other pseudonyms). The use of a false name not only ensured that the author remained anonymous, it placed the threat within a wider network of agrarian agitation, thereby contributing to the belief that lawlessness was indeed widespread and widely supported.

Many of the demands made by Captain Rock in his various guises are specific and concerned with local or immediate issues – tithes, rent, food prices, evictions, religious antagonisms. The threats proffered ranged from attacks on cattle, to house burning, to assassination. The letters show less interest in regional, national or British politics, and contain surprisingly few references to contemporary politicians; even Daniel O'Connell, who dominated nationalist politics for almost three decades, achieved only two mentions. A strength of this collection is that it shows the concerns of a group within Irish society, poor agricultural labourers, that have traditionally not had a voice of their own. But as well as offering insights into the lives of working people, this collection throws light on other aspects of Irish society: the interaction between landlords and tenants; the day-to-day working of the forces of law and

order; and the government's response to Irish problems (including the use of local informers). Gibbons also suggests in the illuminating and thoughtful 43-page introduction, that the letters demonstrate that literacy was quite dispersed, even if the majority of letters indicate little formal schooling. Interestingly, the letters are written in English, the language of officialdom but not of the poor of Ireland. The letters also suggest that a moral economy existed in Ireland before the Famine, with many similarities to pre-industrial protests in Britain and other parts of Europe.

The collection ends in 1845, the year associated with the appearance of potato blight and the onset of famine in Ireland. A second volume, which examines the Famine and post-Famine period, based on this generally over-looked source, would be a welcome addition to Irish historiography.

CHRISTINE KINEALY
University of Central Lancashire

PHILIP HEATH (ed.), *Melbourne, 1820–1875. A diary of John Joseph Briggs* (Melbourne Historical Research Group in association with South Derbyshire District Council, 2005). 243 pp. Illus. £10.99.

John Joseph Briggs was of farming stock and lived at King's Newton, a village located immediately north of the small south Derbyshire town of Melbourne. Both settlements had evolved within the 3,500 acre parish of Melbourne which abuts against the River Trent to the north and the Leicestershire boundary to the east. King's Newton, overlooking the Trent floodplain, was always agricultural in function while Melbourne became more urban in character following the arrival of framework knitting towards the end of the eighteenth century and modest footware manufacture during the nineteenth. The parish population had reached about 3,500 in 1901.

Briggs was born in 1811, son of a well-to-do tenant farmer on the estate of Lord Melbourne of Melbourne Hall. He was sent away to school and then took up an apprenticeship at Bemrose printers of Derby. When ill health forced him to return to his family home at King's Newton in 1837 he became a gentleman farmer. However, he was to spend much of the rest of his life developing his interests in travel, poetry, antiquities and local and natural history. His modest range of publications, which included histories of Melbourne, poems, essays and journal and newspaper articles, enabled him to achieve some standing in the local community.

The previously unsuspected diary was recently discovered by Philip Heath in a collection of Briggs's manuscripts. The recording of events as they occurred, albeit intermittently, begins in 1845 and ends in 1875 while entries before 1845 are few and retrospective. We have therefore an extended record of observations on life in and around Melbourne from the perspective of a well-informed countryman. The entries touch upon many topics but there are a number of recurrent themes. Briggs consistently noted the progress of the seasons and the impact of weather on crops and farm work as an adjunct to which he monitored flood events on the Trent. He commented upon the growing specialization in market gardening around Melbourne favoured by the loamy soils, the impact of the cattle plague in 1866, and also illustrated and speculated upon local archaeological finds. Briggs recorded improvements in communications, not least the politics of railway projects which eventually linked Melbourne to the Midland network. He commented frequently on aspects of the lives and deaths of local personages ranging from tragic accidents to children to social gatherings of local dignitaries and the aristocracy. Local and national political events were of great interest to Briggs including the Crimean War with its days of humiliation and fasting and eventual triumphal parades.

The intrinsic interest of the Briggs diary is much enhanced by the manner of its editing. The introduction provides essential background material on the Briggs family and farm and King's Newton and Melbourne. The significance of diary entries is elaborated through numerous explanatory footnotes and, in particular, by well chosen illustrations including line drawings, photographs and sixteen colour plates. The endpaper maps of King's Newton are helpful but there is a need for a location map to clarify the internal and external relationships of Melbourne parish. In all Philip Heath and the Melbourne Historical Research Group have produced an attractively presented and priced publication. It is also commendable that the South Derbyshire District Council and the Derbyshire County Council have been able to support their enterprise.

ROGER T. DALTON
University of Derby

MICHAEL FREEMAN, *Victorians and the prehistoric. Tracks to a lost world* (Yale UP, 2004). vi + 310 pp. Illus. £25.

Although published by a university press, this is a trade book rather than an academic monograph. It is printed on heavy, glossy paper and contains many illustrations, often in colour. Its topic is the Victorians' discovery of the earth's history through geological time, with plentiful observations on the cultural significance of these often disturbing revelations. In one sense, I was surprised by the book's contents – from the title I had expected something focused mainly on the Victorians' discovery of prehistoric archaeology, which opened up

the whole idea of a primitive 'stone age' preceding recorded history. But Freeman's definition of prehistory is restricted to the pre-human past, with the exception of the one event which was traditionally taken to link earth and human history, the Noachian deluge.

The book offers detailed studies of many aspects of the history of geology, palaeontology and evolution theory. It is particularly strong on charting the literary and artistic responses to the discovery that the earth's structure was best understood as something shaped by a long history of geological and biological change. Freeman has already written on railways and the Victorian imagination, and here we see the role played by railway cuttings in revealing the earth's internal structure. There are many other fascinating insights into the ways in which the Victorians' view of landscape was transformed by the new discoveries, and this, I presume, will be the book's chief interest to readers concerned with agricultural history. Some themes are more original than others – the role of natural history museums as 'cathedrals of science', for instance, has already been widely explored by other scholars.

My own approach to the book, however, is through an interest in the history of geology and evolution theory, and from this perspective it is less satisfying. Freeman is certainly in command of the primary literature in these fields, at least as far as the 1860s, and he has made a serious attempt to grapple with some of the modern secondary literature. But he is much less secure on the late-Victorian period, and thus misses some of the most important reinterpretations offered by modern historians of science. All too often, his approach to the issues is old-fashioned, and succeeds only in perpetuating myths that historians of science have been trying to deconstruct for decades. Geology is still focused on the old heroes, James Hutton and Charles Lyell – there is little to show that it was the rival catastrophists who articulated the developmental model of earth history which dominated Victorian thought. And the Darwinian revolution is still presented very much in terms of the challenge of materialism to traditional religion. Freeman shows little interest in the ways in which late nineteenth-century scientists (including the architects of the emerging human sciences) developed alternatives to the Darwinian theory which would preserve a teleological view of history in which the human race emerged as the final goal of life's development. Noah's flood may have still been a serious issue in the 1830s, but by the 1870s it had been marginalized by a model of biological, cultural and social progress which linked the life sciences with anthropology and archaeology into a powerful evolutionary paradigm.

I found this book simultaneously fascinating and frustrating. It helped me to understand some of the wider interactions of the earth sciences with Victorian visual culture, but it seemed out of touch with many of the latest interpretations offered by historians of science dealing with this and related areas of study. In the end, I suspect that if Freeman had (as his title implies) dealt also with the emergence of an evolutionary view of human prehistory, he would have produced a better-balanced account, at least for the later Victorian period.

PETER J. BOWLER
Queen's University, Belfast

KEITH GRIEVES, NICK MANSFIELD, GEORGE SHEERAN, WINIFRED STOKES, MELANIE TEBBUTT, ANDREW WALKER and JOHN WALTON, *Rural and urban encounters in the nineteenth and twentieth centuries: regional perspectives* (CORAL, 2004). 131 pp. £7.50.

This collection of papers originated in a conference organized under the umbrella of the Conference of Regional and Local Historians in 2002. It serves as a salutary reminder that the encounters and mutual perceptions of town and country can take many and various forms.

Two of the papers highlight the connection between industrial activity and the countryside in the late eighteenth and early nineteenth centuries. Stokes draws attention to the personal links between agricultural improvement and industrial development in south Durham. An example was that of Christopher Mason, an estate owner and agricultural improver, who sold his prestigious Shorthorn cattle herd and ventured into railway investment after the well-publicized success of the Stockton and Darlington railway. Sheeran's paper presents a different face of the countryside/industry symbiosis in his analysis of contemporary northern landscape paintings. These are here interpreted as evidence of cultural disapproval; George Walker's 'Factory Children' of 1814 shows the children as 'expressionless and wizened, old before their time'. But the aristocratic interpretation of landscape as cultural harmony was restored by the unknown artist who depicted Sir Titus Salt's Saltaire Mills, newly relocated to the Aire valley in 1853. He placed them centre-stage, as a new version of the aristocratic country house, adapted to the new world of factory industry.

Moving on in time, Walker analyzes the social evolution of the Lincolnshire show, as it grew in size from its inauguration in 1869. Its success drew increasing numbers of visitors, and a rising proportion of industrial workers, as Lincoln itself became the national centre for

the manufacture of farm machinery. This led the organizers to anticipate problems of social order, and the adoption of socially segregationist policies in ticketing, seating and refreshments. Perhaps these were unnecessary; at least the show did not suffer the level of public concern raised by the more boisterous Lincoln April horse fair.

Tebbutt and Walton consider the impact of the open spaces of the northern uplands on the urban and on the rural imagination. Tebbutt takes the case of the north Derbyshire moorland area known as the Dark Peak, and examines the responses of the urban walkers who used it. She shows the mixture of psychological responses evoked by rambling on the moor, foremost of which was the desire for mental and physical self-improvement. The obverse of this was a sense of disgust with the overcrowded and unhealthy town, where healthy manliness was under siege from its environment. Walton considers the debate which resulted from the decision, enshrined in the National Parks and Countryside Act of 1949, to form a new national park in the North York Moors. Opposition to the establishment of the park was intense, continuous and vociferous. Walton shows elegantly the extreme and unwavering distrust to any proposals emanating from the towns; the opposition caricatured the plan as an urban rape of the countryside, in entire neglect of the available evidence. Continuing resentment by rural dwellers of any plan originating in the towns can be traced in the recent activity of the Countryside Alliance and in the controversy concerning hunting with dogs.

Finally, the papers by Grieves and Mansfield centre on the period of the First World War. Grieves looks at the perspectives on the conflict revealed by the (largely middle-class) diary keepers and epistolary writers in rural areas, such as the Rev Andrew Clark of Great Leighs in Essex. Here, there was a sense that rural areas were rather marginalized, not being kept well informed of the war's progress by the authorities. Some comfort was to be obtained by an emphasis on the eternal round of nature, but the sense of rural isolation and vulnerability was dramatically heightened by the Zeppelin raids, which must have been terrifying on a dark night, as the behemoths roared thunderously overhead (although doing little damage). When rural dwellers ventured into town, they were repelled by the frenetic activity, inflation and conspicuous consumption, although the imposition of food rationing led to the restoration of town-country links, as urban dwellers looked to their country contacts for supplies. Mansfield discusses the curious case of agricultural trades unionism in the Welsh Marches of Shropshire and neighbouring counties in the 1920s. Here the central point is the complete failure of attempts at unionization after its brief flowering in 1917–20. There was an institutional weakness, since the two major unions were bitter rivals, but at bottom efforts to unionize were thwarted by the conservatism of the labourer and the strong paternalism of the farmers and estate owners. Newly-formed organizations – the Women's Institute, Young Farmers' Clubs, and the British Legion – served to underpin the conservative cultural consensus. There is a sense here of unionism as an urban export, finding no roots in the profoundly rural Marches.

Overall, these papers serve as a salutary reminder that relations between town and country are always a nuanced affair, and that simple dichotomies are of little analytical value. This is not to say that simple models of town-country antagonism do not continue to operate in public and private discourse to this day, but that they are continually mediated by the course of economic evolution and the varying fortunes of interest groups.

PETER DEWEY
Royal Holloway, University of London

ABIGAIL WOODS, *A manufactured plague? The history of foot and mouth disease in Britain* (Earthscan, 2004). xvi + 208 pp. 16 plates. £19.99.

The first recorded outbreak of foot and mouth disease (FMD) in Britain began in August 1839. It continued to spread until the end of 1841, but never disappeared completely, and there were several further waves of infection, each lasting a year or two, through to the 1860s. It began to be accepted as an unpleasant, unfortunate, but unavoidable feature of farming life that had affected almost every parish in the country at one time or another. Animals recovered from it, and farmers and dealers continued to take them to market. At big markets such as Smithfield the floor sweepers filled baskets with the shed hooves of infected animals. The contrast with the 2001 FMD outbreak, in which many of the millions of animals that died were themselves probably uninfected, but happened to be within three kilometres of an infected place, could hardly be greater. This book explains how the change came about.

It was, Dr Woods argues, largely an accidental creation of the nineteenth century. The symptoms of FMD appear to have been more severe in more highly productive pedigree animals, and aristocratic breeders co-operated with protectionist Tories to sponsor the 1864 Cattle Diseases Prevention Bill, which was withdrawn in the face of opposition from Liberal free traders and the meat trade. But an outbreak of cattle plague in the following year led eventually to the 1869 Contagious Diseases of Animals Act. It was this Act, and

its successors up to 1884, that produced, according to Dr Woods, the widespread perception of FMD as a dangerous plague rather than a common disease. Stricter controls produced a greater awareness of the prevalence of FMD and its consequent cost and contagiousness. They also had a greater impact outside the farm gate through the bringing about of cancellation of markets and fairs. At the same time, the rise of refrigeration produced a dead meat trade, and so reduced the fear of meat shortages caused by controls on the import of live animals. In the years of freedom from infection following the 1884 Act, familiarity with FMD was replaced by fear of the unknown. And finally, the bans imposed on imports from countries with FMD by the USA, Canada, and Australia would have had no impact on commercial producers in the UK, but significant effects for pedigree breeders attempting to export breeding stock to those countries. Thus when FMD reappeared in 1892 it was met by a slaughter policy, this time accompanied by compensation for animals lost.

The subsequent history of FMD in the UK is about the maintenance of this policy in the face of opposition from foreign suppliers, scientific controversies over the epidemiology of the disease, and the development of effective vaccines. It involves a series of official enquiries, the perception of pedigree exports as a sign of national superiority, 'the "spin", subterfuge and scientific manipulation that characterized the British government's response to the disease threat' (p. 53) in the interwar years, especially in relation to Irish and Anglo-Argentinean trade, the perennial problem of pig swill, offensive and defensive germ warfare, and the varying powers and influences of civil servants and politicians in the Ministry of Agriculture, the veterinary, medical and scientific professions, the meat trade, and pedigree livestock breeders. The result is a rich mixture of political, scientific and agricultural history.

In part this is history as polemic. Dr Woods is clearly unconvinced of the value of the slaughter policy, and sets out its detailed history to demonstrate that it was by no means the only possible response in the UK, just as it was inconceivable, until recently, in the different circumstances of continental Europe. In consequence it raises some interesting questions about the role of history, and the extent to which it can effectively contribute to what is clearly an ongoing policy debate. But it is more than this. It is also an excellent example of the sort of history of science and technology that tries to go beyond simple explanations of how initial misconceptions were replaced by present enlightenment as a result of the heroic efforts of the pioneers. In an age when books often become too long for their own good this one is admirably short – 150 pages of text and another fifty or so of notes and bibliography – but, ironically, it might with advantage have been longer, to set its discussion in the context of this expanding science and technology history. Similarly, given the nature of her polemic, it would have been interesting to have had more comparative material: on FMD in continental Europe, for example, or FMD compared with leprosy, which might be seen as a manufactured human plague, or with salmonella, which might perhaps have been treated by slaughter, but wasn't.

PAUL BRASSLEY
University of Plymouth

JONATHAN BELL, *Ulster farming families, 1930–1960* (Ulster Historical Foundation in association with the Ulster Folk and Transport Museum, 2005). 132 pp. Illus. £9.99.

This book, aimed at non-specialists, enriches our understanding of rural society in twentieth-century Ulster, illuminating not only its agricultural economy, but also such themes as rural industry and gender relations. Bell presents oral history as a rich source for the reconstruction of rural life in Ulster between the 1930s and the 1960s. In an introduction and useful prologue, he considers how to navigate oral sources, and argues for the essential value of this material. The text is complemented by a good range of photographs, including many of the volume's subjects. Bell often allows them to speak for themselves, and, as is often the case in such exercises, silence is as meaningful as the spoken word. Surprisingly, given the tumultuous events encompassed by both the period under consideration and the later timeframe in which the oral narratives were recorded, there are only oblique references to rural sectarianism (a curiosity that Bell notes in his introductory remarks). For insight into that feature of Irish rural society, readers will have to consult the work of other scholars, including Rosemary Harris, whose classic *Prejudice and tolerance in Ulster* is complemented by this book. Equally striking, the border is suppressed in this survey of a province that straddles two states – a curious matter, as one might expect divergent experiences in the Free State/Irish Republic and Northern Ireland, especially during wartime, to be foregrounded in memories of rural life, or in Bell's accompanying commentary. The salience of this silence demands exposition.

As the latest in a number of publications by smaller presses highlighting sources for the study of rural Irish history, this book will find a place on shelves besides such works as James Morrissey (ed.), *On the verge of want*. It should invite its audience to contemplate the value of oral history, and perhaps spur new research.

Bell sketches a range of themes ripe for further investigation – the uneven extent of mechanization on farms, divergent systems of farm labour, changing features of rural sociability, and intertwined relations of gender and authority on the farm. The transcribed oral narratives that he interweaves with his analysis of rural change are highly engaging. There is a strong emphasis on the variety of the subjects' experiences, influenced among other things by gender and the size and location of farmholdings. They resist even tentative generalization about rural Ulster's encounters with what Bell characterizes as the forces of 'modernization' (in particular farm technology and state intervention). The narratives suggest, with great colour, another powerful influence at work in the shaping of such experiences – individual personalities. The personal interactions detailed here – between family members, farmers, neighbours, workers and agents of the state – are rich in detail and nuance.

The concluding section offers a lucid discussion of oral history (largely culled from Gaynor Kavanagh's *Dream spaces: memory and the museum*), but this study is largely a selection of narratives assembled to highlight experiences as they are recounted in later life. Some scholars may find the archive from which these cases were selected fertile terrain for the theorizing of memory, but Bell asserts its value for the archaeology of a near-past which, he asserts optimistically, is indeed 'knowable'. Regardless of the purposes to which these voices are marshalled, their vividness (when describing, for instance, how rural families in Northern Ireland circumvented wartime rationing), is indisputable. This book may have benefited from a short bibliography, as it contains only a limited number of footnotes. Some readers may also fault Bell for being unreflective about the nature of his own project, seeing it as a window onto the every-day life of diverse rural people, rather than a complex series of layered narratives, including his own, giving voice to a heavily structured interpretation of the past. But by including the reflections of such people as the peripatetic farm labourer James Ennis and the farming sisters Isabel Lyons and Dolly McRoberts (whose experiences belie notions of immutable sexual divisions in farm labour), Jonathan Bell draws attention to narratives that have much to contribute to ongoing scholarly fieldwork in rural Ireland.

K. J. JAMES
University of Guelph

COLIN PEARSE, *The whitefaced drift of Dartmoor's 'prapper' sheep: commemorating the fiftieth anniversary of the Whitefaced Dartmoor Sheep Breeders' Association* (The Author, 2004). xl + 367 pp. Illus. £25 incl. p & p from the author, Barramoor Farm, North Bovey, Newton Abbot, Devon TQ13 8RP.

The Whitefaced Dartmoor is not one of the better-known breeds of sheep. Indeed, the Rural History Bibliography had no entry specifically on the breed until this book came along, and neither does the breed feature often in general books on sheep and sheep breeding. It is now regarded as one of the rare breeds.

It is a breed whose numbers are small, with no more than thirty registered flocks. It has its origins among the first sheep to withstand the rigours of life on Dartmoor, although its modern form has been established only during the last 150 years or so. A breed association was not established until 1951, brought together in defence of a breed that had experienced several decades of decline. Other breeds, such as the Scotch Blackface, and crosses of Border Leicester, Suffolk and other types had been introduced into Dartmoor farming especially during the 1920s and 1930s, pushing the Whitefaced Dartmoor back.

In keeping together to maintain the breed, the founders of the Whitefaced Dartmoor Sheep Breeders' Association and their successors have proved about as hardy as the sheep themselves, and it is in celebration of the first half century of the association's existence that this book has been produced.

The book is devoted to the men and women – the farmers, their families and the flockmasters – who have been responsible for upholding the Whitefaced Dartmoor tradition during the twentieth century. Their reminiscences and records of their flocks, successes at shows and sales, and aspects of farming life on Dartmoor form the bulk of the text. After a wide-ranging introductory chapter that seeks to set the sheep farming of Dartmoor, and the Whitefaced sheep in particular, into a historical and geographical context, 329 pages are devoted to these people, presented family by family. It is a substantial body of oral history, interspersed with other material. Although much of the text would have benefited from a stronger editorial hand, and an index would have been helpful, there is much raw material here for the historians of farming on Dartmoor in the twentieth century.

JONATHAN BROWN
University of Reading

MICHAEL CLAYTON, *Endangered species. Foxhunting – the history, the passion and the fight for survival* (Shrewsbury: Swan Hill Press, 2004). xvi + 316 pp. Illus. £25.

Michael Clayton is uniquely placed to write the history of late twentieth-century foxhunting. Having taken up hunting in his teens, as he tells us in this book, part history, part memoir, he began a career in print journalism, made the leap to television and then from television news reporting for the BBC to the editorship of *Horse and Hound* in 1973, which he also served as its hunting correspondent, Foxford. This way Clayton found the perfect combination of career and hobby. He claims to have hunted with 200 packs at home and abroad (and on expenses too!). His previous books have established him as the leading commentator on foxhunting over the past thirty years.

This book falls into three parts. The first four chapters offer an account of hunting in the twentieth century. The middle chapters are more thematic. Chapters Five and Six discuss the hound and horse respectively. Chapter Seven offers an account of some huntsmen, past and present, Eight discusses hunting abroad. Chapter Nine is really a memoir of Clayton's time in the field as both a young man and as Foxford, and here one suspects some reworking of his clippings. Chapter Ten represents a change of gear and forms the third part. It offers an account of successive attempts to legislate hunting with dogs out of existence, taking the story to the passage of the 2004 bill and the illegalization of hunting in at least its traditional form from 18 February 2005. Clayton of course wrote too soon to know of the failure (so far) of the legal challenges to the act, but equally the common agreement that the act has – so far – failed in its purpose of suppressing foxhunting. Nor could he know that the leader of the Conservative party elected at the end of 2005 had hunted and was reported to be sympathetic to hunting. The story is plainly not over yet.

Clayton's book comes with glowing testimonies from *The Field*, *Country Life* and the *Daily Mail*. It contains much useful information, but given his vantage point over the past thirty years as an observer and participant, the book – shot through as it is with nostalgia, valedictory comment and uncertainty about what will happen – is a disappointment. It is a journalist's book – short snappy paragraphs, occasional good jokes, a tendency to mention everyone – but no inside stories, no revelations of personality clashes, of the lobbying of ministers – not even the odd revelation on who was sleeping with whom (although he quotes the adage that a mistress was 'something between a Master and a mattress', p. 86). Occasionally it is a little vague – about dates for instance – which suggests that Clayton is perhaps writing from memory rather than his files. It lacks sociological observation. Was the field as socially wide as claimed? Did it change over time? Who were the MFH as the supply of men and women with private incomes ran dry? Clayton tells us that Foxford was criticized for writing too much about Leicestershire: 'I pointed out that newspapers gave far more space to Arsenal than minor Third Division clubs' (p. 196). Something of the same criticism can be made of this book which, to me at least, has more to say about the cream of the hunting fraternity than the problems of the socially non-U farmers' hunts. Where Clayton does lift his guard a little and offer pithy opinions is when he displays sympathy with those figures who realized the need for the sport to raise its public profile, dispel its aristocratic and landholding image, and counter the drip of anti-field sports propaganda. And he repeats criticisms (which he has made elsewhere) of the Quorn's conduct in the digging-out scandal of 1991. One wonders whether Clayton might yet write his memoirs and tell us more about the internal politics of hunting as it came under pressure from the anti-field sports lobbies.

As a book by a leading practitioner written with other members of the hunting fraternity in mind, the book will doubtless be enjoyed by many and achieve a wide circulation. Rural historians will find it to be an interesting source with some good leads to be followed up rather than the definitive last word. We lack an academic study of any twentieth-century field sport despite the fact that for long periods, sporting uses of the countryside have plainly been a significant factor in determining land use (this can perhaps be seen more plainly now that the post-war productivist revolution has run its course) and public attitudes to field sports have coloured larger attitudes to the countryside, farmers and farming. Indeed, to make a political point, one feels that since 1997 the smoke generated by pro- and anti-hunting lobbies has often disguised the lack of real thinking about other rural issues. I have already argued that foxhunting (and field sports) is an area in which rural historians should have something to say. Until they rise to that challenge, Clayton is as good as we have.

R. W. HOYLE
University of Reading

LAWRENCE GARNER, *Dry stone walls* (Shire, Second edition 2005). 40 pp. £4.50; TOM WILLIAMSON, *The archaeology of rabbit warrens* (Shire, 2006). 72 pp. £5.99.

In this second edition of his earlier Shire volume, Lawrence Garner offers a comprehensive and beautifully-illustrated survey of the craft of the dry stone waller

whose works, fascinating in their variety and charm, captivate the traveller through Britain. Gwynedd or Gloucestershire, Sutherland or Derby, Yorkshire or County Down, the regional and local variation of wall construction, dependent upon both geological and agricultural considerations, cannot fail to delight. With enthusiasm and learning tempered by long practical experience, Garner outlines the peculiarities of walling materials and the practical problems involved in their utilization in different parts of the country. While dating will always remain a problem, he discusses the earlier, rather crude walls whose origins probably lay in early clearance and moves us quickly on to a consideration of the enclosures of the eighteenth and nineteenth centuries constructed by specialist craftsmen. In so doing he introduces some splendid technical terms which may be familiar to readers of this *Review* possessed of a more esoteric vocabulary range than myself. But I somehow doubt that many of my readers would identify a 'cripple', 'lunky' or 'smoot' as a hole at the bottom of a wall by which sheep gain access to the adjoining field!

Although Lawrence Garner admires the magnificent mountain walls of Gwynedd, he is less than enthusiastic about kindred enclosures in the south of Wales where building was more 'optimistic and intuitive than skilful' and where the limited use of throughstones and coping was to be deplored. The problem, of course, is that in much of Wales south of Machynlleth there is little good walling stone and for this reason the earth and stone bank topped with a quickset hedge is the main form of enclosure. If Mr Garner, in his capacity as director of the Dry Stone Walling Association, would come to Ceredigion and show me how to build a half-decent wall with our local shale and rounded conglomerate I will be in his debt! A great deal of interest is currently being shown in the restoration of derelict stone walls across the land and thanks to the efforts of bodies like the Dry Stone Walling Association and the British Trust for Conservation Volunteers the number of people receiving training in the craft is on the increase. I suspect that as environmental imperatives become of over-riding importance their skills will be increasingly required, and in that case the dedication of men like Lawrence Garner towards the preservation of the appropriate craft skills will be amply justified.

I would not be in the least surprised to learn that the versatile Tom Williamson builds a mean stone wall. Even a cursory review of the last thirty years of rural literature suggests that there is little to which this historian, archaeologist and smallholder is not prepared to turn his hand, usually to excellent effect. On this occasion he focuses his attention on that rather disagreeable mammal, the rabbit, reintroduced to this country by the Normans. More especially he is interested in the rabbit warren and the two thousand or so recorded pillow mounds, prominent features of the warrens from medieval times. To the confusion of some archaeologists who have interpreted them as neolithic burial structures, pillow mounds, rectangular, square, polygonal or 'V' shaped, were an important element of the landscape before the eighteenth century when agricultural developments allowed the cultivation of land occupied by the vast warrens. Williamson offers detailed descriptions both of the distribution and construction of surviving pillow mounds and of the embankments, fences, walls and ditches enclosing the warrens themselves. While some were of simple dump construction from spoil dug from the surrounding ditch, others were made of material brought from afar, while others yet, like those in the Welsh uplands, comprised carefully elaborated stone-capped artificial burrows cut into the ground surface below the mound. A good warrener would ensure above all that the pillow mound remained dry since rabbits will not tolerate wet conditions, and accordingly every effort was made to retain sloping sides and to maintain regular coverage of the upper surface by throwing material from the surrounding ditch to the top of the mound.

Design and construction of mounds also had to take into account the need to catch the inmates at appropriate times of the year and Williamson discusses the various combinations of dogs, ferrets, nets and pit and tip traps used for this purpose. As with his descriptions of vermin traps and the operational minutiae of the warren, Williamson's text is admirably clear, lavishly illustrated, succinct and of abiding interest. My only quibble lies with his section on the few surviving warreners' 'lodges' where warreners lived and stored their carcases, skins, nets, traps and other paraphernalia. I wonder whether it is always right to assume that merely because a contemporary farmhouse or pub close to a former warren is called a 'lodge' that it was necessarily the lodging of the warrener. Take the case of Thomas Tresham's outstanding late sixteenth century folly, the Triangular Lodge near Rushton Hall in Northamptonshire. On the grounds that this astonishing building, a profound and esoteric meditation on the Trinity, is mentioned as 'warrener's' lodge in a set of estate accounts, Williamson assumes that it served that vulgar function. He may, of course, be right. Yet, having played in that spooky folly as a child and been brought up in the belief that Tresham and his pals hatched the Gunpowder Plot within its walls, I profoundly hope that he is wrong!

R. J. MOORE-COLYER
University of Wales, Aberystwyth

TOM WILLIAMSON, *Sandlands: The Suffolk coast and heaths* (Windgather Press 2005). 164 pp. 72 figs. £16.99.

This book is simply riveting and should be required reading for anyone involved with the conservation of the landscape. Tom Williamson, now the acknowledged expert on this type of environmental study, writes with passion and directness, drawing together research funded variously by the Suffolk Coast and Heaths AONB, English Heritage and Suffolk County Council. The result is a most attractive and well-illustrated publication with appeal for both academic and general readers. Of particular note are the maps – past and present – which illustrate the receding coastline, the contraction of coastal marshes, disappearing heaths, changing settlement patterns and the planting of woodland, all dominant features of the Sandlands, an important Area of Outstanding National Beauty in overfarmed and increasingly threatened East Anglia.

What distinguishes the book is the format adopted by Williamson. Rather than follow the traditional chronological approach, he treats aspects of the countryside thematically. In this way, he is able fully to explore the distinctive character of the marshes, heaths, fields, settlements and the coast in turn. He provides the necessary chronological framework in the introduction, 'History and the environment', starting with a typically surefooted description of the origins and nature of the district; the section on early settlers carries unusual conviction, bringing to life a period mysterious to all but the specialist. Their farming activities, with precise detail on the destructiveness of early farm tools, lead us to consider the long term interaction – for good and evil – between man and his environment. This is the overriding theme. He reminds us that the landscape we see today is very much the creation of the period of agricultural improvement and prosperity of the eighteenth and nineteenth centuries, when field patterns were reorganized, settlements built, plantations established and marshes drained. Williamson does not ignore the cultural and the romantic: landscapes are more than by-products of economic and social activities, they live in the imagination. But his primary aim is to look beyond the aesthetic appeal and understand the forces and influences which moulded this unique landscape.

Having set the scene, Williamson turns to his five thematic chapters. 'The coastal wetlands' starts with useful definitions of different types of fen and marsh, the flora and fauna associated with them, and the part they played in rural economy, providing food, salt, fuel and building materials. For centuries, man has tried to improve this valuable resource by reclaiming the salt marshes for grazing, and later by more complex drainage schemes, involving the latest technology of the nineteenth century. The task was never easy and from the earliest times required co-operation between landowners and tenants to build and maintain embankments, dykes, sluices and walls; sometimes the spirit of collaboration was not forthcoming, particularly when areas of common marsh were concerned. Williamson carefully takes us through this intricate and dramatic story, using maps, documents, archaeology and aerial photography, showing how the efforts of our forebears shaped and reshaped the wetlands. We are left marvelling at their ingenuity and determination, but despairing at the lack of sensitivity shown in more recent years. Today, only a tiny fraction of the marshes survive, with the vast majority under the plough or chemically-farmed grassland. A depressingly consistent theme emerges of wholesale destruction of fragile landscapes in the second half of the twentieth century, with conservation bodies struggling to reverse the tide.

The story of 'The heaths' follows a similar pattern of change and development in response to man's needs, descending into neglect and decline in the twentieth century, but here the outlook is more promising as several initiatives start to bear fruit. Williamson's description of the ecology and management of the heaths over the centuries helps to explain why it is a simpler task than restoring marshland. These chapters illuminate, in the most graphic and informed way, the complexities facing the conservationists and the absolute need to support their endeavours.

The two chapters on 'Settlements, fields and boundaries' and 'Woods, parks and plantations' cover the more familiar ground we associate with Williamson and his earlier books; they provide the backdrop of 'normal' landscape and comfortable everyday life. Drama returns in the final chapter on 'The landscape of the coast'; this stretch boasts some of the most spectacular examples of coastal erosion in the country with towns falling over the soft cliffs, the formation of long shingle spits, the silting up of rivers and ports cut off from the sea. We are left in no doubt that the remorseless power of the sea has been, and with global warming is likely to remain, the principal influence creating the special quality and character of the Sandlands.

ELIZABETH GRIFFITHS
University of Exeter

ROBIN STANES, *Old farming days. Life on the land in Devon and Cornwall* (Tiverton: Halsgrove, 2005). 160 pp. Illus. £19.99.

This handsome and lavishly-illustrated volume is essentially an updated version of Stanes' *The old farm* which appeared in 1990. While it could so easily have been yet

another of those wistfully nostalgic, maundering and rather dreary accounts of 'the old days', it is in fact a thoughtful, detailed and unsentimental review of rural life in the south-west between the seventeenth and twentieth centuries. There are the usual descriptions of crops and animals, food and drink, haytime and harvest and the evolution of local vernacular architecture, along with a close examination of the hearthside culture of south-west Britain with its periodic feasts and festivals. Particularly impressive is the lengthy section on those vast and occasionally enigmatic Devon banks and the names of the fields they enclose. As Stanes is careful to point out, from a farming perspective Devon and Cornwall were rather different from many other parts of the country. A combination of early enclosure and the availability of ample upland common grazing gave free rein (within the limitations of their leases) to farmers to develop husbandry systems which eliminated the need for wasteful fallow courses. Hence the alternate husbandry, rotational farming and water meadows which so impressed Oliver Cromwell that he declared the farming of Devon and Cornwall to be the best in the land. If some elements of Devonian agriculture, including 'paring and burning' and various aspects of local mixed farming found critics among nineteenth-century advocates of the Norfolk four-course arrangement, the system was sufficiently robust and flexible to allow most farmers from the south-west to ride out the depression of the 1880s and 1890s while many of their detractors went bankrupt.

As a scholar and sometime farmer himself, Stanes writes very knowledgeably on the social side of the rural world: of kinship, family and inheritance; of marriage, society and religion, and of the darker side of village life: the feuds, the 'rough music', the abuse of witches and the 'disappearance' of unpopular folk. Although the absence of a clear chronological framework sometimes makes it difficult to tell whether we are reading of the 1650s or the 1950s, this is, to my way of thinking, the most stimulating section of Stanes' book. I could not help reflecting, as I read of the 'fun' at haymaking and the communal nature of much of the work of the fields that for some people rural life was, in virtually all respects, beastly and brutish. Apart from the dreary and back-breaking labour involved in the growing season (endless hoeing and singling row crops, 'roguing' cereals, carting muck), at harvest (thistles and yet more thistles) and threshing in the winter (the horrors of rats in those corn stacks, the muscle-wrenching business of handling 18 stone sacks of wheat and the wheeziness engendered by fungal spores), there was the regular inhumanity of man to man. To be sure, life in the fields as a boy could be great fun if you didn't *have* to be there, as in my own case where the majority of the day was spent wandering around with a gun potting the odd rabbit. But if you *had* to labour in those fields and were slightly out of the ordinary; a shade eccentric perhaps, or even female, life could be hellish. As a boy in the late 1950s I well remember the pleasure taken by my father's men in taunting an epileptic casual labourer until he had a fit. Meanwhile, the mentally feeble residents of my Northamptonshire village (and they were in plentiful supply) were considered quite fair game by those who would probably have been at the front of the crowd at a jolly seventeenth-century witch burning! Bullying, incest and physical and sexual abuse, to say nothing of bestiality and deplorable cruelty to animals were commonplace in the 'innocent' rural England of my childhood. Robin Stanes quite rightly emphasizes the many positive virtues of rural life which, after all were the norm. Or were they? Perhaps the time has come for the oral historians to capture the realities of the rural world in the first two post-war decades before it is too late. In the meantime, as the environmentalists moan in their urban drawing rooms, I shall continue to rejoice in the products of Fisons, ICI and Monsanto, those illustrious eliminators of plant and animal disease, facilitators of an easier life, and indefatigable destroyers of thistles and poppies, whose efforts fuelled the remarkable agricultural revolution of the 1950s and 1960s.

R. J. MOORE-COLYER
University of Wales, Aberystwyth

Elsewhere and General

RICHARD W. UNGER, *Beer in the middle ages and the renaissance* (University of Pennsylvania Press, 2004). xvii + 319 pp. 12 tables; 22 illus. £29.50.

In *Beer in the middle ages and the renaissance*, Richard Unger sets out to explore the production and consumption of beer during pre-modern times in northern and western Europe, the region where beer was, and often remains, the preferred drink. During that period, 'beer was a necessity, a part of life, a drink for everyone of any age or status, and a beverage for all times of the day from breakfast to dinner and into the evening' [p. xiii]. As such, it was much prized as a source of nutrition, widely regarded as a healthy beverage when drinking water was not, and consumed only incidentally for its intoxicating effects. Indeed, Unger contrasts beer's intimate association with subsistence in earlier times with its close modern association with primarily recreation and intoxication, especially revolving around sporting events and university life.

After brief introductory remarks about beer production in ancient times, Unger quickly moves on to the

medieval and early modern periods. Most of the book is dedicated to tracing the development of brewing from the early middle ages to the seventeenth century, by which time it had become integral to a complex and prosperous commercial economy. As an aid to understanding such development, Unger suggests that it went through stages similar to those identified by Roman historian and archaeologist, D. P. S. Peacock, in his study of the developmental stages of pottery production. Accordingly, Unger identifies six stages in the development of brewing, ranging from domestic production and household industry through individual and concentrated workshop production to manufactory- and factory-based commercial production. Only the last stage, factory-based commercial production, associated with the industrial revolution and massive production scales, occurred after the period Unger considers. While there was a chronological sequence to these stages of development, they did not occur simultaneously in all places. In fact, he says, by the end of the period in question, all stages still could be found in some place or another. Though these stages were not synchronous, they did mark increments in the scale of production. Even so, until the seventeenth century, production levels remained relatively small, the largest perhaps on the scale of microbreweries today.

The most significant change to beer production during the Middle Ages, according to Unger, was the gradual introduction and eventual domination of hops over other flavouring and preserving agents in the brewing process. While a number of large monasteries apparently made some beer with hops from the ninth century onward, it was the brewers of Hamburg, Bremen, and other cities of north Germany who made it commonplace after 1200. Until then, most beer was flavoured and preserved by mixtures of herbs known collectively as *gruit*, usually including leaves of bog myrtle or wild rosemary and one or two additional herbs, but varying greatly from one place to another. *Gruit* continued to be the preferred additive for many: consumers because of its familiar flavours; brewers because it worked with known methods and equipment; rulers because they taxed it and derived considerable income from it. Still, hops possessed one attribute that eventually permitted it to win out over *gruit*, its enhanced preservative qualities, which allowed hopped beer to become a reliable and lucrative export product. In short, hops gave beer a longer 'shelf life'. As a result, the use of hops in brewing began to predominate in the increasingly concentrated workshops of north Germany during the thirteenth century, in Holland during the fourteenth century, in the rest of the Low Countries during the fifteenth century, and in England and elsewhere after 1500.

Besides the changes in beer production associated with the adoption of hops, Unger also discusses changes over time in the types of grains used in brewing, usually combinations of wheat, oats, and barley, the kinds of equipment used, the frequency of brewing, and many other aspects of beer production. He also pays attention to what sorts of people brewed, how brewers organized their workplaces, and what organizations they formed in support of their trade. Further, Unger includes extensive discussions of the importance of beer trade in the late-medieval and early modern commercial economy. In addition, he examines the role of beer, as well as its ingredients, as a source of tax revenue over the entire period. The result of all of this is a book that is impressive in both breadth and depth. He has assembled a rich variety and quantity of material, partly based on his earlier detailed study, *A history of brewing in Holland, 900–1900: economy, technology, and the state* (Brill 2001), and supplemented by the work of many other scholars from primarily England, France, Germany, and the Low Countries. Unger's book is not an exhaustive study of pre-modern brewing in northern and western Europe, but it is comprehensive and exemplary. And because it is well-organized and well-written, it provides a useful and accessible introduction to a vast subject that at the same time provides a solid context for the work of other specialists in the field.

WILLIAM H. TEBRAKE
University of Maine, Orono

VILJO RASILA, EINO JUTIKKALA and ANNELI MÄKELÄ-ALITALO (eds), *Suomen maatalouden historia*, I, *Perinteisen maatalouden aika, Esihistoriasta vuoteen 1870* (Helsinki: Suomalaisen Kirjallisuuden Seura / Finnish Literature Society, 2003). Publication 914:1. 646 pp. Illus. €237 for this volume and two others.

This is the first of three volumes which will constitute the definitive history of Finnish agriculture and it spans the period from Stone Age settlement to the 1870s. It is intended for the Finnish specialist not the foreign reader and, as a result, it is assumed unnecessary to sketch in the characteristic features of the physical environment that affect agricultural activities – the interplay between land and water on a glaciated peneplain, the coniferous woodland, the mosslands that cover about a third of the country, cold clays and sandy heaths, the high-latitude climate where winter prevails over summer, the seasonal rhythm of daylight and darkness, the risk of summer frosts. Within this setting agricultural activity has always been a combination of farming and forestry, of farming and fishing or a combination of all three. Down to 1870 subsistence farming prevailed with the practices those of

the *Raubwirtschaft*. Additionally, throughout its history, Finland's farming community has been scourged by intermittent wars and famines, the last at the very time that the volume concludes.

The text falls into five parts: from the prehistoric period through early colonization to the middle ages; the response to the organization of Sweden's Vasa dynasty; the years of the Enlightenment, and the first half of the nineteenth century. A final section identifies trends and developments. An appendix lists old systems of weights, measures and currencies. Among the three editors, special mention must be made of Eino Jutikkala, the most senior Finnish academician and Nordic historian. His contributions on Finland's entailed estates, population change and famine recall his major publications in these fields.

As the eastern half of the Swedish realm, Finland's records are similar to those of Sweden itself and they continued in their established form after Finland became a Russian Grand Duchy in 1809. From the sixteenth century, land registers enable the settlement of Finland to be mapped in fair detail. From the 1630s, with the extension of the cadastral surveys of the Swedish Land Survey Office to Finland, it is possible to identify the character of representative farms, with different types of land use recorded and taxed at different rates. Subsequent legislation covering the consolidation of land holdings (Sw. *Storskifte*; F. *Isojako*) since the eighteenth century has resulted in a major source of evidence for detailed studies in Finnish agricultural history. Half page illustrations exemplify the character of these documents.

Complementing the use of the land is the history of the farmers themselves. The traditional Finnish farmer still rejoices in the name of *talonpoika* (Sw. *bonde*). Perhaps owner-farmer – even yeoman farmer – is the best translation, not 'peasant' as it may still appear in some dictionaries. There are illustrations of the complexes of farm buildings each with its special function. Sometimes there have been extended families, members of which have often colonized the outlying woodlandseters. Below the *talonpoika* in the rural hierarchy was the day labourer or crofter (F. *torppari*), already a near proletariat by the 1870s. The role of women in the farming community is given special treatment.

At the upper end of the social structure were the crown estates, born in the late fifteenth century and numbering 44 a century later. Other landed estates were generally acquired through service to the crown, not least by way of the army. The extremes of the agricultural scene by the 1870s are illustrated on the dust cover with its photograph of swidden (F. *kaski poltto*) or rotational burning of woodland for cropping, and on a double page elsewhere in the book by a romantic painting of a Finnish estate with its classical *corps de logis* and surrounding park (the 'English park' for some estate owners).

The text is enlivened with scores of illustrations, the smaller of them on the margins of the printed page. The earliest are reproduced from the wall paintings of Finland's medieval churches, those at the end of the volume from photographs that were taken while old practices and features still remained. So many of the lesser illustrations record the importance of wood for the production of farm equipment – carts and boats, ploughs and harrows, wheels and runners, yokes and harnesses, grain and hay pikes, buckets and churns. Supple birch bark was the raw material for other products from backpacks to shoes. Farm markets are remembered, not least through a graphic painting of Porvoo horse market, the Finnish horse being a distinctive breed capable of coping with winter circumstance. There are sections on reindeer husbandry and the emerging interest among Finnish artists in the agrarian landscape.

Most Finns still have their roots in the land. This impressive volume tells how deep those roots have been for Finland's society and economy.

W. R. MEAD
Aston Clinton, Bucks

JEAN-MARC MORICEAU, *Histoire et géographie de l'élevage français du moyen âge à la révolution* (Fayard, 2005). 478 pp. 26 tables; 7 illus; 32 figs; 53 documents. €29.

The title of this book evokes not only the fruitful relationship that has long existed between rural historians and rural geographers in France, but also the specific circumstances of the *pôle rural* that Jean-Marc Moriceau co-directs with geographer Philippe Madeline at the *Maison de la récherche en sciences humaines* at the Université de Caen. Such centres for the social sciences have been established in recent years in each of the French regions and now provide enviable support for research in history, geography, anthropology, sociology and related disciplines. They have also revitalized publication of monographs, edited collections and periodicals by university presses throughout France. As well as holding a chair of modern history, Moriceau edits the periodical *Histoire et sociétés rurales* that has published a suite of important articles since 1994 whose spatial reach extends far beyond France. In addition, he has been instrumental in republishing a number of 'classics' in rural history and ensuring that innovative thematic volumes also reach their audience.

Against the background of a major doctoral thesis (*Les fermiers de l'Île-de-France*, 1994) and a range of other

volumes, including *Terres mouvantes: les campagnes fraçaises du féodalisme à la mondialisation* published in 2002, Jean-Marc Moriceau presents his *Histoire et géographie de l'élevage*. In fact, this is a repackaged and much expanded version of *L'élevage sous l'ancien régime* (1999). He has retained essentially the same structure and chapter headings but the present book has been enriched by the addition of many new examples and references and a suite of most attractive maps drawn by Maguy Desgardin. Moriceau is most certainly aware of the importance of space and social structure – at a variety of scales – as well as of time in his work. The end result is 478 pages of text, compared with 256 pages in 1999.

Fifteen chapters of unequal length trace how livestock economies have functioned across a wide span of time, stopping short of the dramatic changes that accompanied the railway age. The quantity of *enquêtes* and other sources of documentation from the later decades of the *ancien régime* means that discussion of eighteenth-century conditions is privileged over examination of earlier periods. France is, and always has been, an expression of diversity, and thus Moriceau begins by sketching out the geographies of cattle rearing, pig raising, and horse rearing in the 1790s, with his unavoidably incomplete maps for 1794 being complemented by nationwide coverage for 1852 (reproduced from Michel Demonet, *Tableau de l'agriculture française*, 1990). Source of fertilizer, food and so many other products, livestock farming was also a fragile affair subject to the vagaries of weather, floods, droughts, frost and other natural hazards, as well as to animal diseases and attacks from wolves and other wild beasts. Cattle rearing takes pride of place in the discussion, with some excellent maps of agricultural systems and of supply areas of livestock to Paris and Lyons (however, these are even more impressive in their colour versions in *Terres mouvantes*). Sheep, goats and pigs have a chapter of their own, and this is followed by a short but intriguing chapter that covers rabbits, pigeons, poultry, freshwater fisheries and bees. Such sources of foodstuff were undoubtedly important for both urban and local consumption but scarcity of documentation has meant that they have often been overlooked.

Dairy farming and the functioning of internal systems of trade for butter, cheese and milk are examined at length, before Moriceau offers a critique of traditional, and spatially variable, sources of fodder (stubble, heaths and moors, marshes, natural pastures, leaves from deciduous trees) and then turns to the 'revolutionary' impact of fodder crops introduced to some *pays* during the eighteenth century and the *couchage en herbe* of areas that could supply dynamic urban markets and thereby escape from the centuries-old exigency of polyculture. Such changes were not simply outworkings of the discipline of distance and evolving communications. As Moriceau has shown compellingly in his earlier work, they reflected the changing perception of specific landowners and occasionally of whole communities. New opportunities could lead to overexploitation of fragile fodder resources, as growing population numbers or human greed outran 'natural potential' in the context of available knowledge and technologies. Transhumance offered a way of managing differing seasonal availability of fodder resources and was surprisingly widespread. A long and detailed chapter relates not only to the Alps, Pyrenees and Massif Central but also to parts of northern France. Hence the excellent work of Mlle Thérèse Sclafert on *estivage* and *hivernage* of sheep in Haute-Provence is complemented by intriguing maps showing the seasonal movement of herds of pigs in seventeenth-century Burgundy and in the Île-de-France. But transhumance was open to abuse when excessively large numbers of animals were involved or were not controlled effectively as they moved along drove roads (*drailles*). Agricultural environments were, indeed, contested spaces with individual livestock farmers having dramatically different appreciations of rural resources from those espoused by peasant communities. In the final chapters of *Histoire et géographie*, Moriceau brings society to the foreground of discussion to complement the enduring, but constantly reappraised, presence of space.

With the inclusion of boxed extracts from documents, numerous tables, reproductions of drawings of livestock (for example, from the *Nouvelle maison rustique*), and excellent maps, Professor Moriceau's latest book is a most welcome addition to the literature on the agricultural history of France. As a geographer, I am particularly impressed by the quality of the maps. Most are highly effective, even in black and white, but it is a pity that J-R. Pitte's map (p. 205) presenting the spatial logic of cheese production was not redrawn. The bibliography of some five hundred items is an invaluable source for further studies, covering not only classic regional monographs by historians and geographers but many articles that have appeared in recent years (however François Sigault's 1975 article on agricultural systems before the railway age is not listed). At 29 Euros, *Histoire et géographie de l'élevage français* is excellent value. Professor Moriceau's next book, mentioned on page 78, will be *Le loup et l'homme depuis le moyen âge*.

HUGH CLOUT
University College London

GÉRARD BÉAUR, CHRISTIAN DESSUREAULT and JOSEPH GOY (eds), *Familles, terre, marchés. Logiques économiques et stratégies dans les milieux ruraux (XVIIe–XXe siècles). Actes du colloque France-Québec-Suisse, Paris, novembre 2002* (Presses Universitiaires de Rennes, 2004). 278 pp. €18.

The survival of the peasant farm as an intergenerational enterprise has been one of the central themes of European agrarian history ever since Romantic thinkers proposed an ineluctable tension between traditional peasant culture and the mercantile valuations of land and labour that in the late eighteenth and early nineteenth century seemed everywhere to be gaining ground. The present volume of conference papers falls squarely in that hallowed dialectical tradition. With few exceptions, the communications concern the legal and extra-legal techniques employed by French peasants to maintain their holdings intact from one generation to the next in the face of the strict partible inheritance regime promulgated in the Civil Code of 1791. From the perspective of the tension between market and traditional values, the recourse to subterfuges in order to bequeath the family farm to a single heir in regions that had practised non-partible inheritance of agricultural wealth expresses the persistence of traditional social values in the face of modernization imposed by the state. The theme is well-worn.

The superabundant source material deposited in archives of civil registrations, parish records, *cadastres*, and notarial minutes supplies ample information for tracing inheritance practices in the eighteenth and nineteenth century. Despite that documentary luxuriance, the results reported in the studies included in the present collection are disappointing. It is hardly news that in regions where farms were passed to a single heir (with compensation for the other heirs), the Civil Code had little immediate impact on regional patterns of property transmission. The articles make minor rectifications to Jean Yver's study of regional inheritance practices in France, which was based on legal texts, but they do not significantly alter his broad conclusions. Most of the articles on France are preliminary investigations of archival resources rather than finished products of exhaustive study of well-defined questions. What is missing is a clear statement of why anyone besides legal historians should be interested in the trivia of inheritance practices. A few essays nevertheless stand out. Desaive's analysis of seventeenth- and eighteenth-century petitions for 'emancipation' of minors from wardship in the Auxerrois indicates a growing willingness of tutors to emancipate female wards at a younger age in the eighteenth century. This is a track worth following up as an indicator of changing *mentalités*: its significance for rural history seems rather thin, however. In another interesting essay, Rémy describes how in recent times the high Alpine pastures that were exploited (but not owned) in common in the Tarentaise region of Savoie became an object of contention among their several owners as a result of declining agricultural and the rising recreational value of Alpine open spaces.

Perhaps the most interesting communications concern French Canada. The studies by Dessureault and Dépatie provide intriguing evidence on how the structure of local economic activity affected the composition of the household labour force in the eighteenth and nineteenth century. Craig's study of four rural general stores in the 1830s and 1840s shows how the consumption of market-supplied commodities evolved in a very a remote district of upper New Brunswick. Lafleur, Paquet and Wallot demonstrate the richness of the Canadian sources for analyzing the evolution of family land holding. Wien gives an original analysis of the effect of the demand for labour in the fur trade on the small pool of available farm labour in eighteenth-century Quebec. These are excellent essays, but their connection to the issues that inspired the conference that gave birth to this volume seems distant. On the whole, the collection is disappointing. It would have benefited from a more ambitious introduction to the material, and more severe editing of unripe fruit that in time may give a real harvest.

GEORGE GRANTHAM
McGill University, Montreal

JOHN MCKENDRICK HUGHES (ed. JOHN R. HUGHES), *The unwanted. Great War letters from the field* (University of Alberta Press, 2005). xxxvii + 395 pp. Illus. C$32.95.

This fascinating book is an account of one man's war. John McKendrick Hughes (1882–1967) was a Canadian who enlisted into the 151st Battalion of the Canadian Mounted Rifles. This battalion was broken up in the autumn of 1916 and the lower ranks were attached to other battalions to reinforce fighting units on the Western Front, leaving an embarrassing number of officers surplus to requirements. McKendrick was one such officer, hence the title of the book. He languished in England for some time but in July 1917 responded to the call for officers to devote themselves to communication work, even though that meant reverting from the rank of major to that of staff lieutenant, second class. Fiercely patriotic, farmer McKendrick agreed and rose to the challenge of being an 'agricultural officer'.

British troops were already working alongside French farmers to produce food for the army since German submarines played havoc with supplies from across the

Channel. During the summer of 1916 the Somme offensive liberated a stretch of land from which British troops harvested crops and, with the help of German prisoners of war, planted abandoned patches of farmland to grow cereals, potatoes and other vegetables. Early in 1917 'agricultural officers' – often farmers in civilian life – were appointed to co-ordinate military help to local farming families. In this way, John McKendrick Hughes featured in a little-known aspect of agricultural history that arose from non-combatant men providing catering, clerical, medical and agricultural support. The men who experienced the trenches, stormed enemy sites, or 'went over the top' were only part of the British army. As Dr Craig Gibson explains in a twenty-page introduction, the 'blood and guts' horror of combat emphasized in military histories and evoked in the mythology of nation building was not the only story. He estimates that of two million British and dominion officers and men in northern France and Flanders in the first week of August 1917, only 700 to 800,000 belonged to combatant units.

Between August 1917 and demobilization in 1919, John McKendrick Hughes used his agricultural – and Canadian – initiative to organize soldiers who were rotated away from the front line or worked under special orders to help local farmers, to produce food items for British soldiers and, in the summer and autumn of 1918, to harvest ground captured from the Germans, some of which had been planted by his own men.

The unwanted tells this remarkable story from the point of view of an energetic Canadian in his middle thirties who had no time for British army rules. His solidly pragmatic approach paid off and he made use of fellow Canadians for essential agricultural tasks, knowing that many shared his 'down to earth' qualities and disregard for 'red tape'. He drafted his book in 1956 from evidence contained in a mass of hastily-written letters sent, often on a daily basis, to his wife Sara between 1916 and 1919. Almost all the original letters were lost subsequently but the manuscript was passed on to a grandson, John Richard Hughes, who edited it for publication, provided copious notes and appendices, and enlisted the help of Dr Gibson to write the introduction. The book presents an often entertaining account of remarkable success in agricultural endeavour under difficult circumstances: bomb craters, whizzing shells, dead horses and human corpses were frequently encountered. Potatoes, vegetables, pigs and cattle figure largely in this farmer's story, together with entertaining reminiscences about the British office class. After the war, John McKendrick Hughes returned to his farm near Flatbush in northern Alberta, becoming a leading figure in local agricultural co-operatives and a keen author. Characteristically, the family's farmhouse was known as 'The Barracks'.

I liked this book greatly for the light it shed on wartime agriculture on the Western Front and for the images it conveyed of parts of northern France that I know well from my own fieldwork on settlement reconstruction in the wake of war. Reproductions of folded sections of maps used by Hughes are especially poignant. *The unwanted* reminded me of my own family: of distant relatives who went to Canada and Australia before the Great War, of my maternal grandfather who drew detailed plans for laying out narrow-gauge railways to supply the front line, and of my father who fought in that war and whose shrapnel-pitted back reminded me of how he and so many others were scarred for life. Of course, I also have some reservations. *The unwanted* is a long and personal book reinforced by notes and appendices from grandson John. I wondered whether they needed to be so detailed and whether two long letters needed to transcribed and reproduced in facsimile. Here is a work of family, military and agricultural history combined. The University of Alberta Press are to be congratulated for producing an elegant book with excellent photographs and page design at a very good price.

HUGH CLOUT
University College London

JONATHAN HARWOOD, *Technology's dilemma. Agricultural colleges between science and practice in Germany, 1860–1934* (Bern: Peter Lang, 2005). 288 pp. £29.

Technology's dilemma, according to this book, is that it is rooted in science but must remain aware of the needs of its users. Consequently academic technologists must pay attention to both, and the balance is not easy to maintain. Should they, for example, conduct a trial to determine which of two fertilizers has the greater impact on the yield of a specific crop, or carry out a programme of experiments to determine the basic physiological characteristics of crop plants and the ways in which they are affected by nutrient availability? The first will almost certainly be quicker, easier, and cheaper to carry out, and produce immediately usable results; the second may take a lifetime, but save endless repetitions of the first kind of experiment. The first will appeal to farmers and fertilizer firms who want quick answers to practical questions, but they will do little for the experimenter's professional reputation. The second will enhance scientific status but receive few thanks from commerce.

Harwood's contention is that technical education establishments, and especially those agricultural ones with which he is most concerned, will tend to specialize in one direction or the other, but that the more practical

institutions will, over time, tend to be more academic, or exhibit 'academic drift'. The danger in their doing so is that their graduates will lack practical skills and that their staff will lose contact with the concerns of the farmers and ancillary industries that will eventually employ the graduates. He elucidates the process with an explanatory 'model of institutional dynamics': the staff in such establishments will want to enhance their academic status, and in consequence will strengthen their science orientation. The effort they apply to so doing will depend upon their institution's rank in the status hierarchy, whether or not it is part of a university, and in which faculty, and whether it has an urban or rural location (more science is expected in urban locations). Success in status enhancement will depend upon the attitude of the government ministry (usually either agriculture or education) controlling the establishment and of local agricultural interest groups, who might work through formal political channels or attempt to achieve direct influence by funding research or teaching that is perceived to meet their needs.

The bulk of the book is concerned with validating this model through a study of agricultural education in Germany between the middle of the nineteenth century and the 1930s. Harwood describes the various academies, colleges and university departments and their student bodies, with their varying status hierarchies, funding sources, and responsible ministries over Germany as a whole. He then compares two institutions at the scientific end of the spectrum (Berlin and Halle) with three of the more practical (Breslau, Hohenheim and Bonn) as far as geographical location, formal organization, teaching programmes, staff and student backgrounds, advisory activities and research are concerned. Finally he compares Bavaria's two establishments, Munich and Weihenstephan, from 1872 to 1934. His concluding chapter is mainly concerned with applying his model to the history of agricultural education outside Germany (specifically in Britain, the Netherlands and the USA), to the history of engineering, medical and management engineering, and to the present-day reform of technical and professional education.

The treatment of German agricultural education is detailed, and, as far as this reviewer can tell, expert and convincing. The principal strength of the book, and the reason why it is worth reading for those with no particular interest in either Germany or agricultural education, is the way in which it constructs its explanatory model and then uses it to make sense of what could so easily be a formless mass of detail. It fails, however, on its promise 'to illuminate the history of agricultural science and education … in Britain' (p. 33), and this is a great pity, for status hierarchies, academic drift, differing objectives of sponsoring ministries, and the other components of Harwood's model all have relevance to the history of agricultural education in Britain since the 1840s. But only a page of discussion, most of it derived from a single unpublished work, is devoted to the British comparison, and the plethora of college histories, doctoral theses and historical surveys that have emerged in the last ten years is completely ignored. The irony is that, on the whole, they validate his model just as well as his German examples. Harwood also bemoans the lack of a book-length treatment of the agricultural sciences, thus neglecting not only recent work, but also Russell's classic *A history of agricultural science in Great Britain*, published forty years ago. The problems of this book therefore arise from the author's apparent unfamiliarity with British sources, and British historians should not make the corresponding mistake of ignoring his theory and his work on Germany. Agricultural historians have much to learn from historians of science and technology, even if on some points the traffic might profitably pass the other way.

PAUL BRASSLEY
University of Plymouth

FERNANDO COLLANTES GUTIÉRREZ, *El declive demográfico de la montaña española (1850–2000) ¿una drama rural?* (Madrid: Centro de Publicaciones, Ministerio de Agricultura, Pesca y Alimentación, 2004). 47 tables; 17 graphs. 364pp. No price given.

Spain is a very mountainous country. Within Europe, its average height above sea level – around 600 metres – is exceeded only by Switzerland and Austria. Fernando Collantes' nicely crafted monograph analyzes the diversity of mountain regions within the peninsula, along with their demographic experiences over the last century-and-a-half. From the 1860s, all of Spain's highland zones experienced population decline at some stage. Before the 1950s, this decline was most clearly visible in relative terms, vis-à-vis the expanding conurbations of Madrid and the periphery. After that date, however, rural decline was more pronounced, reaching its climax during the country's industrial boom of the 1960s and early 1970s. The main reasons for this overall demographic decline, Collantes argues, are to be found in the nature of the country's economic development. Rejecting the paradigm of mountainous areas as self sufficient, Collantes views them, first and foremost, as part of the spatial division of labour. In particular, nineteenth-century Spain witnessed the demise of those activities, such as livestock farming, in which its mountainous zones enjoyed either absolute or comparative advantages. At the same time, certain upland areas benefited from the diffusion of non-agrarian activities, not

least mining and later tourism. Initially, a great deal depended on the economic strategies of peasant families. With the spread of manufacturing industry, many districts of the Pyrenees and Cantabrian Cordillera saw their economies radically transformed due to the expansion of coal mining – a phenomenon which, he maintains, is best seen as the diffusion of industrialization from Catalonia and the Basque Country. At this stage, labour relations moved out of the family sphere, whilst the inhabitants of the mountains became increasingly subject to entrepreneurial and political decisions taken some distance away.

Why did these zones become depopulated? And, more importantly, how do we account for the marked disparities between Spain's mountainous regions? Here Collantes emphasizes the close correlation between the phases of demographic evolution and the phases of Spanish economic growth. Before 1950, the possibilities of emigration from the mountains came up against a number of important obstacles. These included the slow rate of urban demand for unskilled labour, together with low levels of national economic growth. Other obstacles, including high levels of illiteracy, as well as the long distances from industrial areas, were of particular significance in the south. In certain areas, among them Cantabria, the situation was not all that desperate. Yet, from the 1950s, as welfare conditions deteriorated in the mountains, the higher wages that could be earned in western Europe or in Spain's burgeoning industrial centres set in motion a growing rural exodus, eased in recent times by in-migration.

In geographical terms, Collantes outlines the experiences of Spain's four great mountainous zones. Firstly, in the north, ecological conditions favoured the pursuit of cattle farming, based on small-scale units using family labour. At times of least demand, family members performed additional tasks, some of which took them away from the mountains for long periods. From the end of the nineteenth century, the area also witnessed the rise of temporary emigration to Latin America. In addition, the region benefited from a growing demand for livestock products from the cities, high rainfall, and good communications. It also saw the emergence of important mining and industrial zones, such as Mieres (Asturias) and el Bierzo (León). Secondly, Collantes argues, industrialization in the Pyrenees provoked constant tensions between the effects of polarization and diffusion. As sheep farming gave way – all too slowly – to beef and dairy cattle, the attractions of Basque and Catalan industry led to heavy population losses from the second half of the nineteenth century onwards. On the negative side, the profits to be had from coal mining soon proved disappointing to investors while, more positively, hydroelectric power in the river valleys of northern Catalonia partly accounted for the spread of textile colonies. A century later, the favourable geographical location of the Pyrenees as well as their natural conditions brought much-needed investment in tourism, not least winter sports. Thirdly, nowhere was demographic decline more marked than in the mountains of the interior. Before 1950, nearly all this area experienced depopulation due to 'the weakness of its insertion into the new division of labour'. During the middle decades of the nineteenth century, the twin props of the interior zone's pre-industrial economy, transhumant sheep farming and woollen textiles, were in sharp decline. Yet, unlike the Pyrenees, the zone was incapable of switching from sheep to cattle farming, due to its inadequate rainfall. Nor did the interior benefit greatly from diffusion, with a few exceptions like the timber industry of Soria. The proximity of Madrid completed the picture. Fourthly, throughout the period 1860–2000, the mountains of the south witnessed the smallest net loss of inhabitants. Despite the precariousness of its situation – high levels of mortality, low levels of consumption, mass illiteracy – the region's population went up by almost fifty per cent before 1950. How was this possible? The answer, it would appear, lies with the continuous expansion of the region's export base, centred on the so-called Mediterranean trilogy of wheat, wine and olives. After that date, illiteracy and the long distances to be travelled helped slow down the rate of emigration.

Finally, Collantes asks, wherein lies the rural drama of Spain's mountainous regions? Is it due to depopulation, the consequence of poor welfare provision, or low standards of living? Was it brought about by the disappearance of traditional patterns of rural life, as a result of economic development, or conversely by the lack of it? In his opinion, the aim of the Spanish government's rural policy should be not to re-establish past situations but to create new ones. Hence, this well-researched and thoughtful book concludes, what the country needs is a number of different strategies for its mountainous regions, designed to address a variety of situations.

JOSEPH HARRISON
University of Manchester

GIOVANNI FEDERICO, *Feeding the world. An economic history of agriculture, 1800–2000* (Princeton UP, 2005). xiv + 388 pp. 75 tables; 4 graphs; 1 map. £29.95.

Giovanni Federico's global economic history is the first of its kind, an ambitious, bullish survey of an industry that has confounded the forecasts of pessimists from Thomas Malthus to Paul Erlich. It summons an

impressive range of data (75 tables in the text, plus a statistical appendix of 17 pages) and a huge specialist literature, mainly in English (46 pages of bibliography).

The book is very well organized. It begins with an account of how geography (encompassing soil and climate) made agriculture 'different'. The diversity that is much of the sector's charm for agricultural historians does not detain Federico, however. This is history cast very much in economic terms, in which arguments from first economic principles are generally favoured over the 'anecdotal evidence' of historians (e.g. pp. 4, 141, 186, 231). The core of the book analyzes the industry within a production function framework. This involves describing output trends (Chapter 3), and then explaining how inputs (Chapter 4), productivity growth (Chapter 5), technological progress (Chapter 6), institutional change (Chapter 8), the role of the state (Chapter 9) affected output over time. The final chapter offers fifteen stylized facts – some of them quite striking – and casts a provocative and optimistic look to the future.

No soundly-based estimate of global food production is possible before 1870. Federico reckons on the basis of admittedly flimsy evidence that output kept pace with population, but at consumption levels consistent with poor nutritional status. Thereafter, with the onset of national agricultural censuses, the data improve. Federico estimates that the annual rate of growth of world food output per head rose from 0.15 per cent in 1870–1938 to 0.56 per cent in 1961–2000. The earlier figure is derived from an expert reading of a range of sources, the later from data in the UN Food and Agricultural Organization's website (http://faostat.fao.org/). The achievement of late nineteenth-century agriculture was to keep pace with population growth, against widespread predictions to the contrary. Output per worker grew, albeit slowly, thanks mainly to additional inputs of capital and land. Price data are shown to broadly corroborate this story: the real price of food products tended to rise before 1870 but has fallen sharply since then.

Taken together, the percentage growth rates above imply an increase in the available food per capita of less than two-fifths between 1870 and 2000. The impact of such a relatively modest increase on life expectancy and physical size of *homo sapiens* is striking. Presumably the increase in output was matched or exceeded by the increase in nutritional content, although the issue is not broached. Artificial fertilizers, biological innovations, increased specialization, and the resilience and creativity of farmers (large and small) fended off the law of diminishing returns with ease. An attendant reduction in the impact of harvest fluctuations over time is implicit, though not discussed.

Throughout, *Feeding the world* bears witness to a historian's conversion to the economic approach to the past. In the spirit of Douglas North, institutions tend not to matter in the long run, because they are adaptable. Federico concedes that a purely rational choice approach is, to an extent, ahistorical because it leaves much of what happens in the short run unaccounted for (p. 220). Federico's 1800–2000 is a long time, however, even in history. In the spirit of Ronald Coase, property rights don't matter insofar as they are enforceable. Thus traditionally contentious issues such as sharecropping, inheritance customs, and forms of ownership are by no means ignored, but they play secondary roles. This also means that the focus is much more on issues of efficiency and productivity than on the distributional issues that feature much larger in traditional accounts.

Federico's reading of the past informs his relatively 'upbeat' outlook on the future. In common with most present-day students of agricultural economics and development economics, he is optimistic about agriculture's capacity to deliver the goods and unconvinced by the many environmentalists and ecologists who worry about 'sustainability'. Federico is probably right, but greater attention to the situation in Africa, which does not feature much here and is absent in the index, must temper confidence. In both Africa as a whole and in sub-Saharan Africa, the food supply has barely been keeping pace with population since 1960. Is Africa's backwardness due to the 'peculiarities of agriculture', the inflexibility of its institutions, the persistently high rates of population growth, or the uniqueness of the African environment (p. 222)? The failure – so far – of desertification to wreak the havoc widely predicted in the 1970s and 1980s, and the decreasing incidence of famines of biblical proportion, are in tune with Federico's themes of farmer resilience and institutional flexibility. Yet global warming poses a real threat, and Africa's poor are probably more susceptible to its potential impact than those of any other continent. That Africa's share of global population is predicted to reach 21.7 per cent by 2050 (according to the latest UN medium-range predictions) – compared to 8.8 percent in 1950 and 14 percent today – is no cause for complacency.

The range, stance, and clarity of this hugely impressive book make it ideally suited to classroom use at advanced undergraduate or graduate level. It deserves to be widely read, in university libraries and beyond.

CORMAC Ó GRÁDA
University College Dublin

Conference Report: The Society's Winter Conference, 2005 'English landed society in the nineteenth and twentieth centuries: a celebration of the work of F. M. L. Thompson'

by John R. Walton

The conference, attended by more than seventy people, celebrated the eightieth birthday of Professor Michael Thompson by exploring a theme he has made his own. John Chartres (University of Leeds) began proceedings with a brief appreciation of Michael and his contributions to agrarian history and history more generally. The conference then assumed the familiar form of four papers, each treating some aspect of landownership and landowning society during and since the nineteenth century.

John Beckett (University of Nottingham) and Michael Turner (University of Hull) spoke on the English land market between 1918 and 1921. Sceptical of the much-repeated claim that one quarter of England changed hands during those years, Beckett and Turner traced the origins of this belief to inadequate *Estates Gazette* data granted undeserved publicity by newspapers like *The Times* which were not slow to recognize the headline-making potential of the demise of the great estates or the loss of substantial portions of them. It was notable that later on, during the 1930s, when the Liberals had faded as a political force and their anti-landlord policies no longer threatened, the issue faded too. If concerned commentators of the period 1918 to 1921 were too ready to fear the worst, then what figures might reasonably characterize what happened during those years? In the absence of a national land registry and its database, it is not easy to say. However, combining reports on land sales contained in the Annual Review of the *Estates Gazette* with those in the Yearbook of the Royal Institution of Chartered Surveyors, and making appropriate allowance for double counting, suggests a turnover of about eight per cent of England. Measured in constant prices, sales were not greatly in excess of those in some earlier periods, notably the years immediately prior to the First World War.

Mark Rothery (University of Exeter) then presented his paper 'Probate, financial diversification and the wealth of the English landed gentry, 1870–1935'. Focusing on the counties of Devon, Lincolnshire and Hertfordshire, Dr Rothery estimated that land, which had constituted eighty per cent of gentry wealth in 1870, amounted to no more than 58 per cent by 1935, with the biggest decade-on-decade decline affecting those who died in the years 1910 to 1919. However, declining landed wealth, which was attributable to declining land values as well as divestment, was associated with rising overall wealth as the gentry increasingly committed to other asset categories, favouring investments of a conservative, passive and non-entrepreneurial character. Examples included the wealthiest person in the sample, J. Michael Williams, whose receipts from south Wales coal were placed in a diverse investment portfolio which included land in south-west England, and the old-established south Devon family of Strode of Newnham Park, who sold about half of their landed estate before and after the First World War, mostly to sitting tenants whom they supplied with mortgages. The capital thus realized went initially into local industrial, especially mining, enterprises, then into national railway stock, and eventually into overseas ventures, including Australian government bonds and the Melbourne water undertaking. Despite

their greatly diminished landholdings, the gentry could still legitimately consider themselves part of 'the quality' in the 1930s.

In the first session of the afternoon, David Cannadine (Institute of Historical Research) reflected on 'The country house from the twentieth to the twenty-first century'. During the seventeenth century, country houses were demolished to be replaced by something grander. During the twentieth century, one-sixth of the surviving stock were demolished to be replaced by nothing at all. Some surviving aristocrats, as at Chatsworth, have turned their patrimony into thriving economic enterprises. But a post-aristocratic Britain, no longer much infected even by Brideshead-influenced nostalgia for the country house, has nonetheless set itself firmly against further demolitions of country houses. National Trust properties attract fewer visitors than do their gardens, and many houses, once lived in by the more-or-less obscure, are difficult to present and interpret in an appealing way. 'Now we have saved Tyntesfield', asked Cannadine, 'what is it for?' The speaker contrasted the situation in Britain with that in Ireland, where the country house has long been regarded more as a symbol of alien oppression than as the embodiment of national heritage, and attrition continues apace. This is not Britain's chosen path, but it is difficult to see where that it has chosen will lead.

The fourth and final paper by Antony Taylor (Sheffield Hallam University) bore the title '"The British aristocracy, probably the most unnecessary a body that any civilised society exhibits and endures" (J. E Thorold Rogers). Land utopianism and anti-aristocratic sentiment in late nineteenth century Britain'. The speaker argued that Thorold Rogers' hostility to aristocracy, as articulated in various publications but most notably *Six centuries of work and wages*, influenced the thinking of others to the extent of giving coherence to an idea which had hitherto existed only on the fringes of subterranean counter-culture. *Six centuries* provided the narrative that the land reform movement had previously lacked. Among those on whom its influence is detectable were Keir Hardie, Robert Tressell, and the advocates of Henry George's single tax on property.

The day's events demonstrated the continuing vitality of one important strand in Michael Thompson's research, happily still matched by that of Michael himself.*

* We hope to publish the papers by Professors Beckett and Turner, Dr Rothery and Professor Cannadine in a future issue of the *Review*, and a paper by Dr Taylor at a later date.

THE AGRICULTURAL HISTORY REVIEW



a journal of agricultural and rural history

Volume 54, Part II
2006

The Agricultural History Review
Volume 54 Part II 2006

CONTENTS

Notes on Contributors		iv
Forthcoming Conferences: PROGRESSORE		vi
The Bishop and the Prior: demesne agriculture in medieval Hampshire	JOHN HARE	187
Scottish environmental history and the (mis)use of Soums	ALASDAIR ROSS	213
The case of John Dyer's fat-tailed sheep and their tail-trolleys: 'a thing to some scarce credible'	JOHN GOODRIDGE	229
Parliamentary enclosure and changes in landownership in an upland environment: Westmorland, *c*.1770–1860	IAN WHYTE	240
Farewell to the peasant republic: marginal rural communities and European industrialisation, 1815–1990	FERNANDO COLLANTES	257
Farm service, seasonal unemployment and casual labour in mid nineteenth-century England	NIGEL GOOSE	274
Smallholdings in Norfolk, 1890–1950: a social and farming experiment	SUSANNA WADE MARTINS	304
Children's labour in the countryside during World War II: a further note	R. J. MOORE-COLYER	331
Obituaries:		
Professor Maurice Beresford FBA, 1920–2005	J. A. CHARTRES	335
Professor Gordon Mingay, 1923–2006	W. A. ARMSTRONG	338
Gordon Mingay: an appreciation	MICHAEL TURNER	340

Book Reviews

Britain and Ireland

P. H. W. Booth (ed.), *Accounts of the manor and hundred of Macclesfield, Cheshire, Michaelmas 1361 to Michaelmas 1362* — PHILLIPP R. SCHOFIELD — 344

John Langdon, *Mills in the medieval economy. England, 1300–1540* — RICHARD HOLT — 344

R. W. Dunning (ed.), *The Victoria history of the counties of England. A history of the county of Somerset*, VIII, *The Poldens and the Levels* — JAMES BOND — 345

Sylvia Pinches, Maggie Whalley and Dave Postles (eds), *The market place and the place of the market* — NEIL HOWLETT — 346

Ian D. Whyte and Angus J. L. Winchester (eds), *Society, landscape and environment in upland Britain* — R. J. MOORE-COLYER — 347

Joseph Bettey (ed.), *Wiltshire farming in the seventeenth century* — H. R. FRENCH — 348

Dorian Gerhold, *Carriers and coachmasters. Trade and travel before the turnpikes* — R. J. MOORE-COLYER — 349

Marie-Louise Legg (ed.), *The Diary of Nicholas Peacock, 1740–1751. The worlds of a County Limerick farmer and agent* — H. R. FRENCH — 350

W. P. Griffith, *Power, politics and county government in Wales. Anglesey, 1780–1914* — MATTHEW CRAGOE — 351

Michael Holland (ed.), *Swing unmasked. The agricultural riots of 1830 to 1832 and their wider implications* — BARRY REAY — 352

Nigel E. Agar, *Behind the plough. Agrarian society in nineteenth-century Hertfordshire* — NICOLA VERDON — 353

Mark Freeman (ed.), *The English rural poor, 1850–1914* — NICOLA VERDON — 353

Keir Waddington, *The bovine scourge. Meat, tuberculosis and public health, 1850–1914* — RICHARD PERREN — 354

Jonathan Brown, *Farming in Lincolnshire, 1850–1945* — CHARLES RAWDING — 355

Elsewhere and General

Jacques M. Chevalier and W. Andrés Sánchez Bain, *The hot and the cold. Ills of humans and maize in native Mexico* — SHEILA COSMINSKY — 356

William D. Godsey Jr., *Nobles and nation in central Europe. Free imperial knights in the age of revolution, 1750–1850* — MATTHEW LEVINGER — 358

Oliver Marshall, *English, Irish and Irish-American pioneer settlers in nineteenth-century Brazil* — J. H. GALLOWAY — 359

Enric Saguer (ed.), *Els últims hereus. Història oral dels proprietaris gironins, 1930–2000* — JOSEPH HARRISON — 360

Stephen B. Brush, *Farmers' bounty. Locating crop diversity in the contemporary world* — DOUGLAS GOLLIN — 360

Apology — 361

Conference Report: The Society's Spring Conference, April 2006 — ANNE MEREDITH — 362

Notes on Contributors

FERNANDO COLLANTES is an Assistant Professor of Economic History at the University of Zaragoza (Spain). He has specialized in the transformation of rural economies and societies during industrialisation and its implications for present-day policy debates. His doctoral research (which was the basis of a book published in 2004) dealt with the depopulation of mountain communities in Spain from 1850 to 2000. He is now working on the decline of agriculture in the economy of rural Europe from the eighteenth century to the late twentieth century. He is currently the editor of the Spanish journal *Ager: Journal of Depopulation and Rural Development Studies*. Address: Facultad de Ciencias Económicas y Empresariales, Gran Vía 4, 50005 Zaragoza, Spain, e.mail collantf@unizar.es.

NIGEL GOOSE is Professor of Social and Economic History and Director of the Centre for Regional and Local History at the University of Hertfordshire. He has published extensively in early modern urban history, and has recently co-edited a collection of essays on *Immigrants in Tudor and early Stuart England* (2005). He also works on aspects of local demography, economy and society in the nineteenth century, with special reference to Hertfordshire, and has published two books and a number of articles in this area. He is editor of the journal *Local Population Studies*. Address: Department of Humanities, University of Hertfordshire, College Lane, Hatfield, Herts. AL10 9AB, e.mail n.goose@herts.ac.uk.

JOHN GOODRIDGE is Professor of English at Nottingham Trent University, and the author of *Rural life in eighteenth-century English Poetry* (Cambridge, 1995, 2006). He is the editor of the *John Clare Society Journal*, General Editor of the Pickering & Chatto *Labouring-Class Poets* series, and has published editions of the poets John Clare, Robert Bloomfield and John Dyer. Professor Goodridge has edited John Philips's georgic poem *Cyder*, and is working on an edition of Dyer's *Fleece*; both co-edited with Dr J. C. Pellicer (University of Oslo). His most recent project is a study of Clare's poetry. Address: English Division, Nottingham Trent University, Clifton Lane, Nottingham NG11 8NS.

JOHN HARE teaches history at Peter Symonds' College, the sixth form college in Winchester. His research interests have concentrated on medieval social and economic history, archaeology and architecture, particularly in southern England. He has completed a book on conditions in later medieval Wiltshire, and is currently continuing his work on countryside, towns and cloth. His study, *A prospering society. Wiltshire in the later Middle Ages*, is forthcoming. Address: Peter Symonds College, Winchester, SO22 6RX.

RICHARD MOORE-COLYER is emeritus professor of Agrarian History at the University of Wales, Aberystwyth. He is currently researching towards a biography of the poet, environmentalist and Germanist, Henry Rolf Gardiner. Address: Department of History and Welsh History Hugh Owen Building The University of Wales, Aberystwyth, Ceredigion SY23 3DY.

ALASDAIR ROSS is post-doctoral research fellow in the AHRC Research Centre for Environmental History at the University of Stirling. His main fields of interest are environmental and medieval history. He has published a number of articles and was the co-editor of *The exercise of power in medieval Scotland* (Dublin, 2003). He is the editor of *History Scotland* magazine and is currently completing a monograph investigating the relationship between the parish and earlier units of land in medieval Moray. Address: Department of History, University of Stirling, Stirling, FK9 4LA, e.mail alasdair.ross@stir.ac.uk.

SUSANNA WADE MARTINS is a Research Associate in the School of History, University of East Anglia. She is currently working with Dr Tom Williamson on a Leverhume-sponsored project studying farming and landscape in East Anglia from 1870 to 1950. Previously she has worked on eighteenth- and nineteenth-century agriculture and the buildings associated with it. Recent publications include *Farmers, Landlords and Landscapes* (2004) and *The English Model Farm* (2002). Address: The Longhouse, Eastgate Street, North Elmham, Dereham, Norfolk, NR20 5HD, email scwmartins@hotmail.com.

IAN WHYTE is Professor of Historical Geography at Lancaster University and director of its MA in Lake District Studies. He has worked extensively on aspects of the economy, society and landscape of early modern Scotland. More recently he has focused on aspects of landscape and socio-economic change in the upland areas of northern England in the eighteenth and nineteenth centuries, particularly parliamentary enclosure . His books include *Landscape and History since 1500* (2002), *Society, landscape and environment in upland Britain* (ed. with A. J. L. Winchester, 2004), and *Scotland before the Industrial Revolution. An economic and social history, c.1050–c.1750* (1995). Address: Department of Geography, University of Lancaster, Lancaster, LA1 4YB, e.mail i.whyte@lancaster.ac.uk

Forthcoming Conferences

The Society's Annual Conference for 2007 will take place from 2 to 4 April at Hereford. There will be speakers on a range of topics from the medieval to the contemporary, a new researchers session, and a field trip to see a range of agricultural and landscape features of interest to rural historians.

A full programme and booking form will be available early in the new year on the Society's web site, and will be circulated to members. Postgraduate students in rural history are eligible for bursaries to cover the cost of the conference, and should contact the Secretary (j.broad@londonmet.ac.uk) for details of how to apply.

PROGRESSORE

The attention of rural and agrarian historians is drawn to the European Science Foundations COST Action A35: PROGRESSORE, the Programme for the study of European rural societies.

The main objective of the Action is to provide the necessary keys to understand the changes experienced by present-day European rural societies in the light of their historical experience. Therefore the Action will establish guidelines for the management of rural space in the coming years. The Action intends to produce the basic data needed for the better understanding of current changes in the rural world and to define the choices available to decision-makers. The Action also intends to provide the historical knowledge which will allow us to re-think the future of European peasantries, faced with problems with which historians have learned to deal by examining societies in the past: under-employment and multiple occupations, migrations and rural depopulation, the distortion of competition by the marketplace or by the policies established by political authorities, the problems of resource allocation, distribution and redistribution of heritages and holdings.

The work of the programme is concentrated in four working groups on (respectively), 'Landed Property', 'The management of rural land', 'Peasant societies' and 'Politics and peasants'.

Calls for papers for future meetings may be found on the PROGRESSORE web site, www.ehess.fr/projets-europe/progressore.html.

The Bishop and the Prior: demesne agriculture in medieval Hampshire*

by John Hare

Abstract

The bishops of Winchester possessed the richest and by far and away best-documented estate in medieval England. This article examines demesne agriculture on part of its estates and that of a related estate in the same area: the Cathedral Priory at Winchester. Together these two estates show some of the characteristics of the great estates of southern England and particularly of the great chalkland manors: mixed farming characterised by large sheep flocks and late leasing of the demesne. But while the two estates show much in common, they also show subtle variations in the chronology of demesne shrinkage and in the emphasis given to different crops and livestock. Some of these variations may be ascribed to the differing nature of the household that the estate supported, while for others the explanations for the variation in managerial policy are less clear.

The medieval estates of the bishopric of Winchester provide us with an extraordinarily rich quantity of documentation, described recently by Richard Britnell as 'the core of one of the most astonishing archives anywhere in the world to survive from the medieval period'.[1] The enrolled accounts survive for most manors and for most years from 1208–9 until after the end of the fifteenth century. They start earlier than the surviving accounts for most other estates; moreover, the bishops continued demesne agriculture later than on most other estates. It has been calculated that there are about 10,000 individual manorial accounts for the period of demesne agriculture, of which about half would have been from Hampshire. The fullness and importance of this archive has long been recognised.[2] But this

* This paper is a by-product of earlier work on Wiltshire, to be published as *A prospering society. Wiltshire in the later Middle Ages*. I am grateful for discussions on the bishopric with Mark Page and Jan Titow, and to all those whose published and unpublished work has enabled me to produce this article. Dr Page also kindly commented on a draft of this paper. An earlier version was given at the 2003 Annual Conference of the British Agricultural History Society at Winchester.

[1] R. Britnell, 'The Winchester pipe rolls and their historians', in R. Britnell (ed.), *The Winchester pipe rolls and medieval English society* (2003), p. 19.

[2] Britnell has summarised the use made by scholars of the bishopric records ('Winchester pipe rolls and their historians'). The work on the priory may be less familiar. The work of J. S. Drew is found in his 'Manorial accounts of St Swithun's priory Winchester', *English Historical Rev.*, 62 (1947), pp. 20–41, repr. in E. M. Carus-Wilson (ed.), *Essays in economic history* (3 vols, 1954–62), II, pp. 12–30 and in the typescript volumes he prepared on individual manors (*Chilbolton, Michelmersh, Houghton, Silkstead*), available in Winchester Cathedral Library and the Institute of Historical Research, London. Joan Greatrex' work is in her doctoral thesis, 'The administration of Winchester cathedral priory in the time of Cardinal Beaufort'

extraordinary amount of documentation creates its own problems. How do we cope with this huge mass of data?[3] How typical was this estate or was it, in Bruce Campbell's phrase, a 'unique estate' in both its economy as well as its documentation?[4]

This study seeks to explore the typicality of the episcopal estate by comparing its Hampshire manors with those of a related, also well-documented but less familiar estate, that of the Cathedral Priory of Winchester. The intention of the comparison is both to examine and explain the variations between the two estates and, through their similarities, to establish some of the characteristics of demesne agriculture in central southern England. Both estates had originally belonged to the bishop, their final legal separation occurring as late as 1284, although in practice this division had taken place long before. The cathedral priory's estate has for long been overshadowed by the bishopric. Although its records are patchy in their survival and do not begin until the middle of the thirteenth century, it still constitutes one of the best documented medieval estates in southern England. For present purposes the comparison has been restricted to the core estates in Hampshire, in order that similar manors and lands are being compared. On a large estate like the bishopric, there could be enormous variation between its far-flung manors.[5] Both estates were extremely wealthy. One was the richest bishopric in England (with an annual income of about £4000),[6] the other the richest monastery in Hampshire (with an income of over £1500). Both estates were dominated by Hampshire manors and between them they dominated the county. Many of their manors were large complex possessions, incorporating several settlements, originally acquired in the Anglo-Saxon period.

But there were also major contrasts between the two estates. They possessed very different households, and this could affect agrarian policies. The bishop was an itinerant lord, who moved

Note 2 continued
(unpublished PhD thesis, University of Ottawa, 1972), and subsequent articles, e.g. 'St Swithun's priory in the later Middle Ages', in J. Crook (ed.), *Winchester cathedral: nine hundred years, 1093–1993* (1993), pp. 139–166; 'The reconciliation of spiritual and temporal responsibilities: some aspects of St Swithun's as landowners and estate managers (*c.*1380–*c.*1450)', *Proc. Hants. Field Club* 51 (1996), pp. 77–87. Barry Harrison has followed up his study of the Wiltshire manors with an unpublished one of a group of north Hampshire ones. The Wiltshire manors are also treated in my *A prospering society*, and 'Agriculture and land use on the manor', in P. J. Fowler (ed.), *Landscape plotted and pieced* (2000), pp. 156–9.

[3] For the purposes of this paper, the available material has had to be heavily sampled. Snapshots of the two estates have been provided by the published bishopric accounts for 1211, 1302 and 1410, and by the composite priory manor accounts for 1248, 1283 and 1311, the stockbook for 1389–91 and the figures from manorial accounts about 1400 are given in Greatrex' thesis. Longer sequences have been provided by the typescripts of J. S. Drew, the work of N. S. B. and E. C. Gras on Crawley, and by my work on Bishop's Waltham. In addition, manorial accounts and pipe rolls have been used to explore specific problems. The priory material is mainly in the Winchester Cathedral Library (WCL) where it is presently being recatalogued. I have therefore used the dates of the accounts. The bishopric accounts are in the Hampshire Record Office (HRO) where they were formerly numbered with an Eccl 2 number, but have now been renumbered with a class reference 11M59B2. The accounts ran from Michelmas to Michaelmas and have been dated by the close of the account. Readers should note that there were two manors of Overton. That in Hampshire belonged to the bishop and that in Wiltshire to the priory. The context should make it clear which is being referred to.

[4] B. M. S. Campbell, 'A unique estate and a unique source: the Winchester pipe rolls in perspective', in Britnell (ed.), *Winchester pipe rolls*, pp. 21–43.

[5] J. Z. Titow, 'Some differences between manors and their effects on the condition of the peasant in the thirteenth century', *AgHR* 10 (1962), pp. 1–13 and repr. in W. Minchinton (ed.), *Essays in agrarian history* (2 vols, 1968), I, pp. 39–57.

[6] M. Page, 'William Wykeham and the management of the Winchester estate, 1366–1404', in W. M. Ormrod (ed.), *Fourteenth-century England* 3 (2004), p. 108.

between his many great residences and his movements were, in the long-term, unpredictable. For him the estate was essentially a producer of ready money and it aptly fits Postan's description of such estates as 'federated grain factories producing largely for cash'.[7] The estate could also supply food for the episcopal household, but its demands were inconsistent, depending on a variety of influences on any bishop's itinerary, although in his absence his great houses and parks could also be used by members of his household. By contrast, the main priory household was static and more predictable in its demand for food, with a concentration of demand in Winchester itself. It had less need to feed large numbers of horses. In the opening decade of the fifteenth century, the priory received an annual minimum of about 1,500 quarters of grain from its estates.[8] Barley made up the largest quantity (43 per cent), almost all of which went to the cellarer to be used for making ale. Meanwhile at the beginning of the 1390s, getting on for 500 pigs, 600 sheep, about 50 cattle and in excess of 4,000 cheeses were sent to be consumed by the priory household.[9]

The bishopric estate was also subject to other influences. At the death of a bishop, the livestock belonged to his executors and his successor had either to purchase the demesne herds and flocks from his predecessor's executors or rebuild them over a period of years. Flock sizes were thus affected by human mortality as much as that of the sheep, as may clearly be seen at Crawley.[10] As a further example, at Bishop's Waltham livestock numbers fell in 1404, the year of Bishop Wykeham's death, and fell further after this when most, but not all, of the sheep were bought from his executors. It then took a few years to build numbers up again to something like the earlier levels. The decision was also taken to integrate the flocks of this manor and those of nearby Droxford, with the lambs and hogasters kept at the latter manor (see Table 5).[11] In addition, vacancies, when the estates were in the hands of the crown, could also lead to the demesnes being stripped of grain and livestock.[12]

This study draws both on new work and on the work of others. On the bishopric, the figures for demesne agriculture are largely drawn from the published works of J. Z. Titow and D. L. Farmer underpinned by Titow's unpublished work, the published pipe rolls, other published work on

[7] M. M. Postan, *Essays in medieval agriculture and general problems of the medieval economy* (1973), p. 44; see also Campbell, 'Unique estate', p. 29.

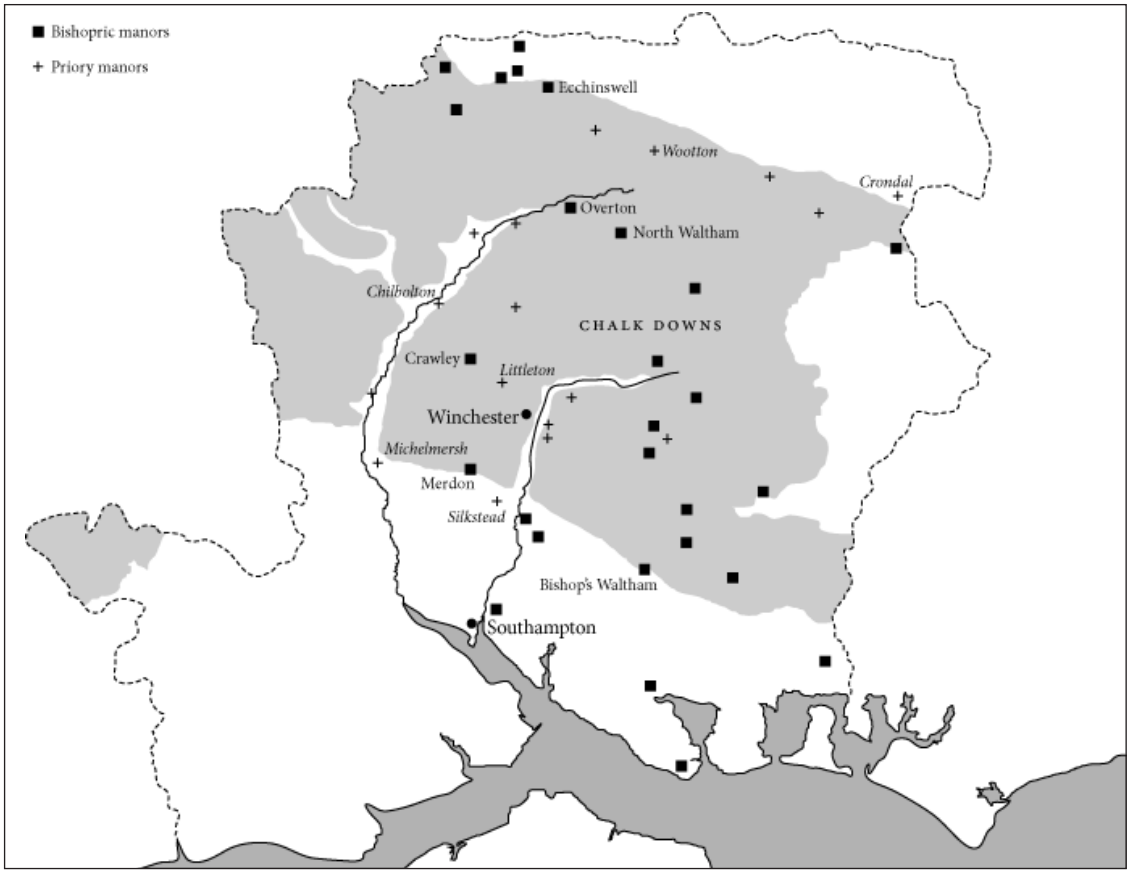
[8] Calculated from figures in Greatrex, 'Administration of Winchester cathedral priory', appendix D1 XXV, based on the nearest account chronologically to 1405. (Figures from individual manors may have fluctuated from year to year and there is no evidence for six manors where continued cultivation is likely.) The totals are an approximation and, because some manors have no surviving documentation, an underestimate. The 1580 qtrs. were made up as follows: wheat 601, barley 672, oats 219, dredge 88.

[9] WCL, stockbook. The cheese figures are calculated from the incomplete manorial figures tabulated in Greatrex, 'Administration', App. C.

[10] J. Z. Titow, 'Land and population on the bishop of Winchester's estates' (unpublished Ph.D. diss., Cambridge, 1962); for the estate as a whole, p. 44a. For Crawley the material is most easily accessible in M. Page, 'The technology of medieval sheep farming: some evidence from Crawley, Hampshire, 1208–1349', *AgHR* 51 (2003), pp. 141–3; see id., *Winchester's estate, archive and administration* (Hampshire Papers 24, 2002), pp. 14–15. For later examples, as at the death of the predecessors of bishops Edington and Wykeham, see the figures in N. S. B. Gras and E. C. Gras, *The economic and social history of an English village* (1930), pp. 399–419.

[11] M. Page (ed.), *The Pipe Roll of the bishopric of Winchester, 1409–10* (Hampshire Rec. Ser., 16, 1999), p. 191.

[12] K. Biddick (with C. C. J. H. Bijleveld), 'Agrarian productivity on the estates of the bishopric of Winchester in the early thirteenth century: a managerial perspective', in B. M. S. Campbell and M. Overton (eds), *Land, labour and livestock. Historical studies in European agricultural productivity* (1991), pp. 101–4.



MAP 1. Hampshire Estates of Bishop and Prior of Winchester.

the estate and my own work, especially on Bishop's Waltham. The priory material is largely based on my research which builds on that of Joan Greatrex and the extensive typescripts made by J. S. Drew. The huge amount of surviving documentation has necessitated considerable selectivity. Six manors from each estate have been chosen for detailed analysis. While they make no claim to exact comparability, they were selected to cover the main agricultural areas of the county: two overlapping the chalk and the Hampshire basin in the south, two from chalkland valleys, two chalkland manors near to the large town of Winchester, two colonising manors on the clays and former woodland south of Winchester, two manors on the northern downlands, and two overlapping the chalk and clays of the London basin (Map 1). Each of the pairs draws from the bishopric and from the cathedral priory so that there is a rough degree of comparability between the two estates, and too narrow a regional focus is avoided.

I

In a recent and important study Bruce Campbell has grouped the agricultural activities of demesnes into a series of national arable and pastoral farming types on the basis of a cluster analysis of their agricultural activities. The Hampshire manors within his national sample are

dominated by those of the bishopric of Winchester, the second largest group being the estate of Beaulieu abbey in 1269–70 whose lands lay mainly in the south-west of the county.[13] The priory estates are largely – but not completely – excluded from his sample. I have adopted an earlier and less sophisticated form of analysis, and have looked at the various agricultural elements in turn. Downland farming falls into Campbell's type four (spring course crops predominate) or type five (three-course cropping of wheat and oats), with some manors shifting from five to four as a result of the relative growth of barley. There were also a few manors in the north of Hampshire in type three (with the cultivation of mixed grains, dredge and bere).[14] In terms of pastoral farming, the manors fall into Campbell's types three and four. They possessed large non-working elements in the great sheep flocks, the two types being distinguished by their use of oxen. Type three drew its power from mixed teams of horse and oxen, type four was similar but with a predominance of oxen for the working animals and little cattle rearing.[15]

Both estates shared a common geographical environment in Hampshire (see Map 1). Their manors lay predominantly in and adjacent to the long-settled band of chalk which dominated the agriculture and landscape of the county. Here settlement tended to concentrate along the river valleys that dissected it or along the chalk escarpments. Settlements were nucleated and surrounded by open fields, usually with half the arable being cultivated at any one time. In the river valleys, estates, tithings and parishes tended to be long and thin running back from the valley. This gave each settlement a portion of the available types of land: meadow, well-drained land at the spring line for settlement, heavier more fertile soils, thinner arable soils and the downland pastures. Each part was an integral part of the economy of the settlement. Sheep produced wool and meat, but they also generated and spread manure, which helped to enhance the arable yields, and thus linked downland and arable in an integration of arable and pastoral farming of a sort that is familiar from succeeding centuries.[16] Dung enabled higher yields to be attained, and although agriculture had not reached the eighteenth-century situation (when dung became the most valued product of the sheep), our medieval farmers were clearly well aware of its value, as reflected in the carrying duties for the hurdles as at Chilbolton, or the renting out of the flock.[17] The size of the flocks would suggest that the lords were able to maintain the fertility of the soil.[18] On the downland plateaux there were also some smaller settlements.

A very different situation existed in the clays of the London basin to the north, in the Hampshire basin to the south, or on the clay with flints that overlay large parts of the chalkland. Here settlements and demesnes were often smaller but still with open fields, usually cultivating two-thirds of the arable. There were also more farmsteads, hamlets and enclosed fields. Here extensive colonisation involved the enclosure of substantial amounts of woodland that had probably never been part of an open field system. Such enclosures were either small peasant enclosures

[13] B. M. S. Campbell, *English seignorial agriculture, 1250–1450* (2000), p. 444.

[14] Ibid., pp. 261–7, 255–7, 280–1, 285–9.

[15] Ibid., pp. 112–7, 106–20.

[16] Hare, 'Agriculture and rural settlement', in M. Aston and C. Lewis (eds), *The medieval landscape of Wessex* (1994), p. 160.

[17] Drew, *Chilbolton*, p. 105; for the renting out of flocks in neighbouring Wiltshire, see Hare, *A prospering society*, ch. 4.

[18] E. Newman, 'Medieval sheep-corn farming, how much grain yield could each sheep support?', in *AgHR* 50 (2002), pp. 164–80.

or large-scale seigneurial assarts. These were the areas that came to be dominated by pasture and dairying in later centuries.[19]

II

Nationally the renewal of demesne farming was underway by about 1200, before the time of the earliest pipe rolls and the first surviving manorial accounts. By 1208, demesne agriculture had resumed on most of the bishopric manors, but was probably at an early stage on the lands of the priory. On the bishopric estate, only Bentley and North Waltham were not included in the 1209 pipe roll, although they were both cultivated by the lord in 1211.[20] For the priory the first extant account is of 1248, so that we need to turn to a tax assessment for its Wiltshire lands in 1210/11 to obtain a sense of how many of its demesnes were in hand at an earlier date. This shows some manors with low and suspiciously round figures for sheep (250, 250, 100, 100, 400), and others with more irregular figures (239, 925).[21] It seems that the former were still leased. This would suggest that the bishopric was ahead of the priory in resuming direct cultivation, but not substantially so.

This resumption of seigneurial agriculture occurred partly within the open fields but it also involved the creation of new enclosed farmsteads or granges that afforded greater flexibility of use and freed seigneurial agriculture from the restrictions of open field communal agriculture. It was not so much a resumption of the old agriculture as the creation of new agricultural activities and fields. Such agricultural expansion occurred on both estates (Table 1). South of Winchester on the wooded claylands, the priory created a new manor at Silkstead, on the fringes of its existing manor of Compton by 1243, with a demesne but no tenantry.[22] Next door to it, the bishopric manor of Merdon saw exceptional growth of the demesne and tenant land in the thirteenth century. It was the only bishopric manor to show substantial growth in the later thirteenth century (a 40 per cent growth), when elsewhere the bishopric demesne was being reduced.[23] At Bishop's Waltham many of the field names used from the thirteenth century onwards – la Worthe, Roverigge, la More, Krikelscroft, Longhegge – were described in a rental of 1461 as 'Newlond' suggesting their origins as enclosure from the waste. Altogether the sown acreage of the bishopric in Hampshire grew by eight per cent between 1209 and 1240, but registered little overall increase thereafter, and much decline.[24]

The priory lands also showed growth and flexibility, both within and outside the open field. At Whitchurch and elsewhere, there were open field furlongs with regular rotations and furlongs sown less frequently. At Chilbolton (after 1309) and Wonston (after 1329) farming seems to have been reorganised with a large part of the demesne consolidated outside the open field.[25]

[19] On regional farming here in the sixteenth century, see J. Thirsk (ed.), *The agrarian history of England and Wales*, IV, *1500–1640* (1967), pp. 64–71.

[20] But see also Bishopstone and Fonthill in Wiltshire discussed in *A prospering society*, ch. 2.

[21] P. M. Barnes and R. Powell (eds), *Interdict documents. Two surveys of Wiltshire during the interdict* (Pipe Roll Society, new ser. 34, 1960), pp. 23–5.

[22] Drew, *Silkstead*.

[23] Calculated from J. Z. Titow, *Winchester yields. A study in medieval agricultural productivity* (1972) and see also Titow, 'Land and population'.

[24] For the estate as a whole see Titow, 'Land and population', pp. 21–2.

[25] B. Harrison, pers. com.

TABLE 1. Sown acreage on selected Bishopric and Priory manors, 1208–70 to 1411–70

	1208–70	1271–99	1300–24	1325–49	1350–79	1380–1410	1411–70
Bishop's Waltham	*1208–70*	*1271–99*	*1300–24*	*1325–49*	*1371*	*1410*	*1434*
acres	532	422	347	189	192	128	117
Michelmersh	*1248*	*1283*	*1311*	*1326*		*1413*	*1428*
acres	375	326	309	315		221	212
Overton	*1208–70*	*1271–99*	*1300–24*	*1325–49*	*1376–9*	*1410*	*1432–5*
acres	307	296	209	215	174	144	140
Chilbolton	*1248*	*1282*	*1311*	*1347*	*1358*	*1403*	*1438*
acres	376	410	462	535	576	423	456
Crawley	*1208–70*	*1271–99*	*1300–24*	*1325–49*	*1376–9*	*1410*	*1441*
acres	358	324	272	213	196	185	157
Littleton	*1248*	*1283*	*1311*	*1323*		*1400*	*1428*
acres	378	271	370	333		229	212
Merdon	*1208–70*	*1271–99*	*1300–24*	*1325–49*	*1376–9*	*1410*	*1467*
acres	396	561	453	332	272	253	186
Silkstead		*1283*	*1311*	*1347*	*1371*	*1395*	
acres		255	307	275	201	171	
North Waltham	*1208–70*	*1271–99*	*1300–24*	*1325–49*	*1361*	*1410*	
acres	221	180	165	133	124	95	
Wootton			1311	*1338*	1373	*1410*	*1440*
sullions[a]			558	768	503	503	382
Ecchinswell	*1208–70*	*1271–99*	*1300–24*	*1325–49*	1376–9	*1410*	*1467*
acres	166	170	141	124	114	93	103
Crondal	*1248*	*1283*	*1311*	*1323*	*1380*	*1410*	*1450*
acres	364	366	382	333	147	212	197

Notes: this table has been designed to show chronological variation within an individual demesne. Manors given in italics belonged to Winchester Cathedral Priory.

Acres: there is considerable variation in the type of acres used in the earlier part of the period, with customary acres as well as measured, by perch, acres. Titow converted the two types of acres to a common scale. On the priory manors used there seems little difference between the two types of acre.

[a] Units of measurement at Wootton are sullions (half an acre).

Sources: The bishopric: figures are taken from Titow's *Winchester yields*, from Farmer's 'Grain yields', Page (ed.), *Pipe roll, 1409–10*, and HRO, 11M59, B2/11/15, 64; and Gras and Gras, *English village*, HRO 11M59, 132/11/15; B1/199.

For the cathedral priory: WCL, composite accounts for 1248, 1283 and 1311, HRO, 5M50, 2691, 2692; Drew, *Chilbolton*, and *Silkstead*, G. W. Kitchen (ed.), *The manor of Manydown* (Hampshire Record Ser., 10, 1895), pp. 150–3; WCL, Wootton 1373; Crondal 1323; Littleton 1400, 1428.

At Chilbolton a new enclosure or purpresture, with a ditch around it, was created in 1307.[26] Enclosures of this sort might give the lord a relatively large amount of more distant or even poorer land, but brought him a number of advantages. Once the demesne land was separated from the tenanted land, the lord secured greater flexibility in the ways he could use it. He could now focus the manuring power of his great sheep flocks on his own lands and thus improve his yields. But other factors might counterbalance this: peasant labour works may have been relatively inefficient compared with that of hired labour or of peasant labour inputs on their own land.[27]

III

The main crops on the episcopal estates at the start of the thirteenth century were wheat, barley (winter or spring) and oats. Rye was a rarity here, and peas, beans and vetch were only grown on a small scale.[28] But there were contrasts in the relative importance of these crops (Table 2). On the bishopric estates, most manors had two major crops, usually wheat and oats, as at Bishop's Waltham, or one dominant crop, almost always oats on the chalklands, as at Crawley and North Waltham.[29] Oats was generally most extensive, although in the Wiltshire chalklands it was pre-eminently a seigneurial crop.[30] Wheat came a close (or not very close) second. Barley was usually very much the third crop. This pattern probably reflected the poor soils and wide extent of colonisation on the clay with flints that covered much of the northern chalklands. Wheat was more important on the newly colonised claylands as at Merdon, Bishop's Waltham and Ecchinswell. Such patterns were less obvious on the priory estates. Here wheat and oats dominated some of its northern manors, as at Wootton and Crondal, but elsewhere, barley was an important crop: it usually covered about 25–35 per cent of the sown acreage and was generally the second crop, or almost this, at Chilbolton and Easton.[31] These changes may have reflected the agriculturally richer riverine manors of the priory, the impact of different market influences, or of household policies. Hampshire offers a very different pattern from neighbouring Wiltshire where barley seems to have been more important, although here too the bishopric produced some of the largest areas of oats. In addition, the growing Salisbury market and its increased demand for ale may have helped generate very high acreages for barley in its immediate hinterland. Peas, beans and vetches covered a small part of the arable, and mixed crops such as bere (winter barley) were found on some northern manors on both estates, as at Wootton, North Waltham and Ecchinswell.

Mixed farming dominated the agriculture of Hampshire, as of most of England. But here it was characterised by the large sheep flocks both on our two estates and those of other

[26] Drew, *Chilbolton*, p. 251.

[27] On the issue of comparing customary and hired works, D. Stone, 'The productivity of land and customary labour: evidence from Wisbech Barton in the fourteenth century', *EcHR* 50 (1997), pp. 646–54.

[28] See also J. Z. Titow, 'Field crops and their cultivation in Hampshire, 1200–1350, in the light of documentary evidence', unpublished paper, Hampshire RO, 97M97, C1.

[29] Ibid.

[30] J. N. Hare, 'Lord, tenant and the market: some tithe evidence from later medieval Wessex' (forthcoming).

[31] Titow, 'Field crops'. At Easton, the figures in 1311 were wheat 27%, barley 25%, oats 41%, vetch 4% and peas 3%. Calculated from WCL, composite account, 1311.

TABLE 2. Sown acreage by crop (as a percentage of the total sown area)

		Wheat	*Bere*	*Total winter crop*	*Barley*	*Dredge*	*Oats*	*Total spring crop*	*Vetch*	*Other legumes*
Bishop's Waltham	1211	46.7		46.7	9.1		41.7	50.8		2.5
	1302	43.8		43.8	9.5		39.1	48.6	6.7	1.9
	1371	33.9		33.9	18.2		34.4	52.6	5.5	8.1
	1410	41.6		41.6	19.2		25.1	44.3	3.1	11.0
Michelmersh	1248	58.7		58.7	8.8		32.1	40.9	0.4	
	1283	33.2	1.5	34.7	16.3		41.5	57.6	5.1	2.5
	1311	32.0	1.3	33.3	20.4		34.3	54.7	5.8	5.5
	1326	36.6	1.9	37.5	26.0		27.0	53.0	5.4	4.1
	1413	44.3		44.3	33.0		19.0	52.0	0.9	2.7
Overton	1211	7.7		40.7	48.4	16.7	34.9	51.6		
	1302	20.0	16.0	36.0	22.0		39.0	61.0	2.0	1.0
	1410	23.0	3.0	26.0	33.0		31.0	64.0	0.0	10.0
Chilbolton	1248	14.7		14.7	40.5		42.9	83.4	0.9	0.9
	1311	18.4	6.5	24.8	24.2	5.8	35.9	66.0	5.2	3.9
	1358	28.3	6.3	34.5	34.8	6.0	15.5	56.3	3.9	5.3
	1403	30.7	0.0	30.7	33.3	7.3	18.4	59.1	2.8	7.3
Crawley	1211	16.8	21.0	37.8	17.9		44.3	62.2		
	1302	19.7		19.7	25.6		49.2	74.8	2.7	2.9
	1357	30.9		30.9	29.7		26.4	56.1	8.1	4.9
	1410	32.4		32.4	27.0		21.6	48.6	10.8	8.1
Littleton	1248	15.7		15.7	29.2		53.3	82.4	1.3	0.6
	1311	21.6	1.6	23.2	44.3		24.3	68.6	5.4	2.7
	1400	30.3		30.3	44.2		25.5	69.7		
	1428	39.2		39.2	27.2		18.9	46.1	4.7	9.9
Merdon	1211	61.3		61.3	12.1		26.5	38.7		
	1302	43.0		43.0	21.5		21.5	43.0	5.4	8.6
	1410	45.8		45.8	22.1		22.1	44.2	4.7	5.1
	1467	43.0		43.0	21.5		21.5	43.0	5.4	8.6
Silkstead	1311	28.7		28.7	21.5	4.2	37.1	62.8	4.2	4.2
	1358	46.2		46.2	23.4	1.2	23.4	48.0	3.5	2.3
	1395	45.0		45.0	28.1		18.1	46.2	4.1	4.7

Continued overleaf

		Wheat	*Bere*	*Total winter crop*	*Barley*	*Dredge*	*Oats*	*Total spring crop*	*Vetch*	*Other legumes*
North Waltham	1211	7.7	40.7	48.4	16.7		34.9	51.6		
	1302	23.4	24.8	48.3	7.6		43.4	51.0	0.7	0.0
	1361	17.7	13.7	31.4	16.9		44.4	61.3	4.8	2.4
	1410	30.1	5.4	35.5	17.0		43.3	60.3	0.0	4.2
Wootton	1311	14.9	23.3	38.2	12.9		36.7	49.6	6.5	5.7
	1338	19.3	18.8	38.0	16.7		39.1	55.7	3.1	3.1
	1373	22.7	15.5	38.2	19.5		34.4	53.9	4.4	3.6
	1410	28.8	8.0	36.8	26.0		37.2	63.2		
Ecchinswell	1211	72.2		72.2			27.8	27.8		
	1302	36.9	12.0	48.9	7.9		42.2	51.1		
	1410	44.0	7.5	51.5	17.3		31.1	48.4		
	1467	44.7	8.7	53.4	19.4		27.2	46.6		
Crondal	1248	70.6		70.6	19.7		6.4	26.1	2.4	1.0
	1283	55.7	5.2	60.9	7.9		28.2	36.1	2.2	0.8
	1311	42.1		42.1	12.0		36.6	48.7	4.7	4.5
	1323	45.6	3.3	48.9	12.6		38.4	51.1		
	1410	44.9	0.0	44.9	25.9		29.3	55.2		
	1450	44.7	0.0	44.7	21.8		33.5	55.3		

Note: manors given in italics belonged to Winchester Cathedral Priory.
Sources: as for Table 1.

lords (Table 3).[32] The chalklands of southern England were among the greatest wool-producing areas of the country, and possessed some of the largest known flocks in England. The bishopric regularly maintained well over 20,000 sheep before 1280, peaking at about 30,000 between 1258 and 1273. Thereafter it generally possessed well below the 20,000 mark. The cathedral priory also seems to have had a similar-sized flock, of about 20,000, in the early fourteenth century.[33] Both bishopric and priory possessed individual flocks of over 1000 sheep, at Twyford, East Meon, Crawley and Overton, Chilbolton, Barton and Easton and occasionally elsewhere, as at Hambledon and Bishop's Waltham. At their peak, there were some flocks of over 2000 sheep.[34]

Such large flocks represented a considerable investment, and during the winter the sheep were kept and sheltered in permanent sheep houses, or *bercaria*, and fed on hay. Bercaria were

[32] Hare, 'Agriculture and rural society', pp. 160–1.

[33] E. Power, *The English wool trade* (1941), p. 34: the source of the reference is not clear, but the later fourteenth century figure was very similar, and figures for individual manors in Wiltshire and Hampshire suggest fourteenth-century stability.

[34] See Titow, 'Land and population', Table IV; WCL, composite account, 1311. For similar large scale flocks in Wiltshire, see Hare, *A prospering society*.

surrounded by a fenced or walled enclosure with a ditch, bank and hedge.[35] The sheep shed itself would have been a solid timber-framed building with timber or stone footings, with several bays, and with two or more doors. The priory built a new eight-bay house at Michelmersh in 1280, a new one at Chilbolton in 1307, and at Silkstead a four-bay building was lengthened by an additional three bays, and a new sheephouse was built in 1314.[36] Larger manors often possessed several sheep houses for the different flocks, the wethers, the ewes, and the hogasters: Michelmersh had two, Crawley and Chilbolton had three and Overton four.[37] Minor expenditure on the sheep houses was a regular feature of the accounts.[38]

Both estates also possessed substantial pig herds, particularly in the chalkland (Table 3). The priory had herds of over 50 on at least six Hampshire manors (Chilbolton, Wootton, Whitchurch, Hurstbourne, Easton and Michelmersh).[39] In 1302, the bishopric had eight herds above 50 pigs, with particular concentrations in the south-east at East Meon, Hambledon and Fareham (96, 92 and 73 pigs respectively). Their distribution may have been influenced by proximity to the main episcopal residences as well as woodland foodstuffs, with herds of over 40 at Twyford (for Marwell), Bishop's Waltham and Droxford (for the former), Alresford and Bishop's Sutton (for the latter), and Merdon and Crawley (for Winchester). While its chalkland and clayland manors provided large herds, some lacked them, as at Overton and Ecchinswell.[40] The priory had large herds on some of its chalkland manors, as at Chilbolton and Easton, and on the northern manor of Wootton. Pigs could be brought from a considerable distance, as from the priory's Wiltshire manors, and were then fattened up on the nearer manor of Chilbolton, before reaching Winchester.[41]

The location of specialist cattle herds may also have been influenced by the demands of the households as well as geographical factors (Table 3). The priory's cows were mainly found in the chalkland riverine valleys, with their relatively large areas of meadowland, or on the clayland pastures. The bishopric possessed larger herds, particularly near its most important residences. In 1302, the largest herds were at Highclere (50 and 43), Bishop's Waltham (27 and 40), Twyford (2 and 42), and Bishopstoke (38 and 35), with considerable expansion based on purchase of new stock at Bishop's Waltham and Twyford, although in the latter case this was to be shortlived.[42] All of these four manors had parks, which would have provided permanent pasture for cattle as

[35] For a general survey of sheepcotes, see C. Dyer, 'Sheepcotes: evidence for medieval sheepfarming', *Medieval Arch.*, 39 (1995), pp. 136–64, and 138–47 for the Cotswold structures. See also his *Lords and Peasants in a changing society. The estates of the Bishopric of Worcester, 1680–1540* (1980), p. 138. Hare, 'Agriculture and rural settlement', pp. 161–2, discusses the Wiltshire and Hampshire documentation and Hare, 'Agriculture and land use', pp. 157–8 for those at Overton (Wilts.). See also D. McOmish, D. Field and G. Brown, *The field archaeology of the Salisbury Plain training area* (2002), pp. 115–7.

[36] Drew, *Michelmersh*, p. 125; *Silkstead*, p. 218; *Chilbolton*, pp. 143, 159–60.

[37] Hare, 'Agriculture and rural settlement', p. 161; Drew, *Michelmersh*; *Chilbolton*, pp. 40, 81; Page, 'Medieval sheep farming', pp. 146–7.

[38] e.g. M. Page (ed.), *The Pipe Roll of the bishopric of Winchester, 1301–2* (Hampshire Record ser., 14, 1996), pp. 95, 108, 15, 20, 64, 76, 45, 54, 71, 83, 87, 99, 307–8, 24; Page (ed.), *Pipe Roll, 1409–10*, pp. 184, 96, 215, 234, 41, 67, 324, 43, 65, 74; Gras and Gras, *English village*, pp. 108, 72, 79; Page, 'Medieval sheep farming' pp. 146–8.

[39] WCL, composite account, 1311.

[40] Page (ed.), *Pipe Roll, 1301–2, passim*.

[41] Drew, *Chilbolton*: 1267, 180; 1318, 319 (the pigs came from Overton, Stockton and Enford); 1325, 334.

[42] Page (ed.), *Pipe Roll, 1301–2*, p. 275, at Twyford (for Marwell), 41 out of 42 cows remaining had come from purchase, The herd was low or non-existent between 1296 and 1301, and low from 1306 (Titow, 'Land and population', Table III).

TABLE 3. Livestock on twelve Hampshire manors, selected dates, early thirteenth to mid-fifteenth century.

		Horses	*Oxen*	*Bulls*	*Cows*	*Juvenile cattle*	*Total cattle*	*Wethers*	*Ewes*	*Rams*	*Lambs*	*Total sheep*	*Pigs*	*Juvenile pigs*	*Total pigs*
Bishop's Waltham	1211	8	102	2	48	24	176	268	436	0	71	774	72	38	110
	1302	6	54	1	40	26	121	271	236	8	122	663	36	13	49
	1410	7	24	2	23	21	70	334	256	6	0	617	25	26	51
Michelmersh	1248	5	46		15	23	84	2	162	6	12	182			
	1283	6	49	1	10	11	71		236	11	153	400	23	15	38
	1311	8	51	2	17	14	84		385	12	177	574	24	40	64
	1390	7	43	2	14	20	79		303	11	331	645	75	51	101
	1413	7	44	1	14	18	77		282	8	124	414	49	52	22
Overton	1211	10	34		5	9	48	374	342		122	838	5	17	22
	1302	12	20	1	26	27	60	631	401	17	280	1329	0	0	9
	1396	7	19	1	25	15	74	631	428	14	317	1390	1	8	15
	1410	8	18	1	20	16	60	515	355	12	323	1205	1	14	64
Chilbolton	1248	10	26		6	6	38	458	501	2	243	1204	31	33	64
	1311	12	21	1	11	15	48	511	649	18	314	1492	19	36	55
	1358	12	10	1	14	16	41	860	614	20	313	1807	46	32	78
	1433	12	18	1	10	14	43	231	434	12	256	933	45	52	97
Crawley	1211	10	37				37	458	474		220	694	31		31
	1302	8	35	1	19	15	70	433	575	0	268	1276	33	23	56
	1357	9	20	0	0	0	20	570	505	15	255	1345	45	52	97
	1410	7	20	0	0	0	20	520	396	16	287	1219	1	0	1
Littleton	1248	17	20		1	2	23		1110	15		1125	31	37	68
	1311	16	18	0	9	17	44	385	432	17	208	1042	25	26	51
	1399	3	9	1	5	8	23	388	452	12	282	1134	70	43	113

		Horses	*Oxen*	*Bulls*	*Cows*	*Juvenile cattle*	*Total cattle*	*Wethers*	*Ewes*	*Rams*	*Lambs*	*Total sheep*	*Pigs*	*Juvenile pigs*	*Total pigs*
Merdon	1211	29	59	1	21	29	110	143	186		98	427	28	7	35
	1302	16	59	1	26	28	114	171	261	14	125	571	18	35	53
	1410	6	50	1	24	21	96	701	308	9	0	1018	46	40	86
	1467	6	30	1	24	18	73	566	359	9	3	937	0	0	
Silkstead	1283	12	12		7	12	32	43	55	2	29	129	18	21	39
	1311	10	20	1	5	2	30	208	223	6	123	560	21	11	32
	1358	4	12				12	83	132	5	61	281	4	13	17
	1395	4	16	1	4	7	28	248	215	8	[a]	471	61	39	100
North Waltham	1211	13	40		3	3	46		143	199	119	507	4	12	16
	1302	17	9				9	167			148	315	0	0	
	1361	6	10	0	1		11	540			4	544	1	8	9
	1410	6	9				9	553				553	1	20	21
Wootton	1311	13	34	1	16	18	69	254	248	11	200	713	31	35	66
	1338	13	20		11	13	44	227	253	12	230	722	54	80	134
	1373	10	23	1	15	21	60	259	249	7	151	666	44	50	94
	1395	11	31		11	23	65	174	236	8	130	548	80	58	138
Ecchinswell	1211		32				32		225			225			
	1303	2	30				30	425			249	674			
	1410	4	18				18	501			319	820	1	14	15
	1467	2	18				18	410			286	696	1	14	15
Crondal	1248	14	57		11	13	81		357	7	153	514	24	18	39
	1283	16	51		12	11	74		168		80	248	28	7	35
	1311	14	52	2	20	18	92	23	295	16	142	476	14	36	50
	1390	15	36	2	24	38	100		254	7	40	301	62	36	98

Note: manors given in italics are manors of Winchester Cathedral Priory.
[a] 107 lambs sent to Barton
Sources: as Table 1.

well as deer, and would have served the demands of the neighbouring palaces.[43] In 1302, most of the cattle in Twyford were kept specifically in the park at Marwell, and produced milk for cheese.[44] Oxen provided the main tractive force, but horses were more widely used on some of the colonising manors, as at Overton and Chilbolton. Although the these two estates were largely restricted to the chalklands and the adjacent claylands, the evidence from Beaulieu Abbey suggests that significant cattle rearing was already developing in the New Forest and its neighbouring areas.[45]

IV

Despite demographic growth, demesne acreages shrank before the Black Death. This was particularly noticeable on the bishopric estate where the demesne reached its peak in the 1270s, after which it contracted on almost all the Hampshire manors. As Titow remarked, 'Broadly speaking, and taking all Hampshire manors of the bishopric as a whole, reclamation of land was the dominant feature of the first half of the thirteenth century and contraction the dominant feature of the period after about 1270'.[46] In Hampshire, this was particularly evident at Bishop's Waltham and Overton.[47] Only four manors showed any growth between the periods 1209–69 and 1270–99, and only at the colonising manors of Merdon (41.7 per cent) and Bishopstoke (14.9 per cent) was growth on any significant scale.[48] Merdon had shown considerable tenant colonisation in the early thirteenth century.[49] Eleven manors showed a drop in the area of cultivated arable of more than 10 per cent.

Such leasing could reflect either worsening finances of cultivation and falling yields, or a situation in which land shortage meant that the lord could gain increased rent revenue from a desperate peasantry. But, as Titow has argued, the shrinking demesne was not reflected by a comparable expansion of the tenant land, while on some manors, such as Bishop's Waltham, the leasing of portions of the demesne occurred at the same time as its continued expansion.[50] Although there was no uniform policy of contraction over the whole estate, the policy extended far beyond Hampshire, as at Taunton in Somerset, and in the total figures for the whole estate.[51] But contraction occurred on a substantially larger scale and much earlier than on most other estates in the country.

The contraction in the area of arable continued into the later fourteenth century (Table 1).[52] At Overton, there was also a considerable decay of tenant rents in the latter fourteenth century which continued, albeit on a smaller scale, into the early fifteenth century. There were

[43] E. Roberts, 'The bishop of Winchester's deer parks in Hampshire, 1200–1400', *Proc. Hants Field Club* 44 (1983), pp. 73–7.

[44] Page (ed.), *Pipe Roll, 1301–2*, p. 276.

[45] S. F. Hockey (ed.), *The account book of Beaulieu abbey* (Camden Soc., fourth ser., 16, 1975), pp. 144, 50, 56, 61.

[46] Titow, 'Field crops', pp. 27–8.

[47] Titow, *Winchester yields*.

[48] Calculated from Titow, *Winchester yields*, pp. 140–3. The two showing insignificant growth were Echinswell (2.4 per cent) and Hambledon (0.4 per cent), pp. 136–8.

[49] Titow, 'Land and population', p. 83.

[50] Ibid., pp. 24–6.

[51] Titow, 'Land and population'; C. Thornton, 'The level of arable productivity', in Britnell (ed.), *The Winchester pipe rolls*, pp. 115–6.

[52] Froyle, belonging to St Mary's abbey, Winchester also showed a decline in the demesne, and an early leasing by 1381, long before the estate had leased its Wiltshire manors.

TABLE 4. Bishop's Waltham, arable farming, 1209–1434 (acres)

	Wheat	*Barley*	*Oats*	*Vetch*	*Legumes*	*Total*
1209–70						532.0
1271–91						422.0
1300–24						347.0
1325–47						189.0
1366	66	30	77	7	5	185.0
1375	64	34.5	72	8.5	20.5	199.5
1388	65	37	42	10	8	162.0
1395	66	34.4	50	5		155.4
1404	60.4	33	42	6	10	151.4
1405	53	36	36	8	8	141.0
1416	52	29	34		5	120.0
1427	52	27	33	2	2	116.0
1434	52	28	33	2	2	117.0

Sources: average figures 1209–1347 from Titow, *Winchester yields*; the others from manorial accounts, HRO, 11M59, B2/11/2–64.

difficulties in some of the manor's constituent villages including the desertion of the settlement of Northington, where a village of 33 tenants was replaced by a single farm with four hedged fields.[53] At Bishop's Waltham, the dramatic fall in demesne acreage in the late thirteenth and early fourteenth century was followed by a period of relative stability after the Black Death (Table 4). This levelling out after the Black Death may be of more general application. Between 1209–69 and the period before the Black Death (1325–49), the acreage of the Hampshire manors shrank by 34.7 per cent. Between the latter period and 1410 it shrank by rather less, 26.6 per cent.[54] The Hampshire material seems to bear out Farmer's comments that in the later 1370s the typical manor on the estate still cultivated about 85 per cent of its pre-plague area, and in 1419–22 about 75 per cent.[55] This demesne contraction has frequently been associated with the peculiar conditions of declining population that came with the Black Death, but on the bishopric, it seems to be even more a feature of the years between 1270 and 1350.

By contrast, the priory estate showed much less evidence of early shrinkage in the area of land cultivated. Its main valley manors (such as Chilbolton and Michelmersh), remained stable in acreage during the fourteenth century. Of our six demesnes, only Michelmersh seems to have peaked before the end of the thirteenth century.[56] Chilbolton possesses a sequence of 31 accounts from 1248 to 1433: these show the area under crops fell slightly between 1273 and 1282 but then recovered. The high levels found in the fourteenth century remained until about 1392, when the acreage was reduced, having peaked in the middle decades of the century. But

[53] Hare, 'Agriculture and rural settlement', pp. 166–7.

[54] Calculated from Titow, *Winchester yields* and Page (ed.), *Pipe roll, 1409–10*. See also the trends under Wykeham charted in Page, 'William of Wykeham', p. 112.

[55] D. L. Farmer, 'Grain yields on the Winchester manors in the later Middle Ages', *EcHR* 30 (1977), pp. 561–2.

[56] Table 1 and Drew, *Michelmersh*.

contraction occurred in the fourteenth century on some of the smaller and poorer demesnes of the north Hampshire manors, for instance Wootton (where most of the decline was before 1361), Sutton (1330–87) and Crondal (between 1323 and 1380, recovering partly in 1390).[57] This and evidence elsewhere suggests that the early contraction of the bishopric may be exceptional.[58]

V

The fourteenth-century demographic decline had already started before the Black Death, but the devastating appearance of plague left the survivors better off, and subsequently able to benefit from the growing demand of the textile industry in neighbouring Wiltshire and later in north Hampshire. Farming showed both overall shrinkage and continued prosperity and demand. There was an increased emphasis on the more valuable crops, wheat rather than barley for bread, barley rather than oats for ale, and an increase in pastoral farming at the expense of arable, as at the neighbouring manors of Crawley (bishopric) and Littleton (priory). Barley production expanded, although there seems nothing like its exceptional growth in Salisbury's immediate hinterland (where the parsonage demesne at Downton was for a time engaged in a barley monoculture).[59] Demesne shrinkage was limited in scale. Buoyed up by larger flocks and therefore more manure, arable farming remained successful. The bishopric estate showed improved yields, particularly in barley and oats. The years between 1370 and 1409 were particularly successful with almost all grains cropping better than usual.[60]

On both estates, wheat, barley and oats remained dominant (Table 2). Wheat remained the largest crop at Bishop's Waltham, and retained or increased its share of the sown area. Barley retained its traditional importance as at Overton and Chilbolton. It remained the third crop at Bishop's Waltham, but here it expanded in relative terms, while oats fell (Table 4). Oats remained a key crop in the chalklands, but on both estates, it showed the most dramatic decline in acreages, as the poorer land ceased to be cultivated or was cultivated less frequently.[61] But oats continued to be more widely sown on the bishopric manors, where they usually made up the second largest sown acreage, while barley was the second crop on most of the priory manors. Only a few of the northern priory manors showed a significantly larger area of oats than barley. Legumes occupied the smallest areas but showed evidence of limited growth on many manors. The use of bere had been unusual and now became even less common (as at North Waltham and Ecchinswell). In general, the demesnes here show similar patterns to the national trends identified by Campbell, with the greatest changes being the expansion of barley and the contraction of oats.[62] Wheat grew in relative terms on some manors, while nationally it fell slightly.

While the demesne arable shrank in the later fourteenth century, pastoral farming expanded. Livestock numbers rose sharply after the Black Death and generally continued to grow during

[57] J. Hare, 'Regional prosperity in fifteenth-century England: some evidence from Wessex', in M. A. Hicks (ed.), *Revolution and consumption in late medieval England* (2001), p. 111; Drew, *Chilbolton; Michelmersh*, HRO, 5M50, 2691; Sutton showed a 25% fall between the two years (WCL, accounts 1330, 1387).

[58] Campbell, *English seignorial agriculture*, pp. 237, 235.

[59] Hare, *A prospering society*, ch. 5.

[60] Farmer, 'Grain yields', pp. 559–60.

[61] Chilbolton, Wootton and Sutton, and Crondal: Drew, *Chilbolton*, WCL, Wootton 1338, 1398; Sutton (1995 acquisition) 1330, 1387; Crondal, Composite 1248, 1323, Greatrex, 'Administration', App. A.

[62] Campbell, *English seignorial agriculture*, pp. 240–1.

the later fourteenth century.[63] Sheep farming remained resilient. It was practiced on a massive scale in the later fourteenth century, and continued to be closely integrated into the rest of the rural economy. This was particularly marked on the bishopric estate, where the Black Death was followed by a dramatic growth in sheep numbers and then stability at a new level, both on the whole estate, and on individual Hampshire manors. On the estate as a whole, sheep totals had fluctuated around 14,000 in the 1340s, but they rose rapidly from the later 1340s reaching a peak in 1369 of 35,000. There then followed a period of decline and then recovery, flocks averaging 33,000 between 1388 and 1397. The dramatic fall to about 8,000 sheep at the beginning of the fifteenth century probably reflects Wykeham's death, and the sale of stock by his executors. A few flocks were leased as at East Knoyle (Wilts.), and others were run at a slightly reduced scale (as at Bishop's Waltham, Table 5). A new stability was achieved in the early fifteenth century, when Cardinal Beaufort was a notable exporter of wool. Flocks were now at a significantly lower level, but were still greater in size than those of the early fourteenth century.[64] The Hampshire flocks remained high, with East Meon, Twyford, Overton, Merdon and Crawley maintaining flocks of over 1,000 sheep in 1410.[65]

The cathedral priory also expanded its flocks during the fourteenth century, but the change was much more limited, and varied considerably between manors. In Wiltshire, there was an increase of less than 20 per cent between the early part of the century and 1389/91, whilst on the six Hampshire manors, the total flock size was virtually identical between 1311 and 1390 (being 5007 in 1311 and 5029 in 1390). There was significant growth at Chilbolton, Littleton and Hurstbourne, but much less on some other manors. Chilbolton reached a peak in 1339 and Silkstead showed a slight contraction in the mid-fourteenth century. In general, stability rather than exceptional growth seems to have been characteristic of the priory's manors. All this was appreciably less than Campbell's national figures, which show flock sizes increasing as a percentage of total livestock units by 87 per cent.[66] One wonders how far these national calculations been over-influenced by particular regional biases or by the fluctuations on the well-documented manors of the bishopric of Winchester and in Norfolk.

Nonetheless the cathedral priory had a flock second in size in this area only to that of the bishopric. No other estate in southern England would seem to have run them close. Moreover, the survival of the priory's stock book for 1389–92 allows us to see the whole estate at the peak of its sheep farming much more clearly than most other estates.[67] The stock book summarises the priory's livestock on each manor, mainly at mid-yearly inspections in April, as well as providing figures for Michaelmas 1390 and 1391. It incorporates much of the information that would be available in countless manorial stock accounts were these to survive. It is a remarkably valuable and unusual source, and its snapshot of a great estate in southern England may be reinforced

[63] Farmer, 'Grain yields', pp. 562–3.

[64] M. J. Stephenson, 'Wool yields in the medieval economy', *EcHR* 41 (1988), pp. 385–6; with Wykeham's death the flock of East Knoyle was disposed of and not initially resumed, Page (ed.), *Pipe Roll, 1409–10*.

[65] Ibid., pp. 271, 368, 219, 371, 385.

[66] B. M. S. Campbell, K. C. Bartley and J. P. Power, 'The demesne-farming systems of post-Black Death England: a classification', *AgHR* 44 (1996), p. 134. The percentage growth of sheep in absolute terms was less. Any decline in the working stock of the demesne would increase the relative importance of the sheep flocks.

[67] For comparative figures for individual manors see Hare, *A prospering society* and the longer runs for a few of the Hampshire manors tabulated in Drew, *Chilbolton* and *Silkstead*.

TABLE 5. Bishop's Waltham, livestock, 1209–1434

	Horses	*Oxen*	*Bulls*	*Cows*	*Juvenile cattle*	*Total animals*	*Wethers*	*Ewes*	*Rams*	*Lambs*	*Total sheep*	*Adult pigs*	*Juvenile pigs*
1209–70						133					835		
1271–91						123					657		
1300–24						106					645		
1325–47						62					558		
1211	8	102	2	48	24	184	268	435		71	774	72	38
1302	6	54	1	40	26	127	271	236	8	122	637	36	13
1366	5	24	1	21	22	73	319	275	12	170	776	26	26
1375	6	29	2	33	26	96	410	277	8	47	742	57	26
1387	7	28	2	34	29	100	346	324	9	188	867	27	26
1395	6	33	2	30	27	98	349	335	12	168	864	22	26
1404	6	23	2	28	10	69	284	232	8	135	659	18	26
1405	6	24	2	20	20	72	228	153	7	0	388	0	0
1416	6	20	2	15	17	60	340	282	6	0	628	33	26
1428	6	20	2	20	18	66	303	278	8	0	589	1	0
1434	4	19	2	20	12	57	295	278	8	0	581	1	0

Note: The column for total animals includes all those listed except for sheep and pigs. By the end of the accounting year the hoggasters have become reclassified so that they appear as adult sheep.
Sources: as for Table 4.

by other evidence from individual manors. In 1390, the priory possessed twenty different flocks (most of which lay in Hampshire, but with some outliers in Wiltshire), with a total of 20,357 sheep (Table 6). Like the bishopric, it maintained both a large number of flocks, and particularly large individual manorial flocks. These were exceptionally extensive around and to the north of Winchester. There were smaller flocks on the smaller demesnes of north Hampshire, such as Crondal, which show signs of contraction and this may have reflected a shift to other types of pastoral farming.

In Hampshire, as elsewhere on other chalkland estates, flocks were run on an inter-manorial basis and transfers of sheep were common. In part these were aimed at correcting temporary deficiencies, such as when murrain struck particularly hard on an individual manor, or when a manor had a surplus of one kind of sheep. But in other cases, manors possessed an incomplete flock, lacking either the breeding ewe flock, the young hogasters, or the wethers that were kept for wool, so that regular movements of sheep were necessary. This reflected a growing specialisation of manorial flocks. As Table 6 shows, Michelmersh and Crondal possessed breeding flocks, while the small manors of Hannington and Sutton, and Houghton kept only wethers. These specialisms suggest that the breeding flocks were kept on the more sheltered pastures and the hardier wether flocks on the upper downland pastures. While much movement was short distance, sheep might also be walked much further; for instance from the Wiltshire manors to Winchester or to the manors of east Hampshire. In 1390 Sutton and Hannington, both of which had no breeding flock, received new stock from Crondal, Barton, Wootton, and Enford and Alton, and both received sheep from Littleton in 1391. In 1390, the large manor of Easton, near Winchester, received wethers from Barton and lambs from Silkstead. The following year it sent hogasters to Mapledurham and received lambs from Crondal and Silkstead. Such movements continued to be recorded in the early fifteenth-century accounts.[68] The flock was greater than its individual manors, and policies could change. Thus at Silkstead from 1385 to 1396, lambs were sent to other manors and returned as hogasters before shearing in the following year.[69] Inter-manorial movements of sheep were also found on the bishopric manors, although such movements may have been more local in character, as between manors in the Clere group, the linking of the Bishop's Waltham and Droxford flocks in the fifteenth century, and movements between Marwell, Twyford, Merdon and Crawley.[70] As was usual on many large chalkland estates, the wool was pooled and sold centrally.[71]

Sheep produced wool and meat for the market and the prior's household, as well as manure. Sheep were separated, fattened and sold, most to the market. Even on the priory estate in 1391, only 16 per cent of the 3794 sheep chosen for fattening were sent to the household.[72] At Enford (Wilts.) in 1403, five times as many sheep were sold locally in the markets of Salisbury and west Wiltshire, as were sent to Winchester.[73] Given the large size of the flocks, this is likely to have

[68] WCL, Stockbook, fos. 1r–15r, 23r, Greatrex, 'Administration', App. E1, xxxv–xliv

[69] Drew, *Silkstead*, pp. 81, 622–713.

[70] Page (ed.), *Pipe Roll, 1301–2*; id., *Pipe Roll, 1409–10*; HRO, 11M59, B2/11/ 41, 50, 64; B1/210, 211.

[71] G. W. Kitchen (ed.), *Compotus rolls of the obedientiaries of St Swithun's priory* (Hampshire Record Soc, 1892), pp. 224–7; Hare, *A prospering society*, ch. 5; Drew, *Chilbolton*; Page (ed.), *Pipe Roll, 1301–2*; id., *Pipe Roll, 1409–10*; Gras and Gras, *English village*, pp. 199, 247, 57, 67, 76, 85, 302, 12.

[72] WCL, stockbook, fo. 34v.

[73] British Library, Harl. Roll, l/X/7.

TABLE 6. Livestock on the estates of Winchester Cathedral Priory, Michaelmas 1390

	Cart horses	*Plough horses*	*Total Horses*	*Oxen*	*Bull*	*Cow*	*Bullock*	*One year*	*Calves*	*Total Cattle*	*Weth-ers*	*Rams*	*Ewes*	*Lambs*	*Total sheep*	*Pigs*	*Piglets*	*Total Pigs*
Crondal	6	6	15[a]	36	2	24	8	14	16	100		7	254	40	301	62	36	98
Sutton	4	1	5	11						11	275				275	48	39	87
Hannington		6	6	2						2	292				292			0
Wootton	4	6	10	24	1	11	7	8	8	59	301	8	252	176	737	68	58	126
Whitchurch	5	6	11	22	1	15	6	7	8	59	468	17	428	268	1181	78	52	130
Hurstborne	5	17	22	22	1	22	8	11	12	76	767	19	492	286	1564	69	51	120
Wonston	4	1	5	10	1	3	3	3	3	23	414	12	368	231	1025	24	27	51
Chilbolton	2	6	8	12	1	10	4	5	6	38	810	19	533	324	1686	73	39	112
Mapledurham	5		5	18	1	4	3	3	2	31	245	7	195	[b]	447	50	40	90
Easton	5	10	15	22	1	16	8	8	8	63	803	21	611	419	1854	68	52	120
Barton	6	18	24	40	2	20	6	7	12	87	1010	21	901	727	2659	51	86	137
Thurmond	6		6							0	318	10	304		632			0
Silkstead	4		4	14	1	5	2	2	3	27	246	8	219		473	40	39	79
Littleton	6		6	10	1	5	3	2	3	24	438	14	506	329	1287	33	44	77
Houghton	5		5	10						10	397				397	27	30	57
Michelmersh	4	3	7	43	2	14	4	8	8	79		11	303	231	545	75	51	126
Stockton	5		5	14						14	505			111	616	44	39	83
Enford	4	12	16	20	2	10	7	6	6	51	952	18	556	356	1882	44	52	96
Overton	5	3	8	27	1	10	8	8	8	62	975	19	556	350	1900	76	57	133
Alton	4	4	8	32	1	8	6	5	6	58		12	454	148	614	45	42	87
Wroughton	4		4	16		12	9			37					0			0
Total	93	99	195	405	19	189	92	97	109	911	9216	223	6932	3996	20367	975	834	1809

Notes: Stockton, Enford, Overton, Alton and Wroughton are in Wiltshire and have been included to provide a complete picture of the estate. There were some small manors that belonged to individual obedientaries: they were not included in the stockbook and are therefore not in this table.
Nesting swans were recorded as follows: at Whitchurch 4; Hurstbourne 5; Chilbolton 13; Houghton 2; Michelmersh 4; Stockton 12; Enford 6.
[a] including three 'horses' in addition to carthorses and ploughhorses.
[b] 104 were sold as kebbs.
Source: WCL, stockbook, fos 16r–19r.

been a general situation. Finally the sheeps' manure linked the downland pastures to arable farming through the consequent higher yields. Large sheep flocks were an integral part of the rural economy.

The two estates differed in their policy towards pigs. In contrast to the bishopric, the cathedral priory estate considerably increased its swineherds in the course of the fourteenth century. At Chilbolton, the average size of the herd doubled from 50 in 1248–1348 (18 years' accounts) to 105 in 1358–96 (six accounts), with a peak of over a hundred in the 1390s.[74] They rose even more dramatically at Michelmersh, from 52 in 1326 to 126 in 1390.[75] Elsewhere comparison of isolated accounts reinforces this impression. The herd size had increased substantially at Sutton, doubled at Crondal and almost trebled at Easton. There was little growth at Wootton.[76] Pig herds seem to have been particularly large on the chalkland manors of north and central Hampshire (at Wootton, Whitchurch, Hurstborne, Chilbolton and Easton). Much, but not all, of this expansion went to feed the priory household. The estate provided the priory with 499 pigs in 1390 and 469 pigs in 1391.[77] The stockbook shows the pigs were driven to Winchester in October and November, each manor sending about a quarter of its herd to feed the priory.[78] This was a household where pig-meat was consumed on a particularly large scale. By comparison, Canterbury Cathedral Priory consumed 90 pigs, or less than a fifth of this, in 1484–5 and Syon Abbey, an annual average of 67 between 1446 and 1461.[79]

By contrast pig farming shrank on the bishopric estate. At the beginning of the fourteenth century the herds of the two estates had been comparable in scale. But by 1409–10 the bishopric possessed only five substantial herds of over 50, with two of the largest in south-east Hampshire, at East Meon and Hambledon.[80] By contrast the priory had 15 manors with over 50 pigs (Table 6). At Bishop's Waltham, which overlapped the chalk and clay, the number had shrunk compared with 1210–11, but the fall had occurred before the fourteenth century. Elsewhere, demesne pigs were unimportant as in the chalkland manor of Overton, and they had ceased to be kept on the demesne at Crawley by 1329.[81] On both estates the issue of piglets became fixed, and the reeve kept any surplus. At Bishop's Waltham, the return of piglets had become fixed at 30 by 1350, of which three were for tithes and one for the swineherd.[82] On the priory estate, the yield was fixed at 60 at Chilbolton from 1325, and 45 at Silkstead from *c*.1325.[83] It is perhaps significant that on both these priory manors, the fixed issues were greater than those found under the previous system, and the number of adult pigs continued to fluctuate. The growth of pig production on the priory estate is clearly on a much greater scale than the national figures provided by Campbell would suggest. He found only a three per cent increase in pigs as a percentage of livestock units on his core demesnes and ten per cent on those of the London

[74] Calculated from Drew, *Chilbolton*.

[75] The average herd over the period 1248–1326 was 55 (calculated from Drew, *Michelmersh*). In 1312 the herd was 101, and in 1413 it had dropped to 83.

[76] Sutton 1330, 50: 1386/90, 80: Crondal 1248, 39; 1311, 50; 1390, 98: Easton 1310/1, 53/36 1390 120; Wootton 1337/8, 108/13, 1390, 126; WCL, 1995 acquisition, Composites 1248 and 1311, Stockbook, Wootton account.

[77] WCL, Stockbook, fos 19, 38.

[78] WCL, Stockbook, fo. 19v.

[79] M. Mate, 'Pastoral farming in south-east England in the fifteenth century', *EcHR* 40 (1987), pp. 523–36.

[80] East Meon (99), Hambledon (81); Merdon (86), Bishops Sutton (55), Bishops Waltham (51).

[81] Although there seem subsequently to have been some temporary herds. Gras and Gras, *English village*, pp. 450, 302, 311, 450.

[82] HRO, 11M59, B2/11/2.

[83] Drew, 'Accounts of St Swithuns', p. 23; *Chilbolton*, pp. 89–91; *Silkstead*, pp. 99–102.

area.[84] This may reflect either the priory's own demands as well as a wider and growing regional prosperity with a consequent increased demand for pork, or the peculiarities of the bishopric and other estates, who largely left pig-farming to their tenantry.

Cattle numbers often shrank although there seems to be evidence of a growing regional specialisation away from the chalk. On the Cathedral Priory estate, the largest herds of cattle in Hampshire were at Crondal in the north of the county where it possessed 24 cows in 1391, and in the richer river valleys of the Test and Itchen in central Hampshire, where the herds could draw upon the lush pastures and supply the demands of Winchester and its household, as at Hurstborne, Easton, Michelmersh, Barton and particularly Whitchurch. Such specialism was also reflected in the high figures for cheese production at Hurstbourne, Crondal and Barton.[85] Leland noted the emphasis on cattle farming in the south of the county in 1542, although this was an area where our estates were weak.[86] But when the bishop of Winchester leased Bitterne in *c.*1380, he enlarged the dairy stock from 24 to 50 cows (rising subsequently to 51 in 1393) and received over £6 for the milk rent of the cows.[87] There were still 45 cows together with younger stock in 1410.[88] The estate of Titchfield abbey, with its concentration of lands in southern Hampshire, also reveals the development of cattle farming.[89] Another possible area of specialisation lay in the north of Hampshire in the London basin. This is not a well-documented area, but we can glimpse a growing pastoral specialisation of agriculture, as at Crondal or the Berkshire manor of Coleshill (Edington Priory), such as was to characterise future agrarian development.[90] We can thus begin to see emerging the farming areas of the early modern period, with distinctive dairying and pastoral areas in north and south Hampshire.

Where the chalkland arable demesne was reduced in size, the poorer soils were opened up for alternative uses. Poor arable could be used for sheep, and poorer pastures could be converted to rabbit warrens. The latter was a general development in the chalklands of southern England, on our estates and on others: as on the duchy of Lancaster's manor of King's Somborne,[91] and Hyde Abbey's Micheldever.[92] The bishopric of Winchester had warrens on the northern and central expanses of downlands at Highclere and Ashmansworth,[93] and two giant warrens at Overton and Longwood Warren. By the end of the fourteenth century, Willesley warren in Overton was producing over a thousand rabbits per year, even 1448 in 1421. It was leased in 1433 with a lodge and 2000 rabbits for £9 per year.[94] Longwood Warren, to the south-east of Winchester, operated on a similar scale in the fifteenth century producing over 1,100 rabbits in

[84] Campbell, Bartley and Power, 'The demesne-farming systems', p. 134.

[85] Greatrex, 'The reconciliation of spiritual and temporal responsibilities', pp. 77–87.

[86] J. Chandler (ed.), *John Leland's Itinerary* (1993), p. 202.

[87] E. Miller, 'Farming practices and techniques, the southern counties', in id. (ed.) *Agrarian history of England and Wales* III, *1350–1540* (1991), p. 298; HRO, 11M59, B2 12/4, 8, 10.

[88] Page (ed.), *Pipe Roll, 1409–10*, pp. 203–7.

[89] VCH, *Hampshire*, II, p. 185.

[90] R. Faith, 'Berkshire: fourteenth and fifteenth centuries', in P. D. A. Harvey (ed.), *The peasant land market in medieval England* (1984), p. 171.

[91] TNA, DL29/728/11991, VCH, *Hampshire*, III, p. 391.

[92] Hare, 'Agriculture and rural settlement', p. 164. For rabbit farming in Wiltshire and Hampshire see the same article and for East Anglia, M. Bailey, 'The rabbit and the medieval East Anglian economy', *AgHR* 36 (1988), pp. 1–20.

[93] e.g. HRO, 11M59, B1/166; J. Greatrex (ed.), *The register of the common seal of the priory of St Swithun, Winchester, 1345–1497* (Hampshire Record Ser., 2, 1978), p. 193.

[94] HRO, 11M59, B1/129, 133, 144, 166, 181; Miller, 'Farming practices and techniques', p. 301.

1402 and was leased for an annual rent of £10 from 1441.[95] Such warrens could make a significant contribution to manorial finances. We know much less about the priory's activities. In the early fourteenth century, its huntsman was catching rabbits at Chilbolton and later it had a small warren at Littleton.[96] Moreover its manor of Easton, for which no late accounts survive, overlapped with the great chalkland wilderness which provided one of the two great bishopric warrens (at Longwood Warren). Such conversions of poor downland soils and difficult terrain allowed them to produce a valuable but easily produced crop, with low labour costs. There were risks: death and escapes could have a dramatic effect on a warren's profits, and thus of the manor as a whole. The warrens added to manorial revenues, provided for royal, noble and episcopal households, and helped open up the market for rabbit meat and furs to a much wider market.

At Overton, the warrens were already in operation by the 1360s, but we know little of their development elsewhere.[97] Initially the change of land use was probably expensive. The medieval rabbit would seem to have been less tough than its modern descendants.[98] They needed to be kept in artificial warrens with disturbed and well drained soils and built-in burrows or rabbit holes with roofs of scrub and bushes, as at Merdon on the bishopric.[99] The management of the burrows or *les buryes* is referred to in a lease of Longwood Warren.[100] Such warrens have left their traces on the landscape as pillow mounds, or as groups of banked ridges, but are difficult to date.[101]

VI

By 1400, the leasing of the demesnes was well underway in much of England. It had already occurred on some of the lay estates in the Hampshire chalklands (as on the Duchy of Lancaster's manor at King's Somborne). But at this date there had been little leasing on our estates or other great ecclesiastical manors in southern England, other than on a few small or outlying manors.[102] Here, as in the chalklands of Wiltshire, the main period of leasing was from the 1420s to the 1440s although exact dating is difficult on the priory estates because of the erratic survival of individual manorial accounts. Early leasing, some of which was only temporary, occcurred at Hannington (in 1380s and again in 1394), at Hinton (1406) and Mapledurham (1411–7), while Silkstead was leased permanently from 1399. Subsequently the steady trickle of leasing came to include the large manors: Wonston (leased between 1400 and 1406), Hurstbourne (in 1408), Littleton (between 1428 and 1457), Chilbolton (1433 to 1444), Crondal (1451 to 1465) Mapledurham (1425 to 1430), Thurmonds (after 1428), Whitchurch (1433 to 1436), Wootton (1442 to 1445)

[95] HRO, 11M59, B1/181.

[96] Drew, *Chilbolton*, 1311, 1346, 1347. But this may have belonged to an earlier of phase of rabbit hunting before the introduction of artificial warrens; Greatrex (ed.), *Common Seal*, p. 135.

[97] But not apparently at Overton in 1347: HRO, 11M59, B1/99. E. Roberts, 'The bishop of Winchester's deer parks in Hampshire', *Proc. Hants Field Club* 44 (1988), p. 78; E. Stokes (ed.), *Abstracts of Wiltshire* inquisitions post mortem … *1227–1377* (Index Library, 48, 1914), pp. 181, 299.

[98] O. Rackham, *The history of the countryside* (1987), p. 47.

[99] Greatrex (ed.), *Common Seal*, p. 180.

[100] Ibid., p. 150.

[101] Hare, 'Agriculture and rural settlement', pp. 164–5.

[102] Hare, *A prospering society*, ch. 6; id., 'The monks as landlords: the leasing of the demesnes in southern England', in C. Barron and C. Harper-Bill (eds), *The church in pre-reformation society: essays in honour of F. R. H. Du Boulay* (1985), pp. 82–94.

and Michelmersh (after 1428).[103] The priory's great home manor of Barton was leased by 1475, but direct cultivation was resumed the following year and continued in 1489.[104] The bishopric showed a similar chronology. Here there had been limited early leasing as at Ashmansworth (1382) and Wield (1392). But it made little progress under Bishop Wykeham except on the smaller, least valuable and most recently acquired estates. There was little leasing in 1410 and even less a few years later. In 1419–22, 18 out of 23 Hampshire manors still maintained direct cultivation and 11 in 1432–3. Bishop's Waltham was leased between 1434 and 1436 and Crawley in 1448–9.[105] Most manors had been leased by 1450, with only three Hampshire manors and two elsewhere remaining under direct cultivation. By 1455, the only manors in hand anywhere on the estate were in Hampshire (Ecchinswell and Merdon) and these continued direct cultivation until 1472.[106] It is not clear why these two were retained in hand longer than any others, as they were not especially profitable.[107]

The causes of leasing were varied. Economic factors, such as high or rising wages, and falling or stagnant grain prices since the late fourteenth century boom, had put the finances of the demesnes under pressure. On many manors of the bishopric, arable profits declined from the second decade of the fifteenth century.[108] But they still made a profit and it is difficult to find a purely economic explanation for the new preference for leasing. Demesne agriculture, however, involved high administrative costs and produced a relatively small part of the manor's income. Economic trends may not have caused leasing, but they probably destroyed the context which had allowed the development of the exceptional and bureaucratic system of direct cultivation that England had adopted in the thirteenth century. The bishopric records may excite the historian, but they also remind us of the time-consuming and wasteful nature of the whole procedure: how much repetitious and out-date material was copied down year after year. Now recourse was made to an earlier and simpler method of exploiting estates. The land was rented out for an agreed and negotiable sum. It was no longer necessary for a lord to argue with his reeve about each minor detail of cost. A sudden shortening of the records followed. But in the chalklands, lords did not adopt the new policy with any speed or apparent enthusiasm.

Comparison of the process of leasing on the two estates can establish some important characteristics. Here, as in neighbouring Wiltshire, the demesne was leased as a single block to a single tenant, whether to a former peasant farmer or a member of the professional gentry, such as the Kingsmills or Langtons.[109] The large scale chalkland demesne agriculture continued and remained characteristic of this area in subsequent centuries. The new policy could be adopted within the existing pattern of feeding the household. Those priory manors that had previously provided large quantities of foodstuffs, frequently continued to do so, albeit now in the form

[103] Based on appendices in Greatrex, 'Administration', C1, B2 and A2, and HRO, 5M50, 2691, 2.

[104] WCL, Box 9/37 and 41.

[105] Page (ed.), *Pipe Roll, 1409–10*; HRO, 11M59, B2/11/34–6; Gras and Gras, *English village*, pp. 475–89.

[106] J. Z. Titow, 'Arable cultivation on the estates of the bishops of Winchester, 1208–1475' (unpublished paper), HRO, 97M97, C8, p. 5; Page (ed.), *Pipe Roll, 1409–10*, pp. xxi–xxiv; Farmer, 'Grain yields', p. 562; Campbell, 'Unique estate', p. 33; HRO, 11M59, B1/60–1.

[107] Titow, 'Arable cultivation', pp. 10–11.

[108] pers. comm. J. Z. Titow.

[109] No systematic study of the Hampshire lessees has been made, but for neighbouring Wiltshire, see J. N. Hare, 'The demesne lessees of fifteenth century Wiltshire', *AgHR* 29 (1981), pp. 1–15. For the Kingsmills and Langton, see Hare, 'Regional prosperity', p. 119 and E. Roberts, 'Overton Court Farm and the late medieval farmhouses of demesne lessees in Hampshire', *Proc. Hants. Field Club* 51 (1996), p. 93.

of food rents, of grain and poultry, as at Chilbolton (1444, with 50 quarters of grain and some poultry), Michelmersh (1496), Wonston, Whitchurch, Wootton and Crondal.[110] Such food rents are familiar from other monastic estates, as at Canterbury and Wilton.[111]

The last years of direct farming saw a limited reduction in sheep numbers, and there may have been some reduction in investment costs, as in the expenditure on hay at Crawley.[112] But on both estates the leasing of the demesne arable was followed by an extended period, for up to a generation after the arable had been leased and continuing until the 1460s, 1470s or even 1480s, when lords continued to maintain in hand a large flock. This also occurred on many other manors in the chalkland, both ecclesiastical and lay (as with the Duchy of Lancaster).[113] The priory flocks were leased at Silkstead between 1465 and 1468, at Wootton between 1471 and 1475, Whitchurch between 1471 and 1483, Littleton after 1479 and at Houghton, Michelmersh and Barton after 1489.[114] There was a similar situation on the bishopric. By 1465, when arable farming only remained on two manors, there were still fourteen manorial flocks, all of which were in Hampshire. This had fallen to nine by 1477, and there were at least three by 1482. By 1487 only Twyford, with a massive flock of 1250 sheep, continued such direct cultivation, and this was leased by 1489.[115] On both estates the continuation of sheep-farming probably reflected the difficulties in finding someone able to accept the very considerable capital risks involved in taking on such a massive flock. Some chalkland monastic estates continued their flocks for even longer, as on those of Shaftesbury and Wilton in Dorset and south Wiltshire. Ultimately, and by the end of the fifteenth century, leasing had achieved a new stability and permanence on our estates.[116]

The retreat from demesne cultivation did not, however, lead to an end to seigneurial investment. Lords continued to invest in manorial buildings, as elsewhere in the region.[117] The bishop built a new barn at Burghclere in 1451–2, and at Overton, he paid over £47 and provided timber for a new barn in 1496–8, and later spent over £41 on a new farmhouse in 1505–6. Similarly the priory may have built a new farmhouse at Littleton and spent heavily on new buildings at Stockton (Wilts.).[118]

VII

The comparison of these two estates shows the profound influence of common regional factors. Each estate was shaped by patterns of agriculture of which they were both part, and which they also influenced. They showed the characteristics of the chalklands, particularly of the great ecclesiastical estates in Hampshire and Wiltshire. Their large-scale agriculture was characterised by the great demesne flocks that produced wool and meat and whose manure was crucial to

[110] Greatrex, 'Administration', p. 156 and table C1; Greatrex (ed.), *Common Seal*, p. 188.

[111] R. A. L. Smith, *Canterbury Cathedral Priory* (1943, 1969 edn), p. 193; Hare, 'Monks as landlords', p. 89.

[112] D. Stone, 'The productivity and management of sheep in late medieval England', *AgHR* 51 (2003), p. 8.

[113] Hare, *A prospering society*, ch. 6; id., 'Monks as landlords', pp. 82–94; id., 'Regional prosperity', p. 117.

[114] WCL, Barton 1479 and 1489.

[115] HRO, 11M59, B1/197, 200, 205, B1/210, 211, 212. Merdon was being leased in 1487. Flocks were kept at Crawley until at least 1465, but had ceased by 1470, so that the sequence of figures in Gras and Gras, *English village*, could be extended.

[116] Hare, 'Monks as landlords', pp. 87–8.

[117] Hare, *A prospering society*, ch. 6.

[118] Roberts, 'Overton Court Farm', pp. 95, 102–4; id., *Hampshire Houses, 1200–1700* (2003), p. 230.

maintaining and renewing the fertility of the soil, and thus the profitability of arable agriculture. Here, as on other estates in the area, the lords maintained arable cultivation longer than elsewhere in England, and often kept their large sheep flocks long after they had leased their arable. Such conservatism on both estates may have reflected the practical difficulties of finding men who could undertake the financing of such large-scale agriculture. Beyond the chalklands lay areas where flocks were smaller, and where, in the claylands, pastoral farming became increasingly important in the fifteenth century.

Such regional similarities and the wider differences within the vast bishopric estates should be expected. Medieval agriculture remained close to the soils and to the landscape. At the same time there were subtle variations between the two estates that reflected both individual decisions by estate managers, and the contrasting demands of the two estates for cash or food. The priory's need to feed a static household may have encouraged a more conservative management, as with the later food leases. The itinerant nature of the bishopric, with its absence of a single predictable place where food was needed for consumption, probably encouraged a greater emphasis on cash and the market.

One of the most obvious contrasts between the two estates lay in the much earlier contraction of the demesne arable on the bishopric estate compared with the relative stability of the priory. The emphasis on cash receipts may have encouraged the bishopric to expand more rapidly and then to contract more speedily. Did they expand too rapidly, overburden the soil in the quest for cash and then cut back? Did they shift to the higher rents that could now be levied as a result of increased pressure on the land? Or had the rapid expansion shown up the weaknesses inherent in an over-dependence on labour works? Demesne contraction, moreover, may have been accentuated by the growing cost of restocking on the bishopric estates after episcopal deaths and vacancies. This general situation was made worse by a series of short-lived bishops in the later thirteenth and early fourteenth century.

There were also variations in cropping and livestock provision between the two estates. The bishopric showed a significantly greater prevalence of oats, probably the result of greater colonisation of poor downland soils, and of a greater emphasis on oats throughout this estate. Both were great sheep farmers and they continued in this role well into the fifteenth century, but the priory in the later fourteenth century showed a greater central management of its flocks. The bishopric paid less attention to pigs, and here the priory's need to feed its household may initially have been crucial. Later the demands of the priory for pork and bacon may have been reinforced by the growing demands of the market, and an agricultural and industrial labour force that could now afford more meat and less grain.

The unique documentation of the bishopric of Winchester means that this is an estate to which economic and agricultural historians will endlessly return. Its scale and its documentation allow us to quantify as with no other estate, and it will therefore continue to remain fundamental to our understanding of medieval agriculture. But we also need to compare its agricultural practices with those on other manors in similar topographical areas. Such comparisons allow us to highlight those elements common to a particular region or *pays*, but they also allow us to see how different estates responded to particular circumstances, by making different management decisions. Only through such comparisons can we hope to understand the complexity and variety of medieval agriculture.

Scottish environmental history and the (mis)use of Soums*

by Alasdair Ross

Abstract

For much of the historical period in Europe, upland pasture has been apportioned into relatively small units. Scotland was no exception to this norm and here such units were called soums. Both soums and stocking figures have been widely used to construct theories relating to the environmental history of the Highlands, particularly in relation to changing grazing pressures during the last 300 years. Using a particularly stark case study from Breadalbane, this article will argue that in fact soums are largely unreliable and confusing pieces of historical evidence that should never be used without good corroborating evidence. In the absence of reliable historical souming information, it will be suggested that historians should instead integrate site-specific palaeoecological data into their arguments to create a more accurate picture of changing grazing pressure over time.

One of the more difficult tasks for anyone involved in researching the environmental history of upland areas is trying to estimate the impact of livestock density on pasture in a particular area, and how this may have changed over time. Attempting to quantify this is important because it can help to understand how the modern landscape was shaped and so inform future decision making. There is a growing recognition that a large proportion of the upland environment in north-west Europe had been apportioned into relatively small areas of pasture by an early date, and that these pastures were highly regulated with limits on the numbers of livestock that could be grazed. It has been argued that these restrictions took two main forms: 'stinting' and 'levency and couchancy'. Stinting was the maximum amount of livestock that a household could graze and permitted managers to control the usage of pasture according to local conditions. Alternatively, levency and couchancy dictated that people could only graze the livestock that their pasture would sustain during the winter months. As such, it gave more freedom to the individual who could adjust the limits of their exploitation by increasing or decreasing the size of their holdings according to their own economic plans.[1]

In Scotland, research into historical livestock densities is made particularly difficult by the paucity of the surviving evidence before the fifteenth century. Often it is not until the

* Thanks are due to my colleagues Althea Davies, Alastair Hamilton, Richard Oram and Fiona Watson for commenting upon an earlier draft of this paper. I thank the Leverhulme Trust for funding the research on which this paper is based (award F/00241/C). Thanks are also due to the referees and to Professor Hoyle for their comments.

[1] Martina De Moor, Leigh Shaw-Taylor and Paul Warde (eds), *The management of common land in north-west Europe, c.1500–1850* (2002), p. 25.

seventeenth century that the documentary record really improves in areas like the western and north-western Highlands and Islands. This contrasts strongly with other European countries which possess much fuller records for the earlier periods. In Scotland, some fifteenth-century documents refer to the stinting of pasture into soums, which can be defined as an imposed unit of pasture that supported a finite number of livestock at different times over the course of a year.[2] At its most basic level, a soum was commonly calculated to be the equivalent of the grass requirements of one cow. This could be converted into other livestock units: for example, a soum could pasture anywhere between four to ten sheep instead of a cow and a horse was frequently reckoned to be the equivalent of two soums.[3] Some sources give both the summer and the winter soums for a particular area and, as might be expected, the summer souming figure was usually greater than the winter soum. However, this was not always the case and occasionally the winter souming figure exceeded the summer total, indicating that some localities in Scotland specialised in foggage (winter pasture).[4]

Some of the evidence relating to souming in medieval Scotland was discussed by A. A. M. Duncan in 1975. He argued that souming was prevalent south of the Mounth[5] in the area where the 'ploughgate' was commonly found and almost wholly absent from north of the Mounth in the zone where the *dabhach* was the more common means of land assessment.[6] According to Duncan, this was because the ploughgate represented an extension of arable and hence increased pressure on pastoral resources. Therefore, the numbers of animals permitted to graze on each ploughgate had to be strictly controlled.[7] Winchester raised this possibility too although he also suggested that souming in Scotland may have been an attempt to enumerate the numbers of animals that could be kept throughout the year.[8]

Probably the most prolific writer on the importance of livestock densities and souming in Scotland, and particularly the Scottish Highlands and Islands post-1600, has been Robert Dodgshon. He has used both soums and stocking figures from a wide variety of historical sources to construct a number of theories that focus on the environmental history of the Highlands. Dodgshon has rightly recognised that there are problems with translating souming figures into actual livestock numbers. First, because soums only record mature stock, no ostensible official allowance was calculated for immature animals like calves, foals, lambs and kids. Second, often the soum often represented the wishes of the estate, not the tenant. Nevertheless, since soums could also be used to calculate rent, Dodgshon expected tenants to have maintained actual stocking levels that closely matched the figures recorded in the actual soum. In addition, Dodgshon has used souming and stocking figures from the Breadalbane estate in particular to argue that there was a pre-clearance shift towards sheep production in the

[2] For a legal definition of souming, see Lord Stair, *The institutions of the law of Scotland* (1981), pp. 461–2.

[3] Albert Bil, *The Shieling, 1600–1840* (1990), pp. 135–8.

[4] National Archives of Scotland (hereafter NAS), GD170/411 (unnumbered).

[5] The Mounth is the line of hills that extend westwards across Scotland from Stonehaven on the coast of eastern Aberdeenshire (Map 1). It was one of the traditional divisions within the kingdom of the Scots from the early medieval period.

[6] A ploughgate (carucate) is commonly defined as an area of arable land. In contrast, a *dabhach* seems to have been an area of land that contained all the economic resources necessary to enable group of people to survive throughout a year.

[7] A. A. M. Duncan, *Scotland: the making of the kingdom* (1975), pp. 356–7.

[8] A. J. L. Winchester, *The Harvest of the Hills* (2000), p. 83.

southern Highlands, although he also concluded that it was the 1860s before sheep numbers rose dramatically overall.[9]

However, there remain a number of unanswered but fundamental questions regarding souming in Scotland. For example, it is often assumed that soums were calculated in the same manner throughout the country even though this theory has never been tested. Likewise it is often assumed that soums were identical in value throughout Scotland and that they can be compared over space and time. A final, but important, line of enquiry concerns the origins of souming itself. When was it was first devised as a means of protecting particular environments from overgrazing, if indeed that was its rationale? While this latter point may prove to be unanswerable, there are some valuable lines of enquiry that can be profitably pursued. The first concerns land division and the relationship between the soum and larger units of land assessment.

I

It is becoming increasingly clear to historians that the landscape of Scotland was divided up into different units of land at some point in time before parishes were created. These units of land were variously called dabhaichean, merklands, husbandlands, arochars, and tirunga, to name but a few. This means that the Scottish landscape was divided before the first half of the twelfth century, since King David I (1124–53) is traditionally held to be responsible for the enforced payment of teinds to local churches, which in turn led to the creation of parochial units.[10] It might be possible to push the date for the formation of these different units of land even further back in time. For example, the Book of Deer, compiled *c.*1130, records the existence of the two dabhaichean of upper *Ros abard* during the reign of King Máel Coluim mac Cináeda (Malcolm II, 1005–34).[11] If this grant is a genuine record of the eleventh century, then the existence of some of these land units can be demonstrated *c.*1000. There are even some hints in the evidence that these units could have been in existence before *c.*900. It will, however, need a much fuller examination of the evidence relating to the whole of the Scottish landscape before any kind of firm theory can be constructed.

Recent research also indicates that many of these units contained all the necessary natural resources to enable a group of people to survive throughout a year. Thus, each unit had access to forest, peat, fishing, arable, grazings and mountain pasture. Often, some of these resources were contained in pieces of land (*pendicles*) detached from the main unit.[12] It is recognised that these land units had various functions: for example, the people living in them were regularly assessed for military service and each unit also seems to have returned render in the form of foodstuffs such as cheese, butter and livestock to a superior lord. This latter point is very important. In order to function as an economic unit, both to feed the people living within it and to return render, it is only logical that all of these different land units would first have been assessed to ascertain, for example, how many livestock of what types could be maintained over the course

[9] R. A. Dodgshon, 'Livestock production in the Scottish Highlands before and after the Clearances', *Rural Hist.* 9 (1998), pp. 19–42.

[10] Duncan, *Scotland*, p. 298.

[11] Kenneth Jackson, *The Gaelic notes in the Book of Deer* (1972), pp. 31–5.

[12] A. Ross, *The Province of Moray, c.1000–c.1230* (unpublished University of Aberdeen PhD thesis, 2 vols, 2003), I, p. 121.

of a year before the render was imposed. Although this argument assumes that the assessment was done by a central authority, there is no reason to assume that the individual soums were simultaneously created by the same assessors. Soums could just as easily have been a by-product of assessment, decided at a local level.

While there seems to be no direct Latin equivalent of the word 'soum' in early Scottish sources, the documentary evidence does contain plenty of examples of people being granted the right to graze animals. For example, in 1165 Malcolm IV granted a carucate of land in Peeblesshire along with the pasturage of 1000 sheep. Between 1193 and 1195 William I granted the monks of Melrose the right to pasture 200 ewes, 16 oxen and four cows on the lands of Hassendean. In the early thirteenth century William son of Gamell granted the advowsons of Twynholm church in Galloway, which included common pasture rights for 16 sheep and one horse, to Holyrood Abbey. Examples are not confined to southern Scotland: sometime between 1208 and 1215 Lady Muriel of Rothes and her husband Walter Murdach granted the monks of Kinloss the right to pasture 12 cows, one bull, 16 oxen, four rams and 100 sheep on part of the haugh of the dabhach of Dundurcus beside the river Spey. Similarly, in 1282 the monks of Arbroath were granted the right to pasture 100 sheep, four horses, 10 oxen, 20 cows and a bull on a bovate of land in the Garioch.[13] All of these grants relate to the church. Similar types of grant to secular parties before *c*.1350 are much rarer though this is probably a feature of the surviving evidence in Scotland which is heavily biased towards ecclesiastical records before that date.[14] It is very unlikely, however, that these types and numbers of animals were randomly chosen.

There are also early records of disagreements between landlord and tenant over livestock numbers. One such example was the new arrangement, dated between 1188 and 1204, made between the monks of Melrose and Patrick I, earl of March, concerning lands in Lothian where the monks had previously been allowed to keep three flocks of sheep on common pasture. In this agreement the earl granted the monks an additional five acres of land in the southern part of *Mosiburnerig* which the monks were to enclose with a ditch to make a sheepfold. This would ensure that in future there would be no controversy between the monks and their landlords over sheep numbers. From this date, the three flocks were to contain a maximum of 500 animals, 1500 wedders in total.[15] This document suggests that the earl of Dunbar, and probably also the other tenants of the common pasturage, were concerned about the overstocking of an economic resource.

As the majority of these examples also involve sub-tenancies, which would have required close control by a superior lord, it is unlikely that they are examples of levency and couchancy. Instead, since these documents assign precise numbers of different animals to set areas of

[13] G. W. S. Barrow (ed.), *Regesta Regum Scottorum*, I, *The acts of Malcolm IV* (1960), p. 274; G. W. S. Barrow (ed.) with W. W. Scott, *Regesta Regum Scottorum*, II, *The acts of William I* (1971), pp. 359–60; Cosmo Innes (ed.), *Liber Cartarum Sancte Crucis* (1840), no. 72; NAS, Adv. MS. 29.4.2[x], fos. 231r – 232v; id., *Liber S. Thome de Aberbrothoc* (2 vols, 1848), I, no. 314. The grant to Melrose from King William, which probably related to overstocking, is discussed in A. A. M. Duncan, 'Roger of Howden and Scotland, 1187–1201', in Barbara E. Crawford (ed.), *Church, chronicle and learning in Medieval and early Renaissance Scotland* (1999), p. 138.

[14] One such secular example can be found in A. A. M. Duncan (ed.), *Regesta Regum Scottorum*, V, *The acts of Robert I* (1988), p. 520.

[15] Cosmo Innes (ed.), *Liber Sancte Marie de Melros* (2 vols, 1837), I, nos. 55 and 56. My thanks to Richard Oram for this reference.

land, and since there were also disagreements over the actual numbers of animals pastured in particular areas, logically these could be considered as reasonably early examples of different proportions of a soumed landscape, even though the different groupings of animals are not expressly called soums. Some of these examples also demonstrate that souming was more common north of the Mounth at an earlier date than Duncan allowed and indicate that he was perhaps mistaken to try to differentiate between the ploughgate and the *dabhach*.[16]

When Scots started to replace Latin in some documentation towards the end of the fourteenth century, the word 'soum' or 'sowm' began to appear and it occurs with increasing frequency throughout the fifteenth and sixteenth centuries, almost always in connection with individual farms or townships.[17] In contrast, soumings relating to entire estates are comparatively rare until the seventeenth century but then occur with increasing frequency, helped in part by the surveys completed for the Commissioners of the Forfeited Estates after the Jacobite rising ended in 1746, and also by estate surveys as landlords took an increasing interest in maximising the economic potential of their lands. At present, there is no way of telling whether the survival of entire estate soums after *c.*1600 is just an accident, or whether it indicates changing economic or political circumstances, or increasing concern about pastoral resources.

In relation to souming, one of the most important of these estate surveys was that completed by John Farquharson and John McArthur for the third earl of Breadalbane in 1769. Farquharson surveyed the north side of Loch Tay, McArthur the south side (Map 1). Only McArthur, however, included souming figures in his survey and from these it is clear that he calculated each soum according to the acreage of moor and pasture, both within and without the head-dykes of each township. Accordingly, his calculations ranged from just over three to five acres per soum, depending on the quality of the pasture.[18] Interestingly, McArthur did not explicitly state that he used local knowledge to help make these calculations. This means that he may have imposed a new method of calculating soums on the south side of the loch.

This last suggestion is strengthened by the fact that a souming of Breadalbane by some of the tenants in 1805, in response to instructions from the Earl 'for encouraging a proper breed of sheep and cattle', imposed both new march boundaries and a new method of souming on the Loch Tay portion of the estate.[19] This was done to facilitate the division of the landscape into lots, each of which contained a set number of soums. Different lots in different parts of the estate were assigned different proportions of each species (excluding goats) to pasture, implying that the souming reflected the varying quality of the ground. The document does not state how many acres of moor and pasture were assigned to each individual soum. This 1805 organisation of the soumable landscape was completely different from Farquharson and McArthur's 1769 survey and yet was obviously perfectly acceptable to most of the local population.

In fact, these were only two in a series of soums completed on the Loch Tay portion of the Breadalbane estate during the period 1769–1805. New soums were made in 1769, 1780, 1783, 1797 and 1805. To put this in context, there had only been two, or possibly three, soumings of the estate in the 150 years prior to 1769, and there are records of only two soumings between 1805

[16] Many other examples of souming in dabhaichean north of the Mounth can be found in a wide variety of sources.

[17] For example NAS, AD1/37; GD122/1/15; GD148/246.

[18] Margaret M. McArthur (ed.), *Survey of Lochtayside, 1769* (Scottish History Soc., third ser., 27, 1936), p. 82.

[19] NAS, GD112/16/5/6/19.



MAP 1. Scotland showing some of the places mentioned in the text.
1. Loch Tay portion of the Breadalbane estates.
2. Glenorchy/Lorne portion of the Breadalbane estates.

and 1900. From these figures it would appear that for some reason parts of the Breadalbane estate were undergoing an unusual number of changes in souming capability, and possibly also in the method of souming assessment, between 1769 and 1805.

There were probably two main catalysts for these changes. The first was international warfare both in the Americas and on continental Europe that would have placed increasing economic demands on domestic producers for meat and wool. There is little doubt that the Breadalbane estates would have been geared to help meet some of these demands. The second catalyst may have been internal estate politics. From the 1780s it is clear that a number of tenants on different parts of the Breadalbane estates were making increasingly strident petitions to the estate factors to have their neighbours removed so that they could then take over the tenancy of the neighbouring township and expand their herds of animals. A good case in point is the petition of James McDiarmid, tenant of Tomfluir in Glentalnaig, who wrote to the estate in 1795 to ask that the two families who held the tenancy of the neighbouring farm of Tullichglass should be

removed and the farm given over to him. According to McDiarmid, at least one of the families was young enough to easily find paid work elsewhere and the other tenant had both ridiculed and ignored estate recruiting demands. The factor agreed with McDiarmid and the tenants of Tullichglass were promptly cleared.[20]

It would be wrong, however, to assume that all these social changes and economic demands resulted in an increased estate souming capability. Using the officiary of Ardtalnaig as an example, in McArthur's survey of 1769 it was estimated to contain approximately 1347 soums. Yet in 1805 the same officiary was assigned 872 soums in 49 lots.[21] Similarly, Tirarthur seems to drop from 288 soums in 1727 to 196 in 1805, and Morinsh from 1020 soums in 1727 to 474 in 1805, although these last two calculations assume that the extent of these townships remained unchanged between 1727 and 1805. Unfortunately, it is not explained how these lots related to pre-existing land holding or to earlier soumings. These figures, if correct, indicate that it would be very unwise to attempt to compare souming figures for a group of townships over a long period of time. They could also indicate a massive deterioration in the carrying capacity of the grazings, although this cannot be confirmed without scientific evidence. To sum up so far, each soum may have been unique both in terms of the different proportions of animals being soumed, the density of animals allowed per soum, and in the physical extent and quality of the soum itself, in addition to any environmental changes. This is entirely logical since the landscape itself was constantly evolving and the form and type of souming would have to be altered accordingly.

Nevertheless, McArthur's method of calculating soums in 1769, assuming it was widely known and used on the Breadalbane estates in the latter part of the eighteenth century, seems valid as it assigns a set amount of pasture and moor to each animal and it is often assumed that this is the way by which all soums were calculated in Scotland. In fact, this is not the case. A description of a souming of the 'Skirts' of the forest of Mar in Strathdee, undertaken by local men in 1729, has survived among the Mar and Kellie papers. The document states that the souming of this part of Mar was calculated according to the amount of water available in each rivulet and burn for the livestock. Pasture never entered the equation.[22] Only after this task had been completed were the soums assigned to each plough of land. Such a method of calculating soums in the eastern Cairngorms is understandable if the effects of drought at that time were similar to that experienced today, for even short droughts in this area can cause marked drops in the water levels of the larger river systems and smaller streams and burns to dry up completely. Such droughts would obviously be problematic if large numbers of livestock had to be watered on a regular basis over an extended period of time during the summer. More importantly, from this evidence it seems clear that soums were also estimated in different ways in different parts of the country. Furthermore, it cannot be assumed that the method of calculating

[20] NAS, GD112/11/4/1/21/1.

[21] The apparent drop in the total number of soums is perplexing at a time of international warfare when sheep prices were very high. However, it is impossible to make any direct correlation between a soum of 1787 and a soum of 1805 since we may not be comparing like for like. For example, the 1805 soums may have been assigned a higher average acreage of moor and pasture.

[22] NAS, GD127/17/147/1. This document states that the forest of Mar was traditionally divided into two sections, the main forest and the skirts, each containing 800 soums. The document also states that sheep and goat numbers had been converted into cattle for the purposes of calculating the souming.

the souming capacity of the forest of Mar in 1729 was unique to Strathdee, either in terms of method or in geographic location.

Just as soums were calculated in different ways throughout the country, so the numbers of animals that comprised a soum also differed. Some documents relating to Perthshire and Argyll indicate that a soum pastured one cow or half a horse or five sheep or goats. In these documents it seems that immature animals were discounted.[23] In the 1760s on the island of Tiree a soum equalled either one cow, one horse or five sheep.[24] In contrast, on one part of the Buccleuch estates in 1634, a soum was calculated to equal either one cow or ten sheep.[25] These figures bear some resemblance to eighteenth-century soums of lands much further north, like Stratherrick and Glenstrathfarrar, where one horse or ten sheep or ten goats also equalled one soum. However, in these latter calculations, all immature cattle were counted in any souming equation at the rate of two per soum.[26] Moving further north again, this time to Coigach, one immature animal was allowed for every two cows.[27] What is interesting about these last three examples is that they were all carried out by the same two tacksmen, both named Alexander Macrae, from Achyouran and Inversheil respectively, in the barony of Kintail. This suggests that these men were not applying Kintail souming rates to other parts of northern Scotland but were instead fully aware of the numbers of different livestock that the land could support in other parts of the country. These local variations seem to have permeated through into the assessments imposed on each merkland: for example, during the seventeenth century the merklands around Loch Awe were assessed at 20 soums of cattle per merkland, those close by in Glenorchy assessed at 27 soums per merkland.[28] What all of this also implies is that any attempt to construct comparative studies of soums in different parts of Scotland becomes infinitely more complicated for two main reasons. First, the method of calculating soums differed from area to area. Second, the numbers of animals allowed to each soum also differed in different areas.

The intimate knowledge displayed by the two Macraes of the different grazings in the areas they set, together with the density of animals that could be supported in a given area, may also be represented by the different values that were given to different soums within each particular estate. For example, in Stratherrick the values of the different soums varied in price from 1*s*. 4*d*. to 7*s*. In Glenstrathfarrar it varied between 2*s*. and 4*s*. In Locheil the prices were set between 3*s*. 6*d*. and 10*s*. per soum. In all of these places the total valuations of the different soums were used to calculate the overall rental of any given township during the latter half of the eighteenth century.[29] This was not an innovation introduced by the Commissioners of the Forfeited Estates. There are plenty of examples in the documentary record of the different values assigned to pasturages pre-1700.[30] In 1461, for example, Sir Alexander Lawder of Haltoune paid John of Mentieth 6*d*. for each of the 24 soums that he rented from John on the common grazing on the South Raw of Ratho near Edinburgh.[31] During the 1620s

[23] NAS, GD112/9/1/3B/43.

[24] E. R. Cregeen (ed.), *Argyll Estate Instructions: Mull, Morveen and Tiree, 1771–1805* (Scottish History Soc., fourth ser., 1, 1964), p. 23, n. 2.

[25] NAS, GD224/943/6.

[26] NAS, E769/72/5; E769/72/6.

[27] NAS, E746/166.

[28] NAS, GD112/16/13/1/1; GD112/51/48/5.

[29] NAS, E769/72/5; E769/72/6; E786/50.

[30] NAS, GD170/203/4/11B.

[31] NAS, GD135/1052.

each soum on the Cademuir near Peebles was worth 13*s*. 4*d*. and, on the Buccleuch estates in the 1630s, each soum was individually valued at between £3 and £6 annually in the estate rentals.[32] A similar relationship between the value of stints and rentals can also be found in parts of England.[33]

Just as souming prices varied according to different types of pasture on different estates, so proportions of species per soum could vary within one particular estate. As we have already seen, in some parts of the Breadalbane estate one soum was calculated to support one cow, half a horse, or five sheep.[34] In contrast, on other parts of the same estate, in Glenlochay, Glendochart, and on parts of north Loch Tay, the equivalence was one cow or half a horse or seven sheep to each soum.[35] These proportions could also vary over time. In 1805 the new souming of the Breadalbane estate refined the definition of a soum so that a milk cow became the equivalent of two ewes, a three year old quey (heifer) was equal to three sheep, a two year old quey was equal to two sheep, and a stirk was the equivalent of one sheep. A foal became a soum at one year old and two soums at two years old.[36] Even though these changes could have been made to account for changes in the breeds and sizes of livestock we are fortunate to have these numbers. Without them, it would be difficult to make comparisons of average soumings or livestock densities, even between townships on the same estate.

Within a particular township or estate, the evidence indicates that the different tacksmen, sub-tenants and cottars were all allocated a part of the total soum, possibly either in accordance to the percentage of the total holding for which they were responsible or in return for various services. For example, in 1247 it was mentioned that a keeper had been allocated the right to keep two cows and ten sheep on common pasture in return for service to the monks of the abbey of Lindores.[37] During the 1470s the abbot of Coupar granted a number of soums from his moor of *Munthquhel* to various people including servants.[38] In 1511 a shepherd received the 20 soums of pasture that accompanied the acres he cultivated in Dunkeld.[39] Similarly, in 1642 three cottars, Jon dow McEwine, Donald McPhiper and Martin McKeith, who resided in the townships of Claggan, Tullichglas and Tomfour on the south side of Loch Tay, each held six, three, and six soums of their respective dwelling places.[40]

It is also obvious from different estate records that although souming rates seem to have been agreed between the estate and the tenants, these rates were occasionally exceeded by the tenantry. Typical examples of punishment for over-souming can be found in local court books, almost all of which post-date 1500.

> […] Quhilk day Donald Mcgillechrist in Laydour is accusit for inbringing of xx oursowmes of gudis uponn the lairdis bowgang of Laydour in anno 1618 instant mair nor the toun may

[32] NAS, B58/14/2. My thanks to John Harrison for this reference; GD224/943/6.

[33] A. J. L. Winchester, 'Upland commons in northern England', in De Moor, Shaw-Taylor and Warde (eds), *Management of common land*, p. 44.

[34] NAS, GD112/9/1/3B/43.

[35] NAS, GD112/38/27/6.

[36] NAS, GD112/16/5/6/19.

[37] John Dowden (ed.), *Chartulary of the Abbey of Lindores, 1195–1479* (Scottish History Soc., 42, 1903), pp. 178–80.

[38] Charles Rogers (ed.), *Rental book of the Cistercian Abbey of Coupar-Angus* (2 vols, 1879), I, pp. 62 and 204.

[39] R. K. Hannay (ed.), *Rentale Dunkeldense, being accounts of the bishopric, A.D. 1505–1517* (Scottish History Soc., Sec. ser., 10, 1915), p. 274.

[40] NAS, GD112/17/7, fo. 17v.

hald. The defender confesses that he had fyve 3eld gudes of oursowme upon the saidis landis the space of xv days the tyme foirsaid and yairin is convict in ane wrang.[41]

Unlawis of this Court, Patrik Mcgillegarwie officiar
Donald Mcgillechrist in Laydowir for haldin of owirsowmes on the bowgang of Laydour in anno 1618 – £3.
Donald Mcewinvoir in Lekbwie for inputting of ye saidis owirsowmes ye tyme foirsaid – £5 […].[42]

Similar breaches of trust can also be found all over Scotland.[43] Even so, such breaches only amount to a miniscule percentage, both in relation to the amounts of livestock pastured in Scotland and to the numbers of court records, and there are vast areas of the country for which neither the local court books nor other records contain references to over-souming. In addition, there appears to be no clear link between instances of over-souming and the periodic reassessment of soums.

Perhaps the two most obvious reasons for a lack of over-souming are that either the local officers were doing an excellent job of policing the pasture or the tenants were generally law-abiding. Logically, there must have been a great deal of self-regulation between neighbours in respect to common pasture and there is a suspicion that some disputes must have been resolved long before they ever came to court. There is also a third option. It has recently been argued that the use of agistment (off-farm grazing, usually during winter), which allowed some farms to maintain larger numbers of stock, can be traced back no further than the opening decades of the nineteenth century.[44] However, there is good evidence in some family papers that agistment occurred on a regular basis throughout the year long before the mid-eighteenth century and this clearly needs to be investigated more fully on a national basis.[45] In this respect, the use of pre-Clearance agistment may easily have acted as a safety valve in an otherwise seemingly rigidly soumed landscape and could help to account for the relative lack of prosecutions for over-souming. Were this so, it would bring Scotland into line with other north-European countries who adopted a similar strategy.[46]

One further important point to bear in mind is that it would be misleading to make too much of these examples of over-souming since there are also a number of instances of under-souming amongst tenants.[47] Under-souming in particular makes it even more difficult to accurately estimate stock numbers, and their impact on the vegetation of any given township, since it was

[41] W. C. Dickinson (ed.), *The Court Book of the Barony of Carnwath, 1523–1542* (Scottish History Soc., third ser., 29, 1937), p. v.

[42] NAS, GD112/17/4, fo. 158v.

[43] NAS, GD174/856/5; GD128/63/5; GD148/246; GD112/17/2, fo. 15r; RH11/34/1, fo. 146r. Dickinson, *Carnwath*, p. 210.

[44] Robert A. Dodgshon, 'The Scottish Highlands before and after the Clearances: an ecological perspective', in I. D. Whyte and A. J. L. Winchester (eds), *Society, landscape and environment in upland Britain* (2004), pp. 75–6 and n. 39.

[45] For example, National Library of Scotland, Dep. 313/983. This states that some of the parishes in Sutherland had been accustomed to grazing livestock from other parts of Sutherland as well as from Ross-shire on a regular basis before the Clearances.

[46] Martina de Moor, Leigh Shaw-Taylor and Paul Warde, 'Preliminary conclusions. The commons of north-west Europe', in De Moor, Shaw-Taylor and Warde (eds), *Management of common land*, pp. 250–1.

[47] For example, NAS, GD174/856/4; GD112/17/4, fo. 21r and at fo. 169v.

not a punishable offence and only occasionally noted when estates were conducting a survey of their tenants. Unfortunately, though, all these problems are relatively minor when it comes to interpreting the souming lists themselves.

II

These problems can be explored through a detailed discussion of the souming of Glenorchy from the early seventeenth to the mid-eighteenth century. One of the earliest surviving estate soums can be found in the Breadalbane estate papers.[48] There are two copies of this document, an original of 1626 and an undated copy written in a much later hand.[49] To date, it is the information from this latter copy that has been commonly used in discussions of Breadalbane, and particularly Glenorchy, souming and livestock densities.[50] A comparison of the two documents immediately raises a number of problems. First, it is clear that the person who later transcribed the 1626 original made a number of copying errors, probably because he could not read the handwriting. Some numbers in the later list have been miscopied.[51] The clerk who wrote the 1626 original used an unusual contraction usually written 'vc', although it, or something similar, also appears as 'vc^{is}' and 'vc^{s}'. While this could be taken to represent the number ninety-five in the first entry (Lettirmor), it clearly means something quite different in the entries relating to the townships of Molaii, Bochylls and Arivean. The later copyist treated this contraction in different ways. In relation to Lettirmor he transliterated it to mean forty-eight. In the entries relating to Molaii and Bochylls he ignored it completely and in the entry relating to the township of Large he both transcribed it as the number six and also ignored it. Second, the scribe of the later copy also added information to the souming list that may have been relevant to his lifetime, but which is not present in the original. The copiest has in some cases added soums on what could have been a presumption, although it may also have been because it represented the types and numbers of animals on the townships in his day.

So, while souming averages of 50.7 cows, 49.9 sheep, 47.3 goats and 9.04 horses per township have previously been calculated using the figures from the eighteenth-century copy of the souming list,[52] it is now obvious that these calculations are inaccurate. Since it is still unclear what the 'vc' contraction was meant to represent, any calculation of livestock averages from the original souming list should exclude the four townships in which it is used.[53] Another two entries should also be ignored: no actual souming totals (except for horses in Kinachrakine) were given for the townships of Ardtaitill and Kinichrakin, and Croft Dalmally should also probably be excluded because it was clearly not a township. There is one final problem. In the entry for

[48] A distinction has been drawn between soums and stocking lists since the latter could be under-soumed, over-soumed, or equal to the soum. There is usually no way of determining which of these three possibilities is correct.

[49] NAS, GD112/16/13/1/1 (original); GD112/12/1/2/1 (copy).

[50] R. Dodgshon, *From chiefs to landlords* (1998), pp. 174–5.

[51] Oxen were not represented on the 1626 soum even though there is independent evidence that some of the Glenorchy tenants kept them before that date (c.f. NAS, GD112/9/6). Accordingly, it may be presumed that oxen were counted in with cattle on the official soum.

[52] Ibid., 174.

[53] Although the contraction only appears on part of the entries for Lettermor and Bochylls, specifically for cattle, it is probably safer to ignore the entire entry in each case.

Stronmillachan the statement regarding sheep and goats is ambiguous since it appears to refer back to the preceding number of horses. I have assumed, however, as per the norm for this document, that the numbers of sheep and goats were almost always equal to the number of cows and not the number of horses. If so, this leaves us with a total of 38 townships in the 1626 original for which we have good data sets. If the souming averages for these 38 townships are calculated, we arrive at figures of 53.0 cows, 49.9 sheep, 49.2 goats and 10.1 horses per township. These figures are reasonably close to Dodgshon's calculations from the faulty later copy and at first appear to support his statement that the townships in Glenorchy supported significantly more sheep and goats than townships in mid-Argyll.[54]

However, problems with the information contained in the 1626 original document do not end here. This is because the souming figures in it are directly contradicted on a number of occasions by other documents from the same archive. For example, although the township of Corries was apparently soumed at 48 cows [and] eight horses and mares [and] 48 sheep [and] 48 goats in the 1626 document, on at least two different occasions during the remainder of the seventeenth century it was stated that the entire township possessed a total of 48 soums.[55] Similar examples can be offered for other townships in the list.[56] This means that instead of treating the 1626 document as a list of livestock soums and positing that the word 'and' should be inserted after each separate species entry, we should instead read the document (as in the case of Corries) as, 48 soums of cows [or] 48 soums of sheep [or] 48 soums of goats. This interpretation immediately raises a further problem in relation to the numbers of horses, mares and staigs.[57] Should they be included or excluded in the total of 48 soums? Unfortunately, there is no way of deciding this from the seventeenth-century evidence alone. Even more importantly, this means that souming averages per Glenorchy township cannot now be calculated for each species because we simply have no idea what proportions of each of the three (or four) separate species were included in the set soum. What is also clear is that the Glenorchy townships probably contained significantly fewer animals in 1626 than calculated above or by Dodgshon.

In fact, the next point of comparison that can be made with the 1626 soum is a rental of Glenorchy that was compiled in 1730 and which also listed the soums of each township.[58] It is immediately obvious that the townships had undergone some kind of administrative organisation between 1626 and 1730 as this document separates the townships into four separate divisions: the Braes, the Middle, the Strath, and Glenstrae. Furthermore, not all of the townships or crofts listed in the 1626 soum are present in the 1730 list: Lettirmor, Lettirbeg, Corries, Croftauchlamalzie, Barawrich, Brekley and Mayne are all missing. This may be for a number of reasons. First, like Innergawnan and Ariechastallan, some may have undergone a process of amalgamation with other townships between 1626 and 1730. Second, the two Lettirs and Corries had been in wadset for a long time by the 1730s and the estate was clearly unable to regulate the souming of these lands. Third, since it is known from other sources that the township of Mayne was taken out of crop production before 1690 and converted into a shieling for the tenants of

[54] Dodgshon, 'Livestock production', p. 23.
[55] NAS, GD112/9/3/7/5.
[56] NAS, GD112/62/4/5.
[57] A staig is either a young horse under three years or a stallion.
[58] NAS, GD112/16/13/3/1.

Craig,[59] there is a strong possibility that other lands in Glenorchy could have undergone similar transformations by 1730.

This latter point explains why it is impossible to compare the two Glenorchy soums of 1626 and 1730 and determine if there were increases in stocking levels. As a result of changes in land use we obviously cannot compare like with like, even if it is assumed that the same method of souming was used on both occasions. It seems clear that between 1626 and 1730 some townships could be transformed from crop production to shieling grounds (and back again), while others were amalgamated. This has every appearance of an estate that was geared to the economics of supply and demand and willing and able to alter its production strategies accordingly,[60] although an environmental factor which necessitated change, like the awful storms experienced by other parts of Scotland between *c.*1690 and *c.*1710, also cannot be ruled out at this stage. Broadly similar alterations in production strategies can also be found upon the Grant estates in Strathspey after 1720 when a large number of shielings were first converted into farms before being re-converted back to common grazings, according to economic demands.[61] Either of these points (or perhaps both) would also help to explain why some townships in Glenorchy appear to have experienced a massive drop in souming capacity while others appear to have experienced a massive gain, and why only three of the townships in the 1626 list still appear to have possessed an identical soum in 1730.[62]

The penultimate document relating to stocking levels and souming in Glenorchy is dated to 1799.[63] This is a list compiled for the Breadalbane estate of 43 farms in Glenorchy and around lochs Etive and Awe. Only 31 farms out of this total were actually located in Glenorchy. The stocking data from this document has been converted into soums, using the 'standard' rates of one cow, half a horse, five sheep, or five goats per soum. This conversion enabled Dodgshon to compare the 1730 and 1799 soums and demonstrate that there had been an increase in livestock numbers after the Glenorchy farms had converted to specialist sheep production in the 1780s.[64]

Such an assumption about livestock numbers may be premature. Of the 35 Glenorchy farms in the 1799 list, only five of the entries list actual stock numbers. The remaining 26 entries only estimate what numbers of livestock the farms *could* support. These data sets should be immediately discarded since we have no idea whether the estimates were ever actually implemented in practice. This leaves a radically smaller basis (five farms) for comparison between the 1626, 1730 and 1799 data sets. Of these five, three appear to have undergone amalgamation with other farms since 1730. However, one of these three includes a place-name (Arinabee) that does not appear on either the 1626 or 1730 lists. This form may be either a scribal mistake or a shortened form of an earlier name or an entirely new township. Since there is no way of guessing which, this data set must also be discarded from any calculations. This means that it is only possible to compare four data sets.

[59] NAS, GD170/203/4/11B.

[60] The evidence suggests that the Glenorchy townships operated in two main economic markets. First, as a part of the internal Breadalbane market and second, with burghs as far afield as Inverness.

[61] NAS, GD248/533/2/82.

[62] These calculations were made on the assumption that the 1626 soum was meant to be read x cows + y horses. This may be misleading.

[63] NAS, GD112/9/3/3/30.

[64] Dodgshon 'Livestock production', pp. 32–3.

TABLE 1. Comparison of the 1730 and 1799 soums in Glenorchy

Farm	*1730 soum*	*1799 figure converted into a soum*	*Difference*
Knockintay	64	90	+ 26
Strone and Succoth[a]	258.4	458	+ 199.6
Brackley	73.6	50	– 23.6
The two Larigs	116	136	+ 20

Note: [a] This assumes that the 'Strone' in question was Stronmonnessage and not Stronmilochan.
Source: NAS, GD 112/16/13/3/1; GD 112/9/3/3/30.

If it is assumed that the 1730 souming and the 1799 rental calculated their soums in the same way, and if it is further assumed that a soum equalled one cow, half a horse, five sheep or five goats on both occasions, then it is possible to calculate that three of the farms appear to show a rise in souming capacity and one shows a loss (Table 1). Unfortunately, there is no way of knowing just how representative any of these figures are for the rest of the farms in Glenorchy and the data set is really just too small to be useful. It is entirely possible that the three farms that show a rise in souming capacity were exceptions and that all the rest of the farms in the glen had a reduced souming capacity to compensate. All that we really can say is that in 1799 a small percentage of the Glenorchy farms still pastured three different species of livestock, cattle, sheep and goats.

The final document in relation to souming in Glenorchy dates to 1818 and it lists some fourteen farms in and around the Glenorchy part of the Breadalbane estate.[65] Although this document is called a souming it would actually appear to be a detailed stock list since it lists thousands of sheep for every farm. There are only three exceptions. The two farms of Corrychyll and Craig each held just less than 1000 sheep and the farm of Ardtettle only stocked cattle. Furthermore, Alexander Campbell, who compiled this list, clearly states that these numbers are for both summer and winter pasturing so that no farm would have to send sheep elsewhere during the winter. This document seems to be the first 'soum' to provide evidence of a massive increase in sheep stocking in Glenorchy although even this picture is probably slightly skewed since 1818 was also the first year after the end of the Napoleonic wars that saw an increase in sheep prices in the western Highlands.[66]

It should now be obvious that any attempt to compare stocking figures between the 1626 and 1818 lists has to make four key assumptions. First, that the acreage of an average soum in Glenorchy remained unchanged over the period. Second, that both lists estimated a soum to hold one cow or half a horse or five sheep or five goats. Third, that both soums had been calculated in the same manner. Fourth, even though it may be possible to trace the amalgamation of various townships between 1626 and 1818, it is also clear that smaller pieces of yet another property could also be occasionally detached or re-attached to the original township depending

[65] NAS, GD112/16/13/1/21x.

[66] Ibid. There is a document in the Breadalbane archive that describes how almost the whole of Glenorchy had been turned over to sheep in 1783 (NAS, GD112/14/12/7/8) but this gives no indication whether the 'official' souming rates had been broken.

on the whim of the factor. These transactions are very difficult to trace and it should always be remembered that a comparison of land over time may not be comparing like-for-like as both the environment and pastoral resources could have changed.

If, however, for the sake of argument we return to the previous example of the township of Corries, in 1626 it held a total of forty-eight soums of cattle ± eight soums of horses.[67] These numbers provide a theoretical maximum figure of sixty-four soums (assuming that one horse soum equals two cattle soums), and if this is then converted into sheep stock (further assuming that there were five sheep to each cattle soum), we arrive at a theoretical maximum stocking of 320 sheep for Corries in 1626. However, by 1818 this township (together with Drissaig, Lettermore and Letterbeg) had become a part of the larger farm of Castles. If we return again to the 1626 figures, this means that further sheep totals for Drissiag (235 sheep), Lettermore (320 sheep), Letterbeg (120 sheep), and Castles (300 sheep) should be added to the Corries total, providing a theoretical total of 1295 sheep on all five townships in 1626. Moving forward to 1818, the much-expanded farm held a maximum theoretical total of 4850 sheep and at least twenty-two cattle. On paper, this amounts to a fourfold increase in stock between 1626 and 1818 although once all the various assumptions are taken into account, it is not entirely clear how valid any comparison actually is.

III

This article has demonstrated that the historical data relating to souming in Scotland, when used in isolation, has the potential to be very confusing. It is now clear that soums were not only calculated in different ways in different parts of the country, but also calculated in different ways at different times in the same area. Furthermore, there are also indications that the physical size of each soum varied over time and that different soums were assigned different numbers of the same species of livestock. As if this were not bad enough, it has been shown that the souming lists themselves are open to many different interpretations and that tenants could both under- and over-soum. In fact, unless a particular soum is closely defined at any given moment in time in terms of surface extent, quality of grazing, and in the numbers of livestock expected to pasture upon it, it is very questionable whether any reliable interpretation can be formed from the data unless it is accompanied by an accurate contemporary stocking list. It is virtually impossible to compare like-for-like and it is exceedingly unlikely that many sets of family papers in Scotland would contain all of the necessary information for souming lists to be used in any meaningful fashion. All of this means that it is probably mistaken to construct a quantitative model using different soums to estimate livestock numbers and their effect on the environment in Scotland over time. There are just too many assumptions that have to be taken into account and many of the data sets can be shown to be quite worthless in statistical terms.

However, all is not lost, particularly if researchers engaged in Scottish environmental history are willing to embrace input from other disciplines. The AHRC Research Centre for

[67] It is impossible to return to the 1730 figures as the soums for Castles and the two Letters are missing from the list because they had been wadset.

Environmental History based at the University of Stirling is currently running a Leverhulme-funded project in which historians, economists, ecologists and palaeoecologists are working together to measure the impact of humans on upland environments in Scotland. One of the major benefits of this inter-disciplinary co-operation has been to demonstrate the usefulness of palaeoecological data to historians, and *vice-versa*, whenever there are significant gaps in the data sets collected independently by each discipline. It is now evident that the inclusion of palaeoecological information in historical discussions allows a much fuller picture of both animal husbandry and plant communities over time to be constructed. The sudden regeneration or sudden disappearance of trees, together with the appearance or disappearance of cereal pollen and certain types of grass and weed pollen can tell us much about what use was being made of a local landscape. Admittedly, while such data cannot be used in the type of quantitative analyses that have been commonly used to date, it does open up exciting new avenues for historians to explore in our attempts to evaluate the overall effects of livestock production upon any historic Scottish landscape.

The case of John Dyer's fat-tailed sheep and their tail-trolleys: 'a thing to some scarce credible'*

by John Goodridge

Abstract

The eighteenth-century English georgic poem was a compendious form and incorporated a wealth of information on many subjects, including agriculture. This essay considers an example taken from one of these poems: a description of the fat-tailed 'Carmenian' sheep from John Dyer's *The Fleece* (1757). Comparing this with portrayals of this type of sheep in other texts, the essay focuses on a curious detail described by Dyer and others, that of how wheeled carts were constructed to protect the long tails of these sheep from harm. This has often been regarded as a traveller's tale, but the essay argues that it is indeed true, and that the story's dubious reputation probably springs from the fact that writers from Rabelais to Goldsmith have used it satirically.

In Book II of his ambitious georgic poem on shepherding and the wool trade, *The Fleece* (1757), John Dyer re-tells a story, originating in Herodotus, of a breed of sheep whose tails were so big and heavy that their shepherds had to build little wheeled carts to put underneath them, to prevent them from dragging along the ground and becoming damaged. Dyer calls the breed 'Carmenian' sheep:

> WILD rove the flocks, no burdening fleece they bear,
> In fervid climes: nature gives nought in vain.
> Carmenian wool on the broad tail alone
> Resplendent swells, enormous in its growth:
> As the sleek ram from green to green removes,
> On aiding wheels his heavy pride he draws,
> And glad resigns it for the hatter's use.[1]

In a short article on the subject, published in 1980, David Larson traces this 'hoary tale', as he calls it, through eighteenth-century English literature. Having cited some of the many sources

* An early version of this essay appeared in *ad familiares*, 13 (1997), pp. 3–4 as 'Was Herodotus off his trolley?' I am grateful to Dr Peter V. Jones for permission to re-use this material. It is based on research begun during my tenure as Lord Adams Research Fellow at the University of Newcastle upon Tyne, and I am grateful to Claire Lamont, Terry R. Wright, and the University's Fellowships and Studentships Committee for their support. Thanks for help and advice are also due to Parvin Fatemi, Tim Fulford, Bob Heyes, John Lucas, Leonora Nattrass and Alison Ramsden.

[1] John Dyer, *The Fleece: a poem, in four books* (1757), Book II, lines 414–20. A full text of the poem is available online at: <http://www.hn.psu.edu/Faculty/KKemmerer/poets/dyer/fleece1.htm>, visited 30 January 2006.

for the story, he characterises it as 'one of those false versions of natural history which are repeated as fact simply because no one bothers to challenge them'. He further comments on Dyer's use of the story:

> In Dyer's account the sheep's tail becomes an example of the efficient providence of nature. It would be wasteful of nature to cover the sheep with wool in hot climates, so it is bare, but since the inhabitants need some wool – for hats apparently – nature, giving 'nought in vain,' bestows it only on the tail which consequently needs wheels to bear its weight. […] No example, for Dyer, is too insignificant to reveal the mercantile efficiency of God's natural order. Gifted with a truly sterling lack of humor, Dyer apparently finds nothing amusing in the picture of a naked sheep trailing an enormous tail on wheels through pastorally smooth fields, and gladly giving it up to the (presumably) grateful hatter.[2]

We are asked to laugh at everything here, from the 'lack of humor' to the utilitarian mercantile ideology, with its supposed lack of aesthetic judgement. Larson finds Dyer ridiculous, and so assumes that the story is ridiculous too: but he is mistaken. The fat-tailed sheep undoubtedly exists, and so, I believe, do the trolleys. This essay considers some of the evidence for their existence, and attempts a fuller and perhaps fairer survey of the ways in which the story was used by Dyer and other eighteenth-century and earlier writers.

The fat-tailed sheep of the Middle East, *Ovis aries dolichura* and related types,[3] represents one of the oldest and most important of all domestic sheep groups,[4] and is recorded from the earliest periods throughout the Middle East and the eastern half of Africa, as far east as India, and as far north as Southern Russia.[5] The size of its tail varies greatly in the accounts on record.

[2] David M. Larson, 'Eighteenth century tales of sheep's tails and one of Benjamin Franklin's "American Jokes"', *Philological Quarterly*, 59 (1980), 242–47. See also Charles Child Walcutt, 'Franklin and Goldsmith on sheep's tails', *Notes and Queries* 177 (1939), 438–39.

[3] Latin specific names within the species *Ovis aries*, the domestic sheep, are no longer scientifically recognised as representing true sub-species (see M. L. Ryder, 'Sheep', in Ian L. Mason (ed.), *The evolution of domestic animals* (1984), pp. 63 and 65), but they remain useful in the present context. Frederick E. Zeuner in *A History of Domesticated Animals* (1963), pp. 163–64, distinguished between the long fat-tailed sheep (*O. a. dolichura*), the broad fat-tailed sheep (*O. a. platura*) and the fat-rumped sheep (*O. a. steatopyga*). The sheep we are seeking has to be a long fat-tailed rather than a fat-tailed one, though Sir Percy Sykes, *A History of Persia* (third edn, two vols, 1930), I, p. 32, writes that 'The fat-tailed sheep, *Ovis aries steatopyga*, is the sheep of Persia'.

[4] The 'Western Asia' region (including the Arabian Peninsula and the Near and Middle East where fat-tailed and fat-rumped sheep predominate) accounts for 70% of the sheep produced in Asia, according to C. Devendra and G. B. McLelor, *Goat and sheep production in the Tropics* (1982), pp. 144–45. They add that 'Historically this area can be considered the cradle of sheep domestication'.

[5] For prehistoric sources on fat-tailed sheep see M. L. Ryder, *Sheep and Man* (1983), pp. 786, 130. Classical sources include Herodotus, *Histories*, Book III, para. 113; Aristotle, *History of Animals*, ref. 606a13; Pliny the Elder, *Natural History*, Book VIII, para. 198; Aelian, *On the Characteristics of Animals*, Book III, para. 3, and Book IV, para. 32. Later sources include Marco Polo, *Description of the World* (wr. *c.*1298); Jean Thenaud, *Le Voyage et itineraire d'outre mer* (Paris, *c.*1530); Joannes Leo (commonly 'Leo Africanus'), *Description of Africa*, (first pub. Venice, 1550), trans. into English by J. Pory as *Geographical History of Africa* (1600); Fynes Moryson, *An Itinerary* (1617); Ludolf the Elder, *New History of Ethiopia* (1682); and Sir John Chardin, *Account of His Voyages* (1686). Among more recent sources, Russell (1756), Goldsmith (1774), Youatt (1837), How and Wells (1912), Zeuner (1963), and Ryder (1983), are all discussed and cited elsewhere in this essay. Also of interest is Sir Charles Fellows's short description in *A journal written during an excursion in Asia Minor, 1838* (1839), p. 10, and Sykes, *History of Persia*, p. 32.

It is usually described in terms of weight, and the figures range from eight to eighty pounds.[6] The weight of the wool on the tail would be negligible, and has little to do with the need for trolleys. Larson's scatter-gun criticism of Dyer would have been more effectively focused on this aspect of the story, which the poet may have misunderstood. Modern reference sources on tropical sheep explain why these sheep have such enormous tails. They have evolved in order to serve as a storage area for fat, which can be drawn on in arid or desert conditions, rather like a camel's hump; and they have been further enlarged by selective breeding for the quality of fat they produce, which is used in some areas of the Middle East as a butter or ghee, and is known in Iran (the location of Dyer's sheep) as 'Donbeh'.[7]

The question of the trolleys at first sight also seems straightforward. Ancient and modern sources regularly mention trolleys as well as sledges, splints, belts, nets and other devices for supporting an oversized tail. They are described, for example, in M. L. Ryder's magisterial *Sheep and Man* (1983). Ryder considers that Herodotus may have 'exaggerated somewhat', but nevertheless 'the carts were real enough, since such two-wheeled carts, harnessed to the animal, have been used for fat-tailed sheep all over the Middle East in recent times' (p. 120). There are even seventeenth-century and later illustrations of them, which Ryder reproduces (pp. 229–30). However, in *captioning* these illustrations, Ryder appears to change his mind about the carts, and writes:

> […] there appears to be no conclusive evidence that they ever existed, and Dr Helen Newton Turner considers that the lack of photographic evidence or a first-hand account suggests that the story is a complete fabrication. During the 1950s a cart was on loan to the Wool Industries Research Association, Leeds, from the Royal Scottish Museum, Edinburgh, but there is no conclusive evidence that this was not a model made for a nineteenth-century exhibition.[8]

One's first response to this apparent recantation is surprise, since history seems to be filled with 'first-hand' accounts of sheep's-tail trolleys. The earliest reference to tail support mechanisms

[6] Sources vary in reliability and geographical location; the following is a selection of fat-tail dimensions: 'three cubits in length' (Herodotus); 'a cubit in breadth' (Aristotle, Aelian); '18 inches long' (Pliny); 'thirty pounds and upwards' (Marco Polo); 'eighty pounds' (Leo Africanus); 'twenty to thirty pounds' (Goldsmith); 'fifty pounds' (Russell); 'six or eight pounds' (Fellows); 'over 70 lb' (How and Wells); 'up to 19 pounds' (Sykes).

Many if not most of these figures are credible. In *Akenfield: Portrait of an English Village* (1969), p. 309, Ronald Blythe quotes the vet 'Tim Swift' making the interesting point that 'you dock lambs' tails because if you don't all the fat runs into the tail'. H. Epstein, 'The fat-tailed sheep of Arabia', *Zeitschriftfuer Tierzuechtung und Zuechtungs Biologie*, 63 (1954), pp. 393–94, shows that the propensity for sheep to accumulate localised fat deposits varies enormously under different conditions, and may mutate swiftly.

[7] For the development and function of fat tails see Epstein, 'Fat-tailed sheep', pp. 393–94; Devendra and McLelor, *Goat and sheep production*, p. 119; A. R. Carles, *Sheep production in the Tropics* (1983), p. 25. The sheep's tail in early middle-eastern civilisations was variously used to provide fat for burnt offerings and for tallow, and was in some cultures regarded as a delicacy: see Ryder, *Sheep and Man*, pp. 120, 716. For 'Donbeh' and its nutritional significance see V. Parvaneh, 'The physical and chemical characteristics of sheep tail fat (Donbeh)', *Tropical Science*, 14 (1972), 169–71; Arto der Haroutunian, *Middle Eastern Cookery* (1984), p. 31. See also C. C. Young, 'Concerning the fat-tail and the broad-tail sheep', *American Breeders Mag.* 3 (1912), 181–200.

[8] Ryder, *Sheep and Man*, p. 229. The Royal Scottish Museum, Edinburgh, was unable to find a record of any such trolley in response to my enquiries. I am indebted to James L. Wood, Curator of Engineering and Industry, for his help.

known is from a neo-Babylonian tablet from the sixth century BCE, referring to 'sheep with a belt', which Ryder interpreted as a tail support mechanism.[9] Herodotus (III, 113) is the key classical source on trolleys, which he notes at the end of his description of 'Arabia':

> One other thing is remarkable enough to deserve a mention – the sheep. There are two kinds, such as are found nowhere else: one kind has such long tails – not less than 4½ feet – that if they were allowed to trail on the ground, they would develop sores from the constant friction; so to obviate this, the shepherds have devised the art of making little carts of wood, and fix one of them under the tail of each sheep. The other kind have flat tails, eighteenth inches broad.[10]

The story of the trolleys was taken up in the Renaissance period by Jean Thenaud (*c.*1530), who calls them 'petites charrettes', and Leo Africanus (1550), who describes them as 'exiguis vehiculis' (small carriages). In 1682 Job Ludolphus (usually known as Ludolf or Rudolf the Elder), included in his *New History of Ethiopia* an illustration of a two-wheeled trolley (Figure 1, taken from the 1684 edition).[11] Alexander Russell (1756) and Oliver Goldsmith (1774), whose accounts are quoted and discussed below, both describe boards which may be wheeled. William Youatt (1837) also mentions them, citing Herodotus, Ludolf and Russell.[12] Marco Polo's Victorian editor Sir Henry Yule (1871) quotes the testimony of an Afghan sheepmaster, who 'testified that trucks to bear sheep-tails were sometimes used among the Taimúnis (north of Herat)', i.e. in north-west Afghanistan, fairly near the current borders with Iran and Turkey.[13] The classicists How and Wells in their *Commentary on Herodotus* (1912) record that sheep tails are 'still at times protected by wheeled boards'.[14] The agricultural historian Frederick E. Zeuner (1963) reproduces the illustration from Ludolf (Figure 1), and notes that the trolley is 'still used today in some parts of India and Asia Minor'.[15] Apart from M. L. Ryder's qualified report, the most recent mention of the trolleys by a western writer that I have found occurs in Bruce Chatwin's 1980 essay, 'A Lament for Afghanistan', in which he describes some of his most cherished memories of the country before the Russian invasion: they include 'the fat-tailed sheep brindling the hills above Chakcharan, and the ram with a tail so big they had to strap it to a cart'. Chatwin's 'Chakcharan', sometimes spelled 'Chaghcharan', is about 150 miles to the east of Henry Yule's Herat, in western Afghanistan.[16]

[9] Ryder, *Sheep and Man*, p. 130.

[10] Herodotus, *The Histories*, trans. by Aubrey de Sélincourt, rev. by A. R. Burn (Penguin edn, 1972), pp. 249–50.

[11] Thenaud is quoted in Rabelais, *Gargantua*, ed. Ruth Calder (1970), p. 104n. Leo Africanus is quoted in Herodotus, *Histories*, trans. by George Rawlinson (1875), p. 502n. Ludolf's illustration is reproduced by Zeuner, *History*, p. 164. See also n. 5.

[12] William Youatt, *Sheep: Their breeds, management and diseases* (1837), pp. 113–14. The anonymous author of *The natural history of Quadrupeds, and cetaceous animals: from the works of the best authors, antient and modern* (2 vols, 1811) also mentions the 'small wheeled machines' used to support tails in '[t]hose countries of Asia which abound most in sheep' (II, p. 285).

[13] *The book of Ser Marco Polo, the Venetian, concerning the kingdoms and marvels of the East*, trans. and ed. by Sir Henry Yule (third edition ed. by Henri Cordier, 1903), p. 100n.

[14] W. W. How and J. Wells, *A commentary on Herodotus* (1912), p. 292.

[15] Zeuner, *History of domesticated animals*, p. 164.

[16] Bruce Chatwin, *What am I doing here* (1989), p. 293. Cornelia Starks has kindly drawn my attention to a slightly more recently-written literary source, Lee Langley's novel *Changes of Address* (1987), set in 1940s India, where the narrator mentions the 'Dumba fat-tailed sheep I had seen in the hills, each with a little cart attached to carry its enormous, and later succulent tail'. ('Dumba'

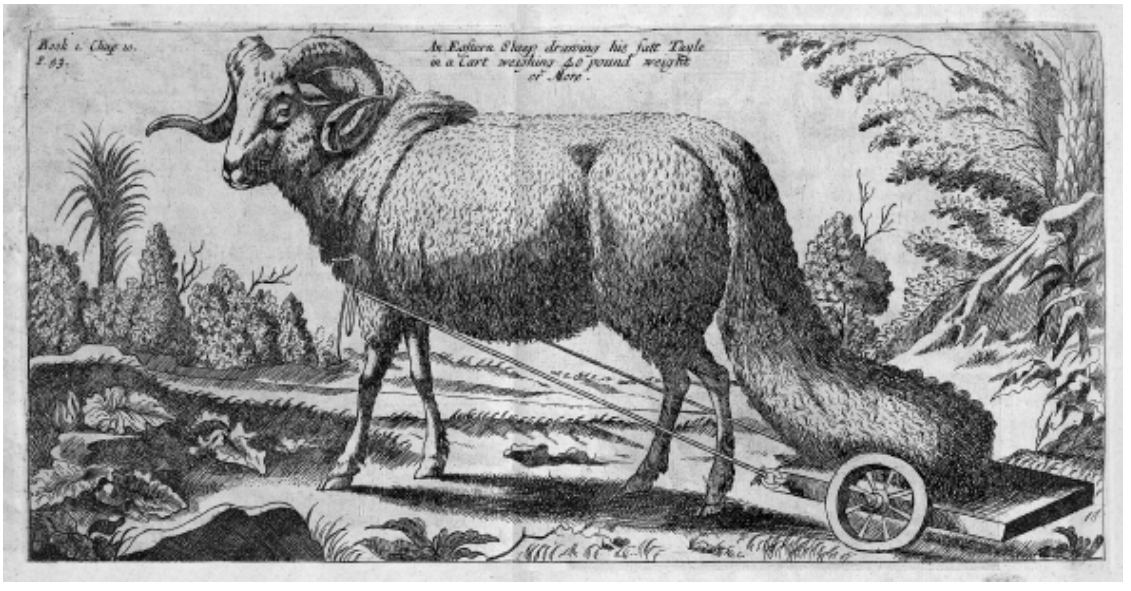


FIGURE 1. Fat-tailed sheep with tail-trolley, from Job Ludolphus (Ludolf the Elder), *A New History of Ethiopia* (1684, Wing L3469), from the plate between pp. 52 and 53. From a copy in Cambridge University Library, by permission of the Syndics of Cambridge University Library.

John Dyer took notes on other subjects from the first English translation of Leo Africanus (1600), which suggests that this may be his source for the story of the trolleys.[17] We can generally trace a number of the accounts cited, ultimately, to Herodotus. This in itself may rouse suspicion, since the subject of whether Herodotus was the 'father of history' or the 'father of lies' (or both) remains an issue for lively debate among classicists.[18] But could so many other writers have succumbed to a false story? (Perhaps as a result of the well-known effects of certain middle-eastern smoking materials?) From Russell (1756) to Chatwin (1980) there are a number of clear, credible, first-hand accounts by writers who have no obvious wish to deceive, who do not seem gullible, and the transmission of whose texts is straightforward. But in any case, who would want to fake up seventeenth-century illustrations, or nineteenth-century models of the trolleys – and for what purpose?

Dr Newton Turner's suspicions may perhaps be informed by unease at later sources; for it is certainly clear that at some point in the history of the story of the tail-trolleys, sceptical and

Note 16 continued
is a Persian word for tail.) I exclude from this brief survey any accounts which seem equivocal, facetious, or otherwise suspect. The range of further reference to topographical and travel books made in some of the sources, especially Youatt, suggests there may be further references to the story to be found.

[17] Edward A. Parker, 'A study of John Dyer in the light of new manuscript materials' (unpublished B. Litt. thesis, University of Oxford, 1938), p. 146.

[18] On the historicity of Herodotus see John Hart, *Herodotus and Greek History* (1982); K. H. Waters, *Herodotus the Historian: His problems, methods and originality* (1985); Detlev Fehling, *Herodotus and his 'sources': Citation, invention and narrative art*, trans. by J. G. Howie (1989); John Gould, *Herodotus* (1989). For specific commentary on the passage on tail trolleys see Herodotus, *The Histories*, trans. by George Rawlinson (1875), p. 502, n. 3; How and Wells, *Commentary*, p. 292. See also Peter V. Jones, 'Scepticism, rationality and an infinite curiosity helped make Herodotus western history's key figure', *The Guardian*, 20 Mar. 1997, p. 6.

comic counter-narratives emerge. This may be seen as early as 1534, when Rabelais used the story in a context which suggests comic exaggeration:

> If this description astounds you, you will be even more astounded by what I tell you about the tail of the Scythian ram, which weighed more than thirty pounds, or about that of the Syrian sheep, to whose rump (if Thenaud speaks true) they have to fix a little cart to carry it, it is so long and heavy. You clods from the flat lands possess nothing to compare with that.[19]

With its measured reference to Thenaud and invitation to the reader to be astonished, this version toys expertly with the hopes and fears about veracity raised by the sort of 'traveller's tale' it was by now no doubt becoming. Its shift towards mythic status is most clearly signalled, however, by its appearance in the shifting, double-mirroring world of eighteenth-century satire. In this guise it was cleverly used by both Oliver Goldsmith (1759) and Benjamin Franklin (1765). Franklin was parodying false English notions about the wealth of the American colonists:

> The very Tails of our American Sheep are so laden with Wool, that each has a Car or Waggon on four little Wheels to support and keep it from trailing on the Ground. Would they [the colonists] caulk their Ships? would they fill their Beds? would they even litter their Horses with Wool, if it was not both plenty and cheap?[20]

This is the familiar Swiftian tactic of ironic, grotesque distortion, using the story as a 'tall tale' in order to pursue a strategy of *reductio ad absurdum*. All earlier accounts are of two-wheeled carts, so Franklin has *four* wheels; wool is of course used for bedding, so Franklin suggests the idea of it being used for *horse* bedding and caulking ships; and so on.

Goldsmith would tell the story 'straight' and *in propria persona* in 1774 (quoted below), thus playing the subject both ways in the ironic manner pioneered by the Scriblerian satirists earlier in the century. His 1759 version, though, is satirical, and told by a 'character', supposedly the writer's cousin, presented as a malicious gossip, who says:

> There goes Mrs. Roundabout, I mean the fat lady in the lute-string trollopee. Between you and I, she is but a cutler's wife. See how she's dressed as fine as hands and pins can make her, while her two marriageable daughters, like bunters, in stuff gowns, are now taking six-pennyworth of tea at the White-conduit-house. Odious puss, how she waddles along, with her train two yards behind her! She puts me in mind of my lord Bantam's Indian sheep, which are obliged to have their monstrous tails trundled along in a go-cart. For all her airs, it goes to her husband's heart to see four yards of good lutestring wearing against the ground, like one of his knives on a grindstone.[21]

This is sharp satirical work of a type very familiar in the period (a 'trollopee' is a loose dress, with obvious connotations). Goldsmith's modern editors have been unable to cast light on the

[19] François Rabelais, *The histories of Gargantua and Pantagruel*, trans. J. M. Cohen (Penguin edn, 1955), Book I, ch. 16, p. 73.

[20] Benjamin Franklin, '"A Traveller": News-Writers' Nonsense', *The Public Advertiser*, 22 May 1765, in Leonard W. Labaree (ed.) *The Papers of Benjamin Franklin*, XII, *January 1 through December 31, 1765* (1968), p. 132.

[21] Oliver Goldsmith, *The Bee*, 13 Oct 1759, in Arthur Friedman (ed.), *The collected works of Oliver Goldsmith* (5 vols, 1966), I, 378 and note.

source for 'my lord Bantam's Indian sheep'.[22] However, in 1749 William Ellis said he had 'heard of a gentleman that lives within twenty miles of London, who keeps about thirty Turkish ewes and a Turkish ram', and 'all of them have broad tails', and that 'Another gentleman in Hertfordshire kept three or four of these Turkey-sheep; one of their tails weighed 8 lbs'.[23] Keeping sheep had evidently been a fashionable pastoral game among the moneyed classes since the mid-eighteenth century. In Sheridan's *School for Scandal* (1777), a fine piece of 'scandal' is woven around the fact that 'breeding' is an accepted topic in social conversation:

MRS. CANDOUR You known, Sir Benjamin, very trifling circumstances often give rise to the most injurious tales.

CRABTREE That they do, I'll be sworn, ma'am. – Did you ever hear how Miss Piper came to lose her lover and her character last summer at Tunbridge? – Sir Benjamin, you remember it?

SIR BENJAMIN Oh, to be sure! – the most whimsical circumstance.

LADY SNEERWELL How was it, pray?

CRABTREE Why, one evening, at Mrs. Ponto's assembly, the conversation happened to turn on the difficulty of breeding Nova Scotia sheep in this country. Says a young lady in company, I have known instances of it; for Miss Letitia Piper, a first cousin of mine, had a Nova Scotia sheep that produced her twins. What! cries the Lady Dowager Dundizzy (who you know is as deaf as a post), has Miss Piper had twins? – This mistake, as you may imagine, threw the whole company into a fit of laughter. However, 'twas the next day everywhere reported, and in a few days believed by the whole town, that Miss Letitia Piper had actually been brought to bed of a fine boy and girl.[24]

The fashion began at the top, King George III ('Farmer George') being the most eminent fashionable sheep-keeper. In 1789 he took receipt of several Spanish Merinos, and he wrote articles on sheep matters for Arthur Young's *Annals of Agriculture*, under the shepherd's pseudonym of 'Ralph Robinson'.[25] Merinos were circulated among a wide circle of landed gentlemen, and this helped to establish a fashion for exotic domestic breeds which were often of little relevance to local agrarian conditions.

Given this contemporary fashionable interest in sheep-breeding, I would venture that Goldsmith's 'lord Bantam' is a pseudonym for a real lord who had perhaps travelled in the East, was keeping a 'fat-tailed sheep', and either had an original tail-trolley or devised an imitation; or else is a composite 'type' representing faddish aristocratic sheep-keeping. Whatever the correct interpretation, Goldsmith clearly is not concerned with discrediting the story of the

[22] *Lord Bantam* is the title of a much later text, a satirical novel of 1871 by John Edward Jenkins about 'a young aristocrat in democratic politics' (*Oxford Dictionary of National Biography*, online edition, visited 30 Jan 2006). One suspects the phrase was once a familiar generic nickname, perhaps implying aristocratic 'cockiness'.

[23] William Ellis, *A compleat system of experienced improvements, made on sheep, grass-lambs, and house-lambs; or, the country gentleman's, the grazier's, the sheep-dealer's, and the shepherd's sure guide* (1749), quoted by Youatt, *Sheep*, p. 125.

[24] D. W. Lindsay (ed.), The Beggar's Opera *and other eighteenth-century plays* (1993), p. 413.

[25] William Marshall, *The review and abstract of the County Reports to the Board of Agriculture* (five volumes, 1818, repr. 1968), V, pp. 45–46; Robert Trow-Smith, *A History of British Livestock Husbandry, 1700–1900* (1959), pp. 132–33, 151–52; Lord Ernle [R. E. Prothero], *English Farming, Past and Present* (6th edn, 1961), p. 196.

trolleys (which would only serve to invalidate his simile), but with drawing on it as a 'real' and 'known' fact in order to give his satire a 'real' and 'known' context, a characteristic procedure in eighteenth-century satire.

Goldsmith's *non-satirical* view of the trolleys is clear and fairly simple:

> The second variety to be found in this animal, is that of the broad tail'd sheep, so common in Tartary, Arabia, Persia, Barbary, Syria, and Egypt. This sheep is only remarkable for its large and heavy tail, which is often found to weigh from twenty to thirty pounds. It sometimes grows a foot broad, and is obliged to be supported by a small kind of board, that goes upon wheels.[26]

But the best and fullest account of the phenomenon I have found was published slightly earlier, in fact shortly before *The Fleece* went to press. It reveals both the contemporary view of the matter, and the sense of unease which comic usage seems by now to have injected into its discussion. Alexander Russell, Physician to St. Thomas's Hospital, wrote as follows in 1756:

> They have two sorts of sheep in the neighbourhood of Aleppo: the one called Beduin sheep, which differ in no respect from the larger kinds of sheep in Britain, except that their tails are somewhat longer and thicker: the others are those often mentioned by travellers on account of their extraordinary tails; and this species is by much the most numerous. This tail is very broad and large, terminating in a small appendage that turns back upon it. It is of a substance between fat and marrow, and is not eaten separately, but mixed with the lean meat in many of their dishes, and also often used instead of butter. A common sheep of this sort, without the head, feet, skin and entrails, weighs about twelve or fourteen Aleppo rotoloes (of five pounds), of which the tail is usually three rotoloes or upwards; but such as are of the largest breed and have been fattened, will sometimes weigh above thirty rotoloes, and the tails of these, ten (or fifty pounds); a thing to some scarce credible. These very large sheep being, about Aleppo, kept up in yards, are in no danger of injuring their tails; but in some other places, where they feed in the fields, the shepherds are obliged to fix a piece of thin board to the under part of the tail, to prevent its being torn by bushes, thistles, etc.; and some have small wheels, to facilitate the dragging of this board after them; whence, with a little exaggeration, the story of having carts to carry their tails.[27]

Russell has the caution of a man who fears he may not be believed. A 'thin' board with 'small' wheels is a cart as clearly as Goldsmith's 'small kind of board, that goes upon wheels', but Russell still has to pretend that there has been 'a little exaggeration' by those who have said so. This note of caution rings true, and if we bear in mind Russell's status as a rational, observant physician, and consider the significant number of credible later first-hand accounts, I think it reasonable to conclude that what Sir Henry Yule called an 'ancient and slippery story' is basically sound.[28]

Dyer's tail-trollied sheep allows the poet to observe and moralise a fairly well-known

[26] Goldsmith, *An history of the earth and animated nature* (1774), III, p. 47, quoted in Friedman (ed.), *Collected works*, I, 378 and note.

[27] Alexander Russell, *The natural history of Aleppo and parts adjacent* (1756), p. 51, reprinted in John Masefield (ed.), *The travels of Marco Polo* (1908), p. 59n.

[28] *Book of Ser Marco Polo*, p. 100n.


[*The Fat-tailed Sheep.*]
* The Animal Kingdom, vol. iv. p. 328.

FIGURE 2. Fat-tailed sheep, taken from William Youatt, *Sheep: Their breeds, management and diseases* (1837), p. 114. Youatt describes it as 'a rather unusual variety of the fat-tailed sheep that formed part of the collection in the Jardin des Plantes in Paris'.

phenomenon, about which he need not necessarily be humorous: the ram resigning his tail to the hatter is, as even the editors of *The Stuffed Owl* conceded, 'poetic enough' as it stands.[29] It remains for us to identify Dyer's 'Carmenian' sheep. Larson says that 'Dyer writes about an actual breed of wool-less sheep, but in his version the sheep's tails do bear wool'. This is misleading. Because of the enormous changes which have taken place in virtually all breeds, the subject of 'pre-improvement' sheep is a vexed one, and agricultural historians normally distinguish 'types' rather than 'actual breeds' of sheep in the early modern period.[30] Nor does Dyer write of a wool-less, or 'naked' sheep as such. The poet is making the general point that in 'fervid climes' (i.e. the tropics) the sheep bear 'no burdening fleece', which is perfectly true, a majority of tropical varieties being 'hairy' rather than 'woolly' or 'fleecy'.[31] Of the Carmenian sheep Dyer writes:

> Carmenian wool on the broad tail alone
> Resplendent swells, enormous in its growth.[32]

This again does not say that the sheep is 'naked' or 'woolless', but that the wool grows extensively on the tail alone. I am not able to supply visual evidence which precisely matches this, but Figure 2 shows a fat-tailed sheep with an even covering of short hair over most of its body,

[29] 'Vergil wrote poetically of sheep-scab and manure; and Dyer's image of the ram gladly resigning his fleecy tail to Lincoln and Bennett is poetic enough,' *The Stuffed Owl: an anthology of bad verse*, ed. by D. B. Wyndham Lewis and Charles Lee (1930), p. 76.

[30] Robert Trow-Smith, *A history of British livestock husbandry to 1700* (1957), and *A history of British livestock husbandry, 1700–1900* (1959); N. C. Russell, 'Animal Breeding in England, *c.*1500–1770' (unpublished Ph.D. thesis, Imperial College of Science and Technology, University of London, 1981).

[31] Devendra and McLelor, *Goat and sheep production*, p. 123; Carles, *Sheep production*, pp. 24–5; Ryder, *Sheep and Man*, p. 47.

[32] Dyer, *The Fleece*, Book II, 416–17.

and a 'resplendent' and 'enormous' growth of wool on its (long and fat) tail and its chest. Wool, like fat deposits, may vary considerably in location and extent, and it is probable that Dyer is thinking of a type which closely resembles this one, but lacks chest wool. The absence of early scientific documentation, and the breed alterations I have mentioned, make it difficult to locate Dyer's 'actual breed' more closely, though I shall attempt to do so. None of Dyer's editors has glossed 'Carmenia', which is not in the *OED* or the modern atlases.[33] Dyer, however, latinizes place names throughout the poem, and I am confident that he is doing so here, drawing on the Latin word 'Carmani', defined as 'a people of the Persian Gulf', the equivalent modern name being Kerman or Kirman.[34]

There are references to Kermani wool in the eighteenth century, though no specific description of a Kermani sheep. John Smith (1747) quotes from 'The Atlas General' on '*Kerman* or *Karman*, 330 Miles from South to North, 180 East to West', noting that 'their Sheep bear the finest Wool in *Persia*'; and from the *Dictionaire Universel du Commerce*: 'The Wools of Kirman are the finest in the World'. Youatt (1837) confirms that 'the best' Persian wool was grown in the province of Kerman, and finds that *numuds*, or fine felt carpets are manufactured there.[35] This may shed light on Dyer's 'hatter', because felt was the major material for eighteenth-century hatmaking, and an important product of Persia. In Britain Nuneaton (a town very much within Dyer's Midland territory) was a major felt-making centre, and the poet can be expected to have known something about the industry.[36] There is in fact a modern Kermani sheep (also identified with the 'Baluchi' and 'Karakui' types), whose wool is described as 'the finest from native breeds in this zone'. However its tail, though fat, is bi-lobed and 'carried high', suggesting a 'fat-rumped' rather than a 'fat-tailed' type.[37] The breed may of course have changed its tail characteristics in 250 years.

Dyer's description, then, shows some awareness of the distinctive characteristics of eighteenth-century middle-eastern sheep husbandry. Whether his account remains humourless (or

[33] This and other latinizations in *The Fleece* are glossed in my forthcoming edition of the poem, co-edited with Dr J. C. Pellicer.

[34] The present city of Kirman was only so named in medieval times, though Karmania was in Alexander the Great's time a separate satrapy: see Ilya Gershevitch (ed.), *The Cambridge History of Iran*, II, *The Median and Achaemenian Periods* (1985), pp. 248, 239. Leon E. Seltzer (ed.), *Columbia Lippincott Gazetteer of the World* (1952), p. 932, includes both a city and a province of 'Kerman or Kirman', defining the province as the same as the ancient 'Carmania'. A possible but much less likely reading of 'Carmenian' is the 'Karaman' breed, from Turkey. Like 80% of Turkey's sheep, this is fat-tailed, and Ryder, *Sheep and Man*, pp. 222–23, mentions the tail-trolley story in relation to Turkish sheep generally. On the other hand the Karaman produces only coarse wool. According to Ryder its tail may weigh up to 6 kilos (as much as 18% of body weight). Its habitat is the vast Anatolian plain of central Turkey and it has the same kind of hardiness as the Kermani sheep.

[35] John Smith, *Chronicum rusticum-commerciale or, memoirs of wool* (2 vols, 1747, repr. 1969), II, pp. 215, 462; Youatt, *Sheep*, pp. 126–27. The *Columbia Lippincott Gazetteer*, p. 932, lists among the industries and products of the modern province of Kerman, 'Sheep and camel raising', and adds: 'Fine wool, which is the main export, also is the basis of the Kerman rug and shawl industry'. Similarly the city of Kerman, a 'major road and trading centre', has 'rug weaving (Kirman rugs); m[anu]f[acturin]g of shawls'.

[36] For felt and hat manufacture see Ryder, *Sheep and man*, p. 738; Eric Kerridge, *Textile manufactures in early modern England* (1985), pp. 137–8.

[37] Devendra and McLelor, *Goat and sheep production*, p. 146; Ryder, *Sheep and Man*, p. 237.

unconsciously humorous) the reader may decide.[38] It certainly reveals an imaginative and practical engagement with most aspects of the subject of 'The Fleece', scientific as well as cultural. In an age of highly specialised and compartmentalised intellectual life, we need to consider more than just the aesthetics of the poem if we are to appreciate this adequately. The cultural history of this story also shows how aspects of agrarian history may be refracted through very different texts with differing aims and effects, and how carefully one needs to sift them to establish the value of the evidence they provide.

[38] John Chalker, *The English Georgic: A study in the development of a form* (1969), pp. 54–55, notes elements of burlesque in the poem; and Dyer is notably alert to the possibilities of punning and word-play: see John Goodridge, *Rural Life in Eighteenth-Century English Poetry* (1995, 2006), pp. 110, 161.

Parliamentary enclosure and changes in landownership in an upland environment: Westmorland, *c*.1770–1860

by Ian Whyte

Abstract

The impact of parliamentary enclosure on landownership, especially on small proprietors, has been considered mainly in the context of lowland open-field arable communities. However, it also affected extensive areas of upland common pasture in northern England. This article examines parliamentary enclosure in Westmorland where the context of enclosure and the structure of rural society were markedly different from southern England, particularly in the prevalence of customary tenures with rights effectively equivalent to freehold. A study of sales of allotments in enclosure awards, and changes in landownership between awards and subsequent Land Tax returns, shows that there was considerable continuity of occupation by smaller proprietors despite enclosure. Parliamentary enclosure in Westmorland does not appear to have caused the large scale disappearance of small owners or their transformation into landless wage labourers. Small owner-occupied farms remained a characteristic feature of this area into the later nineteenth century.

Parliamentary enclosure has been viewed as a form of oppression of smaller landowners by larger ones, with smallholders and owner-occupiers being forced to sell out due to its high costs. The common rights of smallholders and cottagers were removed and replaced, if they were replaced at all, by small, sometimes distant allotments. Loss of common rights and the sale of their plots forced cottagers and smallholders to work as full-time labourers for the larger farmers. This caused increasing social polarisation and growing poverty at the lowest levels of rural society, with a consequent outflow of population to towns and industrial areas.[1] In the Midlands

[1] The literature on parliamentary enclosure is extensive and contentious. One of the earliest studies was A. H. Johnson, *The disappearance of the small landowner* (1909). J. and B. Hammond. *The Village Labourer* (1912) remains the classic statement of the Marxist view that parliamentary enclosure killed off the last remnants of an English peasantry, replacing them with a rural society dominated by capitalist farmers and landless labourers. On the other hand J. D. Chambers and G. E. Mingay, *The Agricultural Revolution, 1750–1850* (1966) takes the view that most labourers had no common rights even before enclosure. More recently J. A. Neeson, *Commoners. Common right, enclosure and social change in England, 1700–1870* (1993) has supported the Hammonds in her examination of the importance of common rights to small famers and in suggesting that enclosure was prompled by deliberate social engineering. A recent survey of the main issues is G. E. Mingay, *Parliamentary enclosure in England. An introduction to its causes, incidence and impact, 1750–1850* (1997). An important recent study, suggesting that labourers rarely had common rights before enclosure, is L. Shaw-Taylor, 'Parliamentary enclosure and the emergence of an English agricultural proletariat',

a rise in poor relief was associated with loss of employment resulting from the conversion of arable land to grass following enclosure.[2]

Larger landowners tended to be the principal beneficiaries of enclosure, which has been seen as a key influence in the decline of the small farmer.[3] This has been confirmed by various local and county studies.[4] When small owners sold their enclosure allotments, three motives are thought to have been involved: the release of capital for use elsewhere, lack of funds to meet the cost of enclosure, or lack of viability of the small allotments that they received.[5] The cost of ring fencing was certainly proportionally greater for holders of smaller allotments.[6] Such sales of land have, however, been seen more positively as providing opportunities.[7] Small owners who sold their allotments at enclosure were often part-time farmers or absentees selling their allotments to raise money for investment elsewhere.[8]

While efforts have been made to identify regional differences, such as between arable and grass districts,[9] research on the social effects of parliamentary enclosure has been heavily slanted towards lowland England. However, some 2.3 million acres of the land enclosed under parliamentary act was common pasture rather than open-field arable and a good deal of this lay in the uplands of north-west England.[10] Here the structure of rural society and the context within which parliamentary enclosure occurred were different.[11] While it is widely believed that in many parts of England removal of the peasantry was complete before the main phase of parliamentary enclosure, in the North-West elements of a peasantry survived into the nineteenth century.[12] Parliamentary enclosure also continued for longer than in the south; substantial areas were enclosed as late as the 1860s and 1870s. This paper considers the changes in landownership

Note 1 continued
JEcH 61 (2001), pp. 640–62. An important sub-set of the enclosure literature has involved a vigorous debate on the reliability of the Land Tax returns in demonstrating a decline in the numbers of small farmers following enclosure: see here G. E. Mingay, 'The Land Tax assessments and the small landowner', *EcHR* 17 (1964–5), pp. 381–8, J. M. Martin, 'Landownership and the Land Tax returns', *AgHR* 14 (1966), pp. 96–103; id., 'The small landowner and parliamentary enclosure in Warwickshire', *EcHR* 31 (1979), pp. 328–43; M. E. Turner, 'Parliamentary enclosure and landownership change in Buckinghamshire', *EcHR* 28 (1975), pp. 565–81. D. E. Ginter, *A measure of wealth. The English Land Tax in historical analysis* (1992).

[2] T. Williamson, 'Understanding enclosure', *Landscapes* 1 (2000), p. 74.

[3] K. D. M. Snell, *Annals of the Labouring Poor* (1985); Neeson, *Commoners*.

[4] e.g. J. M. Martin, 'The parliamentary enclosure movement and rural society in Warwickshire', *AgHR* 15 (1967), p. 36; id., 'Small landowner and parliamentary enclosure', pp. 328–43; M. E. Turner, 'Parliamentary enclosure and land ownership in Buckinghamshire', *EcHR* 28 (1975), pp. 565–81; Neeson, *Commoners*, pp. 202–4, 228, 240, 247.

[5] Mingay, *Parliamentary enclosure*, p. 117

[6] M. Turner, *Enclosures in Britain, 1750–1830* (1984), p. 56.

[7] Chambers and Mingay, *Agricultural revolution*, pp. 90–4.

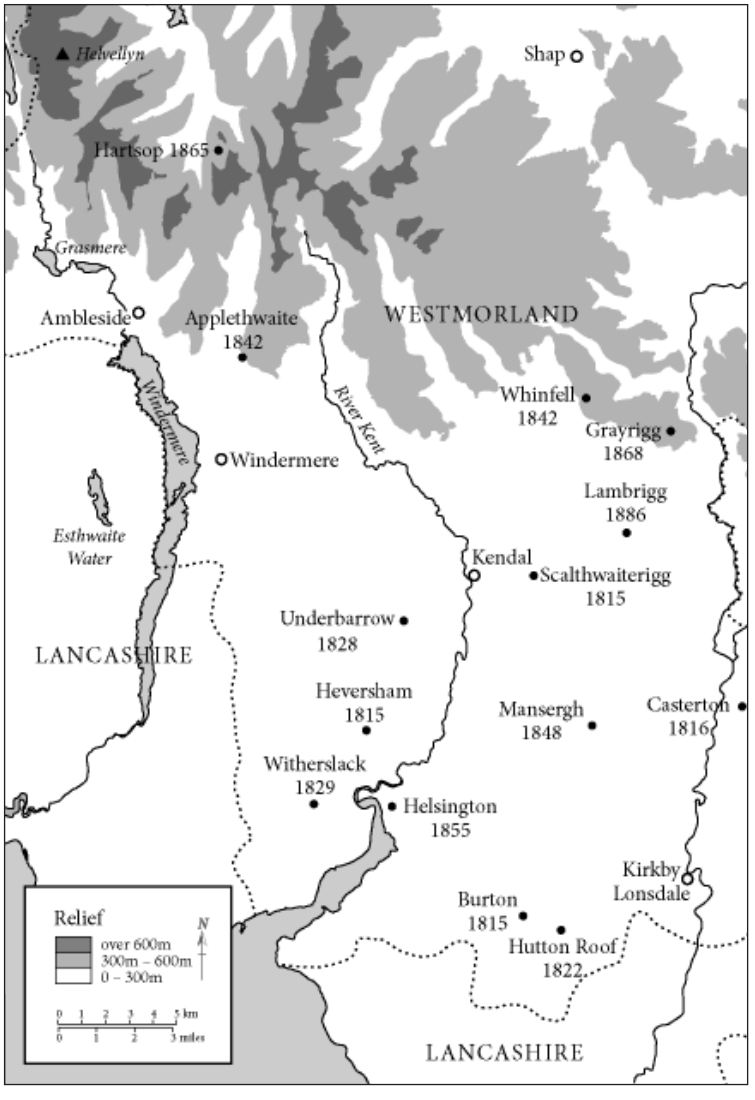
[8] J. Chapman and S. Seeliger, *Enclosure, environment and landscape in southern England* (2001), p. 138.

[9] Turner, 'Landownership changes', p. 575.

[10] M. Overton, *Agricultural Revolution in England. The transformation of the agrarian economy, 1500–1850* (1996), p. 149; M. Williams, 'The enclosure and reclamation of waste land in England and Wales in the eighteenth and nineteenth centuries', *Trans. Institute of British Geographers* 51 (1970), pp. 55–69; J. Chapman, *A guide to the parliamentary enclosures in Wales* (1992).

[11] The distinctiveness of rural society in Cumbria, and of the context of parliamentary enclosure has been stressed in particular by C. E. Searle, '"The odd corner of England": a study of rural social formation in transition, Cumbria, *c.*1700-*c.*1914', (unpublished PhD thesis, University of Essex, 1983), pp. 15–16.

[12] Turner, 'Landownership changes', p. 566; Searle, '"Odd corner"'; N. Gregson, 'Tawney revisited: custom and the emergence of capitalist class relations in north-east Cumbria, 1600–1830', *EcHR* 42 (1989), pp. 18–42.



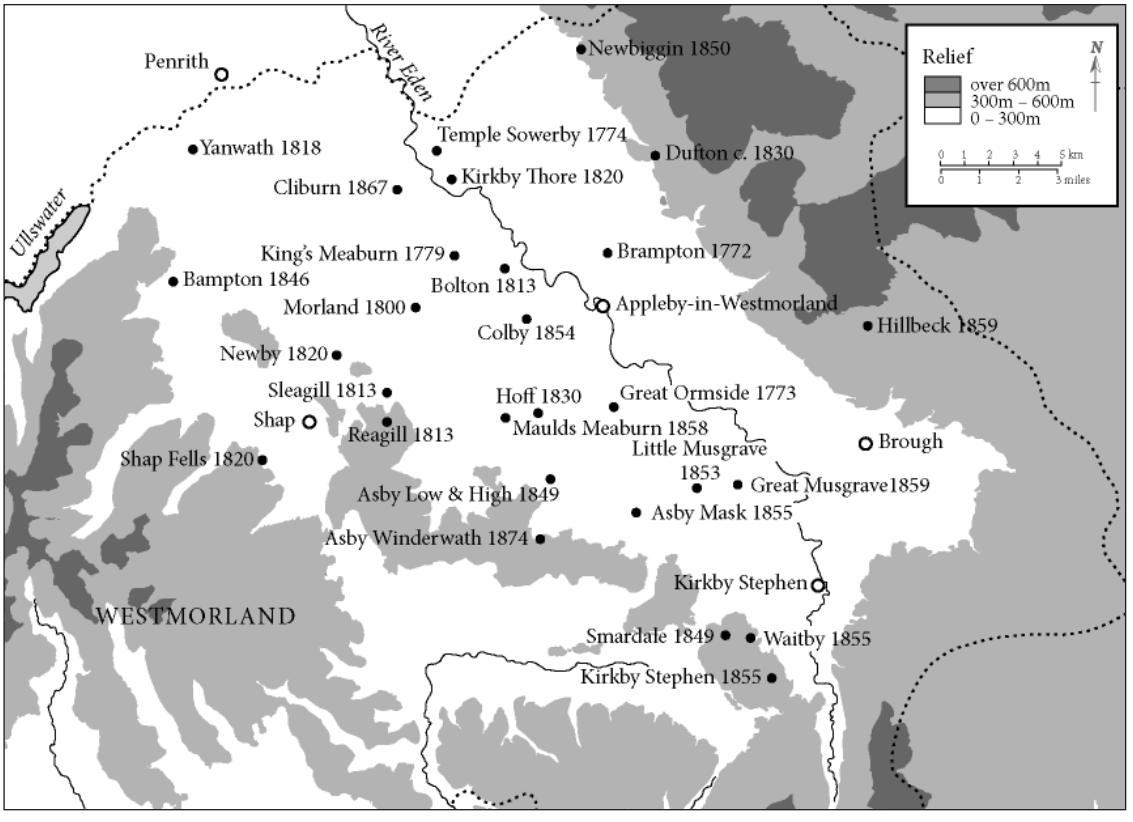
MAP 1. Location of enclosure awards referred to in south Westmorland.

associated with parliamentary enclosure in Westmorland, the most upland county in England. It aims to establish whether the social impacts of enclosure were different in an upland area where most of the land enclosed was common waste rather than open-field arable, particularly in relation to small proprietors.

I

Between the 1760s and the 1890s over 101,000 acres of Westmorland were enclosed under parliamentary act by 97 awards.[13] All of these have been consulted for the present study but

[13] The background to parliamentary enclosure in Westmorland has been discussed in I. D. Whyte, '"Wild, barren and frightful". Parliamentary enclosure in an upland county: Westmorland, 1767–1890', *Rural Hist*. 14 (2003), pp. 21–38.



MAP 2. Location of enclosure awards referred to in north Westmorland.

those specifically mentioned in the text are shown on Maps 1 and 2. Open field arable and meadow accounted for under one per cent of this: the remainder was common pasture.[14] Westmorland was unusual in having three peaks of enclosure; the 1770s, *c*.1800–1820, and the mid-nineteenth century.[15] The expansion of arable was an important influence during the first two of these while the main motive behind enclosure in the third period was the improvement of pasture.[16]

In the later eighteenth century Cumbria preserved a distinctive rural social structure. Customary tenures were common, retaining elements of feudalism and giving tenants rights in their property which were effectively equivalent to freehold, whilst paying rents which had failed to keep pace with inflation.[17] Partly because of the widespread survival of customary tenants with relatively small holdings, rural society was dominated by small family farms and there was

[14] J. V. Beckett, 'The decline of the small landowner in later nineteenth century England: some regional considerations', *AgHR* 30 (1982), p. 107.

[15] R. J. P. Kain, J. Chapman and R. R. Oliver, *The enclosure maps of England and Wales, 1595–1918* (2004), p. 127.

[16] Whyte, 'Wild, barren and frightful', pp. 21–38.

[17] Beckett, 'Small landowner', p. 100. There were around 10,000 customary tenants in neighbouring Cumberland, occupying two thirds of the improved land, at the end of the eighteenth century.

widespread access to land. Farms employed relatively few wage labourers and most agricultural work was done by family members.[18]

Between the mid-seventeenth and mid-eighteenth centuries Cumbrian yeomen enjoyed modest prosperity and there was little decline in their overall numbers. As well as profits from the droving trade, this prosperity was linked to modest levels of customary fines, low Land Tax assessments and the existence of a range of by-employments outside agriculture.[19] There appears to have been some fall in numbers of customary tenants during the eighteenth century.[20] In Westmorland this was partly linked to the expansion of the estates of the earls of Lonsdale and Thanet.[21] Nevertheless, customary tenants continued to display signs of prosperity: the strength of their tenures limited the power of manorial lords and gave them a stake in parliamentary enclosure.[22] Cumbrian customary tenants had considerable say in initiating, and sometimes preventing, parliamentary enclosure.[23] Their rights of common were recognised by enclosure commissioners, regardless of how small their holdings were.[24] The pressure on Cumbrian commons in the later eighteenth century, caused by overgrazing related to the droving trade, potentially disadvantaged everyone who used them but the smaller customary tenants are likely to have suffered most. On several commons it can be shown that the larger owners not only abused the commons by overgrazing but also managed to prevent smaller customary tenants from exercising their common rights at all.[25] At Casterton the larger proprietors had monopolised the grazings and on other commons, such as Dent, the sheep of small owners were driven off the best pastures and even chased off the commons entirely by the dogs of the larger tenants.[26] Under such circumstances it is not surprising that the latter were prepared to agree to enclosure as the only realistic way of maintaining their essentially peasant system of production.[27]

II

When open-field arable was enclosed under parliamentary act, the area that could be converted into allotments was reduced by the need to deduct shares for the lord of the manor and the

[18] Beckett, 'Small landowner', p. 100. A. J. Gritt, 'The survival of service in the English agricultural labour force: lessons from Lancashire, *c.*1650–1851', *AgHR* 50 (2002), pp. 25–50 has suggested that hired labour, whether wage labourers or living-in servants, was relatively unknown in Lancashire before the later eighteenth century. Conditions are likely to have been similar in Westmorland. See J. D. Marshall, 'Rural society before the Victorians', in O. M. Westall (ed.), *Windermere in the nineteenth century* (1991), p. 14. Searle, '"Odd corner"', p. 49.

[19] Becket, 'Small landowner', p. 100; Marshall, 'Windermere', p. 9.

[20] Gregson, 'Tawney revisited'; A. H. Duxbury, 'The decline of the Cumbrian yeoman: Ravenstonedale: a case study', *Trans Cumberland and Westmorland Antiquarian and Archaeological Society*, sec. ser. (hereafter *CW*²) 94 (1994), pp. 202–3.

[21] Searle, '"Odd corner"', pp. 195–200.

[22] C. E. Searle, 'Cumbria's parliamentary enclosure movement: a comparative case study in rural quiescence', *CW*² 95 (1995), pp. 247–69.

[23] For example in Preston Patrick: Cumbria Record Office, Kendal (hereafter CRO (K)), WPR/47.

[24] C. E. Searle, 'Customary tenants and the enclosure of the Cumbrian commons', *Northern Hist.* 29 (1993), pp. 126–53.

[25] For general comments on this, see C. Webster, 'On the farming of Westmorland', *JRASE*, sec. ser. 4 (1868), p. 14. For two specific cases, see CRO (Kendal) WQ/R/I, Sleagill, misc. enclosure papers 1802; *Westmorland Gazette*, 8 Jan. 1825.

[26] Whyte, 'Transforming fell and valley', pp. 34–5.

[27] Searle, 'Cumbria's parliamentary enclosure movement'. Kain, 'Enclosure maps', p. 5 suggests that this was a wider reaction of small owner-occupiers.

tithe owner. Landowners consequently received smaller allotments than the acreages they had originally held in the open fields.[28] This reduction was presumably partly offset by the greater efficiency of working the land as a consolidated, enclosed block. If common pasture was also enclosed, shares of this would have helped to balance the loss of land from the open fields. In Westmorland, however, where the normal pattern was enclosure of extensive commons with little or no open-field arable, landowners retained their original closes on the inbye (improved) land and received allotments which could substantially increase the size of their property.

Their allotments were, nevertheless, reduced by various deductions. In Westmorland the fraction of the enclosed area awarded to manorial lords varied between a tenth and a twenty-fourth (though a sixteenth was most frequent).[29] Manorial allotments were often laid out on relatively high, remote ground on the margins of townships to make it easier for the allotments of smaller landowners to be contiguous with, or at least close to, their existing lands.[30] Manorial lords were better able to afford the cost of building new farmsteads on substantial detached blocks of land than smaller proprietors.[31]

In Westmorland the principal beneficiaries of manorial allotments were the earls of Thanet, absentee landowners based in Kent who had inherited the former Clifford estates centred on Appleby Castle, and the Lowthers, earls of Lonsdale, whose financial interests focused on coal mining and the development of the port of Whitehaven in west Cumberland but whose estates also included extensive property in Westmorland.[32] Both families were enlarging their Westmorland properties in the late eighteenth and early nineteenth centuries and it has been suggested that they specifically bought manorial lordships with a view to the likely profits from enclosure.[33]

The commutation of tithes into allotments of land could also absorb a significant proportion of the area to be enclosed: instances of an eighth are recorded from Westmorland.[34] Around half the Westmorland awards down to the 1830s involved commutation, a slightly smaller proportion than the national figure of 60 per cent.[35] Allotments were also commonly awarded to institutions: churches, chapels, schools, overseers of the poor and private charities. Such grants

[28] Chapman and Seeliger, *Enclosure, environment and landscape*, p. 138. J. S. Cohen and M. L. Weitzman, 'Enclosures and depopulation: a Marxian analysis', in W. N. Parker and E. L. Jones (eds) *European peasants and their markets* (1975), p. 175.

[29] In Cumberland it was a fourteenth; the difference was due mainly to the later continuation of parliamentary enclosure in Westmorland, where 57 per cent of awards made after 1820 involved a deduction of a sixteenth as the manorial share. R. S. Dilley, 'The enclosure awards of Cumberland: a statistical list', *Trans Cumberland and Westmorland Antiquarian and Archaeological Society* third ser., 2 (2000), p. 275.

[30] Striking examples of such manorial allotments include the award of 247a on the summit of the rocky hill of Dufton Pike, 461a of moorland at altitudes of up to 350m on the Shap Fells and moorland rising to 437m on Casterton Fell: CRO (Kendal) WD/HH/51, WQR/I/ 81, 14.

[31] I. D. Whyte, *Transforming fell and valley. Landscape and parliamentary enclosure in north-west England* (2003), pp. 81–6.

[32] J. V. Beckett, *Coal and Tobacco. The Lowthers and the economic development of West Cumberland, 1660–1760* (1981).

[33] Searle, '"Odd corner"', p. 199. The purchase of manorial rights was certainly followed rapidly by enclosure in the case of Thanet manors like Great Ormside: CRO (K), WD/Hoth, Box 23.

[34] Eg. the awards for Shap and Hoff and Drybeck: CRO (K), WQR/I/81 and 41.

[35] Mingay, *Parliamentary enclosure*, Dilley, 'Enclosure awards of Cumberland', p. 274.

were less common before 1800 but were frequent thereafter. The amount of land involved was generally under ten acres though a few more substantial grants are recorded.[36]

In addition to these deductions, enclosure commissioners often sold parts of commons to cover the public costs of enclosure.[37] These included the legal expenses of preparing a bill and presenting it to Parliament, the fees and expenses of commissioners, solicitors and surveyors, the costs of surveying the ground, staking out allotments, making the roads, and ring fencing the tithe allotment. When such costs were met by a proportional assessment on proprietors the money often took years to come in.[38] Selling some of the common meant that landowners only had to pay for ring fencing their own allotments, making internal boundaries and improving the land. This may have benefited smaller proprietors in particular but it represented a further reduction in the area available for allotment. The proportion of commons sold by commissioners varied greatly according to the quality of the land and its price per acre. Fifty-three per cent of Casterton common was sold in 1816 as a large block of poor, unimprovable upland, which appears to have been bought with an eye to its sporting potential. On lowland commons like Bolton and Kirkby Thore as little as five or six per cent was sold, comprising improvable land of relatively high value.[39]

So what were customary tenants left with after all these deductions? The average size of allotments was modest for some small lowland commons. At Yanwath near Penrith, where there was opposition to the enclosure of the 228-acre common on the grounds of the cost to small farmers, the average allotment was only seven acres.[40] Morland and King's Meaburn are other examples where the land received by most allotment holders was probably not worth the costs of enclosure. At King's Meaburn the 411-acre common, on indifferent soils, was in three separate portions. Disputes occurred with neighbouring townships over the boundaries of each of these. The cases went to the quarter sessions and in each instance the King's Meaburn commoners lost, greatly increasing the cost of enclosure.[41] On other lowland commons enclosed in the later eighteenth and early nineteenth centuries, such as Brampton, Kirkby Thore and Great Ormside, the average size of allotment – over 20 acres on good improvable soils – is likely to have been a useful addition to the original holding. In the mid-nineteenth century, the enclosure of large upland commons, as at Applethwaite, Mansergh and Whinfell, produced greater average allotment sizes of 50–60 acres or more but on land with only limited scope for improvement.

For the mid-nineteenth century, when details of the size of the holding on which the original

[36] For example, the 40a 1r 35p awarded to the local school in the Over Staveley enclosure and the 55a 1r op to a private charity in the Hugill award. CRO (K), WGR/I/75–75a, & 6. After the General Enclosure Act of 1845 awards often included allotments of up to four acres set aside as recreation grounds for the inhabitants. S. Hollowell, *Enclosure Records for Historians* (2000), p. 67; W. E. Tate and M. E. Turner, *A Domesday of English enclosure awards* (1978), pp. 31–2.

[37] Chambers and Mingay, *Agricultural revolution*, pp. 78, 85–87. In 40 per cent of the awards in Westmorland (46% after 1800) the commissioners sold land in this way, a proportion comparable to Cumberland but considerably higher than the national figure of around 25 per cent. Mingay, *Parliamentary enclosure*, p. 109; Dilley, 'Enclosure awards of Cumberland', p. 274.

[38] At Preston Patrick in Westmorland even 30 years after enclosure some of the bills had still not been paid. BPP, 1844, V, *Report from the select committee on Commons Inclosure*, p. 133.

[39] CRO (K), WQR/I/10, 14 and 52.

[40] Searle, 'Cumbria's parliamentary enclosure movement', pp. 257–8.

[41] CRO (K), WD/CAT/MUS/ A2173, letters 31 Aug., 1778, 10 Mar. 1779.

TABLE 1. Average percentage increase in holding size with parliamentary enclosure

Enclosure	*Date of award*	*Average percentage increase in holding size*
Asby Mask	1855	96
Asby Winderwath	1874	65
Colby	1854	28
Grayrigg	1868	75
Great Musgrave	1859	59
Hillbeck Fell	1859	136
Kirkby Stephen	1855	85
Lambrigg	1886	37
Little Musgrave	1853	41
Newbiggin	1850	55
Maulds Meaburn	1858	37
Smardale	1849	135
Waitby	1855	72

Source: Cumbria Record Office (Kendal), enclosure awards as follows: WQR/I/4 (Asby Mask); 1 (Asby Winderwath); 20 and 21 (Colby); 32 (Grayrigg); 32 (Great Musgrave); 40 (Hillbeck); 50 (Kirkby Stephen); 26 (Docker & Lambrigg); 58 (Little Musgrave); 69 (Newbiggin); 64A (Maulds Meaburn); 85 (Smardale); 92 (Waitby).

common rights had been based become available, it is also possible to calculate the relationship between the allotment and the original holding (Table 1). Landowners in communities which enclosed smaller lowland commons, such as Colby and Maulds Meaburn, received average increases of around 25–40 per cent. Where extensive upland commons were enclosed, the percentage increase was sometimes much higher, but the quality of the land was poorer. Average increases in holding sizes for earlier enclosures are likely to have been less because of the smaller area of many commons but would still have been substantial.

Of course these gains in land were made at the expense of the loss of use rights, principally grazing, but also the cutting of peat and turf, on the original commons. The value of such rights had, however, been greatly reduced by overgrazing and, as we noticed, in some cases smaller customary tenants had not even been able to exercise their grazing rights at all.

III

Studies of parliamentary enclosure in lowland England have shown that allotments often changed hands at the time of enclosure. In Buckinghamshire there was widespread dealing in land around the time of enclosure with 30 per cent of owners selling out and leaving the parish due mainly, Turner believed, to their inability to meet the cost of enclosure. Between *c.*1750 and 1820 there was a decline of 38 per cent in the number of owners in parishes that had been enclosed.[42] In Warwickshire there was a disappearance of 40 per cent of family surnames from

[42] M. E. Turner, 'The cost of parliamentary enclosure in Buckinghamshire', *AgHR* 21 (1973), pp. 35–46.

enclosure parishes. Smaller proprietors declined by 25 per cent within a decade of enclosure but sales were concentrated among absentee owners.[43] Neeson suggested that as many as half the landowners in parishes experiencing parliamentary enclosure sold off their land during the enclosure period and that a third of the remaining landowners sold off some of their land, though there was considerable variation between parishes.[44]

Land also changed hands before an enclosure act was passed. Turner has interpreted this as a panic reaction by smaller proprietors worried about the costs of enclosure.[45] In Westmorland this is unlikely to have occurred because allotments were added to existing holdings rather than being awarded in lieu of them. Following the passing of an enclosure act land could be sold in three contexts. Common rights could be sold once claims had been accepted by the commissioners but before allotments had been defined by survey. Second, allotments could be sold during the period between the survey and the signing of the award. In the 1770s, when enclosure was often completed within a year or two this was a relatively brief period, but by the early nineteenth century it might span several years.[46] Third, allotments could be sold after an award had been completed, whether separately or together with the original holding. Such sales would not be recorded in any enclosure documents and require other sources to identify.

Pre-enclosure sales of common rights are recorded sporadically, but probably not consistently, in enclosure awards.[47] All that can be said is that this practice was in no way unusual as rights in stinted pastures were bought and sold freely outside the context of enclosure.[48]

More information is available on sales of allotments between the survey and the award from the award schedules themselves. These record changes of ownership and sometimes further sales to third parties. A third of Westmorland awards record the sale of allotments, less than the 50 per cent recorded by Martin for Warwickshire.[49] How consistently were such sales recorded? The earliest awards from the 1770s rarely mention them. Is this because they did not occur or because the practice was simply not recorded? Before 1801 awards were very much locally-produced documents whose content and format could vary considerably.[50] After the General Enclosure Act of 1801 their structure became more standardised, and even more so after the General Enclosure Act of 1845.[51] Did awards become more systematic over time in recording sales of allotments?

The suggestion here is that they did not. Awards were formal legal documents. As the sizes of allotments were based on common rights deriving from the ownership of specific areas of land and other property, no matter who had bought the land by the time of the award, it was still necessary to identify the original owner of the common rights in order to make it clear on what basis the allotment had been allocated, so preserving the link between original property, common rights and allotment in case of future legal challenges. A further indication of the accuracy of earlier enclosure awards concerning sales of allotments comes from a volume recording land purchases in Westmorland by the earls of Thanet. During the period 1770–90,

[43] Martin, 'Small landowner', pp. 328–43.

[44] Neeson, 'Commoners', pp. 240, 247.

[45] Turner, 'Landownership changes in Buckinghamshire', p. 568.

[46] Tate and Turner, *Domesday of enclosures*.

[47] CRO (K), WQR/I/12.

[48] CRO (K), WD/Hoth, Box 18.

[49] Martin, 'Parliamentary enclosure movement', p. 36.

[50] J. Chapman, 'Some problems in the interpretation of enclosure awards', *AgHR* 26 (1978), pp. 108–114.

[51] Tate and Turner, 'Domesday of enclosure awards', pp. 30–2.

all purchases of enclosure allotments made by the estate before the corresponding awards were prepared are recorded in the award schedules.[52] This suggests that awards are reasonably accurate guides to changes of ownership of allotments during the period between staking out the land and signing the awards.

Sales of allotments for 30 awards are shown in Table 2. There was considerable variation between awards. At one extreme was Bampton where nearly half the allotment holders sold out to the Earl of Lonsdale. At the other was Heversham where, despite the cost of drainage and reclamation of lowland peat moss which was met by the commissioners selling nearly a third of the enclosed area, only six per cent of allotment holders sold out totally and a further four per cent in part.

Those who sold all of their allotments were, to judge from their sizes, predominantly smallholders. In all but four awards, the average size of allotments of those who sold out entirely was smaller than the average size of all allotments. Some allotments were sold by widows, heirs or trustees of the original owners, possibly in conjunction with the disposal or division of the main holding. In mid-nineteenth century awards, which contain more information about allotment holders, it is evident that some allotment sellers lived considerable distances away and might have found it impossible to work and difficult to lease the land. Thomas Hodgson, who sold his allotment on Hillbeck Fell on the Cross Fell escarpment, lived in Staindrop, County Durham. Isabella Bell, whose executors sold her allotment on Asby Mask, had lived at Blanchland, Northumberland.[53] Enclosure may have provided a good opportunity for such owners to rationalise scattered properties which had arisen from the vagaries of marriage and inheritance by the sale of allotments and main holdings. For mid-nineteenth century awards, comparison with the 1851 census enumerators' books shows that some allotment sellers were definitely tradesmen, such as William Sanderson at Newbiggin, a stonemason, who kept 3a 3r of his allotment but sold 0a 2r 17p to fellow stonemason, and probable relative, John Sanderson.[54]

But while those who sold their allotments were predominantly smallholders, this is not to say that most smallholders sold out. If smallholders are defined roughly as those receiving allotments of five acres or less, only 21 per cent of smallholders in the awards in Table 2 sold out. So smallholders and small farmers who disposed of their allotments before awards were completed were in a minority even within the third of awards that record allotment sales. Some of them were demonstrably absentees. Others were part-time tradesmen who may have wished to raise capital for non-agricultural activities.

The case of the adjoining townships of Newby, Reagill and Sleagill, where awards were made in 1820, 1823 and 1823 respectively, highlights the complexity of changes in landownership that occurred at the time of enclosure. It was clearly common for owners to have lands in more than one township. So Mary Scott received allotments of 23 acres in Reagill and 10 in Sleagill. The sale of land by the commissioners provided an alternative means to buy land apart from the purchase of allotments; Anthony Nicholson, who received an allotment of seven acres in Sleagill bought a further 17 acres from the commissioners of Reagill. There appears to have been a complex pattern of buying and selling land of which the details given in the awards

[52] CRO (K), WD/Hoth, Box 18, Abstract of purchase deeds of land, 1757–1813.

[53] CRO (K), WQR/I/40 and 4.

[54] CRO (K), WQR/I/69.

TABLE 2. Sales of allotments on Westmorland enclosures

Award	*No. of allotment holders*	*Average. size of all allotments*	*No. of holders who sold out totally*	*Average size of their allotments*	*No. of holders who sold out in part*	*Average size of their allotments*
Reagill 1813	21	10.6	3	13.3	1	14.5
Sleagill 1813	23	14.7	1	3.3	1	6.8
Heversham 1815	263	10.5	20	1.9	7	9.1
Scalthwaiterigg 1815	29	52.2	1	12.3	2	9.4
Burton 1815	33	25.6	4	9.9	0	0
Kirkby Thore 1820	37	7.6	7	6.6	3	24.0
Newby 1820	42	11.4	17	6.6	6	26.5
Underbarrow 1828	56	28.1	14	4.3	9	55.3
Witherslack 1829	23	27.8	2	33.3	2	12.5
Hoff 1830	65	14.6	1	8.0	1	14.0
Applethwaite 1842	72	64.2	11	24.8	2	135.8
Bampton 1846	9	3.7	7	2.3	1	6.3
Mansergh 1848	55	51.3	17	14.1	6	65.8
Asby Low Intake 1849	6	8.5	2	3.0	0	0
Asby High Intake 1849	8	23.9	3	7.2	0	0
Newbiggin 1850	22	5.9	13	2.1	2	20.8
Little Musgrave Intake 1853	7	10.8	3	6.3	0	0
Colby 1854	21	11.9	3	1.4	0	0
Waitby 1854	20	20.3	2	0.4	0	0
Asby Mask 1855	31	24.5	14	8.0	1	50.0
Helsington 1855	20	15.7	3	24.6	0	0
Kirkby Stephen 1855	59	14.3	2	3.0	2	18.5
Maulds Meaburn 1858	28	27.0	2	11.4	0	0
Great Musgrave 1859	32	21.2	2	3.4	1	31.8
Hillbeck Fell 1859	13	70.9	6	6.5	1	25.0
Hartsop 1865	18	140.1	2	86.4	2	171.1
Cliburn 1867	18	12.8	4	5.0	2	32.8
Grayrigg 1868	10	47.3	3	18.7	0	0
Asby Winderwath 1874	35	40.2	8	16.8	3	9.0
Lambrigg 1886	15	29.5	1	38.5	1	25.3

Source: Cumbria Record Office (Kendal), enclosure awards as follows: WQR/I/ 76 (Reagill); 83 (Sleagill); 38 (Heversham); 79 (Scalthwaiterigg); 19 (Burton); 52 (Kirkby Thore); 70 & 71 (Newby); 88 (Underbarrow); 95, (Witherslack); 41 (Hoff and Drybeck); 6 (Applethwaite); 12 (Bampton); 63 (Mansergh); 3 (Asby Low Intake); 2 (Asby High Intake); 69 (Newbiggin); 58 (Little Musgrave); 20 & 21 (Colby); 92 (Waitby); 4 (Asby Mask); 43 (Helsington); 50 (Kirkby Stephen); 64A (Maulds Meaburn); 32 (Great Musgrave); 40 (Hillbeck Fell); 35 (Hartsop); 15 (Cliburn); 31 (Grayrigg); 1 (Asby Winderwath); 26 (Docker and Lambrigg).

probably represent only the tip of the iceberg. John Kendal, a yeomen in Newby, received a 32-acre allotment in Sleagill in 1813. In 1820 he was also awarded 57 acres in Newby but he sold the bulk of it in eight separate parcels, three to other people named Kendall who were probably relations.[55] These transactions represent what Turner has described as 'subtle manoeuvres on … the agricultural or social ladder', further details of which could probably be revealed from other sources.[56]

The fate of proprietors after awards were drawn up can be explored through the evidence of the Land Tax lists. This source is a notorious minefield for the enclosure historian. There are problems in defining small proprietors in the Land Tax assessments in cases where someone owned a little land in one township but a lot in another. There are also difficulties in nominal record linkage within, as well as between, townships. Pre-1780 Land Tax assessments (made before duplicates had to be lodged annually with the clerk of the peace) do not distinguish between proprietors and occupiers and so are unsuitable for tracing owner-occupiers. Those after 1798 may be affected by the omission of landowners due to the process of redemption, though in Cumbria it is unlikely that many smaller proprietors could have afforded the 25 years' purchase.[57] It has been suggested that smallholders were omitted randomly between successive lists for the same township and that northern townships were more liable to such omissions than southern ones because of their lower tax burden.[58] Despite these problems it is felt that the Land Tax records are worth using, albeit with caution. The approach adopted here is to compare the names of proprietors listed in awards with those in post-1780 Land Tax assessments made around 15 years after enclosure.[59] The use of this method has been suggested by Turner.[60] The numbers of proprietors traceable between the two sources are calculated for eight townships. The use of adjectives such as 'senior' and 'junior' to distinguish people with the same names occurs frequently enough in the Land Tax records, and matches similar designations in the awards, to make it probable that distinguishing between individuals with identical names was done reasonably consistently. Where someone with the same Christian name and surname can be traced from an award to a Land Tax list some 10–15 years later, continuity of occupation is assumed (though this does not preclude the sale of part or even all of an allotment provided that the original holding was retained).[61] When such a match cannot be made it is assumed that the proprietor had disposed of their land through sale or transmission to heirs. The latter is suggested where someone with a similar surname but a different Christian name appears in a tax list. Such cases, suggesting continuity of occupation within a family, are shown in column two of Table 3. The disappearance of a proprietor between successive lists does not necessarily mean that they had died or left the township; they may have continued to live there without owning land, though perhaps leasing it.

[55] CRO (K), WQR/I/70, 76, 83.

[56] Turner, 'Landownership changes in Buckinghamshire', p. 366.

[57] Ginter, 'Measure of wealth', p. 14; J. M. Martin 'The parliamentary enclosure movement and rural society in Warwickshire', *AgHR* 15 (1967), p. 33.

[58] Ginter, 'Measure of wealth', pp. 13–151.

[59] The years for which the Westmorland Land Tax duplicates survive do not permit the close comparison within four or five years of enclosure achieved by Turner, 'Cost of enclosure'.

[60] Turner, 'Cost of enclosure', pp. 566, 569.

[61] It is possible that in some instances, a son with the same name as his father might have succeeded to his father's property. This would not be identifiable by this method, but it is likely to have affected only a small proportion of cases.

TABLE 3. Continuity of ownership following enclosure

(A) BRAMPTON: award 1772, Land Tax 1790.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	6	3	5	14
5–9.9	1	1	4	6
10–19.9	2	0	4	6
20–49.9	7	1	4	12
50 acres or more	1	0	0	1
Total	17	5	17	39

(B) GREAT ORMSIDE: award 1773, Land Tax 1790.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	2	1	2	5
5–9.9	2	1	1	4
10–19.9	1	2	1	4
20–49.9	1	0	3	4
50 acres or more	1	0	2	3
Total	7	4	9	20

(C) TEMPLE SOWERBY: award 1773, Land Tax 1790.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5acres	4	0	0	4
5–9.9	4	1	3	8
10–19.9	3	0	2	5
20–49.9	1	0	3	4
50 acres or more	1	0	0	1
Total	13	1	8	22

(D) MORLAND: award 1800, Land Tax 1809.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	9	1	4	14
5–9.9	2	1	4	7
10–19.9	4	1	0	5
20–49.9	2	0	0	2
50 acres or more	0	0	0	0
Total	17	3	8	28

(E) SLEAGILL: award 1813 Land Tax 1823.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	1	2	4	7
5–9.9	2	1	2	5
10–19.9	0	1	4	5
20–49.9	2	0	0	2
50 acres or more	1	0	1	2
Total	6	4	11	21

(F) REAGILL: award 1813, Land Tax 1823.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	1	3	0	4
5–9.9	2	2	2	6
10–19.9	3	1	1	5
20–49.9	1	1	1	3
50 acres or more	1	0	0	1
Total	8	7	4	19

(G) CASTERTON: award 1816, Land Tax 1823.

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	1	3	4	8
5–9.9	1	0	0	1
10–19.9	2	2	1	5
20–49.9	4	0	2	6
50 acres or more	3	0	0	3
Total	11	5	7	23

(H) HUTTON ROOF: award 1822, Land Tax 1830

Size of allotment	*Continuity: Christian name and surname*	*Continuity: surname only*	*No continuity*	*Total*
Under 5 acres	5	1	2	8
5–9.9	1	3	1	5
10–19.9	5	0	0	5
20–49.9	1	0	0	1
50 acres or more	0	0	0	
Total	12	4	3	19

Sources: Cumbria Record Office (Kendal), enclosure awards as follows: WQR/I/12 (Brampton), 72 (Great Ormside), 87 (Temple Sowerby), 68 (Morland), 83 (Sleagill), 76 (Reagill), 14 (Casterton), 42 (Hutton Roof). Land Tax Records, Cumbria Record Office (Kendal), WQ/SR.

To establish whether smaller proprietors were more likely to disappear than larger ones landowners have been classified by the sizes of the allotments they received. This removes the problem of trying to relate the amount of Land Tax paid to the land actually owned.[62] It is suggested that people awarded allotments of under five acres were mainly smallholders; those with five to ten acres small farmers, and the rest more substantial proprietors.

Overall, the continuity of ownership is striking for all sizes of allotment. In Casterton, where landownership was more markedly polarised than in the other townships, there was less continuity among the smallest proprietors with allotments of less than an acre. Even in Great Ormside though, where the Earl of Thanet bought up a number of allotments and farms, 35 per cent of proprietors are still traceable 17 years after the award. Not surprisingly, the level of continuity falls as the period between award and tax list lengthens. It is greatest for Morland where the gap is only nine years: nine out of 14 smallholders there can be traced nine years after enclosure, and in Temple Sowerby, while in Brampton the owners of small allotments were no more likely to disappear than those with large ones. For the townships studied the degree of continuity does not suggest that small proprietors declined unduly as a result of enclosure, though inevitably there were local variations.

IV

It has been suggested that in the eighteenth century and in the 'Midland belt' small owner-occupiers may well have been driven out by parliamentary enclosure, but that elsewhere, and in the nineteenth century, these effects were much less obvious.[63] This study represents one piece of the uncompleted picture of what happened 'elsewhere'. It has been designed to open up a debate into the role of parliamentary enclosure in social and economic change in upland communities in northern England. As such it poses more questions than answers. Nevertheless it can be suggested that in Westmorland, allotments were sold during the enclosure process but only by a minority of smaller owners in a minority of awards. Likewise, while some allotments were bought up by large proprietors in the years after enclosure, this activity was concentrated on a few manors. Most sales of allotments appear to have been opportunistic rather than forced and did not result directly in the large-scale disappearance of small proprietors and owner occupiers or their transformation into landless wage-labourers. The status of customary tenants and the fact that they received allotments in addition to their original holdings as a result of enclosure involving almost entirely common pasture, gave them greater security and flexibility than their counterparts further south. It remains to be seen whether enclosure actually benefited them, but it seems clear that in only a limited number of cases were they severely disadvantaged by it. Parliamentary enclosure in this area was not then a tool by which larger landowners dispossessed the peasantry. The legal recognition given by enclosure commissioners to the claims of common rights advanced by even small customary tenants ensured

[62] The size of allotment would have been determined by the extent of the original holding and by the size of the common. The examples used here, with the exception of Casterton, were townships where commons of between 500 and 1,000 acres were enclosed so that the sizes of allotments should reflect with reasonable consistency the size of the holdings.

[63] Kain, *Enclosure maps*, p. 38.

that they received allotments and had their say in the process of enclosure. The impact of enclosure in other upland counties, such as Northumberland which was dominated by large estates, is likely to have been different.[64]

Small proprietors were not immune to longer-term economic pressures resulting from enclosure. William Blamire described how, in neighbouring east Cumberland in the slump of the 1820s, many small proprietors who had borrowed heavily to invest in enclosure and improvement during the war years were bankrupted and forced to sell out, causing the largest shake-out in landownership in living memory.[65] The fate of these farmers, chronicled in bankruptcy sales in local newspapers, has still to find its historian.

It must also remembered too that parliamentary enclosure was not a universal experience in Westmorland. The fact that more land there remains as common pasture today than was enclosed under parliamentary act, together with contemporary evidence in local newspapers, suggests that many communities weighed up the advantages and disadvantages of enclosure and decided against it, in many cases probably due to the cost.[66] Other changes in rural society, such as the growth of population and the decline of rural industries, affected both communities which had enclosed their commons and those which had not.[67]

The impact of parliamentary enclosure on society in north-west England was viewed positively by some contemporary writers who claimed that it increased local employment in both the short and the longer term, not only directly in agriculture but also in associated activities such as carting, quarrying and lime burning.[68] This claim is supported by the compilers of the 1821 census who stated that the rise of population in the Cumberland townships of Edenhall, Isell and Great Salkeld since 1811 was due to enclosure.[69] Some modern historians have echoed this view.[70] Parliamentary enclosure may have increased flexibility in the land market by providing owner-occupiers with additional land which they could work themselves, lease or sell. Such flexibility is likely to have encouraged rather than worked against the survival of small proprietors by increasing the options available to them.

The numbers of small proprietors in Westmorland fell during the nineteenth century but neither suddenly nor drastically, and for a range of reasons. A pattern of small farms, many of them

[64] J. T. White, *The Scottish Border and Northumberland* (1973), p. 135.

[65] BPP, 1833, V, *Report of select committee on the State of Agriculture*, pp. 303–26.

[66] W. G. Hoskins and L. D. Stamp, *The common lands of England and Wales* (1963), App. A. Westmorland newspapers for the late eighteenth and early nineteenth century carry a number of notices of intent to enclose for which an act was never forthcoming.

[67] This is discussed in more detail in M. E. Shepherd, *From Hellgill to Bridge End. Aspects of economic and social change in the upper Eden Valley, 1840–1895* (2003), pp. 40–5.

[68] e.g. J. Clarke, *A survey of the lakes of Cumberland, Westmorland and Lancashire* (1787), pp. 46, 97; R. W. Dickson, *General View of the Agriculture of Lancashire* (1811), p. 200 and J. Housman, *A descriptive tour and guide to the lakes, caves, mountains and other natural curiosities in Cumberland, Westmorland, Lancashire and a part of the West Riding of Yorkshire* (1821), p. 57. William Carus Wilson, appearing before a House of Commons Select Committee in 1844, speaking of the parishes of Kendal and Kirkby Lonsdale of which, as a landowner there, he had direct experience, saw the process of enclosure as taking the rights of cottagers into account and providing them with more work both in the short and the longer term. BPP, 1844, V, p. 130.

[69] BPP, 1851 Census of Britain, VII, pp. 370–83.

[70] J. D. Chambers, 'Enclosure and labour supply in the Industrial Revolution', *EcHR* 5 (1953), p. 323; Gritt, '"Survival" of service', p. 40.

owner-occupied, survived into the later nineteenth century.[71] The spread of the railway network put farmers more closely in reach of urban markets in south Lancashire, the north-east and even London, encouraging a move from mixed farming towards a specialisation in livestock production and helping to perpetuate smaller farms.[72] Only from the end of the nineteenth century did depression and farm amalgamation become widespread.[73]

More work is needed on longer-term changes in landownership patterns and community structures in Cumbria following enclosure, using a wider range of sources than have been employed here. This article has taken a county-based approach to the study of the social impacts of parliamentary enclosure, one which has a long pedigree though much less so in the north of England than the south.[74] For further study a closer focus is suggested. A good deal of research has been undertaken on Cumbrian rural society in the seventeenth and early eighteenth centuries[75] and some on the later nineteenth century.[76] There has, however, been remarkably little work on the intervening period during which, arguably, socio-economic changes were greatest, including parliamentary enclosure, the impact of the Napoleonic Wars and their aftermath, population growth and the industrialisation of west and south Cumbria. One way forward would be more detailed research into economic and social change at a community level integrating a much wider range of sources than has been attempted here. Such an approach, it is hoped, would shed more light on some of the spatial and chronological complexities of the impacts of parliamentary enclosure which have been outlined here.

[71] In 1873 the proportion of small proprietors in Westmorland was still 47 per cent in the Returns of Owners of Land, a much higher figure than England as a whole: Shepherd, *Hellgill to Bridge End*, p. 119.

[72] A burst of enclosure in the area between Orton and Kirkby Stephen in the 1850s is likely to have been undertaken with an eye to the opening of the South Durham and Lancashire Union Railway; Shepherd, *From Hellgill to Bridge End*, pp. 199–203.

[73] Ibid., p. 119.

[74] For studies of parliamentary enclosure at this scale in northern England, apart from the work already cited, see J. E. Crowther, 'Parliamentary enclosure in eastern Yorkshire, 1725–1860' (unpublished PhD thesis, University of Hull, 1983); R. I. Hodgshon, 'The progress of enclosure in County Durham, 1550–1870', in H. S. A. Fox, and R. A. Butlin (eds), *Change in the countryside. Essays on rural England, 1500–1900* (1979), pp. 83–102, W. S. Rodgers, 'The distribution of parliamentary enclosure in the West Riding of Yorkshire, 1729–1850' (unpublished M. Comm. thesis, University of Leeds, 1952).

[75] e.g. G. P. Jones, 'The decline of the yeomanry in the Lake Counties', *CW*[2] 62 (1962), pp. 198–223; J. D. Marshall, 'Agrarian wealth and social structure in pre-industrial Cumbria', *EcHR* 33 (1980), pp. 503–21; J. K. Walton, 'The strange decline of the Lakeland yeoman: some thoughts on sources, methods and definitions', *CW*[2], 86 (1986), pp. 221–33. A. J. L. Winchester, 'Wordsworth's "Pure Commonwealth"? Yeoman dynasties in the English Lake District, *c*.1450–1750', *Armitt Library J.* 1 (1998), pp. 86–113.

[76] Shepherd, *From Hellgill to Bridge End*.

Farewell to the peasant republic: marginal rural communities and European industrialisation, 1815–1990*

by Fernando Collantes

Abstract

This paper provides a comparative analysis of economic evolution in the upland communities of Switzerland, Scotland, France, Italy and Spain during the nineteenth and twentieth centuries. At the start of European industrialisation, these communities were mainly composed of peasant families which combined the income and resources from their small farms with the earnings from off-farm activities. Industrialisation brought into play three mechanisms which substantially transformed these economies: farm specialisation, the emergence of employment opportunities in industry and services, and rural-urban migration. The timing of the impact of these mechanisms is shown to have varied from region to region.

Economic and social historians have always been interested in the least Panglossian facets of industrialisation. English workers' living standards during the Industrial Revolution have probably been the most frequently visited (and revisited) of these topics but certainly not the only one. In his economic history of modern Britain, Eric Hobsbawn not only focused on some of the social costs of economic change but also devoted a chapter to what he called 'the other Britain'. A straightforward review of the difficulties encountered by the Scottish Highlands contrasts with the general story of Britain's long-run economic success. Adam Smith had already pointed out that even intensely prosperous countries could witness the decay of certain economic branches or geographical spaces. And indeed, according to Sidney Pollard, by the First World

* An earlier version of this paper was presented at the 2005 British Agricultural History Society Spring Conference. Preliminary drafts were also presented at a research seminar at the Istituto di Storia delle Alpi and the 29th Meeting of the Social Science History Association. I gratefully acknowledge the careful reading of these drafts by Jonathan Liebowitz and Jon Mathieu, as well as the comments made by the editor of this journal and two referees. Thanks also to Philip Brown, John Chapman, J. A. Chartres, Roger Dalton, Alun Howkins, Luigi Lorenzetti, Patrick Svensson, Nadine Vivier, and especially Laurent Heyberger and Leigh Shaw-Taylor. Mark Andrews revised my English. The Caja de Ahorros de la Inmaculada provided funding for my research visit to the Istituto di Storia delle Alpi, and the Spanish Ministry of Education and Science (SEJ 2005–07556) and the regional government of Aragón, Spain (DGA 269–61 and 269–86) provided additional financial support. The revised version of this article was finished while I was a research fellow at the Department of Economic History of Lund University (Sweden) in the framework of the Marie Curie Research Training Network, "Unifying the European experience: historical lessons of pan-European development", under the European Commission's Sixth Framework Programme (MRTN-CT–2004–512439).



MAP 1. Selected upland regions in Switzerland, Scotland, France, Italy and Spain

Key: 1: Swiss Alps; 2: Scottish Highlands; 3: French Alps; 4: Massif Central; 5: French Pyrenees; 6: Vosges; 7: French Jura; 8: Italian Alps; 9: Apennines; 10: Cordillera Cantábrica; 11: Spanish Pyrenees; 12: Spanish inland ranges; 13: Cordillera Bética

War several marginal regions in the most industrialised European countries were still waiting to be incorporated into the 'peaceful conquest'. Not only there was another Britain – there was indeed another Europe.[1]

[1] E. J. Hobsbawm, *Industry and empire: an economic history of Britain since 1750* (1968), ch. 15; A. Smith, *An inquiry into the nature and causes of the wealth of nations* (1776), II, ch. 3; S. Pollard, *Peaceful conquest: the industrialization of Europe, 1760–1970* (1981), p. 246.

This article provides a comparative exploration of the economic evolution of marginal Europe during industrialisation. The focus is on the case of upland communities in Switzerland, Scotland, France, Italy and Spain during the nineteenth and twentieth centuries (see Map 1). Section I identifies this topic as one of the relatively blank spaces waiting to be filled in a historiography whose recent progress has concentrated on the early modern period. Section II gives an economic overview of marginal Europe at the start of industrialisation and argues for a qualified depiction in terms of peasant economies. The rest of the paper is about the transformations linked to industrialisation and the subsequent demise of peasant economies as such. Section III provides a comparative chronology of rural change and section IV offers a synthesis of the economic mechanisms driving change. Those mechanisms related to economic and demographic links between mountains and their regional and national environments are particularly highlighted. Section V concludes and makes some suggestions for further research.

I

Literature about marginal Europe is abundant. In the first place we can draw on a large number of studies that focus on a single district or region and provide detailed accounts of its economic and social structure and evolution over time. The Highlands in Scotland, the Alps in any one of several countries, the Massif Central in France, the Apennines in Italy, the several mountainous regions in Spain, all have their own carefully conducted local studies. Perhaps because these local studies are abundant, the literature on marginal Europe is composed of a remarkable number of studies covering long time periods and vast spaces. This tradition starts from Fernand Braudel's seminal book on the Mediterranean world and extends up to recent innovative research such as the volume on the history of the Alps by Jon Mathieu.[2]

Braudel's account of peasant mountain economies in early modern Europe focused more on their similarities than on their differences. His account, which is discussed in the following section, became the basis for the established interpretation in several academic disciplines. Subsequently, some of the fundamentals of the Braudelian model were challenged by new research carried out in the 1980s by Pier Paolo Viazzo, whose revisionist work covered the whole of the Alpine range. Meanwhile, the evolution of historiography on the Mediterranean mountains was fostered by the global vision provided by John McNeill, who also found significant commonalities between his case studies in Italy, Spain, Greece, Turkey and Morocco. Research on marginal Europe was further deepened both in thematic and analytical terms during the 1990s by the publication of important books by Pollard and Mathieu. By showing instances of marginal economies temporarily moving to the forefront of European economic change and mountain regions capable of population growth and agricultural intensification, the more static and pessimistic views of marginal Europe were definitively left behind.[3]

However, the historiography on marginal areas has developed in quite an uneven way. The

[2] F. Braudel, *La Méditerranée et le monde méditerranéen à l'époque de Philippe II* (Paris, 1949); J. Mathieu, *Storia delle Alpi 1500–1900. Ambiente, sviluppo e società* (Bellinzona, 2000).

[3] P. P. Viazzo, *Upland communities: environment, population and social structure in the Alps since the sixteenth century* (1989); J. R. McNeill, *The mountains of the Mediterranean world: an environmental history* (1992); S. Pollard, *Marginal Europe: the contribution of marginal lands since the Middle Ages* (1997).

last couple of decades have witnessed a remarkable intensification of academic debate, but concentrated on the early modern period to a much greater extent than the industrial era. Braudel's analysis never went beyond the pre-industrial period and the technological and institutional features associated with it. Mathieu traces interesting continuities between the early modern period and the first stage of industrialisation, but the substantial changes brought about by the twentieth century (and, more generally, by industrialisation as a long-run process) fall outside his scope. Pollard covers a very long period from the Middle Ages to the first stage of English industrialisation, but he does not consider developments in subsequent stages or the issue of what happened to marginal areas in other European countries as a result of industrialisation. Viazzo's and McNeill's accounts of rural transformation in the Alps and the Mediterranean mountains during the nineteenth and especially the twentieth century are peripheral to their main research contributions. Although Collins' book on the economic history of upland Britain to 1950 remains a distinguished exception, it seems that the great changes undergone by the economy of marginal Europe during industrialisation have not generally interested historians.[4]

Such a lack of balance in the time focus persists side by side with spatial disequilibria. More specifically, few comparisons have been made between marginal areas facing very different environmental constraints. Viazzo, McNeill and Mathieu have made comparisons within the Alps and within the Mediterranean mountains that enabled them to detect thought-provoking interregional and international contrasts. But comparison between the Alps and the Mediterranean uplands has not been so common. In fact, Pollard excluded the whole of the Mediterranean area from his analysis arguing 'reasons of relative homogeneity'.[5] But what happens if we abandon this assumption? The incorporation of additional environmental variety and an extra set of national and regional patterns of industrialisation promises to open explanatory paths that would otherwise remain hidden.

II

The historiographical revision undertaken over the last two decades has affected the way in which we look at economies in marginal Europe in the late pre-industrial period and the early years of industrialisation. Braudel described mountain societies as 'peasant republics' in which relatively homogeneous peasant family units struggled to make the best out of a seriously disadvantaged environment. Braudel underlined at least two features of this economic life: the low degree of market involvement by peasants, and the way in which migration was a crucial safety valve when population grew excessively in relation to a rigidly constrained stock of natural resources. Mountains became then 'fabriques d'hommes' helping populate the lowlands.[6]

This picture has been seriously challenged by rural historians in the last twenty years.[7] Now, for instance, we know that in spite of geographical obstacles (or maybe just because of them),

[4] E. J. T. Collins, *The economy of upland Britain, 1750–1950: an illustrated review* (1978).

[5] Pollard, *Marginal Europe*, p. 259.

[6] Braudel, *Méditerranée*, ch. 1 (i).

[7] Some anthropologists called in question the image of a closed system even earlier; see an example in J. W. Cole and E. R. Wolf, *The hidden frontier. Ecology and ethnicity in an Alpine valley* (Berkeley, 1973, 1999), pp. 20–3.

the economic reproduction of peasant families depended on their performance in a network of markets for commodities, services and inputs that connected them to the lowlands. Some basic examples are the emergence of peasants as suppliers of livestock and livestock products, of transport and petty trade services, and of labour to be used seasonally in the lowlands. Demand-side involvement could also affect crucial products such as grain.[8] We also now know that agrarian dynamics in the uplands were not necessarily driven by the Malthusian narrative evoked by Braudel. Instead, a Boserupian path of agrarian intensification following population growth has been found for the early modern Alps.[9]

This change in historiographical perceptions about the degree of economic openness in peasant communities and their potential for agrarian growth has unavoidably affected the way in which migration is seen. Migration does not now seem to be a simple precautionary check to Malthusian crises but one of the set of elements upon which the family strategy of economic reproduction was built. Braudelian causality has been inverted to suggest that temporary migrations were not a consequence of overpopulation, but rather one of its economic supports. Temporary migration was in fact a strategy of accumulation for certain social groups. Indeed, to talk of social groups raises the question of what ever happened to the concept of relative homogeneity in peasant societies. The historiographical emergence of markets and Boserupian paths inevitably led to a critique of Braudel's egalitarian picture. In this new, more dynamic scenario, it was more plausible to find social and economic differentiation within the peasantry. Furthermore, research on market involvement by peasants found them belonging to commodity chains dominated by other social groups, some of which were internal to upland communities.[10]

However, this does not mean that the peasant family or the peasant (local) economy are no longer useful concepts, especially when trying to account for changes in the long run. In contrast to the new kind of economy that industrialisation would bring about, upland communities featured a high proportion of unpaid family labour in the total labour supply. In addition, and in contrast to the highly specialised farmers to be found in mature industrial economies, the economic reproduction of upland peasants depended on the success of complex, adaptive strategies of multi-activity. These two features are considered in turn.

[8] D. Albera and P. Corti, 'Movimenti migratori nell'arco e nella montagna mediterranea: questioni e prospettive per un'analisi comparata', in D. Albera and P. Corti (eds.), *La montagna mediterranea: una fabbrica d'uomini? Mobilità e migrazioni in una prospettiva comparata (secoli XV-XX)* (Cuneo, 2000), pp. 7–27; R. Domínguez, 'De reserva demográfica a reserva etnográfica: el declive de las economías de montaña en el área cantábrica', in J. L. Acín and V. Pinilla (eds), *Pueblos abandonados. ¿Un mundo perdido?* (Zaragoza, 1995), pp. 35–54; L. Fontaine, *Histoire du colportage en Europe (XVe-XIXe siècles)* (Paris, 1993); M. Gray, 'The Highland potato famine of the 1840s', *EcHR* 7 (1955), pp. 357–68; L. Lorenzetti, *Économie et migrations au XIXe siècle: les stratégies de la reproduction familiale au Tessin* (Bern, 1999), pp. 15–37; McNeill, *Mountains*, pp. 8, 109–12; Pollard, *Marginal Europe*, pp. 128–41; H. Rosenberg, *A negotiated world: three centuries of change in a French Alpine community* (Toronto, 1988), ch. 2.

[9] Mathieu, *Storia*, pp. 29–141.

[10] L. Fontaine, 'Données implicites dans la construction des modèles migratoires alpins a l'époque moderne', *Histoire des Alpes* 3 (1998), p. 30; id., 'Les sociétés alpines sont-elles des républiques de petits propriétaires?', in Association des Historiens Modernistes des Universités, *La montagne à l'époque moderne* (Paris, 1998), pp. 47–62; D. J. Siddle, 'Migration as a strategy of accumulation: social and economic change in eighteenth-century Savoy', *EcHR* 50 (1997), pp. 1–20; Viazzo, *Upland communities*, pp. 143–52.

The high share of unpaid family labour was a direct consequence of the prevalence of small family farms, the relative ease with which rural families could secure land, and the relatively small numbers of landless workers. Braudel probably exaggerated the degree of equality in these communities, but we should concede that economic and social inequality tended to be less acute than in the surrounding lowlands. In the mid-nineteenth century, there were 95 land owners out of 100 families in the Swiss Alps (where the national average was falling below 80).[11] Similar calculations have provided similar results for upland France, and small peasants certainly feature prominently in studies of marginal areas in France, northern Italy and Scotland.[12] In Spain, there were 52 owners out of every 100 families in the mountains but only 39 in the lowlands. If we add the significant number of families that gained access to a small farm by means of tenancy, only about 20 per cent of upland families had no access to land. In much of the Cordillera Cantábrica (in the north of the country) this percentage was even lower and nearly three out of every four peasant families owned cattle, which was the main asset in these communities as they increasingly specialised in livestock raising.[13] Inequality was more significant in the Cordillera Bética, in southern Spain, but even there, more than half of the families had access to land (and many of them did so in a direct way). This last figure is low if compared to other parts of marginal Europe but it stands out in a macroregion where latifundia societies prevailed.[14] The same perception emerges if we compare peasant communities in the southern Apennines and the far more polarized rural societies in lowland southern Italy.[15] Similar contrasts in agrarian structure have also been detected for the uplands and lowlands in Britain.[16]

These small farms were massively reliant on (unpaid) family labour. The share of family labour on Swiss Alpine farms was 83 per cent in 1888. The data for the French and the Italian Alps *c*.1900 shows a quantitatively similar predominance of family labour over wage labour.[17]

[11] Département Féderal de l'Interieur, *Tableaux de la population de la Suisse dressés d'après les resultats du dernier recensement* (Bern, 1851). Swiss Alps here include the following cantons: Uri, Schwyz, Obwalden, Nidwalden, Glarus, Appenzell (A. Rh. and I. Rh.), Graubünden, Ticino, and Valais.

[12] G. Désert, 'Bilan économique à la veille de la Première Guerre mondiale', in E. Juillard (ed.), *Histoire de la France rurale*, III, *Apogée et crise de la civilisation paysanne de 1789 a 1914* (Paris, 1976, 1992), p. 430; H. Clout, *The Massif Central* (1973), pp. 13–7; Cole and Wolf, *Hidden frontier*; G. Coppola, 'La montagna alpina. Vocazioni originarie e trasformazioni funzionali', in P. Bevilacqua (ed.), *Storia dell'agricoltura italiana in età contemporanea*, I, *Spazi e paesaggi* (Venice, 1989), pp. 495–530; A. Fel, *Les hautes terres du Massif Central. Tradition paysanne et économie agricole* (Paris, 1962); Mathieu, *Storia*, pp. 161–86; A. Howkins, 'Peasants, servants and labourers: the marginal workforce in British agriculture, *c*.1870–1914', *AgHR* 42 (1994), pp. 49–62.

[13] R. Domínguez, *El campesino adaptativo. Campesinos y mercado en el norte de España, 1750–1880* (Santander, 1996), gives a detailed analysis of the peasant economy in this region.

[14] Junta General de Estadística, *Censo de población de España, según el recuento verificado en 25 de diciembre de 1860* (Madrid, 1863); F. Collantes, *El declive demográfico de la montaña española (1850–2000). ¿Un drama rural?* (Madrid, 2004).

[15] F. Bettoni and A. Grohmann, 'La montagna appenninica. Paesaggi ed economie', in P. Bevilacqua (ed.), *Agricoltura italiana*, pp. 585–641; McNeill, *Mountains*, pp. 106–7; P. Tino, 'La montagna meridionale. Boschi, uomini, economie tra Otto e Novecento', in Bevilacqua (ed.), *Agricoltura italiana*, pp. 677–754.

[16] A. Howkins, *The death of rural England. A social history of the countryside since 1900* (2003), pp. 7, 166–73; L. Shaw-Taylor, 'Family farms and capitalist farms in mid nineteenth-century England', *AgHR* 53 (2005), pp. 158–91. Pollard, *Marginal Europe*, pp. 95–108, extends the argument to upland areas in Europe as a whole.

[17] Eidgenössisches Statistisches Amt, *Eidgenössische volkszählung, 1970* (Bern, 1971–4); Mathieu, *Storia*, p. 265.

According to the Swiss data, it does not seem that this pattern changed during the twentieth century.[18] Quantitative evidence about labour organisation in Mediterranean mountain farming is scarcer. In the mid-nineteenth century, the proportion of agricultural labourers in the labour force did not exceed 20 per cent in the Apennines.[19] A similar figure can be estimated for the Spanish uplands around 1960, a time when (as we shall see in the following section) they remained basically peasant communities. Data for the early 1980s show degrees of labour commodification that are very similar to those obtained for the Swiss Alps. The qualitative information does not suggest that the situation was substantially different at earlier dates.[20]

However, whilst family farms predominated in marginal Europe, such farms were not big enough to sustain a whole family. In 1900 the vast majority of Alpine farms consisted of less than five hectares. In extreme cases, such as those of the Alpes Maritimes in France or the provinces of Trento and Belluno in Italy, about one half of the farms were smallholdings of under one hectare.[21] According to data for the Spanish uplands in 1962, more than 60 per cent of farms were under five hectares (including both arable and non-arable land), and it has been estimated that the average peasant family in the late nineteenth century had no more than four livestock units and access to four hectares of arable land.[22] Similar evidence can be found for other Mediterranean upland communities.[23] Such a small farm size was plausibly aggravated by the lower yields that have already been documented in international comparisons of northern and southern European agricultures, the latter being more constrained by environmental factors.[24]

As a consequence, it is not surprising to find peasant families engaged in multi-activity strategies that allowed them to complement the income and non-income resources obtained from their small farms. In the way of Richard Wall's 'adaptive family economy', several resources were combined from both market and non-market sources by family members whose off-farm work was allocated according to criteria such as gender, age and marital status.[25] This implied the combination of agrarian activities with others in manufacturing, trade, domestic service and so on. This also implied that income from commodity, service and factor markets combined with farm resources for self-consumption. By the mid-nineteenth century, off-farm sources of income have been estimated to represent more than half of peasant earnings in some villages in the Scottish Highlands.[26] Slightly lower figures for the Italian Alps during the inter-war period suggest that multi-activity patterns continued after the onset of industrialisation.[27] As a matter of fact, the recent stress on complex family strategies is not as

[18] The share of family labour in Swiss Alpine farms even rose slightly to 85–90 per cent during the twentieth century; Eidgenössisches Statistisches Amt, *Eidgenössische*; Bundesamt für Statistik, *Eidgenössische volkszählung, 1980* (Bern, 1981–5).

[19] Bettoni and Grohman, 'Montagna appenninica', pp. 619–20.

[20] Collantes, *Declive*, pp. 119–22.

[21] Mathieu, *Storia*, p. 264.

[22] Collantes, *Declive*, pp. 118, 169.

[23] P. Vitte, 'La montagne italienne', *Annales de Géographie* 563 (1992), p. 73.

[24] P. K. O'Brien and L. Prados de la Escosura, 'Agricultural productivity and European industrialization, 1890–1980', *EcHR* 45 (1992), pp. 514–36.

[25] R. Wall, 'Work, welfare, and the family: an illustration of the adaptive family economy', in L. Bonfield, R. M. Smith and K. Wrightson (eds), *The world we have gained: histories of population and social structure* (1986), pp. 251–94.

[26] T. M. Devine, 'Temporary migration and the Scottish Highlands in the nineteenth century', *EcHR* 32 (1979), p. 348.

[27] Perini, 'I fattori economici e sociali della montagna alpina', *Rivista di Economia Agraria* 13 (1958), p. 332.

path-breaking as might seem, Adam Smith having noticed significant multi-activity in marginal European areas.[28]

Smith himself provides a theoretical insight that may be useful for the analysis of upland peasant communities during the era of industrialisation. He argued that multi-activity was characteristic of poor countries in which the extent of markets was small and therefore insufficient incentives existed for deeper (functional and spatial) divisions of labour.[29] Industrialisation greatly expanded, created and integrated markets for many commodities and services, the result of which was a multiplication of incentives for economic specialisation. By means of several different mechanisms (which are considered in section IV), the upland economy then became something very different from the peasant economy that witnessed the beginnings of industrialisation. The next section deals with the chronology of such transformation.

III

Historians know only too well the limitations of census data concerning occupational structure. One of the most important of these shortcomings has to do with the problems raised by attempting to take the straightforward distribution of population in primary, secondary, and tertiary sectors back in time. This kind of distribution is fully operational only when specialisation has advanced enough to constrain the numbers of those engaged in multi-activity strategies. Until such a threshold is crossed, the number of agriculturalists recorded in the census overestimates to a greater or lesser extent labour input in agriculture, which may lead to an underestimation of labour productivity and other important indicators.[30]

Marginal Europe, with adaptive family economies as basic cells, was certainly affected by this sort of problem at the beginning of industrialisation. Viazzo, for instance, has suggested for the Alps that the great decline in the share of agrarian employment shown by census data for the twentieth century exaggerates the real magnitude of occupational change because many of those originally classified as engaged in agriculture allocated significant fractions of their work time to non-agrarian activities. The observation could fit the Mediterranean uplands equally well once we realise how crucial multi-activity was to their economic reproduction.[31]

The argument here, however, is that these shortcomings in census data may become virtues when different questions are posed. In the case of marginal Europe, the percentage of agriculturalists according to censuses may be misleading when trying to assess the share of agriculture in the local economy, but can provide an quantitative estimate of the proportion of peasants (and their adaptive, complex strategies) in the community. Decreases in the share of census-type agriculturalists thus offer a chronological overview of rural transformation that

[28] Smith, *Wealth of nations*, I, ch. 3; Clout, *Massif Central*, pp. 15–6; Cole and Wolf, *Hidden frontier*, pp. 160–8; Lorenzetti, *Économie*, pp. 1–9; McNeill, *Mountains*, pp. 103–5. Causality worked in the other way as well – availability of off-farm earnings could lead to an even greater fragmentation of holdings; Cole and Wolf, *Hidden frontier*, p. 182.

[29] Smith, *Wealth of nations*, I, chs. 1–3.

[30] See for instance E. A. Wrigley, 'Country and town: the primary, secondary, and tertiary peopling of England in the early modern period', in P. Slack (ed.), *The peopling of Britain* (2001), pp. 217–42.

[31] Viazzo, *Upland communities*, pp. 100–4.

goes beyond the agrarian and non-agrarian dichotomy. Of course, such an interpretation of census data could never do for regions in which land was very unevenly distributed and day-labourers were a substantial part of the population, but it appears to be legitimate for the type of economy described in the previous section. It should be kept in mind, however, that these data are blind to the important changes which the average census-type agriculturalist experienced during the period. Such changes include the gradual transformation of peasants into farmers, as they gained access to new markets for many of their inputs and became highly specialised.[32] This issue is dealt with in the following section about the mechanisms leading to the demise of peasant economies.

Tables 1 to 4 use census date to present the long-run evolution of the percentage of 'agriculturalists' for several regions in marginal Europe. The earliest transformation took place in the Swiss Alps and the Scottish Highlands (Table 1). In the Swiss Alps, by 1870 the basic social structure remained peasant, but the transformation was already underway in small industrial cantons such as Glarus or Appenzell (where the share of agricultural employment was as low as 17 per cent). By the First World War, peasants already formed less than one half of the total active population, the canton of Valais remaining as the only exception. The Highlands in Scotland were going through a similar structural change, Inverness being usually one step ahead of counties such as Sutherland. After an inter-war period of slow but persistent change, by 1950, rural society in the Swiss Alps or the Scottish Highlands presented a very different morphology from the one prevailing before industrialisation began. The process was completed in the following two or three decades.

Available data for marginal France are less clear cut, perhaps because the administrative map less readily divides upland from lowland. The long-run view given by Table 2 shows that in the same way as the Swiss Alps or the Scottish Highlands, the peasant economy was eventually replaced by a more specialised economy in which industry and services prevailed. By the early 1980s the process was finished in the Alps, the Vosges and the Pyrenees, but was still under way in other uplands such as the Massif Central and the Jura mountains. However, complementary figures (as well as qualitative evidence) suggest that rural transformation took place in marginal France later and more slowly than in the Swiss Alps or Scottish Highlands. Marginal France retained its peasant character during the nineteenth century and trends towards another type of rural economy emerged only in a slow and spatially concentrated way. Alpine departments, for instance, had hardly reduced the share of agriculturalists below 60 per cent by 1900.[33]

In any case, Alpine transformation continued during the twentieth century. By the end of the Second World War, not even in the small villages of the Isère department were peasants more than 50 per cent of the active population.[34] By 1964 peasant proportion had fallen below 20 per cent in the northern Alps.[35] Even in the southern Alps (where transformation had been taking place more slowly) peasants accounted for less than 50 per cent by the 1950s.[36] Quantitative

[32] J. de Vries, 'Peasantry', in J. Mokyr (ed.), *Oxford Encyclopedia of Economic History* (New York, 2003), pp. 173–7, gives a general overview of this issue.

[33] Mathieu, *Storia*, p. 263.

[34] M. Gervais, M. Jollivet and Y. Tavernier, *Histoire de la France rurale*, IV, *La fin de la France paysanne depuis 1914* (Paris, 1977, 1992), p. 340.

[35] L. Reboud, 'La région franco-italienne des Alpes du nord', *Économies et sociétés* 5 (1971), p. 684.

[36] R. Blanchard, *Les Alpes occidentales* (7 vols, Grenoble, 1938–56), VII, p. 253.

TABLE 1. Percentage share of agriculture in employment in the Swiss Alps and the Scottish Highlands

	1888	*1930*	*1950*	*1970*	*1990*
Swiss Alps[a]	49	34	27	12	5
Scottish Highlands[b]	51	28	22	12	7

Notes: [a] Cantons: Uri, Schwyz, Obwalden, Nidwalden, Glarus, Appenzell (A. Rh. and I. Rh.), Graubünden, Ticino, and Valais;
[b] Counties: Caithness, Inverness (including the current districts of Skye-Lochalsh, Lochaber, and Badenoch-Strathspey), Nairn, Ross-Cromarty, Sutherland; the dates are 1881, 1931, 1951, 1971 and 1991.
Sources: Eidgenössisches Statistisches Amt, *Eidgenössische*; Bundesamt für Statistik, *Eidgenössische volkszählung, 1990* (Bern, 1995); *Ninth decennial census of the population of Scotland taken 4 April 1881, with report* (1883); *Census of Scotland, 1931* (1932); General Registry Office, *Census 1951. Scotland* (1951–6); id. *Census 1971. Scotland* (1971–5); General Register Office for Scotland, *1991 Census. Report for Scotland* (1993).

TABLE 2. Percentage share of agriculture in employment in upland France

	1866	*1982*
Alps	75–80	5–10
Massif Central	65–75	30–40
Pyrenees	70–75	5–10
Vosges	70	5–10
Jura	66	15–25

Sources: F. Furet and J. Ozouf, *Lire et écrire. L'alphabétisation des français de Calvin à Jules Ferry* (Paris, 1977), p. 178; P. Estienne, 'Évolution de la population des montagnes françaises au XX[e] siècle', *Revue de Géographie Alpine* 77 (1989), pp. 399–400; J. M. Muller, 'L'industrie dans le Massif vosgien', *Revue de Géographie Alpine* 83 (1995), p. 161; P. Perrier-Cornet, 'Le massif Jurassien. Les paradoxes de la croissance en montagne: éleveurs et marchands solidaires dans un système de rente', *Cahiers d'économie et sociologie rurales* 2 (1986), pp. 61–121.

information provided by local studies shows that many Alpine villages remained overwhelmingly 'peasant' as late as 1950 or even 1960, but these villages were no longer representative of the region as a whole.[37]

Other marginal areas in France, particularly the Massif Central, witnessed an even slower transformation.[38] Similar regional contrasts can also be found in the case of Italy (Table 3). Economic change in the Italian Alps was similar in some respects to that on the French side. Change was slow when compared to the Swiss pattern but clearly under way before the Second World War. By 1900, only the provinces of Imperia and Belluno showed some signs of change, while others like the Aosta Valley or Sondrio retained a peasant share of around 80 per cent.[39] However, transformation became more general during the inter-war period and by 1950 the

[37] See that kind of village-level data in B. Barbier, C. Durbiano and C. Vidal, 'Le tourisme dans une haute vallée de montagne: les transformations de Vars', *Méditerranée* 26 (1976), p. 13, and J. Richez, 'Renovation rurale et tourisme. L'exemple de Ceillac en Queyras', *Méditerranée* 9 (1972), p. 57.

[38] P. E. Ogden, 'Analyse multivariée et structure régionale: transformations socio-économiques récentes dans le Massif Central de l'Est', *Méditerranée* 33 (1978), p. 47.

[39] Mathieu, *Storia*, p. 263.

TABLE 3. Percentage share of agriculture in employment in upland Italy

	c. 1870	*1936*	*1951*	*1971*	*1991*
Alps	75	60	39	15	5
Apennines	77	75	67	36	15[a]

Note: [a] Interpolated from Nordic Centre for Spatial Development, *Mountain areas in Europe: analysis of mountain areas in EU member states, acceding and other countries* (2004), p. 91.
Sources: J. Mathieu, *Storia*, p. 263; F. Bettoni and A. Grohmann, 'Montagna appenninica', pp. 619–20; U. Giusti, 'Le dépeuplement des régions montagneuses en Italie', *Bulletin Mensuel du Renseignements Économiques et Sociaux* 34 (1943), pp. 302–3; M. Mazzoleni and G. G. Negri, 'La situación de la montaña en Italia', *Ciudad y Territorio* 1 (1981), pp. 26–7; U. Tappeiner *et al.*, 'Structural Atlas'.

TABLE 4. Percentage share of agriculture in employment in upland Spain

	1887	*1960*	*1981*	*1991*
Cordillera Cantábrica	89	83	42	29
Pyrenees	77	68	21	14
Inland ranges	83	85	41	27
Cordillera Bética	83	84	55	39
Upland Spain (total)	85	78	41	28

Source: Collantes, *Declive*, p. 88.

Italian Alps could not be depicted as a peasant society – at least if the peasant society prevailing in 1850 is taken as a reference. The decline of peasants and mountain farming became definitive during the post-war boom in Italian economic growth. By 1981, those in agricultural occupations constituted no more than four per cent of the economically active population in Alpine Lombardy.[40] The rest of the Italian Alps was moving in the same direction, even if small areas like the Gorizian uplands (with farmers accounting for nearly one third of the active population in 1991) seem to have done so in a slow way.[41]

In contrast, the trajectory followed by the Apennines more closely resembles that of the Massif Central in France. By the end of the Second World War, the Apennine region remained basically peasant except for some non-representative exceptions. Local data for the Apennine districts in Tuscany, Emilia, Rieti and the Aniene valley give figures from 60 to 75 per cent of peasants that fit well with the general figure given in Table 3.[42] The great rural transformation

[40] G. G. Negri, 'Les montagnes de Lombardie', *Revue de Géographie Alpine* 81 (1993), p. 72.

[41] U. Tappeiner, G. Tappeiner, A. Hilbert and E. Mattanovich, 'Structural Atlas of the Alps', CD in *The EU agricultural policy and the environment. Evaluation of the Alpine region* (Berlin, 2003).

[42] E. di Cocco, 'Equilibri territoriali e settoriali nella storia recente dell'Appennino tosco-emiliano', *Rivista di Politica Agraria* 14 (1967), p. 7; P. L. Zatta, 'La cooperazione nella zona Montana e pedemontana – piccola propietà contadina con particolare riferimento alla provincia di Rieti', *Rivista Italiana di Economia, Demografia e Statistica* 10 (1956), p. 593; B. Christenson, 'Aspetti della economia agricola in relazione allo spopolamento dell'alta valle dell' Aniene', *Rivista Italiana di Economia, Demografia e Statistica* 9 (1955), p. 457; Merlo, 'Agricoltura e integrazione economiche nella montagna italiana', *Rivista di Politica Agraria* 21 (1974), p. 51.

took place in the second half of the twentieth century, and it happened very quickly when compared to the protracted Alpine experience.

The Apennines seem to belong to a Mediterranean pattern of rural transformation shared with the Spanish uplands (Table 4). In Spain, upland communities retained their peasant character during the early and intermediate stages of the country's industrialisation, from around 1850 to 1950. Between 1950 and 1975, the rate of growth of the Spanish economy increased from an annual 0.7 per cent to 5.4 per cent and it was only then that peasant communities began to be substantially transformed into something else.[43] The share of agriculture in rural employment fell below 50 per cent as late as in the 1970s (maybe a little earlier for the Pyrenees). In the southern uplands of the Cordillera Bética, such a threshold was not crossed until the 1980s.

Therefore, there were substantial spatial contrasts in the chronology of transformation in marginal Europe during industrialisation. These contrasts fit well with parallel contrasts in the space-time patterns of industrialisation itself. It would not be very useful to see upland communities in Switzerland and Scotland by the First World War as exclusively peasant (or even farming) communities. The same holds for the French and the Italian Alps by the Second World War. Things were different in those marginal areas whose regional and national environment was characterized by a slow progress of industrialisation. The Apennines and the Spanish uplands remained peasant economies in 1950, after which they witnessed a sudden transformation as an equally sudden transformation took place in their economic environment. The next section reviews the implications that such connections have for analysing the mechanisms driving rural transformation.

IV

The evolution of marginal areas was dependent on the transformations brought about by industrialisation. This section reviews three mechanisms of change: agrarian specialisation by peasants, the emergence of capitalist enterprises in industry and services, and demographic decline.

From the early stages of industrialisation onwards, peasant communities faced incentives and pressures for agrarian specialisation. The outcome was a trend towards what Teodor Shanin has called the 'farmerization' of peasant societies, implying capital-intensive agriculture and incorporation into new commodity chains organised by oligopolistic agro-business.[44] This was, in the first place, a consequence of crisis in some of the complementary sources of income which together made the adaptive family economy. For instance, in several districts in the Spanish inland mountain ranges, the decay of textile proto-industry forced peasant families to depend on their farms to a greater extent – with disappointing results as a consequence of the environmental constraints and a poor transport infrastructure that hindered them from reaching urban markets. In fact, peasants from all across marginal Europe had to face, sooner or later, backwash episodes in their complementary activities in manufacturing, trade or transport.[45]

[43] Growth figures taken from L. Prados de la Escosura, *El progreso económico de España (1850–2000)* (Bilbao, 2003), p. 185.

[44] T. Shanin, 'Introduction: peasantry as a concept', in T. Shanin, *Peasants and peasant societies* (1988), pp. 1–11.

[45] Clout, *Massif Central*, pp. 16–7; Collantes, *Declive*, pp. 149–64; Coppola, 'Montagna alpina', pp. 529–30; Devine, 'Temporary migration', p. 345; Gray, 'Highland', pp. 358, 368; McNeill, *Mountains*, pp. 222–32; Tino, 'Montagna meridionale', pp. 738–54.

Increasing farm specialisation was also a consequence of the incentives created by spread effects. Growth in urban demand and the decrease in the transport costs brought about by industrialisation fostered the increasing specialisation of Alpine peasants in cattle-raising. In the 1950s, up to 90 per cent of peasant income in the Swiss Alps came from this source.[46] This was, in fact, the continuation of a trend whose roots can be loosely traced back to the late Middle Ages.[47] Marginal areas endowed with low humidity indexes but high temperatures and sun exposure, such as the Cordillera Bética in Spain or the southern Apennines in Italy, evolved towards agricultural specialisation in a number of Mediterranean crops for sale in regional, national and even international markets. These are just two very different examples taken from a wide set of similar trends that have been found across marginal Europe.[48] In addition, the different versions of agricultural price support policies implemented in Western Europe during the twentieth century probably contributed to the consolidation of specialised, capital-intensive farmers, even if marginal areas lagged behind the lowlands in making this transition.

In any case, farmerization threatened one of the two features of peasant economies which we mentioned earlier, namely multi-activity, but reinforced the predominance of unpaid family labour over wage labour. This second feature would be substantially altered only by the emergence of new, non-agricultural enterprises, which was often the result of urban-rural capital flows attracted by the strategic resources that could be found in marginal Europe. There were several different waves of investment, ranging from energy-related industries (coal and electricity) to some forms of manufacturing and tourism (particularly mass, winter sports during the second half of the twentieth century). Furthermore, the last few decades in the twentieth century witnessed the increasing role of marginal areas in post-industrial residential patterns, which meant additional opportunities for occupational change (especially in the construction and service sectors). Local communities actively participated in these new opportunities, but most of the leading, linkage-creating investments (such as ski resorts) came from the outside. We still do not have a precise measure of the role of local initiatives in the emergence of new enterprises in industry and services. Nor do we have a precise analysis of the reasons why these new dynamics became more widespread in the Alps than in the Mediterranean mountains. Differences in resource endowment and in the level of urbanization and development in the surrounding lowlands may be expected to have played an important part, but further comparative research is needed here.

Alongside peasant specialisation and the emergence of non-agricultural enterprises, a third mechanism for rural economic change was peasant migration, often leading to the depopulation of marginal areas. In the case of Spain (Table 5), population in the four main mountainous

[46] J. Vontobel, 'Le développement des Conseils d'explotation dans les régions de montagne de la Suisse', *Revue Fatis* 6 (1959), p. 46.

[47] J.-F. Bergier, 'Le cycle médiéval: des sociétés féodales aux États territoriaux', in P. Guichonnet (ed.), *Histoire et civilisations des Alpes*, I, *Destin historique* (Toulouse and Lausanne, 1980), pp. 163–264.

[48] Bazin, 'Intégration marchande et évolution des systèmes agrarires montagnards. Les cas de Dômes (Massif Central)', *Études Rurales*, 77 (1980), pp. 63–80; McNeill, *Mountains*, pp. 37–40, 252–4; P. Perrier-Cornet, 'Massif Jurassien'. On diversified farming strategies prior to such incentives, see R. A. Dodgshon, 'Strategies of farming in the western highlands and islands of Scotland prior to crofting and the clearances', *EcHR* 46 (1993), pp. 679–701.

TABLE 5. Population change in upland Spain (annual average rate)

	1860–1900	*1900–1950*	*1950–1991*
Cordillera Cantábrica	0.1	0.2	–1.0
Pyrenees	–0.5	0.1	–0.6
Inland ranges	0.1	0.0	–1.8
Cordillera Bética	0.2	0.5	–1.3
Upland Spain (total)	0.0	0.2	–1.2

Source: Collantes, *Declive*, pp. 35–7.

regions fell from 2.7 million in 1950 to little more than 1.5 million in 2000. Most of this decrease was due to negative migration balances that became particularly large in the 1950–75 stage of accelerated economic growth in Spain. Members of peasant families and whole peasant families were particularly involved in rural exodus (as compared to non-agriculturalists), with implications that have not been fully explored. Of course, the literature has underlined the fact that migration allowed for an increase in the size of the remaining farms (and thus favoured threshold-conditioned technological change) and diminished the viability of some rural services (such as village retailers). But peasant migration was also crucial in giving upland communities the non-peasant morphology they display today. According to the estimates available, more than half of the census-type occupational change that took place in the Spanish uplands during the 1950–91 period was due to peasant migration rather than the expansion of the manufacturing, construction and service sectors in the rural economy.[49]

The greater part of marginal Europe has experienced the working of this mechanism at a certain point in its evolution over the last two centuries. The main exception is that of the Swiss Alps, where occupational change coincided with a remarkable growth in population (Table 6). Some cantons witnessed short periods of depopulation (Glarus in 1870–1900 and 1960–80 or Appenzell during the inter-war period), but total Alpine population has increased from less than 0.5 million in 1850 to 1.1 million today.[50] The transformation of the Italian Alps, which was underway by the Second World War, took place in a context of demographic stability (Table 7). Several parts of the region were in fact depopulating during the first stages of Italian industrialisation – the western districts were in the migration catchment of the country's main industrial areas and lost population at an annual rate of 0.3 per cent between 1881 and 1936.[51] But the Italian Alps as a whole managed to maintain their population numbers and this contrasts with the pattern in other upland communities that were undergoing some occupational change.[52]

In Scotland, for instance, economic change in the Highlands took place simultaneously with a

[49] Collantes, *Declive*, pp. 164–6; id., 'Les économies de montagne à l'heure de l'industrialisation européenne. Que peut-on apprendre du cas espagnol?', *Histoire des Alpes* 10 (2005), pp. 267–82.

[50] Office Féderal de la Statistique, *Eidgenössische*.

[51] U. Giusti, 'Dépeuplement', pp. 302–3.

[52] Bätzing's definition of the Italian Alps (less strict than Giusti's) implies even some population growth; W. Bätzing, *Die Alpen. Geschichte und zukunft einer-europäischen kulturlandschaft* (Munchen, 2003), pp. 276–85.

TABLE 6. Population change in the Swiss Alps and the Scottish Highlands (annual average rate)

	1850–1900	*1900–1950*	*1950–1990*
Swiss Alps	0.7	0.7	0.9
Scottish Highlands[a]	–0.2	–0.4	0.2

Note: [a] Data refer to 1851, 1901, 1951 and 1991.
Sources: Office Féderal de la Statistique, *Eidgenössische volkszählung,2000. Bevölkerungsentwidklung der gemeinden, 1850–2000* (Bern, 2002); General Registry Office, *Census 1961, Scotland* (1961–6); id., *1991 Census*.

TABLE 7. Population change in upland Italy (annual average rate)

	1881–1936	*1961–1971*
Alps	0.0	0.1
Apennines	0.3	–1.2

Sources: Giusti, 'Dépeuplement', pp. 304–5; Mazzoleni and Negri, 'Situación', p. 27.

long-term demographic crisis that ran from the mid-nineteenth century to the 1960s. A similar pattern can be found in the French Alps and other marginal regions in France (Table 8). In line with the now well-established view that the nineteenth-century rural population in France was anything but immobile, migration was a general response by upland peasants to the relative slowness of economic change in their home communities.[53] After the Second World War, the consolidation of some manufacturing activity and the expansion of tourism and new residential patterns allowed for a substantial recovery of Alpine population. However, total upland population in France carried on decreasing during this period. In the Massif Central, for instance, depopulation was a major mechanism bringing about the demise of the peasant economy. Rates of population loss in departments such as Haut Loire, Ardèche or Lozère do not fall far short of the high figures found for Spain.[54]

Demographic crisis was even more intense in the Mediterranean mountains during the second half of the twentieth century. This is, in fact, the main reason why their economic transformation has taken place so quickly compared to the Alpine pattern. Data for several Apennine districts during the 1951–1981 period suggest that the 'default' kind of structural change found for the Spanish uplands was also under way in the non-Alpine Italian uplands.[55] In several parts of the Apennines, depopulation figures came close to Spanish levels.[56] No marginal region, however, witnessed a demographic crisis anywhere near as severe as that of the inland ranges in Spain. Poorly endowed in environmental terms, peasant economies in this region were none too prosperous (even by marginal standards) and hence little capital investment took place in order to develop manufacturing or tourism. In just four decades, population in the Spanish inland ranges fell from 600,000 inhabitants in 1950 to approximately 300,000 in 1991. Occupational

[53] See P. Sicsic, 'City-farm wage gaps in late nineteenth-century France', *JEcH* 52 (1992), pp. 675–95.

[54] Ogden, 'Analyse multivariée', p. 54.

[55] Cocco, 'Equilibri', p. 7; P. Vitte, *Le campagne dell'alto Appennino: evoluzione di una società montana* (Milan, 1995), p. 537.

[56] Vitte, *Campagne*, pp. 91–157; McNeill, *Mountains*, pp. 181–9; Tino, 'Montagna meridionale', p. 702.

TABLE 8. Population change in upland France (annual average rate)

	1836–1876	*1876–1911*	*1911–1946*	*1946–1982*
Alps	–0.1	–0.4	–0.6	0.4
Massif Central	0.1	–0.3	–0.9	–0.6
Pyrenees	–0.3	–0.4	–0.8	–0.5
Jura	–0.1	–0.2	–0.4	0.5
Vosges	0.1	0.1	–0.7	0.1
Upland France (total)	0.0	–0.3	–0.8	–0.3

Source: P. Estienne, *Terres d'abandon? La population des montagnes françaises: hier, aujourd'hui, demain* (Clermont-Ferrand, 1988), p. 270.

change linked to such a demographic crisis had very different implications than the ones that arose in cases of early and robust transformation such as that of the Swiss Alps.[57]

V

During the nineteenth and twentieth centuries, the economy of marginal Europe underwent major changes. Around the start of industrialisation, it consisted of peasant economies whose basic cells were adaptive family economies with complex household strategies. By the end of the twentieth century, peasants had become farmers but, more importantly, agriculturalists had become a small part of the labour force. This article has provided a long-run approach to this transformation. Comparative analysis of upland communities in Switzerland, Scotland, France, Italy and Spain shows that the chronology of the demise of peasant economies was not the same in every case. As argued by E. J. T. Collins, 'the economic history of the upland zone … is reflective of changes in the structure of the national economy'.[58] Change took place earlier in those marginal areas whose regional and national environment was also transformed earlier by the development of industrialisation. This was particularly the case of the Swiss Alps and the Scottish Highlands. In contrast, Mediterranean industrial backwardness delayed the impact of those economic effects capable of transforming the upland economy until well into the twentieth century.

Which were those effects? The article has underlined three of them: incentives and economic pressures felt by peasants in order to specialise in the supply of a small number of agrarian commodities, the emergence of capitalist enterprises in industry and services, and peasant migration and rural depopulation. It has been found that these mechanisms were combined in different proportions across marginal Europe. In particular, economic change in the Alps was remarkably robust because it often took place in a context of population growth and expansion of non-agricultural employment opportunities. In contrast, depopulation was a powerful

[57] See a case study in F. Collantes and V. Pinilla, 'Extreme depopulation in Spanish rural mountain areas: a case study of Aragon in the 19th and 20th centuries', *Rural Hist.* 15 (2004), pp. 149–66.

[58] Collins, *Economy of upland Britain*, p. 16.

mechanism of economic adjustment in the Scottish Highlands during the century after 1850 and in the Mediterranean mountains during the second half of the twentieth century.

This poses some questions for the research agenda. It certainly seems that rural transformation in the Mediterranean uplands entailed higher social costs than it did in the Alps, with the Scottish Highlands and the rest of marginal France standing somewhere in between. But we need reliable estimates of living standards in marginal Europe (and its evolution in relation to the ever-changing national benchmarks) before solid conclusions can be established here. We also need to know more about the role of political systems in the distribution of the costs and benefits of rural economic change. It seems at first sight that the social costs of transformation tended to be higher in those marginal areas located furthest from the crucial centres of political decision-making, as in centralist Spain or in the Scottish Highlands in relation to English rule. Yet, rural transformation seems to have been much less painful for upland communities in the highly decentralised Swiss state. Is this a coincidence or a promising, additional analytical layer to be explored? Finally, more attention should be devoted to the role of specific political responses to decline in mountainous regions. Most policymakers have proved reluctant to say farewell to the peasant republic, and this has often resulted in a distorted policy mix for the uplands. A better historical understanding of the way in which mountain economies evolved during industrialisation could have been helpful in this context, and probably remains so.

Farm service, seasonal unemployment and casual labour in mid nineteenth-century England

by Nigel Goose

Abstract

A county-wide analysis of the census enumerators' books for Hertfordshire vindicates the published report's county figures while revealing distinct local variation, explained by differences in economic vitality, urbanization and industrial employment opportunities. Discrepancies in the data regarding numbers of labourers cannot be explained by seasonal unemployment, but might serve as an index of casualization. Within Hertfordshire, the stronger retention of farm service at mid-century was associated with areas of economic vitality, but these same areas generally experienced higher levels of labour casualization, while seasonal unemployment was more marked in the least dynamic districts. A preliminary analysis by county for England and Wales tentatively suggests that these features might apply more generally.

The long-term trend in the overall incidence of farm service in England from the early eighteenth century is not disputed: there can be no doubt that farm service was in decline between the mid-eighteenth and the mid-nineteenth centuries, for contemporary testimony to this fact is deafening and historical opinion categorical.[1] The regional pattern to this decline was also clear cut: farm servants survived in much greater numbers for far longer in the North and south-west of England, where pasture farming predominated, settlements were more dispersed, farms were generally smaller and alternative employment in rural industries more readily available. In the southern half of the country, however, excluding only Cornwall and Devon, farm service was in general decline. Some contemporaries believed the process was largely complete by the 1820s and 1830s, but according to the figures calculated by Kussmaul the agricultural labour force in all of the southern counties still comprised between 15 per cent and 39 per cent farm servants as late as 1831, significant proportions even if these figures err on the generous side.[2] Despite a recent reassessment of the 1831 census data which concludes that the disparity between the

[1] A. Kussmaul, *Servants in husbandry in early modern England* (1981); K. D. M. Snell, *Annals of the labouring poor: social change and agrarian England, 1660–1900* (1985), esp. pp. 67–103; BPP, 1833, V, *Report of the select committee on agriculture, passim*.

[2] Kussmaul, *Servants in husbandry*, pp. 126–7; Snell, *Annals of the labouring poor*, p. 84. The definition of 'farm labour force' used here includes only paid employees, and hence excludes family labour. The calculations made by Kussmaul for 1831 also, of necessity, exclude all female labour.

north and west and the south and east has been exaggerated, a clear contrast remains.[3] By mid-century, Ann Kussmaul reports, 'few servants in husbandry were hired in the south and east'.[4] Although a couple of reports to the Poor Law Board on the law of settlement in 1847 and 1851 do suggest that the removal in 1834 of the right to settlement in consequence of an annual hiring had produced a slight revival of farm service, this does not appear to be supported by the published census report for 1851.[5] Across nearly the whole of the south and east by this date, the proportion of the labour force (male and female) who were farm servants stood between 4 and 14 per cent according to Kussmaul, whilst the more reliable figures which relate to males only presented by Keith Snell stand in single figures for the great majority of southern counties.[6] Snell's analysis of settlement examination evidence for the south-eastern counties reveals a progressive move towards shorter hirings between 1700 and 1840, the week, month, three or six month or 51-week periods become increasingly common, while the careers of those who did live in as farm servants become shorter. A slight reversal of this trend in some counties in the 1820s was only temporary, possibly with the exception of the county of Lincolnshire. Snell takes pains to point out that – despite the claims of many contemporaries from the 1820s forwards – farm service was in decline rather than dead, and considerable regional variation remained.[7] Such qualifications are, however, often ignored. Donald Woodward's conclusion to a recent re-assessment of farm service in early modern England was that 'By the middle of the nineteenth century, service in husbandry had largely disappeared from a large swathe of the southern and eastern counties, although it remained remarkably resilient throughout much of the North', and provides a clear indication of how this view has become the enshrined orthodoxy.[8]

I

While there can be little doubt concerning the long-term, general trend in the incidence of farm service, a ground-swell of opinion has been developing in recent years to suggest that it may have been premature to announce the death of farm service in the southern agricultural counties at so early a date. One of the first dissenting voices was that of Brian Short, whose analysis of the nature and incidence of farm service in Sussex revealed a more complex pattern and chronology than had hitherto been appreciated, one that was strongly influenced by location and ecology. Hence in the Weald it was still necessary to retain living-in farm labourers to care for the stock which were crucial to the mixed farming regime practiced there, while farmhouses were large enough to accommodate live-in hands and arable produce was sufficient to feed them cheaply. Nor were they entirely absent by the mid-nineteenth century from the highly capitalized, cereal producing farms of the South Downs, and some forms of service persisted through the nineteenth and into the twentieth century, particularly where livestock were

[3] A. J. Gritt, 'The census and the servant: a reassessment of the decline and distribution of farm service in early nineteenth-century England', *EcHR* 53 (2000), pp. 84–106.

[4] Kussmaul, *Servants in husbandry*, p. 10.

[5] Snell, *Annals of the labouring poor*, p. 97, n. 65.

[6] Kussmaul, *Servants in husbandry*, p. 20; Snell, *Annals of the labouring poor*, pp. 95–7. The census figures for female farm servants are suspect because they include domestic servants, which is why Snell's figures for males only are more reliable.

[7] Snell, *Annals of the labouring poor*, pp. 67–77, 87.

[8] D. Woodward, 'Early modern servants in husbandry revisited', *AgHR* 48 (2000), p. 150.

kept. Furthermore, Short identified a progression rather than an abrupt transition from farm service to independent day labour, living-in giving way to boarding-out, boarding-in as lodgers, to payment by the week, and finally to piecework: there was no direct change from living-in farm servant to farm labourer.[9]

The work of both Stephen Caunce and Andy Gritt, on Yorkshire and Lancashire respectively, has supported Short's view that farm service was not necessarily incompatible with progressive, capitalist farming, but was adaptable to the requirements of specific farming regimes.[10] More broadly, Edward Higgs has suggested that the census from 1851 to 1871 may significantly understate the size of the agricultural labour force, due to the exclusion from the published occupational tables of family labour, seasonal labour, female agricultural labour, the agricultural activities of general servants on farms and the classification of 'general' or unspecified labourers in a residual category, regardless of their actual activities.[11] Higgs' revisions affect female labour far more than male, however, and as neither seasonal workers nor those described as general or unspecified labourers were living-in farm servants might indicate the need actually to revise downwards the proportions of male agricultural labourers that can be identified as farm servants in the published census reports. The most important recent and pertinent contribution to this debate, however, is the systematic analysis of the proportions of farm servants – those living-in as a sub-set of the total number of agricultural labourers – in a sample of parishes in the five counties of Berkshire, East Yorkshire, Nottinghamshire, Staffordshire and Sussex conducted by Alun Howkins and Nicola Verdon, work that has been reported at a number of recent conferences and whose publication in *Economic History Review* is awaited. The results of this work reported to date suggest that while farm service may indeed have largely disappeared from some south-eastern counties by the mid-nineteenth century, in other southern and south Midland counties its demise did not come until the 1870s and 1880s, and hence the published census reports (particularly in 1851) understate its continued significance compared with detailed analysis of the manuscript census enumerators' books (hereafter CEBs).[12]

A detailed analysis of the incidence of living-in farm service in the CEBs for the St Albans registration district in Hertfordshire, published in 2000, contributed to scepticism regarding the reliability of the 1851 published census report.[13] At first sight Hertfordshire appeared to conform to the established orthodoxy, as reflected in the responses to the rural queries framed by the

[9] B. Short, 'The decline of living-in servants in the transition to capitalist farming: a critique of the Sussex evidence', *Sussex Archaeological Coll.*, 122 (1984), pp. 147–64. See also M. Reed, 'Indoor farm service in nineteenth-century Sussex: some criticisms of a critique' and B. Short, 'A rejoinder', ibid., 123 (1985), pp. 225–41.

[10] S. Caunce, 'Farm servants and the development of capitalism in English agriculture', *AgHR* 45 (1997), pp. 49–60; Gritt, 'The census and the servant', p. 105.

[11] E. Higgs, 'Occupational censuses and the agricultural workforce in Victorian England and Wales', *EcHR* 48 (1995), pp. 700–16.

[12] A. Howkins and N. Verdon, 'Far from extinct: farm service and the agricultural labour force in England and Wales, *c.*1800–1945', unpubl. paper given at Economic History Society Annual Conference, Royal Holloway, University of London, 2–4 April 2004, and Annual Conference of the Social History Society, Trinity College, Dublin, 7–9 January 2005. For prior suggestions along the same lines, A. Howkins, 'Peasants, servants and labourers: the marginal workforce in British agriculture, *c.*1870–1914', *AgHR* 42 (1994), pp. 58–60.

[13] N. Goose, *Population, economy and family structure in Hertfordshire in 1851*, II, *St Albans and its region* (2000), pp. 109–14. This was elaborated upon in N. Goose, 'Farm service in southern England in the mid-nineteenth century', *Local Population Stud.* 72 (2004), pp. 77–82.

Poor Law Commissioners in 1834, where question 38 asked, 'Do the labourers in your neighbourhood change their services more frequently than formerly and how do you account for that circumstance?', to which 16 Hertfordshire parishes responded.[14] Only one of these, Stanstead Abbotts, answered in the negative, a qualified 'not generally'; all of the rest agreed that this was indeed the case. The evidence of the published report on the 1851 census is no less categorical, for in Hertfordshire at this date a mere 7.9 per cent of the male farm labour force were recorded as farm servants, just 1861 out of a total of 23,476.[15] As in 1831 the figure estimated by Kussmaul stood at 22.8 per cent, farm service in Hertfordshire would appear to have been very quickly on its way to extinction at mid-century.[16] It was paradoxical, therefore, to find Edwin Grey, in his reminiscences of Harpenden in the later 1860s, later published as *Cottage life in a Hertfordshire village*, clearly reporting the continuation of the practice of farm service, both lads and men presenting themselves at the annual hiring fairs held at St Albans or Luton, agreeing weekly wages, a lump sum of £2 at the end of the year's contract plus 1*s*. in binding money.[17] Farm service, this account suggests, may have been changing, but some fifteen years or so after the 1851 census it still appears to have been important enough to capture the attention of Grey, who reported it as a normal feature of agricultural employment.

In an attempt to resolve this paradox the CEBs for the St Albans district (population 17,991), which included Grey's Harpenden, were examined in detail. The CEBs identify farm servants and farm labourers in three ways: through description of the relationship of a living-in labourer to the head of household (and hence inclusion within a farmer's household), through the designation given under the occupation heading, and through the details given under farmers' occupations of the size of their farm and the number of labourers they employed – the latter only occasionally distinguishing living-in from living-out labourers.[18] No confidence can be placed in the terminology employed: both 'farm servants' and 'agricultural labourers' can be found living-in with their employer, while many described in the occupational columns as 'farm servants' lived out, often heading their own households. Two approaches were adopted to determine the proportions of the male agricultural labour force that were farm servants. First, the information regarding the number of labourers that farmers *claimed* to employ, contained in the occupation column for each farmer, was compared with the number of labourers living-in

[14] BPP, 1834, XXXIII, *Report of the Royal Commission on the Poor Law 1834, Appendix (B.1) IV*, pp. 217–27. There were 18 responses from 16 parishes, as Shenley and Westmill each provided two.

[15] BPP, 1852–3, LXXXVIII, *Census of England and Wales 1851, Population Tables*, II, *Ages, civil condition, occupations and birthplaces of the people*, p. 163. This tallies exactly with the figure given by Snell, and of necessity excludes shepherds: *Annals of the labouring poor*, Table 2.1, p. 96.

[16] Kussmaul, *Servants in husbandry*, Figure 7.1, p. 127 and Table A8.1, p. 171.

[17] Grey indicates that teenage boys would earn 3*s*. 6*d*. to 5*s*. per week, adult general farm hands 11*s*. to 13*s*. weekly in summer and 9*s*. or even less in winter, whilst head ploughmen, cowmen or shepherds would earn 15*s*. per week, although it was also possible to earn an extra 7–10*s*. weekly at harvest time. *Cottage life in a Hertfordshire village* (1935), pp. 57, 59–62.

[18] For a discussion of the way in which farms, farmers and farm workers were recorded in the CEBs, see D. and J. Mills, 'Farms, farmers and farm workers in the nineteenth-century census enumerators' books: a Lincolnshire case study', *Local Historian* 27 (1997), pp. 130–43. For difficulties in interpretation of the number of labourers per farmer presented under farmers' occupations, see J. A. Sheppard, 'East Yorkshire's agricultural labour force in the mid-nineteenth century', *AgHR* 9 (1961), pp. 45–6; R. Peek, 'Farm labour in mid-nineteenth century Warwickshire', *Local Population Stud*., 31 (1983), p. 47.

with their employer and enumerated as part of his or her household.[19] The proportion found to be living-in, 23 per cent, was remarkably high given that calculation from the published census report produces a figure of just 7.9 per cent. Of the 149 farms suitable for analysis, 111 or fully 75 per cent included at least one living-in labourer.[20] The significance of the data calculated in this way for agricultural employment will be discussed more fully below.

The second approach adopted conformed to that employed by the General Register Office in processing the manuscript returns for publication. As the Census Report states:

> All labourers in agriculture (except shepherds) not living in the farmhouses are returned under the head 'Agricultural Labourer (out-door)'; those living in the house of the farmer are classed under 'Farm servant (in-door)'.[21]

Hence all male agricultural labourers in the St Albans district (whether described as agricultural labourer, farm labourer or farm servant) listed under 'Occupation, rank or profession' were counted, and the number living in the households of their employer was identified. This method produced very different results.[22] The number of labourers identified was now substantially larger, and in consequence the proportion living in was considerably lower, standing at 15.5 per cent overall.[23]

Whatever method is employed to calculate the proportion of labourers who were farm servants in the St Albans district in 1851, therefore, the figures stand substantially above the county figure given in the printed census report, either double or treble the level of 7.9 per cent revealed there. Alongside the fact that the majority of farmers continued to keep at least one live-in labourer, this appeared to indicate much stronger survival of farm service at mid-century than has often been assumed, as suggested by Grey's testimony concerning the situation in Harpenden in the 1860s. How can the discrepancy between the local evidence of the CEBs and the published county figures be explained? One possibility is that the totals given in the published census report are wrong, another is that the St Albans district was exceptional in its

[19] The information is characteristically presented as 'Farmer of "x" acres employing "y" labourers'. For a fuller discussion of these entries and the instructions given to farmers see E. Higgs, *A clearer sense of the census* (1996), pp. 103–7. Where farmers failed to record the number of labourers they employed, farm servants living in their households were also excluded from this analysis. This explains why the number identified as living-in using the two methods in Table 1 is discrepant.

[20] Goose, 'Farm service', Table 1, p. 79. The figure presented in Table 1 below for the St Albans district (20.9 per cent) represents a slight revision of the earlier calculation.

[21] BPP, 1852–3, LXXXVIII, *Census of England and Wales 1851, Population Tables* II, *Ages, civil condition, occupations and birthplaces of the people*, I, Occupational tables, p. 11 note. This explanation is repeated in a note to each county table.

[22] Unlike in the published census reports, shepherds, cowmen etc. were included in this exercise, but they are very few in Hertfordshire.

[23] Goose, 'Farm service', Table 2, p. 81. Again, the figure presented in Table 1 below for the St Albans district (14.8 per cent) represents a slight revision of the earlier calculation. Differences between parishes were considerably exaggerated in this second analysis, and there were fewer labourers resident in the village of Sandridge than the farmers reported they employed, 188 as compared with 255, the obverse of the situation found in all other parishes. Clearly, some parishes were exporters of labour to work on farms situated in others, while the village of Sandridge was importing labour from elsewhere in the district. What these data clearly shows is that any analysis based upon individual parishes could potentially be entirely misleading. For similar concerns over analysis of this data at parish level see Higgs, *Clearer sense*, pp. 106–7.

retention of farm service at mid-century, and only analysis at county level could reveal which of these interpretations is correct.

II

Since the publication of this study of a single registration district, the analysis has been extended to cover virtually the entire ancient county.[24] One hundred and thirty-six parishes have been examined, incorporating a total of 1780 farms and identifiable agricultural holdings. Of these 1576 were headed by individuals designated as 'farmer', 144 by farm bailiffs, 17 by landed proprietors, 12 by foremen, nine by farm stewards and three by a farm or land 'agent'. Seven agricultural labourers who were clearly heading farms are included, plus one farmer's daughter who was standing in for her absent father on census night. Two gardeners were also included (both from East Barnet) because their households contained living-in labourers. The balance was made up by two described as 'occupier', and one each of bank manager (and occupier), annuitant, butcher, victualler, plait dealer and female servant, plus another with no designation. Of these 1780, 1515 (85 per cent) provided information on acreage totaling 270,644.5 acres, at an average of 177 acres, a median of 133 acres and a range of between 2 and 1262 acres. The number of farmers providing information in the occupational columns on number of labourers employed was 1359 (76 per cent), and this data was analyzed in the same way as the previous regional study of the St Albans district. That is, first the number of labourers reported by the farmers themselves as their employees was compared with the number found to be living in the households of their employees (Method 1 in Table 1 and Appendix 1); and second the number described as agricultural labourer, farm labourer and so forth under 'Rank, profession or occupation' was compared with the number living-in (Method 2 in Table 1 and Appendix 1).

The process was not as straightforward as might be expected, because some farms contained living-in servants despite the fact no labourers were reported by the farmers with whom they lived. It is for this reason that the number of living-in labourers identified in Table 1 and Appendix 1 for Hertfordshire using these two different procedures is discrepant, for to effect an appropriate comparison all living-in servants on farms that reported no labourers had to be excluded from the analysis in Method 1. While it might well be true, as Leigh Shaw-Taylor has recently pointed out, that the instructions to householders to return both indoor and outdoor labourers were clear and should not have been confusing to a group who were generally highly literate, the authors of the census report were correct to suggest that indoor labourers were sometimes omitted.[25] The discrepancy for Hertfordshire was not inconsiderable, the exclusion of farms where no labourers are listed producing a shortfall of 231 out of a total living-in identified by their occupational and residential status of 1853. In many instances

[24] All parishes that were situated within registration districts that lay mainly or substantially within the ancient county are included in this analysis: Kensworth, Studham and Caddinton, which formed part of the Luton District, are excluded. The overlap between the ancient county and the registration county is substantial, but not precise, and hence part of the Royston and Bishop's Stortford registration districts are excluded.

[25] L. Shaw-Taylor, 'Family farms and capitalist farms in mid nineteenth-century England', *AgHR* 53 (2005), pp. 175–6; BPP, 1852–3, LXXXVIII, p. lxxviii.

TABLE 1. Male Living-in Farm Servants by Registration District, Hertfordshire 1851

Registration District	*Method 1*			*Method 2*					*Proportion farms with at least one*	*Proportion of no. labs. (1) to no. labs.(2)*	*Index of Casual-ization (2)/(1)*	*Paupers as % Method 2 labs*
	No. Labs (1) Living-in		*%*	*No. Labs (2)*			*Living-in*	*%*				
				Employed	*Paupers/ unempl.*	*Total*						
Barnet	287	43	15.0	625	6	631	58	9.2	32.9	45.5	2.20	0.95
Berkhamsted	638	100	15.7	1039	32	1071	104	9.7	50.0	59.6	1.68	2.99
Bishop's Stortford	1084	68	6.3	1543	77	1620	74	4.6	27.5	66.9	1.49	4.75
Edmonton	182	10	5.5	367	12	379	12	3.2	17.5	48.0	2.08	3.17
Hatfield & Welwyn	634	115	18.1	1331	19	1350	135	10.0	47.8	47.0	2.13	1.41
Hemel Hempstead	846	224	26.5	1493	11	1504	241	16.0	67.6	56.3	1.78	0.73
Hertford	1003	155	15.5	1681	34	1715	166	9.7	46.9	58.5	1.71	1.98
Hitchin	2120	253	11.9	3635	60	3695	287	7.8	45.7	57.4	1.74	1.62
Royston	2009	90	4.5	2784	64	2848	97	3.4	23.1	70.5	1.42	2.25
St Albans	1251	261	20.9	2175	15	2190	324	14.8	57.3	57.1	1.75	0.68
Ware	943	131	13.9	1636	33	1669	140	8.4	50.0	56.5	1.77	1.98
Watford	971	172	17.7	1727	16	1743	215	12.3	34.1	55.7	1.80	0.92
Hertfordshire	11,968	1622	13.6	20,036	379	20,415	1853	9.1	42.5	58.6	1.71	1.86
1851 Census Report (Herts Registration County)	14,941	n/a	n/a	n/a	n/a	23,509	1864	7.9	n/a	63.6	1.57	n/a

Source: digitized 1851 Hertfordshire CEBs.
Note: in Method 2, those described as an agricultural labourer, but also as a pauper or as unemployed, are listed separately, but included in the total, as there is no way of knowing if their pauperism or unemployment was temporary or permanent.

it was farm bailiffs rather than farmers who failed to provide the required information: the instructions to *farmers* may have been clear, but the responsibilities of farm officials were not. It is also, of course, possible that other farmers or bailiffs who *did* report numbers of labourers returned only those who lived out, and hence the returns by farmers of numbers of labourers are perhaps more suspect than Shaw-Taylor has suggested.[26]

The results of this analysis for each registration district and the county as whole are presented in Table 1; the full results on a parish by parish basis are reproduced in Appendix 1. A county map showing Registration Districts and leading towns is provided in Figure 1 to aid orientation. At the foot of Table 1 are the totals for the major part of the ancient county of Hertfordshire. Both figures, for Method 1 and for Method 2, stand considerably below the proportions calculated for the St Albans district that had given rise to concerns over the reliability of the published census report. Method 2, which conforms to the procedure used in the printed report, shows that 1853 of the 20,415 male labourers were living in, or just 9.1 per cent, a figure that stands only a little above the county total of 7.9 per cent calculated from the printed report. The small discrepancy between these two figures is also easily explained. The printed report covers the registration county, not the ancient county. It therefore excludes Barnet and Edmonton, but includes a number of parishes that lay in the Royston and Bishop's Stortford registration districts but within the counties of Cambridgeshire and Essex, in both of which levels of farm service were particularly low. The *only* other Hertfordshire region to exhibit figures comparable to those found in the St Albans area was Hemel Hempstead, which is contiguous with St Albans, extending out to the west (Figure 1). The overall total, however, confirms rather than contradicts the published census report with regard to the degree to which farm service for male labourers survived in Hertfordshire at mid-century, and hence also confirms its rapid decline. Of course, it remains possible that this may not hold true for other counties, but only further research will show if this is the case or not.[27]

In six of the 12 registration districts, the proportion of farm servants stood at 8–10 per cent. However, when we look to the east of the county, the proportion plummets dramatically. In the large parish of Cheshunt (Edmonton registration district, population 4815) it stood at just 3.2 per cent, in the Hertfordshire portion of the Royston District (population 14,465) at just 3.4 per cent, and in the Hertfordshire portion of the Bishop's Stortford District (population 13,086), at 4.6 per cent, and in these parts of the county only about one-quarter of all farms included even one living-in farm servant. Within regions, as Appendix 1 shows, there was considerable variation between parishes, and although this might be explained in terms of particular farming regimes, the personal predilections of farmers and local variations in the nature and quality of social relations, we must remember that farm labourers were perfectly capable of crossing parish boundaries to find work, and hence these differences could be as much apparent as real. The local variations in these figures deserve emphasis. In some instances one finds that the farmers in a particular parish reported they employed more labourers than could be identified from the occupational descriptions in the CEBs. To give just three examples, in Ridge (Barnet registration district), the farmers reportedly employed 112

[26] Shaw-Taylor, 'Family farms', pp. 174–9, 189.

[27] In particular we await the full results of the research of Howkins and Verdon (see fn. 12, above) which is to be published shortly in the *Economic History Review*.

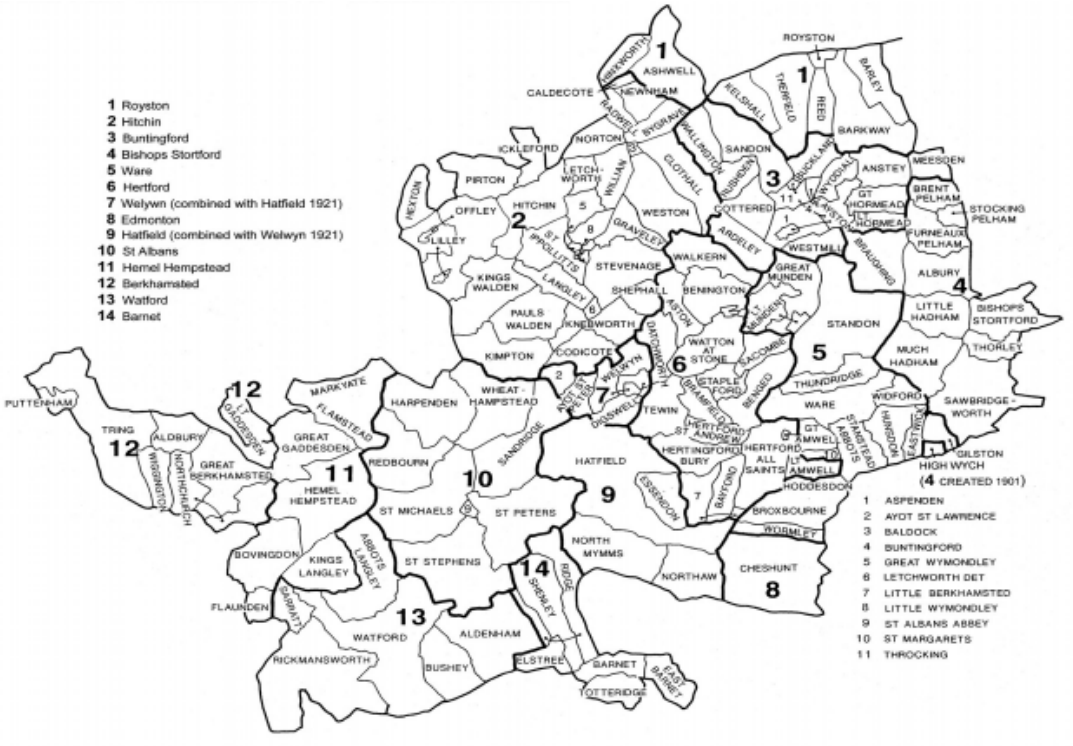


FIGURE 1. Hertfordshire Poor Law Unions and Registration Districts

labourers, but only 70 lived in the parish; in Great Hadham (Bishop's Stortford registration district) the figures were 183 and 135 respectively; and in Sandridge (St Albans registration district) 255 and 185 (see Appendix 1). Clearly, these parishes were not closed entities, and benefited from the labour of agricultural workers from surrounding parishes: analysis of agricultural employment at the level of the single parish, therefore, is inherently problematic. The *regional* disparity between the west and the east of Hertfordshire, is however, clear enough, further demonstrating the variation that can be found within a circumscribed area, for – as the crow flies – Bishop's Stortford lies just 30 miles east of St Albans. What is quite clear is that counties were not homogeneous, and even in one as small as Hertfordshire, approximately 630 square miles, the incidence of farm service could vary considerably, and hence potentially so too could the quality of social relations, and the degree of vulnerability of the labour force to short-term fluctuations in the demand for labour. This local and regional variation also means that sub-county studies of farm service based upon sample populations cannot be expected to conform to the published (county level) data, and are potentially highly misleading. Only studies such as the present study of the whole county of Hertfordshire can accurately test whether the data contained in the published census report is right or wrong.

Exactly why these stark disparities present themselves is far from clear, for in many respects the county exhibits considerable homogeneity. Hertfordshire is a county with little poor quality land, for apart from a few areas of heathland on the Chilterns, the Land Utilization Survey conducted in the 1930s classified virtually all the various soils of Hertfordshire as either good or

medium quality.[28] The Royston and Bishop's Stortford Districts, however, where boulder clay predominated, largely defined the east Hertfordshire arable zone, which also extended further east into Essex. It is possible, therefore, that the heavier arable bias of this part of the county, where year round care of livestock was less necessary, obviated the need for live-in agricultural labour. That said, nineteenth-century Hertfordshire was first and foremost an arable county, with only a subsidiary interest in livestock farming. As the Board of Agriculture reported in 1795:

> Hertfordshire is deemed the first corn county in the kingdom, for with the requisite advantages of climate, and of the various manures brought from London, to aid the production of the most valuable crops, nearly the whole of the soil is proper tillage land.[29]

A few years later Arthur Young concurred, writing that:

> By far the greatest part of the county is under tillage … [the subject of livestock being] as barren a one in Hertfordshire as any that can be named. It is merely an arable county, and the quantity of clover-hay carried to London is so great, and forms so profitable a husbandry, that livestock must be a very inferior object.[30]

Although sheep and cattle were not unknown, and were fairly widely dispersed and valuable for their manure, apart from some specialized cattle fattening in the Tring region no part of Hertfordshire was notable for its animal husbandry or for dairying, and the trend in the first half of the nineteenth century was probably towards arable and away from pasture.[31] The agricultural returns of 1867 place Hertfordshire bottom of the 40 English and Welsh counties in terms of the number of cattle per 100 acres of crops, while for sheep it stood in thirty-second position.[32]

Nor is it easy to draw any clear distinction between the east and the south and west of Hertfordshire in terms of arable agricultural practice. Hertfordshire was one of 10 English counties already largely enclosed by 1600, although the surviving open fields tended to be in the north and east, which shared a pattern of late enclosure with neighbouring Cambridgeshire.[33] The Tithe Surveys of 1837–45 mention 'high farming' in Hertfordshire only at Hatfield, Radwell, Shenley and Wallington, the last of which lay within the Royston District and shared the low level of farm service that characterized the region as a whole. 'Low farming' was identified at St Albans, Ayot St Peter, Wyddial, Brent Pelham and in Shenley again, two of these parishes standing in the low service east and three in areas where the level of service was moderate or high. Twelve parishes still operated a three-course rotation, and of these seven were situated in the Royston or Bishop's Stortford districts, five elsewhere.[34] In terms of the early introduction of agricultural machinery, examples can be found at Buntingford, Sandon and Wyddial in the low

[28] The results are reported in E. Doubleday, *Hertfordshire: survey report and analysis of county development plan* (1951), p. 60.

[29] D. Walker, *General view of the county of Hertford presented to the Board of Agriculture*, quoted in *VCH Hertford*, II, p. 129.

[30] A. Young, *General view of the county of Hertfordshire* (1804, repr. 1971), pp. 55, 182.

[31] N. Agar, 'The Hertfordshire farmer', in D. Jones-Baker, *Hertfordshire in history* (1991), pp. 247–53; G. E. Mingay (ed.), *The agrarian history of England and Wales*, VI, *1750–1850* (1989), pp. 34, 49; H. Evershed, 'Agriculture of Hertfordshire', *JRASE* 25 (1864) pp. 270–2.

[32] Mingay (ed.), *Agrarian history*, VI, Table III.10, pp. 1065–6.

[33] R. Pope (ed.), *Atlas of British social and economic history since c.1700* (1989), p. 1; L. M. Munby, *The Hertfordshire landscape* (1977), pp. 164–6, 181–2.

[34] N. E. Agar, *Behind the plough: agrarian society in nineteenth-century Hertfordshire* (2005), p. 44.

service area, and at Hemel Hempstead, Kings Langley and Sandridge where farm service held on more strongly in 1851.[35] In terms of crop yields Young reported in 1804 an average barley crop of '32 bushels and a small fraction' from a sample of 17 farms. The St Albans and Hemel Hempstead areas stood about average at 32 bushels, and while Albury, Royston and Baldock in the north and east all produced examples of lower yields (varying between 24 and 32 bushels), while on the 'strong lands' of Westmill and Buntingford 40 bushels was achieved.[36] For wheat the average about St Albans and Sandridge was 24 bushels, although Lord Grimston achieved 30, while within the Royston registration district, Ashwell, Baldock and Royston itself generally performed less well than this, while again Buntingford excelled, its 'fine rich loams' frequently producing 40 bushels.[37]

The distribution of farm sizes in the respective Hertfordshire districts is shown in Table 2, and possibly helps explain the very low levels of farm service found in Edmonton, for here there was a particularly high percentage of smallholdings, taking advantage of the fertile, easily worked loams of the lower Lee Valley, a precursor of the glasshouse industry founded in 1883 and destined to become the largest in Britain.[38] The lower slopes of the Chilterns and the Colne Valley appear to have provided similar opportunities for market gardening in general and the growing of watercress in particular, reflected in the large number of smallholdings in the Watford registration district, without which the proportion of farm servants – already above average – might have stood on a par with neighbouring Hemel Hempstead and St Albans. Little light, however, is thrown upon the low figures for east Hertfordshire. Royston contained a larger than average number of large farms of 500 acres plus, but had a lower than average proportion in the range 100–499 acres, which might equally be capable of sustaining farm servants. Bishop's Stortford conformed fairly closely to the county average for the proportion of farms in each category. Both St Albans and Hemel Hempstead included proportionally fewer than average small farms, but not markedly so, and their profile was matched by other districts with lower levels of farm service such as Berkhamsted and Hertford. With the exception of areas where small farms might be expected to rely upon casual rather than live-in labour, the distribution of farm sizes does not appear to underlie the distinction between east and west Hertfordshire in terms of the incidence of farm service. The same conclusion follows from consideration of the ratio of labourers to farmers, shown in the final column of Table 2. Indeed, the correlation coefficient between the proportion of farm servants in the respective districts and the labourer/farm ratio is marginally negative, at –0.07.

Although measurable differences in agricultural practice between low service east Hertfordshire and the high service area of the south-west are difficult to pin down, there can be little doubt that the latter area was the more economically advanced and sophisticated of the two. Despite the fact that Young was able to find pockets of efficient and productive farming in the Royston and Bishop's Stortford regions, in general the techniques and yields achieved here – as far as can be ascertained from the selective evidence available – seem to be inferior to many others areas of Hertfordshire.[39] The south, and particularly the south-west, benefited from proximity

[35] Ibid., p. 57.
[36] Young, *General view*, pp. 94–5.
[37] Ibid., p. 87.
[38] Doubleday, *Hertfordshire*, p. 63.
[39] For lack of progress in Ashwell, B. J. Davey, *Ashwell 1830–1914: the decline of a village community* (1980), p. 37.

TABLE 2. Farm Sizes and Labourer/Farm Ratio in Hertfordshire 1851

Registration District	*No. Farms*	*Acreage*				*Farm Sizes*										*Total no. labourers*	*Labourer /farm ratio*
		Total	*Average*	*Median*	*Range*	*<50*		*50–99*		*100–199*		*200–499*		*500+*			
						No.	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*	*No.*	*%*		
Barnet	55	8311	151	120	2–680	10	18.2	13	23.6	22	40.0	8	14.5	2	3.6	631	11.5
Berkhamsted	83	14,164	171	150	2–680	12	14.5	11	13.3	32	38.6	27	32.5	1	1.2	1071	12.9
Bishop's Stortford	135	24,533	182	120	2–1106	38	28.1	17	12.6	35	25.9	36	26.7	9	6.7	1620	12.0
Edmonton	33	3623	110	100	9–270	14	42.4	2	6.1	12	36.4	4	12.1	1	3.0	379	11.5
Hatfield & Welwyn	87	15,549	179	130	7.5–800	14	16.1	19	21.8	26	29.9	22	25.3	6	6.9	1350	15.5
Hemel Hempstead	126	19,894	158	135	2.5–800	23	18.3	20	15.9	49	38.9	31	24.6	3	2.4	1504	11.9
Hertford	119	21,858.5	184	150	4–639	20	16.8	23	19.3	27	22.7	45	37.8	4	3.4	1715	14.4
Hitchin	232	44,609	192	140	2–850	54	23.3	33	14.2	49	21.1	84	36.2	12	5.2	3695	15.9
Royston	199	41,512	209	120	2–912	54	27.1	32	16.1	37	18.6	51	25.6	25	12.6	2848	14.3
St Albans	161	29,915	186	156	2–700	21	13.0	24	14.9	55	34.2	56	34.8	5	3.1	2190	13.6
Ware	113	24,368.5	216	195	6–875	19	16.8	8	7.1	31	27.4	48	42.5	7	6.2	1669	14.8
Watford	182	22,307.5	123	67	2–1262	77	42.3	29	15.9	28	15.4	45	24.7	3	1.6	1743	9.6
Hertfordshire	1525	270,644.5	177	130	2–1262	356	23.3	231	15.1	403	26.4	457	30.0	78	5.1	20,415	13.4

Source: digitized 1851 Hertfordshire CEBs.

to London, both in terms of the marketing of agricultural produce and the availability of manure in the form of night soil. It can be no coincidence that it was in Harpenden, in the heart of the St Albans agricultural district, that in the 1830s John Bennet Lawes established the progressive estate that evolved into the Rothamsted Experimental Station, inaugurating the agro-chemical industry that was to have such a profound long-term impact upon agricultural practice.[40] The south-west was also well connected with London and the Midlands by road, while towards the end of the eighteenth century the Grand Union Canal was cut through the region.

Table 3 presents a selection of economic indices which provide some quantitative measures of intra-county variation. Towns, albeit small ones, were generally thicker on the ground in the south-west than in the east or north-east of the county, as the percentages urban in the St Albans and Berkhamsted districts show. St Albans headed the county rankings with approximately 7000 inhabitants, although the county town of Hertford (population 6605) also represented a substantial urban presence further east.[41] The south-west also exhibited both the most intensive and extensive industrial development in county. The St Albans, Hemel Hempstead and Berkhamsted districts formed the heart of the straw plait and hat trades, employing proportions of women and children considerably larger than could be found at the same date in the industrial Midlands or North.[42] Few men worked regularly at plaiting or straw hat-making, but the trade did provide employment for substantial number of boys, offering a competing form of employment to agricultural labouring that was unavailable over much of the eastern part of the county. The region could also boast a small silk industry, while by 1851 paper manufacture was already well established in the Hemel Hempstead and Watford districts, the latter including the firm of John Dickinson of Abbots Langley, described in that year as 'magistrate, paper manufacturer, wholesale stationer and box manufacturer, employing 583 men and 345 women and girls'.[43] These features are reflected in the lower proportions of men employed in agriculture in St Albans, Berkhamsted, Watford and Hemel Hempstead, particularly when compared with Royston. The south-west/north-east contrast would also have been clearer had the Ware and Bishop's Stortford CEBs clearly identified the occupations of 'labourers', which could only be classified as 'miscellaneous', this category constituting fully 13 per cent of the occupied male population in each district, even though it is probable that many of these worked either fully or partly in agriculture.

East Hertfordshire generally exhibited below average demographic growth in the first half of the nineteenth century, the four districts of Bishop's Stortford, Hertford, Royston and Ware respectively achieving growth of 62, 60, 50 and 49 per cent compared to a county figure of 72 per cent, while Hemel Hempstead, Berkhamsted, Watford, and St Albans in the south-west were the four leading districts for population growth. In the second half of the century, Bishop's

[40] W. Fream, 'In memoriam. Sir John Bennet Lawes, Bart', *JRASE*, third ser., 11 (1900), pp. 511–24; A. D. Hall, *The book of Rothamsted experiments* (1905); G. V. Dyke, *John Bennet Lawes: the record of his genius* (1991).

[41] BPP, 1852–3, LXXXVIII, pp. cciv–vii.

[42] N. Goose, *Population, economy and family structure in Hertfordshire in 1851*, I, *The Berkhamsted region* (1996), pp. 37–43; Goose, *St Albans*, 82–106; Goose, 'Straw plaiting and hat making', in D. Short (ed.), *An atlas of Hertfordshire history* (forthcoming, 2007), ch. 40.

[43] Digitized CEBs. Hertfordshire, 1851; S. A. Jennings, 'A ravelled skein: the silk industry in south-west Hertfordshire, 1790–1890' (unpublished PhD thesis, University of Hertfordshire, 2002); W. Branch Johnson, *Industrial archaeology of Hertfordshire* (1970).

TABLE 3. Hertfordshire Economic Indices, 1801–51

Registration District	*Population Growth 1801–51 (%)*	*% Occupied Males in Agriculture 1851*	*% Population Urban 1851*
Barnet	79.6	46.6	0.0
Berkhamsted	95.4	37.3	49.2
Bishop's Stortford	61.8	45.9	25.9
Edmonton	75.8	35.2	0.0
Hatfield and Welwyn	48.0	55.9	0.0
Hemel Hempstead	103.0	42.8	20.8
Hertford	59.6	45.3	43.8
Hitchin	82.4	53.2	21.3
Royston	50.0	65.8	0.0
St Albans	83.1	46.1	38.9
Ware	48.6	37.8	29.6
Watford	87.9	38.0	20.2
Hertfordshire	71.8	46.5	24.0

Sources: Census Reports 1801, 1851; digitized Herts CEBs, 1851.
Notes: Data for Edmonton and Barnet relate only to those parishes lying within the ancient county of Hertfordshire. The percentages in agriculture for Bishops Stortford and Ware are distorted by the inclusion in the CEBs of large numbers of unspecified 'labourers', who have not been included in the agricultural category.
Only those towns are included which feature among the Cities, Boroughs and Principal Towns in England and Wales in the 1851 Census Report (BPP 1852–3, LXXXV, Population Tables I, pp. clxvii-ccvii).

Stortford and Royston slumped to the bottom of the county rankings, the former growing by just 9 per cent compared to a county average of 81 per cent, and Royston – alone of the county's 10 registration districts – contracting by 26 per cent.[44]

It was generally in those parts of the county that were economically and demographically most vibrant and most variegated, therefore, that farm service held on longest, not in economic backwaters, supporting similar arguments recently offered about parts of the north of England.[45] Competing sources of employment appear to have been crucial, although the picture is not as clear cut as one might wish. In the Berkhamsted region the proportion of farm servants, at 9.9 per cent, was above average but not notably so, and in Ware too there was a competing form of employment in the form of the malting industry, which also extended into parts of Bishop's Stortford. In these latter areas, however – as the common employment of the terms 'labourer' or 'general labourer' might suggest – far from competing for labour the two industries may have complemented each other, perhaps forming a joint labour force for agriculture and industry that could take advantage of contrasting seasonality of employment. It is to the issue of seasonality that we can now turn.

[44] N. Goose, 'Population, 1801–1901', in Short, *Atlas*, ch. 24.

[45] See references in nn. 3 and 10 above.

III

The contrast in the number of labourers reportedly employed by farmers compared to the number that can be identified by occupation, shown in the final column of Table 1 and Appendix 1, is substantial. The shortfall in the number of labourers reported by farmers as employed on 31 March 1851 compared to the number resident in the county was 8447, or fully 41 per cent of the total, a similar figure to that calculated by Shaw-Taylor for Buckinghamshire.[46] There is considerable uncertainty concerning the reporting by farmers (included in the CEBs alongside farmers' occupational titles) of the number of farm servants and labourers they employed, and this was recognized in the census report itself:

> Some uncertainty prevails as to whether the farmers returned all their in-door farm servants; and women and boys were included in some cases and not in others … The General Tables should be referred to in connexion with this subject; and it should be borne in mind that many of the agricultural labourers by profession are out of employment, and are disabled … 91,698 persons in the return called themselves farmers who had apparently no labourers; many of them probably doing the manual labour themselves, and others with the assistance of their children, while others employed labourers part of the year; and some may have had labourers that they did not return.[47]

It is not easy to establish the relative importance of these different possible sources of omission. Shaw-Taylor's view that the instructions to householders to return both indoor and outdoor labourers were clear has been noted, but the Hertfordshire evidence, as we have seen, indicates that farm officials and some farmers themselves remained confused.[48] In Buckinghamshire the great majority of farmers who returned no labourers were operating on a small scale. Of reported farms under 20 acres, 69 per cent listed no employees, and were probably reliant largely or wholly on family labour; for farms between 20 and 100 acres only 15 per cent reported no labourers, while the figure for those farming over 100 acres was just 2 per cent.[49] In Hertfordshire the situation was similar, the comparable percentages standing at 66, 12 and 1 per cent (1.33). The number of labourers who were actually resident in the households of those farmers reporting no employees, at 231, was not insignificant, but while this number represents 12 per cent of the labourers who lived-in in Hertfordshire, it only amounts to 1.9 per cent of the total number of labourers reported by farmers, and only 1.1 per cent of those that can be identified by their given occupation. Even with a further generous allowance for additional under-reporting of living-in labourers and for under-reporting of boys, therefore, by far the major part of the discrepancy between the two counts of agricultural labourers shown in Table 1 remains to be explained.[50]

[46] Shaw-Taylor, 'Family farms', p. 176. Shaw-Taylor inflates the number of labourers reported by 10 per cent, and still finds they constitute only 60 per cent of the total of labourers. A similar exercise for Hertfordshire would produce a figure of 66 per cent.

[47] BPP, 1852–3, LXXXVIII, p. lxxviii. See also fn. 19, above.

[48] Above, pp. 279–81.

[49] Shaw-Taylor, 'Family farms', p. 175.

[50] This must be regarded as the minimum level of omission, for it is more than likely that at least some of those who did report the number of labourers they employed also failed to include those who lived in. For under-reporting of boys in Buckinghamshire see Shaw-Taylor, 'Family farms', pp. 178–9.

One obvious possible explanation is seasonality of employment, but this is a tricky issue. The farming calendar can vary considerably, even on farms with a similar basic profile in terms of arable and pasture. It is sometimes suggested that the 1851 census was taken at a slack time in the agricultural year (30 March), but this would depend upon the local farming regime.[51] Even in arable counties that did not require the same level of year-round care for livestock as the pastoral counties, sheep were frequently kept and lambing took place in spring and, depending on the breed, this could occur in February, March or even April, although in Hertfordshire it was usually over by mid-January in the south and mid-February in the north.[52] Barley was an important crop in Hertfordshire and, depending upon the variety, could be sown from March to May: here March was the principal seed month, while different types of oats could be sown from February to April.[53] Swedes formed a common component of rotations in the lighter soils across much of southern Hertfordshire, and a second ploughing and scarifying of the soil in preparation for manuring and seeding was undertaken in early spring.[54] Apart from general maintenance work in terms of hedging, fencing or ditching, therefore, spring was by no means devoid of activity on arable farms, even if the amount of work available could not compare with the summer harvest months. A similar conclusion was reached by Alun Howkins on the basis of evidence from Norfolk at the turn of the nineteenth century, where 'in most years farm work started up again soon after Christmas'.[55]

While precise estimation of seasonal activity is difficult, Figure 2 provides a surrogate measure of seasonal unemployment, in the form of a count of the number of paupers in England and Wales, on a week by week basis, for the years 1902 and 1903, together with the average of the 10 years 1893–1902.[56] This data is drawn from a period 40–50 years after the 1851 census which is a little late for our purposes, and it incorporates all paupers, and encompasses the whole of England and Wales, not just the agricultural counties. However, examination of the poor law data available for 1 January and 1 July each year for the same period shows that seasonal variation was a particular feature of England's agricultural counties, and hence Figure 2 might stand as a more or less accurate proxy for agricultural seasonality. What it suggests is that 30 March stood almost exactly half-way between the peak period of employment in July and the nadir of January to February, and could not therefore – in general – be regarded as a particularly slack time of the agricultural year. Compelling local evidence is provided by the admissions and discharges to the Hatfield Union workhouse, which faithfully records dates of admission between 1840 and 1857.[57] A total of 3010 admissions are recorded for these 18 years, giving a monthly average of 251, and a figure for March below average at 227. Indeed, with just 7.5 per cent of overall admissions, March stood in joint eighth place of the 12 months, and well below

[51] Recently by Shaw-Taylor, 'Family farms', p. 182.

[52] See, for example, H. W. Gardner, *A survey of the agriculture of Hertfordshire* (1967), pp. 42–3; Evershed, 'Agriculture of Hertfordshire', pp. 276, 278.

[53] Evershed, 'Agriculture of Hertfordshire', pp. 273, 275; J. Thirsk (ed.), *The agrarian history of England and Wales*, IV, *1500–1640* (1967), pp. 170–1.

[54] Evershed, 'Agriculture of Hertfordshire', p. 272.

[55] A. Howkins, 'In the sweat of thy face: the labourer and work', in G. E. Mingay (ed.), *The Victorian countryside* (2 vols, 1981), II, pp. 511–14, quotation at p. 514. Howkins remarks of the Norfolk evidence: 'with very little modification it could stand for the cereal-growing areas of the country for most of the century' (p. 512).

[56] BPP 1903, LIX, p. 147.

[57] Hertfordshire Archives and Local Studies, BG HAT/41.

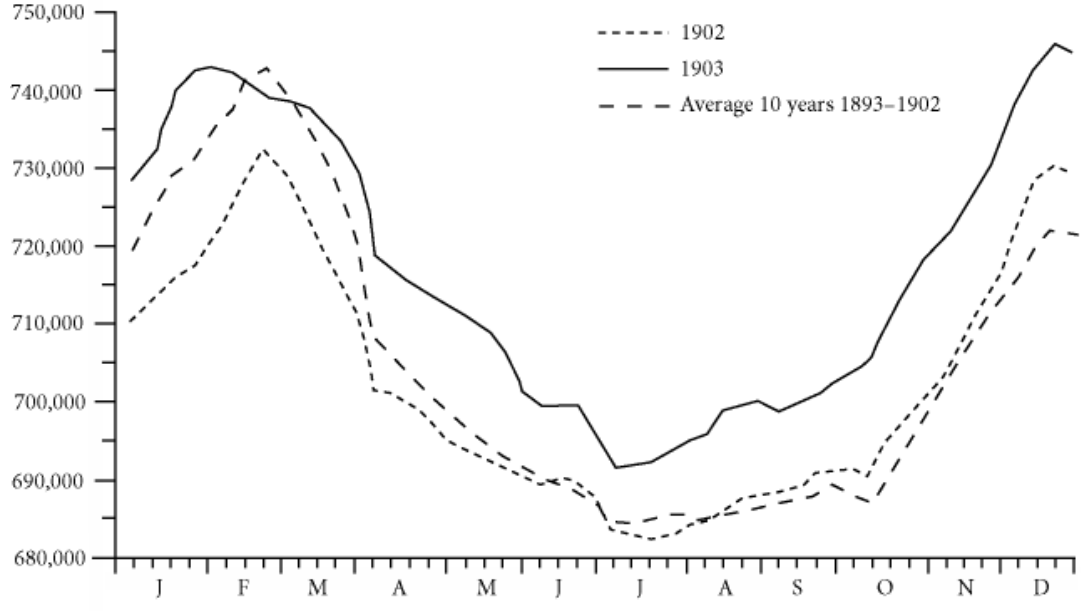


FIGURE 2. Total numbers of paupers (indoor and outdoor) in England and Wales on the last day of each week of the years 1902 and 1903, and the average for the ten years 1893–1902.

Source: redrawn from BPP, 1903, LIX, p. 147.

the true seasonal peak that took place in November, December and January. In 1851 itself, March stood in fifth place, with 13 admissions compared with a monthly average of 12, but again below the winter peak, which this year extended into February.

An agricultural labourer could not subsist on the basis of employment at peak periods only, even if he (and we are dealing here with male labourers only) might be able to ride out the difficult winter months with the assistance of the workhouse, out-relief where available, private charity or various 'makeshift' activities.[58] As female agricultural employment by this date was increasingly seasonal, the peak period of employment suggested by Figure 2 must also reflect a reduction in female pauperism as well as male, and hence for males only employment towards the end of March probably stood closer to the months of fullest employment than to the months of work scarcity.[59] Unemployment of 41 per cent of the total male labour force at the end of March – across Hertfordshire 8447 out of 20,415 agricultural labourers and of a *total* occupied male population of just 51,609 – is improbable, and it is most unlikely, therefore, that the discrepancy shown in Table 1 between the number of labourers reportedly employed by farmers and the number identified under occupation could be explained mainly, or perhaps even substantially, in terms of seasonal unemployment. An alternative, and more plausible, hypothesis is that in

[58] S. King and A. Tomkins (eds), *The poor in England 1700–1850: an economy of makeshifts* (2003); S. Williams, 'Earnings, poor relief and the economy of makeshifts: Bedfordshire in the early years of the New Poor Law', *Rural Hist.* 16 (2005), pp. 21–52.

[59] For female agricultural employment in the later nineteenth century, see N. Verdon, *Rural women workers in nineteenth-century England* (2002), pp. 114–21.

completing the census returns farmers only recorded those labourers in their *regular* employ, not all of those who might have been working for them on 30 March or those employed at piece rates through the rest of the year, and hence the discrepancy between the two figures might provide us, not with an index of seasonal unemployment, but with an index of casualization.

This hypothesis is supported by a regional analysis of the county of Hertfordshire. Table 1 includes 379 agricultural labourers identified from the CEBs as unemployed or outdoor paupers, constituting 1.86 per cent of all agricultural labourers. By registration district, Bishop's Stortford heads the ranking with 4.75 per cent, followed by that part of Edmonton that lay within the ancient county at 3.17 per cent, Berkhamsted with 2.99 per cent and Royston at 2.25 per cent. Paupers are not, however, invariably identified by occupation, and the great majority of those that are identified are elderly, largely representing the effectively retired rather than economically active population. Hertfordshire workhouse populations, while also skewed toward the elderly, included a higher proportion of inmates of prime working age, almost exactly one-third being aged between 16 and 59. Unfortunately the recording of occupations is even more erratic here, although of those workhouses that lay within the registration county, Royston (at 0.94 per cent) and Bishop's Stortford (at 0.89 per cent) head the ranking for male inmates as a proportion of the total male population, the county average standing at 0.71 per cent. For what these figures are worth, they would appear to suggest that the labouring population of eastern Hertfordshire was somewhat more vulnerable to pauperism than most of the rest of the county.

The annual reports of the Poor Law Board, although giving no occupational information, provide more reliable data for outdoor relief as well as numbers of workhouse occupants, and as that data was collected for 1 January and 1 July should more accurately reflect the trough and peak of agricultural employment. In Table 4 seasonal variation in pauperism for the respective Hertfordshire Unions in 1859–63, as reflected in the disparity between 1 January and 1 July, is juxtaposed with indices of casualization of agricultural labour calculated from the census enumerators' books for 1851. For outdoor relief the disparity between January and July is small, and the sex ratio heavily skewed towards women. For indoor relief the January to July ratio is much higher, and the sex ratio consistently favours men, markedly so for every Union except Hertford and St Albans. At the head of the rankings again stand Royston and Bishop's Stortford, the latter quite closely followed by Hitchin and Ware.[60] Royston also exhibits the greatest skew towards men in the sex ratio of its workhouse population, although in this respect Bishop's Stortford stands closer to the county average, and it is possible that this reflects the availability of alternative employment in the malting industry, which was particularly prevalent in the parishes of Sawbridgeworth, Great Hadham and Bishop's Stortford itself. What is quite clear, however, is that the index of seasonality provided by the poor law data does not correspond to the casualization ratio calculated from the occupational information in the CEBs. Indeed, the correlation coefficient between the two indices, at –0.65, is decidedly negative. Furthermore, while Royston heads the seasonality ranking, it stands rock bottom in terms of its casualization ratio.

Further exploration of these relationships is clearly called for at both local and regional levels, and will be the subject of future work. But a preliminary analysis by county for 1851, presented

[60] If males are considered separately there are only minor changes in the rankings, and Royston and Bishop's Stortford remain in first and second position.

TABLE 4. Indoor and Outdoor Relief in Hertfordshire 1859–63 by registration district: Seasonal Variation, Sex Ratio and Casualization Ratio for 1851

Registration District	INDOOR RELIEF						OUTDOOR RELIEF						*Casualization Ratio 1851*
	% Pop. Relieved		*Ratio*	*Sex Ratio Adults*			*% Pop. Relieved*		*Ratio*	*Sex Ratio Adults*			
	1 Jan	*1 July*	*Jan/July*	*1 Jan*	*1 July*	*Total*	*1 Jan*	*1 July*	*Jan/July*	*1 Jan*	*1 July*	*Total*	
Berkhamsted	0.50	0.36	1.38	219	164	194	4.65	4.50	1.03	38	39	39	1.68
Bishop's Stortford	1.29	0.89	1.44	177	145	164	6.97	6.73	1.04	59	56	58	1.49
Hatfield & Welwyn	1.32	1.05	1.26	209	140	175	5.53	5.06	1.09	42	40	41	2.13
Hemel Hempstead	0.70	0.53	1.33	152	137	145	3.93	3.54	1.11	47	44	46	1.78
Hertford	0.81	0.64	1.27	113	99	107	4.80	4.49	1.07	51	50	50	1.71
Hitchin	0.83	0.58	1.42	204	144	177	7.07	6.66	1.06	50	48	49	1.74
Royston	1.10	0.68	1.61	224	160	199	6.35	5.94	1.07	47	45	46	1.42
St Albans	0.90	0.74	1.21	125	99	113	4.03	3.68	1.09	44	42	43	1.75
Ware	1.22	0.87	1.40	163	115	141	7.24	6.78	1.07	42	62	50	1.77
Watford	1.15	1.02	1.12	173	153	163	5.72	5.18	1.10	43	41	42	1.80
Hertfordshire	0.99	0.73	1.35	173	134	155	5.80	5.42	1.07	47	48	47	1.71

Sources: BPP, 1857–8, XLIX Pt. II; 1859, XXIV; 1860, LVIII; 1861, LIII; 1862, XLVIII; 1863, LI; digitized 1851 Hertfordshire CEBs.
Note: the poor law data covers the registration county, while the casualization ratio is calculated from those parts of the ancient county that lay within the respective SRD.

in Table 5, offers some support to the results for Hertfordshire. The poor law data again shows low levels of seasonal variation for *outdoor* relief and, in general, a skew towards women.[61] But for *indoor* relief Table 5 reveals clear regional differences, with many of the most primarily arable agricultural counties towards the south of the country exhibiting larger January/July ratios, as well as higher sex ratios, than most of the industrial or more pastoral counties of the north and west. With regard to the indices of casualization, however, a broad swathe of counties across the north Midlands and the North, which include many of the key English industrial counties, stand at the head of the rankings. The industrial index in the final column of Table 5 is positively, if not very strongly, correlated with the casualization ratio, the coefficient standing at +0.53.[62] The correlation is, however, particularly marked at the upper extreme, for eight counties stand among the top ten on both measures (Cheshire, Derbyshire, Lancashire, Monmouth, Nottinghamshire, Staffordshire, Warwickshire and the West Riding).[63] The correlation coefficient between the proportion of farm servants and the industrial index is also positive, but at +0.39 is weaker, and in this case it is not possible to make a case for a stronger association at extreme values. At county level, if there was a tendency for high levels of farm service to be associated with high levels of industrialization, other factors traditionally associated with the retention of service (a predominance of pasture farming, dispersed settlements and smaller farms) clearly had an impact too. Within Hertfordshire, it was those areas that were more economically advanced, and which were most economically variegated, that retained higher levels of farm service into the mid-nineteenth century, experienced less seasonal variation in demand for labour while simultaneously exhibiting a higher overall level of labour casualization. Nationally, the county data suggest a similar correspondence between economic development, lower seasonal unemployment and higher levels of labour casualization, while the association with retention of farm service is less clear cut. In the arable agricultural counties, however, farm service – while not extinct – was an increasingly endangered species by mid-century, but while seasonal unemployment was most marked in these areas a lower overall proportion of the labouring population in agriculture were casualized.[64]

IV

In conclusion, it is clear that despite the initial scepticism produced by the evidence for the St Albans region about the reliability of the incidence of farm service as revealed in the 1851 census report, for Hertfordshire at least the report is vindicated. As a proportion of the male

[61] For a fuller breakdown of the poor law data by county see N. Goose, 'Poverty, old age and gender in nineteenth-century England: the case of Hertfordshire', *Continuity and Change* 20 (2005), pp. 351–84.

[62] Conversely, the correlation coefficient between the casualization ratio and the proportion of the male population employed in agriculture by county (not presented in Table 5) was negative, at –0.50. The 1851 data have been mapped according to proportions in the primary, secondary and tertiary sectors by Leigh Shaw-Taylor and Tony Wrigley as part of their project 'The occupational structure of Britain 1379–1911', and can be located at http://www.hpss.geog.cam.ac.uk/research/projects/occupations.economic1851.

[63] Rutland is excluded from this calculation because of its tiny size.

[64] For English counties the correlation coefficient between the seasonal unemployment index (Jan/July) and the casualization ratio stood at –0.56 (rank correlation –0.62). The correlation coefficient between proportions of farm servants and the casualization ratio stood at 0.63 (rank correlation 0.75).

TABLE 5. Farm Service, Seasonality of Indoor Relief and Casualization Ratios and Industrial Employment in England and Wales, 1851

	Proportion Farm Servants	INDOOR RELIEF						*No. Labs (1)*	*No. Labs (2)*	*Casualization Ratio (2)/(1)*	*Industrial index*
		% Pop. Relieved		*Ratio*	*Sex Ratio Adults*						
		1 Jan	*1 July*	*Jan/July*	*1 Jan*	*1 July*	*Total*				
Bedfordshire	3.3	0.79	0.48	1.63	149	102	130	11,442	18,380	1.61	0.58
Berkshire	9.2	1.19	0.81	1.47	110	100	106	17,472	25,978	1.49	0.59
Buckinghamshire	6.9	0.96	0.62	1.54	128	101	117	11,853	19,525	1.65	0.59
Cambridgeshire	4.3	1.15	0.69	1.67	176	131	159	17,041	26,143	1.53	0.47
Cheshire	33.8	0.31	0.29	1.08	109	104	107	9276	21,575	2.33	2.08
Cornwall	31.3	0.57	0.50	1.15	44	42	43	12,346	21,610	1.75	1.61
Cumberland	41.4	0.67	0.64	1.04	77	75	76	6677	12,130	1.82	1.46
Derbyshire	30.5	0.35	0.34	1.04	82	88	85	4448	11,623	2.61	2.55
Devon	31.5	0.62	0.54	1.16	85	73	80	25,595	48,567	1.90	0.88
Dorset	3.1	0.93	0.66	1.40	88	84	86	15,815	19,904	1.26	0.69
Durham	27.2	0.28	0.26	1.07	99	99	99	6084	10,047	1.65	5.04
Essex	3.3	1.29	0.89	1.45	159	117	141	32,332	46,836	1.45	0.50
Gloucestershire	8.3	0.82	0.65	1.26	80	83	81	16,331	27,512	1.68	1.46
Hampshire	7.2	1.11	0.89	1.24	106	98	103	20,910	36,144	1.73	0.86
Herefordshire	18.7	0.76	0.62	1.22	82	69	76	6773	14,329	2.12	0.50
Hertfordshire	7.9	1.18	0.76	1.55	167	129	151	14,941	23,899	1.60	0.59
Huntingdonshire	5.6	1.08	0.65	1.66	196	142	174	5512	9063	1.64	0.47
Kent	10.9	1.14	0.91	1.25	121	104	113	28,103	46,456	1.65	0.76
Lancashire	24.2	0.42	0.40	1.06	89	89	89	15,474	36,069	2.33	6.43
Leicestershire	20.0	0.55	0.57	0.96	128	127	127	9602	17,086	1.78	1.78
Lincolnshire	21.8	0.79	0.62	1.27	128	109	120	28,381	50,688	1.79	0.54
Middlesex	5.3	1.22	1.04	1.17	68	64	66	7920	12,241	1.55	1.13
Monmouth	32.1	0.39	0.31	1.24	97	84	91	4042	7987	1.98	3.46
Norfolk	4.7	0.93	0.73	1.27	119	110	115	35,092	51,256	1.46	0.69

	Proportion Farm Servants	INDOOR RELIEF						*No. Labs (1)*	*No. Labs (2)*	*Casualization Ratio (2)/(1)*	*Industrial index*
		% Pop. Relieved		*Ratio*	*Sex Ratio Adults*						
		1 Jan	*1 July*	*Jan/July*	*1 Jan*	*1 July*	*Total*				
Northamptonshire	6.3	0.73	0.55	1.32	106	83	96	17,839	26,243	1.47	0.86
Northumberland	14.8	0.46	0.43	1.07	87	75	81	10,850	14,505	1.34	2.32
Nottinghamshire	24.5	0.46	0.45	1.02	113	96	104	9158	19,647	2.15	2.07
Oxfordshire	5.7	1.00	0.65	1.54	117	89	105	14,906	22,421	1.50	0.62
Rutland	14.7	0.98	0.69	1.42	152	122	139	1494	2897	1.94	0.53
Shropshire	28.7	0.64	0.54	1.18	93	87	90	12,353	26,444	2.14	0.92
Somerset	10.3	0.81	0.64	1.26	93	84	89	24,046	38,678	1.61	1.02
Staffordshire	23.8	0.47	0.44	1.08	100	95	97	10,270	24,326	2.37	4.01
Suffolk	6.3	1.26	0.85	1.49	137	117	129	35,092	45,828	1.31	0.53
Surrey	8.0	1.06	0.91	1.17	96	91	94	11,070	20,217	1.83	0.75
Sussex	8.0	1.28	0.99	1.29	149	122	137	22,595	37,880	1.68	0.72
Warwickshire	14.5	0.43	0.37	1.16	98	94	96	11,982	22,949	1.92	3.10
Westmorland	44.9	0.67	0.61	1.11	79	80	80	2325	4392	1.89	0.88
Wiltshire	3.1	1.21	0.83	1.45	100	68	87	24,619	33,003	1.34	0.59
Worcestershire	11.0	0.47	0.40	1.17	95	93	94	9696	15,786	1.63	1.99
Yorkshire E. Riding	39.4	0.45	0.45	1.00	91	78	85	10,293	19,098	1.86	1.17
Yorkshire N. Riding	37.1	0.43	0.42	1.04	83	87	85	10,854	18,680	1.72	0.72
Yorkshire W. Riding	25.2	0.27	0.24	1.10	108	108	108	17,355	36,993	2.13	4.93
England	15.3	0.71	0.58	1.23	102	90	97	620,259	1,045,035	1.68	1.56
Wales	48.5	0.29	0.26	1.10	75	71	73	40,472	65,285	1.61	1.34
England and Wales	17.2	0.68	0.56	1.23	102	90	96	660,731	1,110,320	1.68	1.54

Sources: BPP, 1852–3, LXXXVIII pt. I *Census of Great Britain, Population Tables II*, vols 1 and 2; BPP, 1852, XXIII, *Fourth Annual Report of the Poor Law Board*. C. H. Lee, *British regional employment statistics, 1841–1971* (1979).

Note: the 'Industrial index' was calculated by dividing the number of males employed in mining and manufacture (occupational orders 2–20) by the number employed in agriculture (occupational order 1).

agricultural labour force as a whole, the percentage of farm servants in the registration county that it reveals, at 7.9 per cent, corresponds closely with the 9.1 per cent calculated here for the ancient county, even if a substantial proportion of living-out labourers by this date were casual rather than regular employees. Within counties, however, even largely arable ones as small as Hertfordshire, there were significant regional discrepancies in terms of the degree to which farm service was retained: historians who rely on the printed county figures may this lose sight of the persistence of pockets of farm service in particular localities or regions.[65] The discrepancies discovered between the south and west and the north and east of Hertfordshire find no ready explanation in terms of variant agriculture regimes and agricultural practice, or in terms of farm sizes or labour/farm ratios. In general, however, it was in the more economically progressive and variegated parts of the county that farm service held on most tenaciously, while in those regions that were relatively lacking in economic and demographic vitality farm service was little more than a vestige by 1851, and was not, therefore, a conservative hangover from a past era.

More of a conundrum is presented by the discrepancy between the number of labourers reportedly employed by the farmers, and the number than could be identified by occupation, for the Hertfordshire evidence supports the view that this cannot largely be explained by underreporting by farmers. Nor, however, does it appear to be the product of seasonal unemployment. For while the very scale of the discrepancy renders this improbable, national and local poor law and workhouse data, allied to local information on farming practice, strongly indicate that March was not a particularly slack month in the agricultural calendar, either for Hertfordshire or for English arable counties in general. A more plausible hypothesis is that farmers only faithfully reported their regular employees, and thus the relationship between the number of labourers resident in the county and the number reported as employed in the census returns might stand as an index of the casualization of labour, not of seasonal unemployment. Regional poor law data for Hertfordshire supports this interpretation, for there is no correspondence between Unions which exhibit high levels of seasonal unemployment as revealed in workhouse admissions and those with high levels of casualization, or vice versa. This is confirmed by a consideration of seasonality and casualization at county level for England, and for North and South Wales. While the arable counties of the south Midlands and the south exhibit much clearer evidence of seasonal unemployment, it was the industrial counties further north that generally showed a higher incidence of casualization. Some, though not all, counties with high industrial concentrations also showed a tendency towards high levels of farm service, although the picture was complicated in this respect by the tendency for persistence of farm service also to be associated with other factors, notably a predominantly pastoral farming regime. As a preliminary generalization, therefore, it can be suggested that – both nationally and within Hertfordshire – high levels of farm service were at least compatible, and not infrequently associated with more economically advanced and variegated areas, and that such areas exhibited low levels of seasonal unemployment but high levels of casualization of agricultural labour. Less dynamic and more wholly arable areas, however, often exhibited lower levels of farm service at mid-century, experienced much higher levels of seasonal unemployment, but lower levels of casualization of the agricultural labour force. It remains to be seen whether or not further analysis at sub-county level confirms these provisional conclusions.

[65] This must, of course, have implications for other studies based on samples of parishes.

APPENDIX 1. Male Living-in Farm Servants, Hertfordshire, 1851

Registration District	*Parish*	*Method 1*			*Method 2*					*Proportion farms with at least one*	*Index of Casualization (2)/(1)*
		No. Labs (1)	*Living-in*	*%*	*No. Labs(2)*			*Living-in*	*%*		
					Empl.	*Pauper/ unempl.*	*Total*				
Barnet	Chipping Barnet	38	0	0.0	186	4	190	0	0.0	0.0	5.00
	East Barnet	12	4	33.3	63	0	63	8	12.7	71.4	5.25
	Elstree	13	3	23.1	60	0	60	7	11.7	50.0	4.62
	Ridge	112	22	19.6	70	0	70	25	35.7	50.0	0.63
	Shenley	77	12	15.6	212	0	212	15	7.1	23.8	2.75
	Totteridge	35	2	5.7	34	2	36	3	8.3	25.0	1.03
Sub-total		287	43	15.0	625	6	631	58	9.2	32.9	2.20
Berkhamsted	Aldbury	51	10	19.6	117	16	133	10	7.5	66.7	2.61
	Frithsden	72	16	22.2	109	1	110	16	14.5	75.0	1.53
	Great Berkhamsted	60	7	11.7	80	1	81	9	11.1	45.5	1.35
	Little Gaddesden	30	3	10.0	67	0	67	3	4.5	50.0	2.23
	Northchurch	81	23	28.4	176	0	176	23	13.1	61.5	2.17
	Puttenham	18	3	16.7	37	0	37	3	8.1	50.0	2.06
	Tring	271	32	11.8	324	14	338	32	9.5	47.2	1.25
	Wigginton	55	6	10.9	129	0	129	8	6.2	25.0	2.35
Sub-total		638	100	15.7	1039	32	1071	104	9.7	50.0	1.68
Bishop's Stortford	Albury	102	7	6.9	160	11	171	7	4.1	36.4	1.68
	Bishop's Stortford	122	4	3.3	128	1	129	5	3.9	10.5	1.06
	Braughing	152	10	6.6	253	18	271	10	3.7	35.3	1.78
	Great Hadham	183	21	11.5	135	0	135	21	15.6	48.0	0.74
	Little Hadham	149	6	4.0	192	15	207	10	4.8	31.3	1.39
	Brent Pelham	42	0	0.0	73	6	79	0	0.0	0.0	1.88

Registration District	Parish	Method 1			Method 2					Proportion farms with at least one	Index of Casualization (2)/(1)
		No. Labs (1)	Living-in	%	No. Labs(2)			Living-in	%		
					Empl.	Pauper/ unempl.	Total				
	Furneux Pelham	81	1	1.2	161	9	170	1	0.6	8.3	2.10
	Stocking Pelham	43	1	2.3	34	7	41	1	2.4	20.0	0.95
	Sawbridgeworth	168	13	7.7	328	10	338	14	4.1	25.6	2.01
	Thorley	42	5	11.9	79	0	79	5	6.3	37.5	1.88
Sub-total		1084	68	6.3	1543	77	1620	74	4.6	27.5	1.49
Edmonton	Cheshunt	182	10	5.5	367	12	379	12	3.2	17.5	2.08
Sub-total		182	10	5.5	367	12	379	12	3.2	17.5	2.08
Hatfield	Ayot St Lawrence	33	7	21.2	23	0	23	7	30.4	66.7	0.70
	Ayot St Peter	42	14	33.3	51	1	52	14	26.9	66.7	1.24
	Digswell	32	10	31.3	44	0	44	10	22.7	66.7	1.38
	Essendon	27	6	22.2	61	0	61	7	11.5	42.9	2.26
	Hatfield	284	33	11.6	697	10	707	51	7.2	51.3	2.49
	Northaw	58	13	22.4	127	2	129	13	10.1	36.8	2.22
	North Mimms	102	16	15.7	193	3	196	17	8.7	39.1	1.92
	Welwyn	56	16	28.6	135	3	138	16	11.6	53.8	2.46
Sub-total		634	115	18.1	1331	19	1350	135	10.0	47.8	2.13
Hemel Hempstead	Bovingdon	116	47	40.5	197	3	200	52	26.0	69.0	1.72
	Flamstead	204	33	16.2	307	0	307	40	13.0	63.3	1.50
	Flaunden	19	7	36.8	59	0	59	9	15.3	100.0	3.11
	Great Gaddesdon	129	37	28.7	223	0	223	38	17.0	78.9	1.73
	Hemel Hempstead	264	78	29.5	498	5	503	80	15.9	64.6	1.91
	Kings Langley	114	22	19.3	209	3	212	22	10.4	57.1	1.86
Sub-total		846	224	26.5	1493	11	1504	241	16.0	67.6	1.78

Registration District	*Parish*	*Method 1*			*Method 2*					*Proportion farms with at least one*	*Index of Casualization (2)/(1)*
		No. Labs (1)	*Living-in*	*%*	*No. Labs(2)*			*Living-in*	*%*		
					Empl.	*Pauper/ unempl.*	*Total*				
Hertford	Aston	62	9	14.5	170	3	173	9	5.2	33.3	2.79
	Bayford	48	5	10.4	75	0	75	5	6.7	28.6	1.56
	Bengeo	58	12	20.7	135	0	135	13	9.6	46.2	2.33
	Bennington	97	12	12.4	155	6	161	12	7.5	60.0	1.66
	Bramfield	39	6	15.4	43	0	43	7	16.3	57.1	1.10
	Brickendon	46	7	15.2	40	0	40	7	17.5	42.9	0.87
	Datchworth	57	17	29.8	150	6	156	17	10.9	53.8	2.74
	Hertford, All Stains	0	0		0	0	0	0	0.0	0.0	0.00
	Hertford, St Andrew	25	0	0.0	29	0	29	0	0.0	0.0	1.16
	Hertford, St John	69	3	4.3	47	0	47	4	8.5	42.9	0.68
	Hertingfordbury	64	22	34.4	138	6	144	22	15.3	77.8	2.25
	Little Amwell	6	1	16.7	67	0	67	4	6.0	16.7	11.17
	Little Berkhamstead	21	0	0.0	91	0	91	0	0.0	0.0	4.33
	Sacombe	62	10	16.1	31	2	33	10	30.3	83.3	0.53
	Stapleford	49	7	14.3	73	1	74	7	9.5	100.0	1.51
	Tewin	57	15	26.3	108	0	108	17	15.7	66.7	1.89
	Walkern	144	17	11.8	152	3	155	17	11.0	53.3	1.08
	Watton	99	12	12.1	177	7	184	15	8.2	30.0	1.86
Sub-total		1003	155	15.5	1681	34	1715	166	9.7	46.9	1.71
Hitchin	Baldock	14	0	0.0	154	1	155	0	0.0	0.0	11.07
	Bygrave	4	0	0.0	43	1	44	0	0.0	0.0	11.00
	Caldecote	16	2	12.5	11	2	13	2	15.4	100.0	0.81
	Clothall	80	12	15.0	118	2	120	12	10.0	50.0	1.50
	Codicote	84	13	15.5	212	0	212	17	8.0	57.1	2.52

Registration District	Parish	Method 1			Method 2					Proportion farms with at least one	Index of Casualization (2)/(1)
		No. Labs (1)	Living-in	%	No. Labs(2)			Living-in	%		
					Empl.	Pauper/ unempl.	Total				
	Graveley	45	8	17.8	76	2	78	8	10.3	57.1	1.73
	Great Wymondley	74	3	4.1	72	2	74	3	4.1	16.7	1.00
	Hexton	47	3	6.4	69	3	72	3	4.2	25.0	1.53
	Hitchin	274	8	2.9	529	8	537	8	1.5	19.4	1.96
	Ickleford	46	2	4.3	108	2	110	2	1.8	33.3	2.39
	Kimpton	142	32	22.5	176	2	178	32	18.0	64.7	1.25
	Kings Walden	129	26	20.2	220	3	223	37	16.6	63.6	1.73
	Knebworth	87	9	10.3	28	0	28	9	32.1	50.0	0.32
	Letchworth	0	0	0.0	0	0	0	0	0.0	0.0	0.00
	Lilley	67	12	17.9	103	0	103	12	11.7	100.0	1.54
	Little Wymondley	58	2	3.4	55	1	56	2	3.6	33.3	0.97
	Newnham	53	3	5.7	49	2	51	3	5.9	100.0	0.96
	Norton	32	9	28.1	92	0	92	9	9.8	100.0	2.88
	Offley	122	20	16.4	222	0	222	25	11.3	66.7	1.82
	Pirton	96	5	5.2	186	0	186	5	2.7	36.4	1.94
	Radwell	28	1	3.6	11	0	11	1	9.1	50.0	0.39
	Shephall	31	4	12.9	49	0	49	5	10.2	50.0	1.58
	St Ippollitts	49	8	16.3	139	3	142	12	8.5	50.0	2.90
	St Pauls Walden	137	24	17.5	238	1	239	24	10.0	58.8	1.74
	Stevenage	147	11	7.5	311	11	322	15	4.7	24.1	2.19
	Weston	172	32	18.6	279	14	293	37	12.6	50.0	1.70
	Willian	86	4	4.7	85	0	85	4	4.7	60.0	0.99
Sub-total		2120	253	11.9	3635	60	3695	287	7.8	45.7	1.74

Registration District	Parish	Method 1			Method 2					Proportion farms with at least one	Index of Casualization (2)/(1)
		No. Labs (1)	Living-in	%	No. Labs(2)			Living-in	%		
					Empl.	Pauper/ unempl.	Total				
Royston	Anstey	136	7	5.1	131	2	133	7	5.3	40.0	0.98
	Ardeley	69	9	13.0	149	1	150	9	6.0	25.0	2.17
	Ashwell	212	0	0.0	287	5	292	0	0.0	0.0	1.38
	Aspenden	54	6	11.1	101	8	109	6	5.5	50.0	2.02
	Barkway	186	1	0.5	173	1	174	1	0.6	7.1	0.94
	Barley	130	2	1.5	181	13	194	2	1.0	20.0	1.49
	Buckland	85	0	0.0	64	6	70	1	1.4	0.0	0.82
	Cottered	86	5	5.8	93	0	93	5	5.4	21.4	1.08
	Hinxworth	49	1	2.0	100	0	100	1	1.0	20.0	2.04
	Hormead, Great	70	2	2.9	149	4	153	2	1.3	14.3	2.19
	Hormead, Little	80	6	7.5	27	0	27	8	29.6	75.0	0.34
	Kelshall	15	0	0.0	99	0	99	0	0.0	0.0	6.60
	Layston	52	4	7.7	130	1	131	4	3.1	50.0	2.52
	Meesden	35	1	2.9	45	1	46	1	2.2	14.3	1.31
	Nuthampstead	49	0	0.0	86	1	87	0	0.0	0.0	1.78
	Reed	64	6	9.4	79	1	80	8	10.0	40.0	1.25
	Royston	51	0	0.0	82	5	87	0	0.0	0.0	1.71
	Rushden	66	12	18.2	54	0	54	12	22.2	60.0	0.82
	Sandon	192	8	4.2	204	6	210	8	3.8	25.0	1.09
	Therfield	107	4	3.7	328	5	333	6	1.8	13.6	3.11
	Wallington	84	3	3.6	77	0	77	3	3.9	50.0	0.92
	Westmill	70	11	15.7	100	2	102	11	10.8	80.0	1.46
	Wyddial	67	2	3.0	45	2	47	2	4.3	33.3	0.70
Sub-total		2009	90	4.5	2784	64	2848	97	3.4	23.1	1.42

Registration District	Parish	Method 1			Method 2					Proportion farms with at least one	Index of Casualization (2)/(1)
		No. Labs (1)	Living-in	%	No. Labs(2)			Living-in	%		
					Empl.	Pauper/ unempl.	Total				
St Albans	St Albans (parish)	0	0	0.0	0	0	0	0	0.0	0.0	0.00
	St Michael (urban)	26	3	11.5	75	0	75	3	4.0	100.0	2.88
	St Michael (rural)	119	33	27.7	168	3	171	46	26.9	68.2	1.44
	St Peter	11	3	27.3	32	0	32	3	9.4	33.3	2.91
	St Stephen	198	48	24.2	352	5	357	53	14.8	72.4	1.80
	Out-hamlets	170	28	16.5	310	0	310	40	12.9	41.9	1.82
	Harpenden	177	36	20.3	360	0	360	41	11.4	44.4	2.03
	Redbourn	126	29	23.0	308	1	309	34	11.0	64.0	2.45
	Sandridge	255	52	20.4	185	3	188	57	30.3	80.0	0.74
	Wheathampstead	169	29	17.2	385	3	388	47	12.1	40.7	2.30
Sub-total		1251	261	20.9	2175	15	2190	324	14.8	57.3	1.75
Ware	Broxbourne	28	0	0.0	13	0	13	2	15.4	0.0	0.46
	Eastwick	16	1	6.3	32	0	32	1	3.1	25.0	2.00
	Gilston	18	3	16.7	40	0	40	3	7.5	66.7	2.22
	Great Amwell	38	8	21.1	87	0	87	8	9.2	80.0	2.29
	Great Munden	93	21	22.6	151	3	154	21	13.6	69.2	1.66
	Hoddesdon	50	0	0.0	67	0	67	0	0.0	0.0	1.34
	Hunsdon	34	2	5.9	101	0	101	2	2.0	100.0	2.97
	Little Munden	93	18	19.4	137	6	143	18	12.6	72.7	1.54
	Standon	252	40	15.9	423	13	436	45	10.3	50.0	1.73
	Stanstead Abbots	66	2	3.0	119	2	121	2	1.7	22.2	1.83
	Stanstead St Margaret	22	0	0.0	18	0	18	0	0.0	0.0	0.82
	Thundridge	65	18	27.7	105	2	107	18	16.8	90.0	1.65
	Ware	101	7	6.9	194	7	201	7	3.5	42.9	1.99

Registration District	*Parish*	*Method 1*			*Method 2*					*Proportion farms with at least one*	*Index of Casualization (2)/(1)*
		No. Labs (1)	*Living-in*	*%*	*No. Labs(2)*			*Living-in*	*%*		
					Empl.	*Pauper/ unempl.*	*Total*				
	Widford	42	8	19.0	109	0	109	10	9.2	66.7	2.60
	Wormley	25	3	12.0	40	0	40	3	7.5	50.0	1.60
Sub-total		943	131	13.9	1636	33	1669	140	8.4	50.0	1.77
Watford	Aldenham	161	39	24.2	282	3	285	42	14.7	42.9	1.77
	Bushey	68	6	8.8	115	0	115	6	5.2	20.0	1.69
	Watford	227	39	17.2	383	5	388	61	15.7	34.1	1.71
	Rickmansworth	324	49	15.1	574	8	582	60	10.3	23.4	1.80
	Sarratt	36	7	19.4	101	0	101	7	6.9	50.0	2.81
	Abbots Langley	155	32	20.6	272	0	272	39	14.3	51.7	1.75
Sub-total		971	172	17.7	1727	16	1743	215	12.3	34.1	1.80
Hertfordshire		11,968	1622	13.6	20,036	379	20,415	1853	9.1	42.5	1.71
1851 Census Report (Herts Registration County)		14,941	n/a	n/a	n/a	n/a	23,509	1864	7.9	n/a	1.57

Smallholdings in Norfolk, 1890–1950: a social and farming experiment*

by Susanna Wade Martins

Abstract

The smallholding movement is unique in modern agricultural history. It is the only occasion on which we see the promotion of small, rather than ever-larger farming units. Their creation had a profound, if short-lived affect, both physically and culturally on the rural scene: yet the history of the movement has still to be written. The documentation for the setting up and administration of smallholdings in Norfolk where by 1930, the County Council was the largest landowner in the county, is particularly complete. After surveying the national background, this paper will look at how far the aims and aspirations of the promoters of smallholdings were met in Norfolk during the years from 1890 to 1950.

Newlin R. Smith, writing in 1946, listed the 'hopes' which had inspired the smallholdings movement from its inception to the outbreak of the Second World War. These included a desire to halt the decline of small farms and so of rural populations, the belief that smallholdings would provide a way for 'new blood' to start to climb the farming ladder, thus providing the possibility of a career progression for the agricultural labourer, and a conviction that smallholdings would increase the political stability of the countryside at a time when agricultural unions were beginning to get a foothold in rural areas. Giving farm workers a stake in the land would make them more conservative in outlook. Finally there was the belief that small farms were more productive and so would help to increase the home-grown food supply.[1] Immediately after the First World War smallholdings were seen as a way of rewarding returning soldiers. This was particularly so in crofting areas of Scotland where the opportunity for solving the land hunger created by the Highland clearances was seized with enthusiasm.[2] In the 1930s it was hoped that smallholdings would relieve long-term unemployment as well promoting good health and military fitness.

All these aims can be traced back to the early allotment movement and are echoed in several of the articles in the *Annals of Agriculture*.[3] In 1819 an act of Parliament authorized overseers of

* This paper arises out of research on the agricultural landscape of East Anglia, *c.*1870–*c.*1950 being carried out with Dr Tom Williamson in the School of History, University of East Anglia and supported by a Leverhume grant. I would like to thank Dr Williamson for his help and advice in the writing of this paper, and the staff of the Norfolk Record Office and Norfolk Property Services in Norwich and Kings Lynn for their assistance.

[1] Newlin R. Smith, *Land for the Small Man* (1946), pp. 207–18.

[2] L. Leneman, 'Land settlement in Scotland after World War I', *AgHR* 37 (1989), pp. 52–64.

[3] J. Burchardt, *The allotment movement in England, 1793–1873* (2002), pp. 12–17.

the poor to acquire blocks of land of up to 22 acres for the purpose of letting land to the poor and unemployed. This was seen purely as a method of poor relief and resulted in the creation of some parish allotments. However, by the 1830s there was a campaign for smallholdings led by John Bright and J. S. Mill who established the Liberal Land Tenure Association. The same ideal is also reflected in the land settlements of the Chartist movement. A few private landowners also took the initiative, one of the first being Mr B. Hall of Six Mile Bottom, Cambridgeshire who, to provide an alternative to wage labour during the 1874 lockout, spent £40,000 on buildings, cottages and laying out allotments and smallholdings for up to 40 tenants. Hall reckoned in 1894 that of the 20 who took on the larger holdings, half were moderately successful, a quarter were struggling and a quarter were failures. Most of the successful ones were, in fact, tradesmen with other jobs.[4] Joan Thirsk quotes several other like-minded landowners and clergymen such as William Lea, vicar of St Peter's Droitwich, who wrote in 1872 of the social and moral benefits of smallholdings and the advantages of creating a 'farming ladder'.[5]

Agitation for smallholdings of between five and 50 acres, and allotments of under five acres, increased in the 1880s, and it was Jesse Collings, an MP for Ipswich, who initiated further legislation in the House of Commons. Several enabling acts were passed of which the first was The Allotments Extension Act of 1882. Where a need for land could be demonstrated, a public enquiry had to be held, and if no suitable land was available for sale or rent, a Compulsory Purchase Order could be issued through a Provisional Order of the Board of Agriculture and land bought by the Local Sanitary Authority. In 1894 these powers were transferred to the new Rural District Councils. Initially land could be bought for allotments of less than five acres, but this did not satisfy Collings, who wanted to see smallholdings of up to 50 acres created. Having purchased the land, local authorities were authorised to take out loans for improvements such as drainage, enclosure, roads, buildings and making village greens.

It was not until 1892 that Collings managed to secure the passage of his Smallholdings Act. It was supported by the prime minister, Lord Salisbury who said in a speech in Exeter that year that although he did not think smallholdings were the most efficient means of land utilization, the holders of such farms would be 'the strongest bulwark against revolutionary change'.[6] This emphasis on social and ideological, as opposed to economic and agrarian aims, is noteworthy. The Act allowed – but did not oblige – county councils to buy land for smallholdings as distinct from allotments. It was intended to create 'peasant' proprietors as the holdings were to be sold by hire-purchase to the occupants with one-fifth of the purchase price to be paid as a down-payment and the balance over a number of years.[7] This put smallholdings out of the reach of most potential applicants, especially as they had also to demonstrate that they had sufficient working capital, estimated at £5 per acre, to take on the holding, and so generally little was done. Smallholding proprietorship was likely to defeat one of the aims of the movement. Establishment on his own land was likely to discourage, if not prevent, the new owner from moving on 'up the farming ladder'.

[4] H. Laxton, I. Hodge, and G. Davidson, *Smallholdings under pressure* (1987).

[5] J. Thirsk, *Alternative agriculture, a history* (1997), p. 207.

[6] Quentin Bone, 'Legislation to revive small farming in England, 1887–1914', *Agricultural Hist.* 49 (1975), pp. 658–9.

[7] C. W. Rowell, 'County Council smallholdings, 1908–58', *Agriculture* (1959), p. 109.

Government grants and loans at 3½ per cent were available for purchase and for the drawing up of schemes, but up to the end of 1902, only eight county councils in England and Wales had made use of the act and only 569 acres had been bought. One of the reasons put forward by Collings for this poor uptake was that county councils were generally dominated by the landowning class who benefited from the established tripartite landlord/tenant/labourer *status quo*. Collings thought that the Act was most likely to be implemented in counties where councillors were of the 'non-territorial class … free from prejudice and who, from social and political considerations, have taken a wide view of the question'. He quoted as an example, Worcestershire, the first county to avail itself of the act, where, in 1892 a farm of 146 acres was purchased and divided into 32 smallholdings. However, as we shall see, there was no lack of enthusiasm for creating smallholdings on the landlord-dominated Norfolk County Council.[8]

By contrast, Nottinghamshire, remained unenthusiastic as late as 1922. Although the county committee was set up in 1892, no land was bought until it was compelled to do so after 1907. In 1922, it refused to buy land offered it by the Ministry of Agriculture and in 1924, the Council's chairman observed, 'My personal inclination would be to sell the whole of the Council estate if it were practical'. The reasons for this lack of interest could be that the county was well provided with private smallholdings, and gardens and allotments in the mining areas provided by both the Duke of Portland and the rural district councils.[9]

Alongside this move to establish farm workers on the land was another 'back-to-the-land' movement with entirely different origins. A series of agrarian communes and cottage farm settlements had been started by middle-class socialist and anarchist intellectuals in the 1880s and '90s. Rather than seeing their smallholdings as the 'first step on the ladder', they were their ultimate goal. Most were short-lived, partly because of the participants' lack of practical farming knowledge. One of the earliest of the cottage settlements was the Methwold Fruit Colony in the Norfolk fens, set up in 1889–90 by Robert Gooderich. Beginning with two acres, half of which he planted with fruit trees, Gooderich sold his produce, including newly-laid eggs, directly to contacts in London, thus dispensing with the need for a middleman. By 1900 he had built a small jam factory behind his house for processing surplus fruit. However, by 1908, there is no mention of the jam factory in the local directory. Following articles in various newspapers and vegetarian publications (all settlers had to be vegetarians) other Londoners followed him to Methwold and neighbouring fields were bought and divided up. By 1900 there were said to be about 50 settlers on two- and three-acre plots. Each settler needed about £500 to buy his land, build his house and buy tools, seeds and fruit trees, thus excluding the urban working class. An editorial in the *Cable*, a magazine for Lord Winchelsea's farming community, wrote of the Methwold experiment: 'But at Methwold in Norfolk, a new order of things has been inaugurated. The land there has been taken possession of not by country folk but by clerks and tradesmen from London …'.[10] Along with five others, Gooderich and another of the original settlers, Edward Frostick, are described as 'fruit growers' in the 1908 edition of Kelly's *Directory*, while three others are described 'fruit growers' on the

[8] J. Collings, *Land reform, occupying ownership, peasant propriety and rural education* (1906), pp. 212–3.

[9] B. A. Wood, 'The development of the Nottinghamshire County Council smallholdings estate, 1907–1980', *East Midlands Geographer* (1982), p. 26.

[10] J. Marsh, *Back to the Land* (1982), pp. 113–5.

'fruit colony'. But no fruit growers are listed in the 1916 Kelly's and all the 1908 names have gone.[11]

A late example of this type of project was the women's smallholding colony at Lingfield in Surrey, promoted by the Women's Farm and Garden Association. Mrs Wilkins, who as Louise Jebb, had been responsible for an important survey of the early smallholdings published in 1907, was chairman of the sub-committee responsible for the colony. Land was bought in 1920, but by 1934 the last holding had been sold.[12]

At the same date as the first Londoners were arriving in Methwold, the Norfolk Smallholdings and Allotments Committee was set up in response to the Allotment Extension Acts to provide land for local agricultural workers. In contrast to that in Worcestershire, it consisted mainly of councillors who were large landowners including members of the Boileau, Buxton, Le Strange, Ripenhall, Wodehouse and Colman families. The first chairman was Lord Walsingham, followed by Sir Hamon Le Strange. One of the first cases it dealt with that year was an application from 22 inhabitants of Besthorpe who called upon the Committee to help find land in the parish for allotments which could either be purchased or rented by the Wayland Sanitary Authority. After much negotiation suitable land was found.[13] Similar requests for small pieces of land came from elsewhere.[14] The individual allotments required were normally under an acre and the rent charged was between 30*s*. and £2 an acre. Usually land could be found by negotiation and only rarely was it necessary to resort to compulsory purchase. During 1895 there were 32 representations from Norfolk parishes; some were satisfied but 22 were still pending at the end of the year.

Collings, in the book he wrote in support of his second Purchase of Land Bill of 1905, argued on rather shaky historical evidence that since the middle ages England had been reduced from a society of independent yeoman and landowning peasants to one dominated by large estates, tenant farmers and subservient labourers. The decline of the farming interest at the expense of the industrial had resulted in a reduction in the amount of wheat grown with a corresponding dependence on imports. The need to provide an alternative to socialism as a means towards social justice, the necessity of increasing the home food supply, partly as a strategy for national defence, especially in products suited to small scale production such as poultry, horticultural and diary products, the need to reduce rural depopulation and pauperism, and the encouragement of a strong and healthy nation were all arguments advanced by Collings to justify smallholdings.[15] He saw agricultural workers as the degraded remnants of a proud and independent peasantry and believed that if they could be restored to their former condition, they would be a stabilising force in the countryside against radical social upheavals.[16]

[11] Norfolk Record Office (hereafter NRO), MC451/11; *The Independent Vegetarian Advocate*, July 1891; Kelly's *Directory*, 1908 edn, p. 262.

[12] For a full account of the Lingfield experiment, see Ann Meredith, 'From ideals to reality: The women's smallholding colony at Lingfield, 1920–1939', *AgHR* 54 (2006) pp. 105–21.

[13] NRO, c/c10 563, Smallholdings and allotments committee (hereafter SAC) minute book, 1889–1895, 4 May, 1 June, 3 Aug. 12 Oct. 21 Oct. 1889.

[14] Kelling, St Faiths, Bawburgh, Litcham, Shipdham, Wells, Southrepps, Erpingham, Clenchwarton and Salthouse. The St Faiths request for eighteen acres resulted in a public enquiry and a compulsory purchase order (BPP, 1890–1, I, p. 63, 'Bill to confirm Provisional Order by Norfolk County Council').

[15] Collings, *Land Reform*.

[16] Bone, 'Legislation', p. 654.

I

The leading advocate of smallholdings (as distinct from allotments) in the east of England was the Lincolnshire MP, Richard Winfrey. He realised that a system which only allowed for the buying rather than the renting of land disqualified many applicants and so he founded and became chairman of the Lincolnshire Smallholdings Association in 1894 (the first of its kind in the country). This rented 650 acres around Spalding from a fellow enthusiast, Lord Carrington, which was then let to 202 tenants. In 1902 a neighbouring farm was leased and divided into smallholdings on which early potatoes, celery, peas, broad beans, turnips, mustard for seed, and bulbs were grown. In 1906 Lord Carrington built six houses and sets of premises suitable for farms of 40 acres on his land. They were constructed of creosoted wood and galvanized iron and consisted of a barn, hay loft, implement shed, stable for two horses, byre for two cows and an enclosure for calves and pigs.[17] Winfrey's influence spread into Norfolk and in 1900 the Norfolk Smallholdings Association was founded, with Winfrey as chairman and Mr Jermy of Kings Lynn as secretary. Farms at Swaffham, Whissonsett and Watton were bought and divided. The 97-acre Whissonset farm was divided between 18 tenants, all of whom lived in the village. No new buildings were erected on any of the three farms and nearly all the tenants had other work. Rider Haggard described the Whissonsett farm in his survey of rural England as bringing new life to a village in which there had been two disused windmills, empty cottages and derelict farm buildings. The system of farming was traditional with cereals being grown and livestock kept.[18] Unlike the Fenland farms, they were not run as market gardens, but rather on a mixed farming system, which was not as time-consuming for those with other employment. The farm at Watton was said to have a 'prosperous look. The land is better farmed and cleaner than when it was taken on'.[19]

In 1902 a national Small Holdings Association was formed. This bought the 376-acre Cudworth estate in Surrey and divided it into holdings of between three and 25 acres with cottages built on some of them. The Association was run on commercial lines and aimed to recoup its capital by the sale of the holdings.[20] As well as the Association, other voluntary bodies became involved in the movement. In 1906, the Salvation Army set up a company called Land for the People Ltd with the aim of buying land to let as smallholdings. Four hundred acres were bought at Boxstead in Essex and divided into 80 plots. On each there was to be three quarters of an acre of fruit trees and the holdings were to be cultivated by spade culture. Tenants were to be encouraged to keep pigs and poultry and to be market gardeners. They were to form a Society of Growers to act as a co-operative and the farmhouse would be occupied by an 'overseer'. The farm buildings were to be converted into a grading store for the whole colony, and in 1907 22 pairs of cottages were being built.[21] Farm colonies were also established by East London Poor Law Guardians in Essex under the leadership of George Lansbury and with financial support from a wealthy American, George Fells. Land for further colonies was bought, including the 1300-acre estate at Hollesley Bay in Suffolk which had been an agricultural college for the sons

[17] L. Jebb, *Smallholdings* (1907), pp. 216–8.

[18] H. Rider Haggard, *Rural England* (2 vols, 1902), II, p. 506.

[19] Jebb, *Smallholdings*, p. 234.

[20] Collings, *Land Reform*, p. 221.

[21] Jebb, *Smallholdings*, p. 426.

of gentlemen. By the end of 1905 500 unemployed Londoners were being trained for a new life and the colony was to be a model for co-operation rather than competiton. However, with a change of government in 1906, the status of the colony changed to being little more than an overflow workhouse.[22] There were also smallholdings on some private estates. Rider Haggard noted some in the Waveney valley (Suffolk) where by hard work their tenants were making a living. They were mostly farmed by families with a labouring background.[23]

As a result of pressure from Jesse Collings, Richard Winfrey and Lord Carrington, further Smallholdings and Allotments Acts were passed in 1907 and 1908. These acts redefined allotments as holdings of up to five acres and required every county council to set up a Smallholdings and Allotments Committee. Councils were given powers of compulsory purchase. Land could also be let, rather than sold to applicants and efforts were to be made to promote co-operatives. Thus Collings' dream of a landowning peasantry was dropped, but as he admitted, being a tenant of an elected county council was preferable to being a tenant of a private landlord. The publicity given to the passing of the acts focused public attention on the issue of smallholdings and the *Daily Mail* started one as an example for public guidance.[24] The government was particularly keen that 'colonies' of smallholdings should be established so that tenants could work as a community. Land could then be let directly to co-operative associations: the Board of Agriculture published leaflets on co-operation. Earl Carrington told a National Congress on Rural Development in 1911 that 'What we have to aim for is a peaceful rural revolution'.[25] Between 1908 and 1914, 205,103 acres were acquired in England and 14,045 smallholders settled on land.[26]

II

In 1902 a group of labourers in the Norfolk parish of Nordelph asked Mr Winfrey to help them obtain allotments. One hundred and thirty men petitioned Norfolk County Council requesting 500 acres. Winfrey bought 50 acres there, but this was only a start and in 1904, the County Council made its first purchase of 91 acres at Chapel Farm, Nordelph on which 35 tenancies of between one and twelve acres were established. Twenty eight of the tenants were agricultural labourers, one a carpenter and the others included a baker and a grocer. One tenant was a traveling showman in the summer who hired his horses to his neighbours to work their fields in the winter. The farm included a house and buildings which had to be divided between the two main tenants. They were all part-time holdings on which wheat, potatoes and mangolds were grown. The land was described as 'very good, intensively cultivated, mostly near the village and suitable for smallholdings'. The success of the scheme was attributed to the availability of part-time piece work locally and the fertility of the soil.[27] By 1950 the pattern of holdings had changed and there were only two full-time and 19 part-time tenants on Chapel Farm.[28] In 1907 the neighbouring Parkfield Farm in Outwell was purchased and more smallholdings created.[29]

[22] Marsh, *Back to the Land*, pp. 132–3.

[23] Rider Haggard, *Rural England*, II, pp. 403–5.

[24] Smith, *Land for the small man*, p. 78.

[25] NRO, c/c10/566, SAC minute book, 1909–1911, pp. 219–20.

[26] Bone, 'Legislation …', p. 661.

[27] Jebb, *Smallholdings*, p. 342.

[28] Norfolk Property Services, Guard Book 3, p. 45.

[29] NRO, c/c10/565, SAC minute book, 1907–9, purchase completed by June 1907.

Norfolk is the ideal county in which to undertake a study of county council smallholdings. It was one of the first to create them and by 1914 its 13,000 acres of council-owned land, supporting about 1300 tenants, made it a leader in the field. Next in size was Cambridgeshire where the council owned 9217 acres supporting 1194 tenants. The much smaller county of the Isle of Ely owned 6950 acres, supporting 1051 tenants.[30] It was in the areas with a tradition of small farms and market gardening where demand for smallholdings was greatest and the holdings most successful. By the Second World War, Norfolk County Council owned over 30,000 acres of land, all let in smallholdings, making it the largest landowner in the county. As late as 1984 24 per cent of the total national area of smallholdings lay in Cambridgeshire, Lincolnshire and Norfolk.[31]

Not only were smallholdings numerically important in the county, but they are well recorded. The minute books of the County Council's Smallholdings and Allotments Committee start in the 1890s and are held in the Norfolk Record Office along with some plans and reports. Other documents remain with Norfolk Property Services and have been consulted there.[32]

From 1908, the Norfolk committee was actively looking for land to buy and established a sub-committee to identify and acquire suitable properties. Between 1908 and 1914 it used its powers of compulsion 94 times (more than any other council).[33] Although a large proportion of the Committee's members were landowners, they were happy to compel Lord Stafford to give up 34 acres at Bawburgh and Lord Townshend 49 acres at South Creake. In 1911 40 more acres in South Creake were compulsorily leased from Lord Leicester. A significant purchase of 169 acres at Brick Kiln Farm, Whissonsett was made in 1909 for 13 prospective tenants of between five and 27 acres. They would pay 26*s*. 6*d*. per acre plus £15 per annum for the shared use of the house and premises. Elsewhere, between June and September 1909, 171 acres was leased for 21 tenants and 461 acres bought for 38 tenants. Compulsory leasing orders had been obtained but these were often lifted when suitable alternative land was offered for purchase. By the end of 1909 the Council owned 2423 acres and had leased a further 2024 acres providing holdings for 480 tenants. By the end of 1912 the acreage had shot up to 10,306 acres which supported 986 tenants.[34] The most extensive holdings in east Norfolk were on the good loam lands on the edge of the Broadland marshes where nearly all of the Burlingham parishes, covering 3063 acres, were purchased in 1914. By 1914 £30,7738 had been spent on buying, and £4798 annually on renting land.[35]

Once the land had been bought, it had to be equipped. In February 1910 the first sets of premises were erected at West Hall, Denver, consisting of a dairy and three cottages. Often the purchase had included a farm house and buildings which could be divided, and cottages which could be improved. In 1913 two sets of farm premises erected in the Fens had cost £76 and £83 respectively. By 1918 the Committee had acquired 141 houses and erected a further 58.[36]

[30] Smith, *Land for the small man*, p. 84.

[31] Laxton, Hodge and Davidson, *Smallholdings*, p. 15.

[32] I would like to thank the staff of Norfolk Property Services, both in Norwich and Kings Lynn, for their assistance in this research.

[33] Smith, *Land*, p. 80.

[34] NRO, c/c10/566, SAC minute book, 1909–13, fo. 261.

[35] NRO, c/c10/567, SAC minute book, 1913–16, fo. 131.

[36] NRO, c/c10/568, SAC minute book, 1913–16, fo. 38 (annex to minutes of 23 May 1918).

Acquiring vacant possession of cottages could require draconian methods which must surely have gone against the grain for Agricultural Union leaders on the Committee such as George Edwards. In November 1910, a tenant of a cottage in Upton refused to leave and was given until the following April to find somewhere else to live. Existing cottage tenants on the newly-purchased Burlingham estate refused to move. In November 1921, the special Burlingham sub-committee reported that they had 'utterly exhausted our powers to obtain vacant possession of these last-named cottages, principally because of a lack of alternative accommodation. We are now asking the committee for guidance'. The 'clerk was instructed to take necessary steps to obtain vacant possession of cottages required'.[37]

Once the tenancies had been settled, the Norfolk Committee carried out an annual inspection – a system that lasted until 1924. Of the 813 tenants in 1913, only 108 were categorised as 'very highly satisfactory' while the largest category (296) were 'satisfactory'. Thirty nine were either 'not satisfactory' or 'very unsatisfactory'.[38] Specific farms occasionally gave cause for concern. A report on the smallholdings on a 287-acre farm at Litcham was presented in June 1914. The land was said not to be being cultivated to its best advantage. The working of heavy land was not understood. The farm, it was reported, should be cultivated on a four-course system, but a number of tenants were growing corn crops in succession. Mr Read held 50 acres, 26 acres of which was corn and 20 acres down to roots. He was 'doing his best and will probably be satisfactory subsequently', while Mr Howe who held five acres was growing only corn and 'will require careful supervision'. Both of these are typical comments on the tenants' farming.[39]

III

The outbreak of war in 1914 had a profound affect on smallholdings. The purchase of land ceased and the Purchasing Sub-committee was disbanded. Like all the farms in the country, smallholdings were subject to reports of the Local War Agricultural Committees in 1917. In Norfolk, only the unfavourable reports survive. The farm at Litcham was still not satisfactory. Of the 287 acres, only six were in wheat and much of the land was in a 'foul state' but there was said to have been some improvement over the previous four years. There was neglected land at the coastal village of Brancaster, a holding at Whissonset would be difficult to fill when the tenant joined the army, while nine acres at Repps and 16 acres at Fincham were badly farmed. Eight acres at Ten-Mile Bank were in a 'neglected condition'. A report on the nine holdings at Low Farm, South Creake in 1916 was very critical. The 27 acres held by Mr Overton was 'a wilderness of weeds', but it was pointed out that it would be difficult to find another tenant in wartime. At Vicarage Farm, North Elmham, meadows were very wet due to the silting of the river. German prisoners of war were employed on river works, starting well downstream and it was suggested that those held at the nearby workhouse might also be available.[40] The secretary of the County War Agricultural Committee made the comment, 'My committee also think that the County Council might generally notify their tenants of the importance of cultivating their holdings in a

[37] NRO, c/c10/569, SAC minute book, 1916–21, fo. 25.

[38] NRO, c/c10/568, SAC minute book, 1913–16, p. 24

[39] NRO, c/c10/567, SAC minute book, 1913–16, pp. 155–6.

[40] NRO, c/c10/568, SAC minute book, 1916–21, fo. 7.

proper manner'.[41] In fact the war years saw a general reduction in the standard of cultivation if the annual inspection findings are to be believed. In 1916 only 95 smallholdings were classified as 'very highly satisfactory' while the highest number (534) were only 'satisfactory'. As men went away to fight, their holdings were neglected and new tenants could not be found.

IV

Even before the war ended, there was interest in the possibility of providing smallholdings for ex-servicemen. A government report published in 1918 investigated the workings of the 1908 act county-by-county.[42] Only in Derbyshire was there difficulty in letting holdings and frequent changes of tenant, both ascribed to the high rents and lack of tenant capital. In the market gardening areas of Bedfordshire and Lincolnshire, on the other hand, the scheme had been an 'unqualified success'. More detail is given in the report on Essex. Here smallholdings were divided into four types. The smallest and least successful were the part-time holdings. Some were well farmed but many were neglected. A specialist type, found only in Essex, were smallholdings producing seed under contract to companies who provided the initial stock, so little capital was needed. Although the work was light compared with other agricultural work, it required skill and provided a good living. Thirdly there were market gardens of about ten acres a piece. They could be worked by the smallholder and casual labour and were mostly farmed very well and successfully. Finally there were the mixed holdings of 25 to 50 acres which were typically worked with two horses, the smallholder and another helper. A 25-acre holding provided a good living for a farmer who concentrated on dairying with a milk delivery round. There are no direct comments on Norfolk beyond the number of tenants (1350). The Norfolk failure rate (5.7 per cent) is about average for the other counties listed, with Middlesex the highest at 22 per cent.

The Land Settlement (Facilities) Act (1919) provided a fund of £20 million (of which £710,000 was allocated to Norfolk) to buy and equip smallholdings for ex-servicemen, giving county councils increased powers to purchase compulsorily suitable land. Alongside this went the Smallholdings Colonies Act which provided for the settlement of ex-servicemen in co-operatives. Land was purchased at Patrington in the East Riding, at Heath Hill in Shropshire and Sutton Bridge and Holbeach in Lincolnshire. Originally the plan was to divide the land into fruit farms, market gardens and dairy farms, but it was decided to farm Patrington as a single holding on a profit-sharing basis. However, the idea was abandoned in 1920 and conventional smallholdings created. Norfolk had toyed with the idea of following the government advice and considered running the Burlingham estate as a colony, but the idea was soon abandoned.[43]

Altogether, 24,000 ex-servicemen were resettled in England and Wales. The number of smallholdings more than doubled and that of houses quadrupled. This was 'an outstanding effort in the history of land settlement in England and Wales but did not by any means satisfy

[41] NRO, c/c10/568, SAC minute book, 1916–21, fo. 14 (annex to minutes of 10 Mar. 1917).

[42] BPP, 1918, V, (Cd 2903), *Report on the working of the smallholdings acquired under the Smallholdings and Allotments Act, 1908*, pp. 371–80.

[43] MAF, *Land settlement for England and Wales, being a report under the smallholdings and allotments acts 1908 to 1919* (1925), p. 96.

the number of applications from ex-servicemen'.[44] In Surrey 2162 acres was bought between 1919 and 1926, providing holdings for 257 ex-servicemen.[45] In Sussex by May 1921, 181 applicants had been accepted, but only 83 had been settled on 1055 acres of newly acquired land and compulsory powers were being used to secure more.[46] In Cambridgeshire there had been requests from 952 applicants for 15,300 acres. To help satisfy the demand, the Council began to acquire land by compulsory purchase. Shelford Bottom Farm was bought from Caius College to train disabled ex-servicemen. At the same time the War Agricultural Executive Committees were urging councils to avoid aggravation by acquiring land at change of tenancy in order to cause least disturbance.[47] In Norfolk there were no such inhibitions. Compulsory purchases were being made from members of the Smallholdings Committee such as Sir Thomas Hare, which suggests that the price being offered was a good one. Westerby, Boyces, Fen and Widders Farm (759 acres) were bought from him in 1919, at a cost of £41,430, or £54 an acre, a not unreasonable price for good fen-edge land although land could make as much as £88 an acre on the Isle of Ely.[48]

The government still felt that smallholdings should form co-operatives or 'colonies' and a circular letter from the Board of Agriculture in 1919 under the signature of A. D. Hall urged county councils to buy land in sufficiently large blocks for them to be established. Councils should write to all the principal landowners asking for land, and letters were to be sent to all ex-servicemen who were returning to the land pointing out their right to apply for a smallholding. The requirements of local men should be met before applications were accepted from outside the county.[49]

In 1919 the Norfolk purchasing sub-committee was reinstated and reports came flooding in from the local sub-committees suggesting farms that could be bought. Land that was of poor quality, too isolated or too far from a road was usually rejected. At Glebe Farm, Bale (131 acres), the tenant and his father had been there for 40 years and wanted to stay. As there were no ex-servicemen seeking smallholdings in the area, the recommendation was against purchase. The occupier at Manor Farm Hilgay (229 acres) was not so fortunate. Although a longstanding tenant, he was only on a yearly lease and was evicted. Between January and October 1919 5669 acres were bought, costing £101,681 (an average of only £17 an acre). Orders for compulsory purchase had been made in the north Norfolk parishes of Salthouse and Kelling. A report to the committee in July stated over 12,000 acres had been inspected and that 3782 acres, providing for 178 tenants would be available for occupation in September 1919. Purchases continued to meet the demand for tenancies. At a meeting in the Fenland parish of Welney in June, 30 applicants registered their interest in 600 acres and offered to pay rents of between 60*s*. and 70*s*. an acre. They were unanimous in asking the County Council to proceed with compulsory purchase. In the west of the county there were 612 ex-servicemen who had together applied for 7224 acres but only 1350 acres had been secured.[50]

[44] Smith, *Land for the small man*, p. 110.

[45] Meredith, 'Ideals to reality', p. 107.

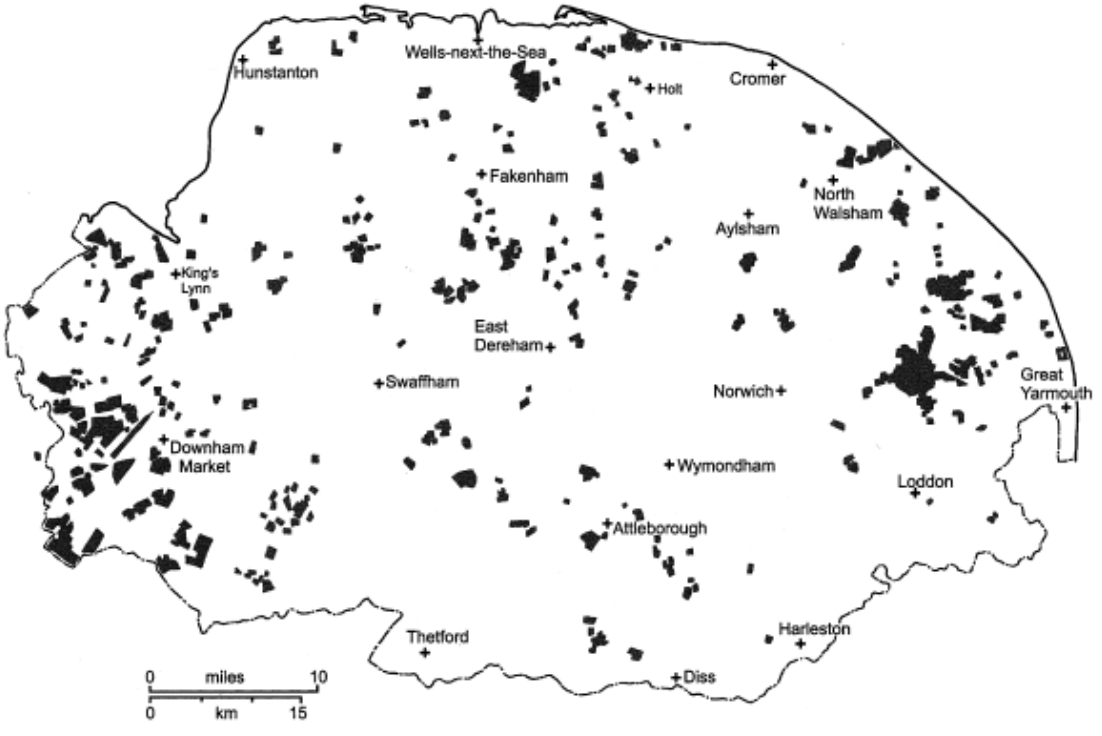
[46] C. A. Lockwood, 'From soldiers to peasants. Land Settlement schemes in East Sussex', *Albion* 30 (1998), p. 454.

[47] A. Howkins, *The death of Rural England. A social history of the countryside since 1900* (2003), pp. 88–9.

[48] Norfolk Property Services, Smallholdings survey books, 1951, 6, pp. 25–8; E. Whetham, *Agrarian History of England and Wales*, VIII, *1914–39* (1978), p. 137.

[49] NRO, c/c10/568, SAC minute book, 1916–21, inserted after fo. 48.

[50] NRO, c/c10/568, SAC minute book, 1919–20, p. 60.



MAP 1. Map to show distribution of County Council smallholdings within Norfolk by 1926. (redrawn by Phillip Judge)

By 1923 the Council's main areas of holdings were concentrated in two contrasting but very fertile regions of the county (Map 1). In east Norfolk, on the Broadland edge, there were 115 County Council smallholdings in Burlingham and over 20 in each of the neighbouring parishes of Ludham, Potter Heigham, Martham and Beighton. Here, medium-sized, prosperous farms, centred on large well-built houses and farmsteads, often dating back to the seventeenth century, were typical. The houses and buildings could be divided for the new tenants. The smallholders were mainly engaged in mixed farming, bullock feeding and the rearing of young stock, although some holdings were devoted to market gardening and fruit growing. To the west the main areas of smallholdings were in the Fens where rich soils meant that small-scale farming concentrating on fruit and vegetables had long been practiced and large landowners scarce. There were 105 County Council holdings in Terrington St Clement and 116 in Welney. Elsewhere, they tended to be in groups of under twelve, falling well short of the colonies that the Board of Agriculture had advocated. On these valuable lands of the black and silt fens, fruit growing remained important. The County Council provided a light railway running through Fern House Farm, Terrington which was divided into 21 smallholdings producing soft fruit and apples.

This policy of expansion through purchase was short-lived and went into reverse after 1925 with the end of the Ministry of Agriculture's ex-servicemen's scheme begun under the Land Settlement Act. The Smallholdings and Allotments Act of 1926 handed financial responsibility over to the county councils. However, loans of up to 90 per cent of the value of the property

and repayable over sixty years were still available to the county councils from the Ministry of Agriculture. At this time Norfolk owned 27,479 acres, making it the county with the largest area of land (roughly two per cent of the area of the county) held for smallholdings by a local authority.[51] But even before the 1925 Act, practical experience in conditions of agricultural depression had called into question the viability of smallholdings. Problems with rent arrears had quickly emerged. In 1920 and 1922 there were rebates of half a year's rent in acknowledgment of the drought of 1921 and the bad season and fall in prices in 1922.[52] In December 1923 the bad debts of 36 tenants, amounting to £1227, were written off. The debtors were described variously as 'bankrupt', 'gone away suddenly', 'in prison' and 'tenant has no money'.[53] As the depression continued into 1925, a need for further reductions was acknowledged. Notices to quit were sent to 29 tenants unless the previous year's rent was paid by the 8 October. A further £435 was written off as unrecoverable.[54] Explanations for these bad debts varied. While one man was described as having 'no means and is one of those who spends his time dodging work', other cases were described with greater sympathy. One man 'was badly gassed during the war, discharged with no pension, lung trouble set in and he has since died'. Another tenant was a war widow with two children; 'there is very little hope of the council obtaining anything further.' In January 1926 18 per cent of the annual rent roll was still outstanding. Out of a total rent due of £11,172 in the east of the county, a reduction of £446 (four per cent) was recommended and in the west where £9093 was due, a reduction of £1701 (18.7 per cent) was suggested. Neither of these sums was accepted by the Ministry, and after some negotiation somewhat smaller amounts were agreed upon. From 1926 negotiations with several tenants whose rents were in arrears resulted in agreements whereby they were allowed to stay so long as the guaranteed income from their sugar beet crop was assigned to the county council.[55] Sugar beet had become the life-line for many Norfolk farmers as the crop replaced turnips in the rotation and commanded a guaranteed price. The by-products of beet pulp and tops could be fed to stock. It is clear by the mid-1920s that many smallholders were running their holdings as conventional farms in miniature rather than adopting crops particularly suited to small-scale intensive farming.

In these circumstances tenants were difficult to find, but it was reported in 1927 that although there were very few 'general applicants for smallholdings, the men who do apply are of a better average stamp than previously, and naturally so, as it requires more courage to venture in this respect with the present state of agriculture as compared with the rush between 1919 to 21'.[56] By this time small areas of land were being sold to rural district councils for housing and fields let as playing fields to parish councils.

Problems in securing rents continued into the 1930s. With the intensification of the depression, 15 per cent of the annual rent bill was in arrears in 1930. In September the sub-committee decided that 'In view of the very serious and continued fall in the prices of cereals, the

[51] Norfolk Property Services, 'Report by the County Land Agent 1925–6' (1927) [a report printed for internal circulation], p. 1.

[52] NRO, c/c10/570, SAC minute book, 1923–4, letter inserted after minutes 27 Jan. 1923.

[53] NRO, c/c10/569, SAC minute book, 1921–3, annex to fo. 63

[54] NRO, c/c10/571, SAC minute book, 1924–5, annex to minutes, 20 Oct. 1925.

[55] NRO, c/c10/572, SAC minute book, 1925–6, annex to minutes, 24 June 1926.

[56] 'Report by the County Land Agent, 1925–6', pp. 3–5.

sub-committee proposes to consider the question of making an abatement off the Michaelmas rents'.[57] Reductions of 12 per cent were granted in 1930 and 1931, but an 'abatement was no longer possible' in 1932. In 1932 £649 was written off as bad debts (the average for the previous six years had been £381) and in November 25 per cent of rents due in April were still outstanding. The fact that the number of tenants wanting to leave (23) was lower than in previous years suggests that very little alternative employment was available. The 12 per cent rent rebate was re-instated in 1933 'as prices still low' and was continued in 1934. By the end of 1934 conditions were improving and the number of notices to quit (14) was the lowest for several years.[58]

The lapsing in 1925 of the 1919 Land Settlement Act was marked by the publication of a report on its achievements.[59] It pointed to the 24,000 ex-servicemen settled, the 2249 new houses built (744 of these had been built in 1908–14) and the 250,000 acres acquired across England and Wales. It addressed the criticism that many of the ex-servicemen were inexperienced at farming by stressing that most were country-bred and many were the sons of small farmers. While there were those who believed that 'a smallholding is a difficult and laborious road leading to bankruptcy', a national failure rate of 6.5 per cent could be partly explained by the agricultural depression of the early 1920s. The report acknowledged that to be successful, a tenant needed experience, industry and capital, but held that the scheme should be judged on its successes rather than its failures. Dairying was more likely to be successful than corn, and stock than crops. Market gardening was risky, but poultry keeping and potato growing were more likely to be profitable. The record was therefore mixed. And so the immediate post-war expansion of county council smallholding came to an end.

V

Unemployment after 1931 produced problems similar to those encountered with the demobilization which followed the end of the First World War. Again, the creation of smallholdings and land settlements was seen to have a role to play in alleviating larger economic problems. A second spurt of county council purchasing with the help of government money for the resettlement of the long-term unemployed began in 1934 with the setting up of the National Land Settlement Association. This was part-funded by voluntary bodies such as the Carnegie Trustees, the Society of Friends Allotments Committee and the National Council for Social Service. The government agreed to provide grants equal to the private donations up to a ceiling of £75,000 for each of the following three years. Its aim was to buy large farms around the country which would then be divided into small units and tenants selected from amongst the unemployed. In this the Association was breaking new ground, as in previous schemes it had been considered essential that prospective tenants had farming experience. This meant that training had to be given. Agriculturalists such as C. S. Orwin were extremely sceptical about the chances of the scheme's success. They feared that these efforts towards agricultural reconstruction and the

[57] NRO, c/c10/578, SAC minute book, Feb.-Oct. 1930, quarterly report ending Sept. 1930.

[58] NRO, c/c10/581, SAC minute books, 1933–4, minutes 22 Apr. 1933, p. 3, 19 May 1934, p. 4.

[59] MAF, *Land settlement*.

relief of industrial distress would result in the re-peopling of the countryside with 'disillusioned and resentful communities'.[60]

Any land that came onto the market at this time of depression was likely to be run down, infertile and weedy so it had first to be brought back into condition. Tenants had to become members of the farm co-operative and buy and sell through it. A few hundred families, mostly from areas of high unemployment, were settled in this way. Many soon abandoned their smallholdings. The scheme was most popular where bare holdings were created near industrial villages as in Lancashire.[61] By 1939, 25 estates had been bought providing 1000 holdings. In spite of the initial problems, by 1939 two-thirds of the tenants were making over £120 a year at a time when the farm labourer could expect to earn a little over £100.[62] The project frequently prompted local resentment as farm workers were not eligible even though they might well have made more successful tenants.[63] An 337-acre farm at Newbourn, eight miles east of Ipswich was purchased in 1936 and divided into 48 holdings. All tenants were provided with bungalows, glass houses and 15 with poultry battery houses. All had piggeries for between four to six pigs. The scheme here survived into the 1960s.[64]

In Norfolk however, the County Council wanted nothing to do with the initiative and no land was bought under its provisions: but the Council continued to expand its own holdings. Between June and September 1933 the Council acquired 1461 acres in the Broads and Fens with a further 270 acres in the Broadland parishes of Somerton and Happisburgh in July 1934. By December 1933, 45 new holdings had been created, 32 of which were already let. From February the Committee had the use of 51 unemployed men doing relief work for planting hedges, dyking and road improvements.[65]

VI

A government report on smallholdings of 1913 contained an extensive section advising on the design of houses and buildings and providing model plans. Three-bedroom houses with living room and scullery and separate dairy and wash room were recommended. While smallholdings for market gardening might need little more than a packing and tool shed with a stable and cartshed alongside, much more elaborate outbuildings were needed for a mixed holding of 20 to 30 acres. Here there should be a fodder and chaff house, stable for two horses, cattle shed, cartshed and a yard with boarded fence. Loose boxes were thought preferable to pig sties for pigs. Dairy farms needed a cow house allowing 800 cubic feet per cow (600 if they were out during the day), a mixing room, stabling for two horses, a cartshed with loft and three loose boxes opening onto a partly covered yard.[66]

In Norfolk, providing living and working accommodation for the new tenants was a problem. The accommodation available fell well short of the ideals laid down in 1913, and, as we have

[60] C. S. Orwin and W. F. Darke, *Back to the Land* (1935), p. 70.

[61] Smith, *Land for the small man*, p. 200.

[62] Rowell, 'County council smallholdings', p. 112.

[63] Whetham, *Agrarian Hist*. VIII, pp. 300–04

[64] P. J. O. Triste, *A survey of the agriculture of Suffolk* (1971), p. 40.

[65] NRO, c/c10/581, SAC minute book, Feb., Sept. 1933.

[66] BPP, 1913, XV, (cd 6708), *Report of the Departmental Committee appointed … to inquire and report as to buildings for small holdings in England and Wales*, pp. 580–82.

seen, even where the estates purchased by the County Council had cottages on them, the sitting tenants might be unwilling to make way for the Council's new tenants. The Council was therefore forced into a succession of makeshift expedients. In August 1919 15 army huts were purchased for conversion to dwellings and in 1920 a further 100 for use at Burlingham and elsewhere 'owing to the urgency of equipping the council's purchases'. Where possible, existing buildings were divided between tenants, and cottages improved. By 1923 many of the Council's 2154 tenants were living in hastily erected bungalows. The council's sub-committee was slow to appoint an architectural assistant to draw up plans for permanent cottages: in June 1920 the Ministry of Agriculture drew urgent attention to 'the necessity of such an assistant'. One was appointed later in the year to meet the ministry's demand that plans and specifications for permanent cottages and buildings be prepared 'without further delay'. A Building Committee report of February 1920 took a sanguine view of the situation. Good progress had been made with the erection of wooden bungalows but there was a need to purchase sections for 60 more. By November 33 wooden bungalows had been completed and 22 more were being built, but there were still tenants unhoused, some of whom were living in lodgings at a distance from their holdings.[67] In 1921 rent rebates were given to tenants whose houses were not ready for occupation in Ludham, Outwell, Southery and Clenchwarton.

The problem was highlighted by an article in the *Norfolk Chronicle* in August 1921 entitled 'Ex-servicemen's scandalous grievances'. It pointed to the County Council's 'shabby and scurvy treatment of those who fought'. Many of the problems could be attributed to inefficiency, both within the county and at Whitehall, but the result was 'disgraceful'. The 50 new settlers at Burlingham, nearly all of whom were disabled in some way, were living either in badly subdivided old houses or in new asbestos bungalows which were hot in summer and freezing in winter. There were no proper stoves or water supplies. When the estates had been taken over, they were very run down and suffering from under-capitalisation after years of depression. The farm premises were leaky and in poor repair: the land was out of condition and a 'jungle of weeds'. The old premises had been divided amongst tenants but little had been spent on improvements. Elsewhere, new buildings were supposed to be provided, but progress had been slow. Tenants had been waiting for months for buildings that should have been ready before they moved in. Many were inconveniently placed for the holdings.[68] In September 1921 there was a meeting of 108 tenants from Burlingham and the immediate neighbourhood who complained about the lack of buildings and the poor quality of their housing.[69]

Many of these complaints centred round the 93 asbestos (trade name 'poilite') bungalows which had been built by the County Council. Made of prefabricated sheets, they could be hastily erected but by 1925 they were already proving very unsatisfactory. The roofs were leaking as the rubberoid seals perished and the ceilings sagged. The walls were not weatherproof as the wooden splines shrank, and the fireplaces were unsafe. The sheds only had earth floors, the front doors were unprotected by porches and the timber-framed partitions were only covered on one side. Limited repairs and improvements were sanctioned and illustrations in the Land Agent's report for 1925–6 show these bungalows with new chimneys and porches as well as

[67] NRO, c/c10/568, SAC minute book, 1919–20, p. 215, minutes 13 Nov. 1920.

[68] *Norfolk Chronicle*, 19 Aug. 1921.

[69] NRO, c/c10/569, SAC minute book, 1921–3.



FIGURE 1. Asbestos bungalow in the process of demolition at Lingwood, on the Burlingham estates

sheds and butts for water storage, but they still remained sub-standard.[70] Fifty one were still in use in 1957, all of which save for 13 had been clad in either brick or cement. One of the last examples has recently been demolished at Lingwood on the Burlingham estate (Fig. 1).

The 1926 report described the housing situation in Norfolk as the government scheme for resettling servicemen came to an end. The two largest estates in County Council ownership were the Burlingham and Hindringham estates. The Burlingham estate consisted of Burlingham Hall, 16 farm houses, numerous farm buildings and a hundred cottages. It was then divided into 138 holdings, averaging about 29 acres each. After some of the farm houses had been divided, 28 dwellings were needed as well as several sets of farm buildings. The Hindringham estate of 12,000 acres in the north of the county was divided into 34 holdings. Eleven new timber or asbestos bungalows and three sets of buildings had been erected after its acquisition. By 1924, the Council had erected a total of 96 bungalows and 31 sets of buildings on all its estates.

Elsewhere exemplary brick houses were being built on the Burlingham estate in the east and Popenhoe and Fern House Farm in the west. Whilst those in the east and mid-Norfolk were red-brick with long eaves in a tudoresque 'cottage style' (Figures 2 and 3), those in the west were square-built, grey brick structures. All had three bedrooms, a parlour and living room with scullery and dairy out the back. Baths were provided under a removable work surface in the scullery. Older properties were modernised as on the Bacton Hall Estate and re-thatching of farm buildings at Burlingham was carried out. It is noteworthy that the influence of the newly-founded Council for the Preservation of Rural England was already being felt by the Committee, and their land agent found it necessary to justify his building policy in the light of their concerns. The reed thatching contracts on the Burlingham and neighbouring estates, undertaken against the opposition of those who favoured corrugated iron, amounted to £9963 and as such 'were possibly the largest thatching contracts ever arranged'. Only in the Fens, where the lack of sound foundations necessitated it, was corrugated iron routinely used.[71]

[70] 'Report by the County Land Agent, 1925–6', p. 8.

[71] Ibid., p. 14



FIGURE 2. A larger type of house built in the 1930s for Kings Head Farm, North Elmham

Norfolk was not the only county having problems providing adequate buildings. Of the 85 dairying smallholdings in Dorset visited by a survey team in 1935, 33 were served by buildings which were poor or inadequate.[72]

When the 1935 Housing Act imposed definitions for overcrowding which should not be breached, the Norfolk Smallholdings Committee voted to give a good example by setting itself higher standards. 'It is not anticipated that there will be many cases of overcrowding in houses occupied by tenants of the Council.' However, if they were not overcrowded, many houses were in a very poor condition. Three cottages at Kidman's corner, North Walsham were in the same condition in 1936 as when they had been let pre-war to farm labourers and therefore not at all suitable for the dwellings of smallholders. Three were to be amalgamated into two and a new house built. New wash houses and dairies were to be built and they were to be 'brought up to standard' but there was still much to be done.[73]

By the mid-1920s, as emphasis shifted from buying new holdings to the equipment of those already existing, it was recognized that without houses and buildings holdings would be difficult to let. Oaklands Farm, Litcham was a mile from the village and a house was needed for a 70-acre holding there. A brick bungalow on a standard plan, and a U-plan set of weather boarded

[72] E. Thomas, 'County Council small-holdings in Dorset and Hampshire: [part] 1, descriptive and sociological', *J. Ministry of Agriculture* 44 (1937–8), p. 23.

[73] NRO, c/c10/583, SAC minute book, 1935–7, annex to minutes, 4 June 1936.

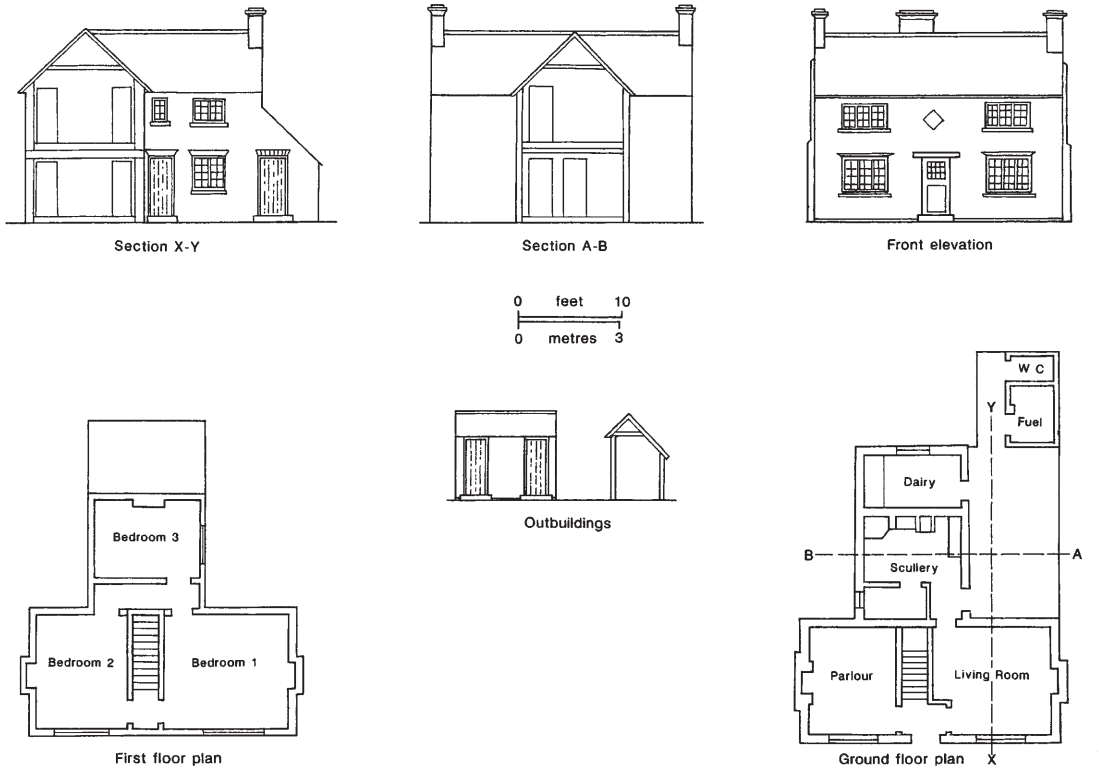


FIGURE 3. Plans and elevations of the type of house built at the Kings Head Farm, North Elmham. (redrawn by Phillip Judge)

buildings were erected (Figs 4 and 5). To maintain the letting value of holdings, £5993 was spent on buildings that year.[74] The Milk and Dairies Act of 1926 meant that improvements had to be made to cow houses. In the Committee's report for 1926, it was reported that 'A standard type of cowshed, generally suited to smallholders, has been evolved after considerable experience of the problem, and also stabling, bullock lodges, cartsheds and fencing'.[75] New ones were built and bullock sheds converted for cows, suggesting that dairying was more profitable that stock rearing.[76] The need to build premises before holdings could be relet continued to be noted into the 1930s and dairies, loose boxes and cartsheds as well as a few barns continued to be built. Most new building was in weatherboard with pantile roofs.[77] The usual plan for new farm buildings for a farm of 30 to 40 acres consisted of an L-plan, weather-boarded group, with open lodges, one for pigs, poultry etc, workshop, implement shed feed stores and three loose boxes. Several examples survive on the Burlingham and Fenland estates. By the late 1930s new builds were likely to include a tractor shed.

[74] NRO, c/c10/574, SAC minute book, 1927, annex to minutes, 8 Sept. 1927 [sic].

[75] 'Report by the County Land Agent, 1925–6', p. 3.

[76] NRO, c/c10/572, SAC minute book, 1925–6.

[77] NRO, CVES 97, 98.



FIGURE 4. House and buildings at Oaklands (now Jubilee) Farm, Litcham.



FIGURE 5. Standard plans for farm buildings on Norfolk County Council smallholdings of the type at Oaklands Farm. (redrawn by Phillip Judge)

VII

Norfolk County Council was one of the most enthusiastic councils in the promotion of smallholdings. By 1946 it had 1,896 tenants on 31,928 acres, two-thirds in east Norfolk. The County Council owned some of the best farming land in Norfolk, with extensive holdings on both the peat and silt fens in the west and the rich Flegg loams in the east. The type of farming and tenants in the two areas differed considerably. The Council owned 1306 acres of good silt land in the Terringtons, Walpoles and West Walton, but much of this was let to part-time, rather than full-time tenants, for whom little provision in the form of buildings was needed. By 1950 there were 63 part-time as opposed to 20 full-time farmers for whom the major activity would have been market gardening and small fruit production as well as growing orchards.[78] Market gardening did not form a separate category in the MAFF farm statistics until the 1940s. Small fruits and orchards included were however and the statistics show these peaking before the war.

[78] Norfolk Property Services, Guard Book 4, pp. 43–62, 105–108, 115–122.

In the east, the County Council's main holdings were around Burlingham. The soil here was a good medium loam and although fruit growing and market gardening were still important, holdings were larger, mostly full-time (97 as opposed to 20 part-time) and so a more mixed farming was possible.

From the beginning fruit farming was seen as an ideal form of farming for the smallholder. In an attempt to encourage it, an eight-acre plot at Burlingham and 3½ acres at Emneth were let to the Agricultural Education sub-committee as demonstration plots in 1923. In 1926 the total area devoted to fruit growing on the Council's estate had reached 762 acres and the main problem preventing further growth was seen to be the uncertainty of crops and prices. The 1925 price for strawberries and gooseberries, which were grown mainly in the Fens, was disappointing. Apples were badly affected by disease and late frosts. Fifty two acres of fruit trees were planted in 1921–22 at the expense of the Council, but it was reported in 1926 that many had been neglected. Potatoes were also an important crop in the Fens, but were badly affected by blight in 1926. Dairying was seen as probably the most promising business for smallholders with 119 new dairies and cowsheds being erected or converted in the early 1920s, mostly in the eastern half of the county. Poultry too could prove profitable, 'but too large a proportion of them [the tenants] are still content with the haphazard methods of feeding and management'. In common with other farms, the acreage of sugar beet on smallholdings was increasing in the 1920s and providing a buffer against depression, with 879 acres being grown in 1925 and 1747 in 1926. 'In several cases tenants who were behind with their rents and other accounts with the Council have been able to clear their debts' by taking up beet growing. Generally, full-time tenants chose to run their holdings as if they were a mixed farm, but on a miniature scale. 'Too many of the smallholders imitate the methods of the large farmer, instead of going more thoroughly into fruit and vegetable growing, sugar beet, poultry and dairying.'[79]

In common with their larger neighbours, smallholders were putting land down to permanent pasture in the early '30s, the seed usually being provided by the Council. Altogether, 11 tenants were provided with seed for 60 acres in 1931 and similar help was given in 1932.[80] In 1933 about 150 acres were reseeded for permanent pasture. By 1934 22 per cent of all smallholding land was in sugar beet and as this was often the only way smallholders could pay their rent, the Committee was anxious that the sugar beet subsidy should not be removed.[81]

An opportunity to see smallholding farming at its best exists through the reports of the Norfolk smallholding competition run between 1927 and 1930. However, the number of entrants (usually around 40), was small compared with the total number of tenants (over 2000). The reports were generally very similar. The number of cows on smallholdings was increasing. Two tenants kept pedigree bulls. One competitor was taking part in the national milk recording scheme, but generally competitors did not have enough cows to warrant this. The pigs looked well and there were some pedigree boars. Some pig accommodation was underused. The yards were well stocked with bullocks and 'in some cases poultry keeping was undertaken on up-to-date lines' although in many instances this was not true. In September 1928 a leaflet was sent to all tenants with their rent demand entitled 'Poultry keeping for smallholders' and by 1930

[79] 'Report by the County Land Agent, 1925–6', p. 5.

[80] NRO, c/c10/581, SAC minute book, 1933–4, annex to minutes, 18 Mar. 1933.

[81] Ibid., annex to minutes, 6 June 1934.

the competition report comments that poultry husbandry had improved as tenants were keeping good laying strains. 'The tenants have apparently greatly benefited from the lectures on the subject at the Norfolk Agricultural Station' (a privately funded research station which undertook trials and publicised its results through programmes of lectures).[82] Only one smallholder kept bees. Some holdings were clean and tidy while others were not. The cultivation, cropping and condition of the arable was good and the majority now grew sugar beet. The fruit growing holdings were particularly well farmed, although more plantations should have been sprayed. (In 1926 the Committee had purchased fruit sprayers which were to be kept at Burlingham for hire.) However, comments on the condition of pasture were far from favourable.[83] Although details of the competition cease to be recorded after 1930, events continued to be arranged. Sixty tenants turned up for a visit to the Sprowston Experimental Station in July 1932 and it was 'deemed a success'.[84]

The 1926 report picked out some exemplary tenants to demonstrate the successes of smallholding. Market gardening, alongside pig fattening and a couple of bullocks, provided a good living for one tenant of 12½ acres. Another ten-acre holding was planted with strawberries and 550 fruit trees and bushes supplied by the County Council and this too was proving successful. Another tenant who had lost an arm during the war had been a horticulturalist before. From four acres he now produced strawberries, raspberries, black currants and sugar beet while fattening 30 pigs. His 100 head of poultry paid the rent. An ex-service officer and son of a small Norfolk farmer ran a mixed 50-acre holding where he kept seven milking cows, several stock cattle and five breeding sows. 'This man is likely to develop into a successful farmer'.[85]

VIII

With the outbreak of war in 1939, smallholders, with the rest of the nation's farmers, were exhorted to produce more food. Along all with other farmers, they were subject to the control of the County War Agricultural Executive Committees (CWAECs). The farm survey of 1940–1 not only noted the condition of the farm, but also the efficiency of the farmer. In Walpole St Peter both the farming and the houses and buildings were said to be good, often better than those of neighbouring owner-occupiers.[86] In Great Massingham one tenant at Kennel Farm lacked capital and was working under a Direction Order. Other tenants were farming well, although some lacked capital. However, the buildings at Kennel Farm were poor.[87] The management of three of the tenants at Grove Farm, Martham was said to be 'faulty' while the buildings at Kemp Farm in the parish, were bad. Particularly criticized was the lack of a water supply to many of the farm houses.[88] But in these conditions at least one tenant thrived. In 1944 George Reed of Ten Mile Bank was the subject of an article in the *Daily Express*. A farm worker who had become a

[82] NRO, c/c10/578, SAC minute book, Feb.-Oct. 1930, annex to minutes 15 July 1930; J. Hutchinson and A. C. Owers, *Change and Innovation in Norfolk Farming. Seventy years of experiment and advice at the Norfolk Agricultural Research Station* (1980).

[83] NRO, c/c10/578, SAC minute book, Feb.-Oct. 1930, annex to minutes 1 July 1930.

[84] NRO, c/c10/580, SAC minute book, 1931–3, quarterly report to Sept. 1932.

[85] Davies, *Report*, p. 111.

[86] TNA, MAF 32/745/261.

[87] TNA, MAF 32/720/230.

[88] TNA, MAF 32/728/141.

smallholder with 39 acres, he had been responsible for bringing twelve acres at Southery back into cultivation and had 'fought and won a ceaseless battle to make the soil of Britain productive … in addition to growing wheat, potatoes, sugar beet, carrots, celery and onions for the nation, he grows oats and mangolds for his three horses, his two cows, his heifer and two calves; his sow and her litter of nine pigs; and his 30 chickens'.[89]

IX

The change in government policy represented by the 1947 Agriculture Act made agricultural rather than social considerations paramount in shaping the future of the industry. Smallholdings were to be seen as part of a stable and efficient agricultural industry in which part-time holdings had no place. The 1947 Act also required a change in the composition of the County Council Smallholdings Committees. Two tenants, one agricultural labourer and one woman had to be included as well as farmers, fruit growers, horticulturalists and the Agricultural Workers' Union. The new committee took on its duties in October 1949 and a survey of the county's farms was undertaken in 1950–1 to suggest ways in which they could be re-organised to fit the new criteria. Part-time farms considered too small to be efficient were to be amalgamated. For instance, the eight holdings at Kennels Farm, Great Massingham were reorganized into four.[90] Moreover, in the post-war years, many of the houses and buildings were in poor condition with no electricity or piped water supply. Some were still 'bare land' holdings with no houses. As late as 1948 tenants in Nordelph and Stow were still living in timber and asbestos bungalows which were 'fast becoming uninhabitable'. There were plans to replace some of them with brick bungalows. Seven bungalows in Burlingham and four at Stow were to be encased in brick in 1949–50 at a cost of £500 each. There was a programme to provide water, electricity and sceptic tanks. In 1948–9, 70 houses were supplied with piped water and 139 with electricity.[91] The result was the writing of a short development plan presented to the Committee in January 1952. There was, it reported, still a healthy demand for full-time holdings of 30–50 acres and the County Council had set aside £100,000 for new purchases. A further £120,000 was committed in existing contracts for improvements. New roads and water pipes were being laid and dykes cut. A total of 167 dairy holdings were being brought up to TT (tuberculosis-tested) standards and electricity installed in 482 holdings. Sixty-five sets of buildings were being improved and 11 entirely new sets were in course of construction.[92]

X

We must now return to the list of 'hopes' quoted at the beginning of this paper to consider how far they were achieved in Norfolk. The smallholding movement probably did little to check either the decline in rural population or the decline, in the long term, of smallholdings generally. Horticulture occupied more people per hundred acres than any other sort of farming,

[89] *Daily Express*, 21 May 1944.

[90] NRO, c/c10/589, SAC minute book, 1947–50, minutes, 8 Nov. 1949.

[91] NRO, c/c10/589, SAC minute book, 1947–50, annex to minutes, 19 Nov. 1949.

[92] Norfolk Property Services, 'Norfolk Development Plan, smallholdings (ts, 1952), p. 3 and App. A.

but this cannot be directly linked to the smallholding movement. Many of the County Council's fenland holdings were in market gardening areas where small farms were typical anyway. Exceptions to this are the six fenland farms of the Stow Bardolph estate which were divided into 37 full-time holdings and the medium-sized farms of the Burlinghams which were reorganised into small tenancies.

There were those who believed that the smallholdings movement helped to create the vibrant and diversified countryside which was perceived as socially and economically desirable. To quote from the development plan of 1952, 'The Norfolk Smallholdings Committee has always had a firm conviction that, to provide an opportunity for the thrifty and industrious agricultural worker with limited capital to progress from the position of farm employee to the status of tenant farmer, was a worthy cause'. It was providing the means to independence that was seen as something valued by the smallholder. 'The fact that they are their own masters, with the countryman's love of freedom to plan his work the way he prefers, which compensates them for the arduous nature of their occupation'.[93]

It is difficult to establish whether the hiring of a smallholding was the first step on the farming ladder for many or how much new blood the movement brought into farming. On the Dorset and Hampshire examples surveyed in 1935, nearly all the tenants were from a rural background, most had been tenants for ten to fifteen years and 61 per cent were between 40 and 50 years old, suggesting that few were moving on to larger holdings.[94] Certainly some Norfolk examples of successful tenants who moved on to larger holdings can be found. Mr Massingham, the winner of the farm prize in one year and reserve in another, is an example of the sort of person for whom smallholdings were originally designed. He left his holding in 1927 to buy his own 90-acre farm in Field Dalling. George Reed, the darling of the *Daily Express*, had previously sold 'his fine skills to the farmer who offered him the highest wage' whilst saving what he could and waiting to become his own master. 'Ambition', 'enterprise' and 'tireless energy' are the words used to describe him.[95] In the early 1940s Reg Buckingham, a casual worker in the Fens, started farming ten acres part-time, cycling ten miles to his holding. By 1950 he had been able to take on a 50-acre holding on the Stow (Bardolph) estate where he grew wheat, barley, potatoes, sugar beet. A new house had been built and 'soon a set of modern time-and labour-saving buildings will be added'. Reg was seen as a shining example of the sort of person for whom smallholdings had been intended. The *Farmers Weekly* special correspondent, travelling the county in 1950 saw many such farmers. 'Mr G. H. Holman began with a part-time holding of three acres in 1930, built up his farming in easy stages and now is a tenant of 46 acres in the Marshland section … Mr A. F. Tate worked on a farm before the war, and lost a leg in action in Italy, is now tenant of less than ten acres growing black currants, raspberries and strawberries with wheat and beet'. Mr R. J. Layt and Mr J. E. Brister, both of Burlingham started with four and ten acres respectively and now rented 60 and 54 acres. Some tenants had made a success of dairying with small pedigree herds. The type of buildings erected for smallholders was commented on favourably and a typical plan reproduced in the article (Fig. 6).[96]

[93] Ibid., pp. 1, 3.

[94] Thomas, 'County Council small-holdings', pp. 19–20.

[95] Kenneth Pipe, 'One man went to plough', *Daily Express*, 21 Apr. 1944.

[96] *Farmers' Weekly*, 29 Sept. 1950, p. 59.

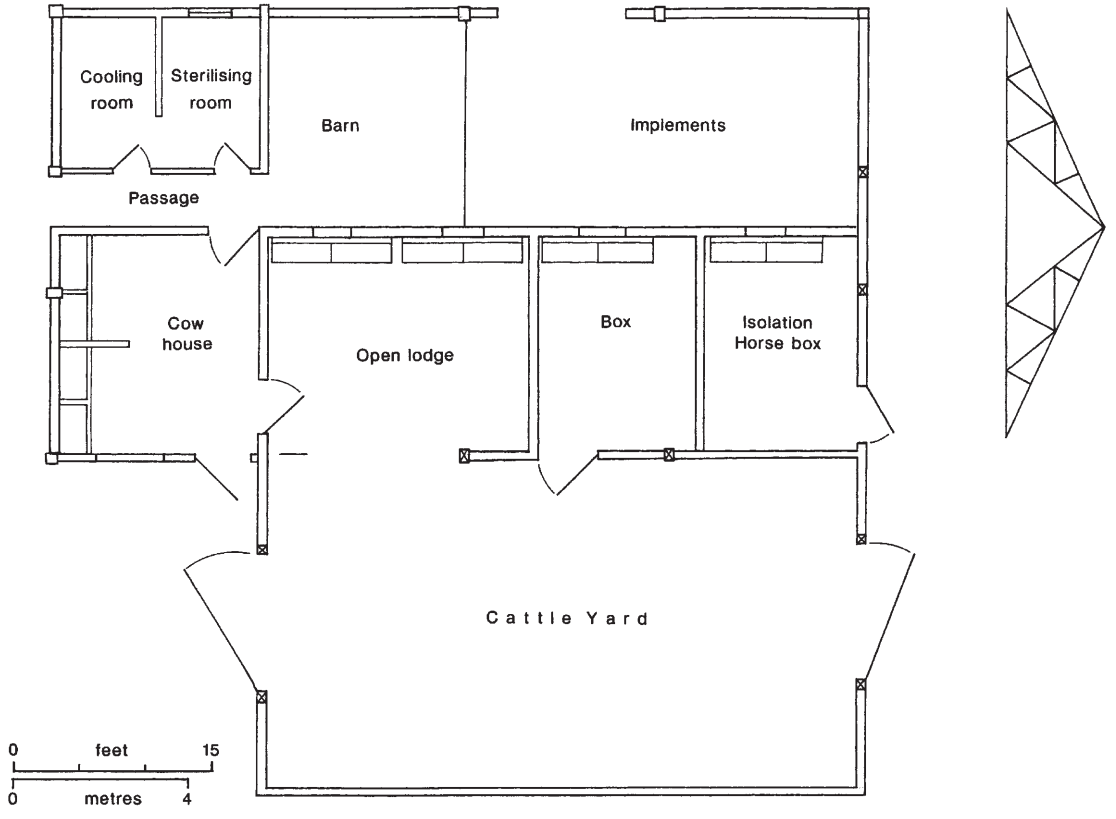


FIGURE 6. Standard plan of the type commended in the *Farmers' Weekly* article. (redrawn by Phillip Judge)

However, although a smallholding was a first step to greater things for some, by far the majority of tenants only just managed to keep going at the same level. The shift from farm-worker to tenant farmer could be difficult enough for those with some capital behind them, but for the average smallholder it was almost impossible.[97] A smallholding could only rarely generate sufficient income to allow the accumulation of funds and, as economies of scale came into play with mechanization, their position became even more precarious.

The hope of Norfolk County Council in 1952 that 'this new class of agriculturalist … would greatly assist in food production, at the same time reinforcing the ranks of those responsible for the continuance of the industry' was probably misplaced in the long term.[98] While market gardens in the Broads and Fens worked by smallholders with little machinery were the most productive system in the early 1920s, by the end of the decade large farmers with capital were converting to vegetable production and overtaking the smallholders in efficiency. In 1935 Orwin and Darke were probably right in stating that there was nothing 'that the smallholder does which the larger farmer cannot do better'.[99]

Smallholdings were successful in providing a house and livelihood for a minority of servicemen

[97] G. Henderson, *The Farming Ladder* (1944).
[98] 'Norfolk Development Plan', p.1.
[99] Orwin and Darke, *Back to the land*, p. 68.

returning to a country with a housing shortage and rising unemployment, and failure rates amongst ex-servicemen were low. They were less successful as an alternative to the dole queues of the 1930s. There was a tenant turnover of about 47 per cent on Land Settlement Association holdings between 1934 and 1939.[100] Finally, smallholdings probably made little difference to the political stability of the countryside or to the friction between agricultural classes.

One aspect of the smallholding ideology which never made any headway in Norfolk or much elsewhere, was co-operation. 'The contented tenant is one having a completely separate holding, his own machinery, stock, implements and set of buildings and a detached house'.[101] An article under the heading 'The Smallholders' Round Table – a weekly series, specially contributed' in the *Norfolk Chronicle* put the case for co-operation in 1921. Only by sharing a shop or stall and selling directly to the public, could smallholders hope to sell their fruit at a profit.

> This is the only chance that I can see of making the fair price for the products of your land and labour. The only crop you can grow where you get equal treatment (with the large farmer) is corn, and a very bitter awakening is coming to those deluded men who imagine that a small holder could live by corn and chickens.[102]

But this advice was not widely heeded. An isolated example of a successful 'colony' was the one established by the Ministry of Agriculture at Sutton Bridge in Lincolnshire (just over the county boundary) where 227 tenants worked some 5000 acres. Between 1926 and 1937 there were 75 changes of tenancy, but only nine of these were the result of failure and 35 tenants had moved on the larger holdings.[103]

On this occasion we have been concerned with the social and economic impact of smallholdings on the tenants themselves and little has been said about the cost to the county councils. Between 1919 and 1926 much of the financial burden of purchase and equipping smallholdings was met by the Ministry of Agriculture and, both before and after that date, long-term, low interest government loans were available. No where in the minute books of the Smallholding and Allotments Committee is there any indication of profit or loss to the County Council. While there was concern over the necessity of rate rebates and the need to ensure value for money from contractors, there is no evidence as to how far the Council's smallholdings were regarded as a profitable enterprise or, more realistically, a burden on the rates.

The creation of smallholdings had a significant if temporary affect on the farming economy and landscape over many parishes within East Anglia. It could be argued that they were only successful in areas like the Fens which were not dominated by large landowners and where small-scale farming was already usual. Here, 'new smallholdings can crop up naturally … depopulation was stayed, poor relief diminished, public houses disappear and a closer settlement of the land is accomplished at no cost to anyone'. On the whole, however, they failed 'where generations of farming on a large scale has destroyed the smallholding instinct'.[104] The Burlingham estate, surrounded by large farms, is an exception to this. Here it was possible to change a largely cereal-growing area into successful holdings operating on a horticultural and mixed

[100] Smith, *Land*, p. 218.
[101] 'Norfolk Development Plan', p. 3.
[102] *Norfolk Chronicle*, 12 Aug. 1921.
[103] Smith, *Land for the small man*, p. 166.
[104] Jebb, *Smallholdings*, pp. 14, 437.

farming system. In landscape terms, fields were divided, concrete roads laid out and poor quality cottages improved. While the original farm houses and buildings were used where possible, new brick bungalows and small low groups of buildings, often including ex-army huts, sprang up.

Enthusiasm for the smallholding movement ran out after the Second World War, when it became clear that increasing productivity could only be achieved on large-scale farms. This economic aim took precedence over any other considerations and, as holdings were amalgamated, a social experiment aiming to create the small-scale farms which were typical of much of Europe came to an end.[105]

[105] More recently, in the 1970s and 1980s, many were sold off. In 2005 the Norfolk County Council Estate retained 17,511 acres with 211 tenants, of which 128 had buildings or a house on their holding.

Children's labour in the countryside during World War II: a further note

by Richard Moore-Colyer

In 2004 I published an article in the *Review* dealing with a variety of aspects of childrens' labour on the land during World War II.[1] Subsequently I took part in the BBC Radio 4 *Making History* programme during which I appealed to listeners to forward their childhood recollections of harvest camps and other features of wartime land work. The response was remarkable and I received over 100 letters and emails, many of them lengthy, detailed and replete with valuable information. One lady, for example, a pupil at Princess Mary High School, Halifax, sent me the original school harvest camp log for 1944, a beautifully-illustrated file of essays, poems and cartoons reflecting life at the camp and attitudes towards 'doing ones bit' on the land.[2] This correspondence has been deposited at the Museum of English Rural Life, where I hope it will form the basis of a useful collection. In the meantime I offer this note as a supplement to the earlier article and as an introduction to the new material.

Although a small minority of respondents hated the whole business, for the overwhelming majority the experience of working on the land and, more especially of attending harvest camps, was a very positive one. People referred to the pleasures of tent life, camp food, fireside singsongs, the camaraderie with the older farm workers and, in particular, the fact that campers '… found a new freedom and gained a sense of independence denied to many at the time'.[3] The work may from time-to-time have been tough, yet '… during wartime we accepted minor hardships in the furtherance of the cause and we knew others were suffering much more'.[4] Indeed, having suggested on the broadcast that attendance at the camps may have been in response to parental 'push', I was roundly reprimanded by one respondent, formerly a pupil at Surbiton Grammar School, who told me in no uncertain terms that 'patriotic duty' had been the sole motivating factor.[5] Yet enjoyment was a key feature. One respondent, whose school sustained a direct hit by a V2 rocket while the pupils were at harvest camp, writes of 'the great and joyous experience' of working the land, while another, evacuated with his school to Tunbridge Wells, mentions the 'educational' importance of meeting country characters, also emphasising the

[1] Richard Moore-Colyer, 'Kids in the Corn: School harvest camps and farm labour supply in England, 1940–1950', *AgHR* 25 (2004), pp. 183–206.

[2] Norah Bromley, Hope Valley

[3] Typically, Gordon Nelson, Hebden Bridge, Yorkshire

[4] Peter Collinson, Sevenoaks, Kent

[5] John Cox, Cerne Abbas, Dorset

sheer revelation of the beauty of the English countryside to urban children who had previously had no chance to enjoy it.[6] Lady respondents comment on the sweat, the fatigue and the difficulty of keeping clean. Yet after two weeks, '… we went home, suntanned and stinking of wood smoke, but feeling we had done our bit. Compared with evacuation it was a holiday'. At 16 and 13 respectively, the sisters Dilys Thompson and Dorothy Broadbent worked at a harvest camp in Lutterworth where they spent a good deal of time chatting to Italian prisoners ('glad to be out of the war') in their rudimentary Latin. 'We wouldn't have missed it for anything in spite of the sweat and tired muscles'. 'War or no war', writes Norah Bromley, who regularly attended harvest camps at Billinghay, Lincolnshire, 'it was really memorable; we had a wonderful childhood, made unforgettable friends and enjoyed so much of it all'. Perhaps with tongue slightly in cheek, the Rev. Barbara Mason from the Isle of Lewis attributed her present-day predilection for gardening to her wartime experience picking potatoes, strawberries and raspberries in Perthshire. Ten years old in 1939, she found little difficulty in picking 100 lbs of raspberries in a day which could yield a wage of up to £3 weekly.

Picking raspberries, along with the conventional harvest tasks, was relatively congenial, although stooking could be a miserable business in wet weather. But pea-picking (usually a girl's job) was invariably regarded as 'horrendous'.[7] With hessian sacks over their heads to keep them dry, pupils from Manchester High School picked peas near Ormskirk in 1943 to the accompaniment of almost continuous rain. Ormskirk also played host to a group of fifth and sixth form girls from Levenshulme High School, Manchester in the same year. Camping at Bickerstaff in tents, pupils took turns to help with cooking, tidying the camp and maintaining the latrines ('… trenches with handy heaps of soil, [and] scratchy toilet rolls kept in biscuit tins to keep them dry'), before going out to pick peas. The girls travelled along the pea rows, each carrying a 40 lb skep. The plants were then pulled up with the left hand and the pods stripped with the right into the skep which had to be carried to the end of the field when full. This rather grim operation continued irrespective of the weather, giving rise to a campfire parody of Walter de la Mare:

> Softly, silently now the loon
> Treads the row in her sodden shoon.
> This way and that she peers and sees
> Row upon row of mouldy peas.

In wet conditions where torrential rain had flattened the crop and machinery could not operate, hand-pulling of flax was another rather depressing task. Joyce Avery, in 1940 a 10-year old evacuee to Somerset, writes feelingly of hand-pulling flax until 11 pm throughout the wartime 'double summer time'. 'Because of the spiked seed heads it was bad enough pulling handfuls of the plants from the ground, but worse to be in the following team as we bent or crouched tying bundles of flax tightly with the rough twine making deep cuts in our hands'.

Potato picking too could be an arduous business, although several respondents make the point that being closer to the ground and more supple, children found 'spud-grubbing' less of a strain on the back than adults. The three-week 'potato holiday' held each October in Angus

[6] Keith Pocock, London; Arthur Norris, Bexhill-on-Sea, Sussex

[7] The following is from Dorothy Middleton, Manchester

meant that juvenile backs would be put to the test in days which began at 6.30 am and often continued until late in the evening when potato ploughs and spinners eventually came to a halt.[8] Filling buckets, transferring them to sacks and carrying them to a central collection point were tough jobs for thirteen-year old boys. But, apart from the money to be earned, there were 'social' compensations as the fields filled with children, volunteers, Italian prisoners and legions of chattering grannies sternly supervising the prams parked on the headlands.[9] This may to some extent have made up for the misery of cold and filthy hands, earth-clogged wellies and sodden caps and pixie-hoods vividly recalled by Monica Evans. Fruit and hop-picking, on the other hand, were great fun. Arthur Norris moved from weeding beans ('boring and back-breaking') to hop-picking in Kent in the company of women and children from East London who were a constant source of amusement and good humour. Overhead, in August and September 1940, the Battle of Britain raged and Norris and his pals often slipped out of the hop gardens to search for wrecked aircraft. Fortunately they did not come under fire, unlike one respondent who had been evacuated to Sussex and was attacked by German fighters while picking swedes! If hop-picking was fun, for Norris at least, picking apples was blissful and taking an apple from the branch in the early morning when the dew was still on the fruit and biting into it is an enduring childhood memory.

While most child harvesters slept eight to a bell tent, some camps were located in schools (with, for example, campers from King Edward's Girl's School, Birmingham sleeping on the gym floor at a Henley-in-Arden prep school), church halls, nissen huts, and occasionally country houses or castles. Tents were generally regarded as being rather fun, although in the wet summer of 1943 many tented camps had to be equipped with a network of trenches to prevent flooding. Camp food was normally 'substantial but ordinary' and would be cooked by school staff and volunteers (even the local vicar), frequently assisted by camp members on a rota basis.[10] When the boys of Colfe's School, Lewisham camped at Benenden in Kent in 1940, they were initially pleased to learn that the headmaster's wife had agreed to shoulder the burden of cooking, only to find out when it was too late that she was a vegetarian with a penchant for serving a barely-edible cheese and apple pie.[11] Ray Coker, a pupil at South-East Essex County Technical School was a member of the Scouts and as such his main camp task was to collect firewood for four enormous boilers and to maintain a continual supply of tea for the camp's five gallon billy-cans. Camping near Gargrave in the Yorkshire Dales each wartime summer, Morley Grammar School enjoyed the services of sixth former Gordon Nelson as one of the camp cooks. His duties included picking up supplies from the store in Gargrave, '… often getting titbits from the owner to spice up the menu', snaring rabbits for the pot, tickling trout on Eshton Beck and gathering currants and raspberries from the abandoned gardens of nearby Eshton Hall. In camp, '… we lived like royalty, but at the end of the camp we returned to our meagre rations and plain diet at home'.

Towards the end of each camp, reviews, sing-songs and drama presentations were held, Peter Collinson fondly recalling that his rendition of 'Ragtime Cowboy Joe' was particularly well-received. For older boys and young men there was the prospect of a little sexual *frisson*.

[8] James, Keiller, Angus, Scotland.
[9] Alistair Clark, Perthshire, Scotland
[10] Peter Evans, Godalming, Surrey
[11] Arthur Norris, Bexhill-on-Sea, Sussex

To Peter Evans of Godalming and his brother the idea of two weeks of holiday in return for some farm work seemed a good one and they travelled to Blunham in Bedfordshire to camp in nissen huts. The camp, for adult volunteers and schoolchildren, was gender segregated and it was believed by the authorities that exhaustion engendered by hard labour would discourage nocturnal wanderings. Even so, '… camp controllers would patrol the outer boundaries of our camp field after lights out to make sure there was no mischief afoot in the long grass'. This measure, apparently, did little to deter the sexually adventurous!

Others enjoyed idyllic pleasures. Work at the Lutterworth harvest camps of 1942 and 1943 was interspersed with trips to Rugby and Leicester on wet days, and on Sundays children cycled to Matins at one of the charming local churches with their 'quiet and spiritual atmospheres'.[12] The presence of Italian prisoners-of-war could make life interesting. Although some boys considered working with prisoners to be *infra dig*, Marjorie Rolfe and Eileen Terry from Birmingham got on well both with German and Italian captives, the Italians in particular refusing to believe that the girls had chosen to work on the land and had not been coerced. Again, Manchester girls working in the Ormskirk area found the Italians, '… very glamorous with their dark eyes and incomprehensible accents' and very few thought of them as being 'the enemy'.[13]

The letters and emails in the collection offer a good deal of information on other aspects of the wartime food production effort besides the harvest camps themselves. Vi Treacher was evacuated with her school from London as a 12-year old in 1939 and billeted on a Hertfordshire farm where she remained for five years, each autumn half-term of which was spent potato-picking. This apart, she and the rest of her class collected stinging nettles for making quinine and rosehips for Vitamin C, besides knitting socks and gloves for sailors from oiled wool and making soft toys to be sold to raise funds for the Red Cross. Meanwhile, Henry Hunt from Swanley in Kent reminds us of the ploughing and cultivating of parks, wastelands and playing fields in urban areas, describing his experience as a sixth form volunteer working on the wheat and potato fields created on their parklands by Croydon Council. Other children had singular experiences. Joyce Avery, evacuated from London to Somerset, got her first 'real' rural job at the age of 11 as organ-blower in the local chapel, the man with whom she was billeted being the chapel organist. Manipulating the wooden handle protruding from the side of the organ was not the easiest of tasks for a small girl.

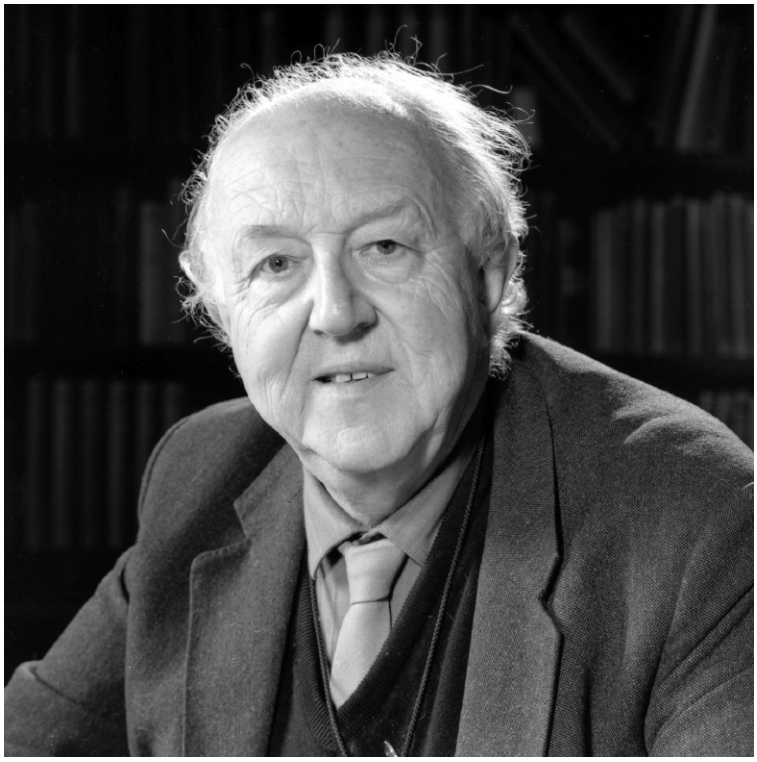
> Once or twice I just couldn't keep up and the music would subside with a dreadful noise like out-of-tune bagpipes. My worst humiliation was during a Harvest Festival service when the large congregation was in the last verse of 'We Plough the fields and scatter'. Mr H. was playing it full volume with all the stops out and, despite my frantic pumping, I could not keep enough air in the bellows. The result was inevitable and, feeling all eyes upon me, I fled in tears.

Today, many would regard subjecting a child to this sort of quasi-torture as overtly abusive, yet for most of my elderly respondents, hard physical labour on the farm or elsewhere was something to be taken in one's stride and even to be enjoyed.

[12] Dilys Thompson and Marjorie Broadbent, Mansfield, Cheshire

[13] Dorothy Middleton, Manchester.

Obituaries



PROFESSOR MAURICE BERESFORD FBA, 1920–2005

Maurice Beresford attended the Golden Jubilee Conference of the Society at Winchester in April 2003, was provided with a wheelchair by kindly forethought of the local organizer, and then wheeled around the hilly site by a variety of younger members, rapidly disabusing them of the belief that he had been long dead, exulting in the attention. He loved renewing his links with agricultural history, and meeting a new generation of scholars, and being able to reminisce about the early days of the Society. As the photograph on the following page – from a conference excursion around 1960 – shows, he liked little better than the opportunity to address an audience, especially when it could be in the field. His death on 15 December 2005 at the age of 85 deprives us of a very distinguished and consistently evangelical rural historian.

Maurice Beresford was educated at Bishop Vesey's Grammar School, Sutton Coldfield, and Jesus College, Cambridge. An experience in his second year at Cambridge, where he took firsts in each year, proved formative of his unique approach to the past. In 1939, John Saltmarsh of King's College took a class of six first-class students, including Beresford, Asa Briggs and the naval historian John Ehrman, for advanced tuition, in his car to Grantchester, where they linked estate terriers with the humps and bumps of selions of the former open fields in modern grassland. Maurice was startled by the experience of 'seeing the fourteenth century' in the modern landscape, and the linkage



of maps, field evidence, and the documents of national and local archives proved the distinguishing characteristic of his research career.

Saltmarsh had also been responsible for the first piece of research, a second-year vacation project in local history, in which Beresford explored the records of his home town to reveal an infield-outfield system in which the poor soils of the 'waste' were periodically redistributed for cropping as lot acres. This was the subject of his first article, written in 1940 and accepted by Keynes for *Economic History*, but lost in bombing, and only 'resurrected' in 1943 in the *Economic History Review*, after the appearance of a short study of Sutton Coldfield had appeared (1942). Bored by revision for his finals, Maurice explored manuscripts in the university library, and located solicitors' records among the recent accessions that led him to work on Commissioners of Parliamentary Enclosure, which produced three studies in 1946, and to think further about the issues of pre-Parliamentary enclosure. Study of the Leicestershire Glebe Terriers reinforced this and led him to encounter evidence of sixteenth-century depopulation and conversion of arable to pasture, later to mature as the study of deserted villages.

A conscientious objector during the war, Maurice engaged in social work at the Birmingham University adult settlement (1941–3), and then at the Percival Guildhouse adult education centre, Rugby, where a room has been named in his memory. This was the base from which he began more regular research forays into the Midland landscape. At first there was mapping of field systems from ridge and furrow, hoping, naively as he later admitted, to evaluate the national extent of past open-field farming, and to reconstruct past landscapes where field maps were absent. Weekend field walking led to mapping of selions and ridge-and-furrow onto the 6-inch Ordnance Survey and there was even an attempt to apply a balloon-mounted camera to the task – this was before the RAF archive of air photographs became available – and the results were published in the *Economic History Review* in 1948. Beresford had satisfactorily demonstrated the identity of ridge-and-furrow and medieval open-field strips, and that the Midland strips, as at Bittesby, were much smaller than the classic Maitland acre, being roughly 220 yards long, but around a third of a chain wide. Discussion of these ideas spread into the pages of this *Review*, but despite critical comments from Eric Kerridge, work by W. R. Mead and by Margaret Spufford sustained his argument, and this link became a central element in what has become the much more complex analysis of field systems, their remodellings, and the origins of communal farming.

William Hoskins had begun the modern study of desertion at Knaptoft (Leicestershire) in the autumn of 1938, and it was only in 1946, when mapping ridge-and-furrow at Bittesby (Warwickshire) that Maurice encountered

earthworks adjacent to the railway embankment that were different, and proved to be the hollow ways and house platforms of a lost village. The gradual realization of the meaning of these earthworks led, after comparing notes with Hoskins on his first excavation at Hamilton (Leics), to three articles on lost villages in 1948, and to his most famous book, *The Lost Villages of England* (1954). His arguments were again challenged, by Kerridge and by J. D. Gould, but the collaboration with the archaeologist, John Hurst, begun in 1952, built the Deserted Medieval Village Research Group, and began the forty-year excavation of Wharram Percy, a DMV on the Yorkshire Wolds. The outcome of this extended collaboration of the 'prolix professor and the taciturn man from the ministry' (M. W. Thompson's phrase) was the demonstration of longevity of the settlement and the fluidity of peasant house sites, making Wharram the benchmark reference for studies of rural settlement history. Collaborative work by others identified long selions in all the Wharram townships, and found some support for a 'Great Realignment' in its fields, as furlongs were created by their subdivision, perhaps as a single act of reorganization.

He made many other contributions to agrarian history, some stemming from his explorations of Tudor State Papers, notably the two-part 'Poll Tax and Census of Sheep, 1549' in the first two volumes of this *Review*, which explored the provenance of the tax and the indications on flocks derived from the surviving returns. His contribution to the Tawney *festschrift* in 1961, 'Habitation versus Improvement' explored the transition of enclosure from threat to the commonweal to its acceptance as community benefit, using a combination of Parliamentary, Chancery and Exchequer records. The use of the decree rolls of Chancery later produced a major listing of enclosure evidence, and *Economic History Review* article indicating their uses and limitations. Beresford's research on *New towns of the middle ages* (1967) covered work England, Wales and Gascony, and explored 'organic' growth and 'planted' boroughs in the expansion or towns, planting, as in Leeds, proving a very effective means or arrenting manorial waste. This led to collaborative work with the founding Editor of the *Review*, Herbert Finberg, which produced *English medieval boroughs: a handlist* (1973).

The balance of town and country was already shifting by the early 1960s, and for the rest of his career urban history predominated, and culminated with *East End, West End: the face of Leeds during industrialisation* (1988). Beneath the city, however, the agricultural landscape remained, and his exploration of urbanization and the building process applied the understanding of field arrangements to explain the physiognomy of the town. 'The back-to-back house in Leeds, 1787–1937' analysed the problem in terms of piecemeal building of housing largely by terminating building societies furlong by furlong from former open field; his contribution to the Hoskins *festschrift* reconstructed the property portfolio of Richard Paley, soapboiler and chapman, to show his purchases field by field, and speculative cottage building; and both themes had been anticipated in his inaugural lecture of 1960, 'Time and Place', where field boundaries were shown to determine the nature of the built environment. You could scratch the urban Maurice and reveal the early modern and medieval agricultural landscape.

Two books added to the three great monographs to define the distinctive Beresford approach to the past. *History on the Ground* (1957) offered six essays in landscape history – boundaries, Elizabethan villages, deserted villages, new towns, Elizabethan market places, and parks, with a concluding guide to practice – linking documents, maps, and field exploration journals. These supplemented or piloted the monographs, or offered thoughts on subjects otherwise not developed in books or journals, and they provide an authentic sense of Maurice's fieldwork. He often gave the impression that it was his favourite book, and certainly its evangelical nature was very much to his taste. *Medieval England: an Aerial Survey* (Cambridge, 1958), with Kenneth St Joseph was the other, and here the combination of wonderful air photography and very crisp explanatory and reflective texts produced a remarkable guide to reading the past in the landscape. The conclusions reached in most of Maurice's books have been modified by subsequent generations, with more grey tones correctly applied to some of his more black-and-white views, but all five have gone into revised second editions: each has lasted.

Maurice was one of the founding members of the Society, and served as a member of its Executive Committee until 1962. Thereafter, he remained its good friend, and assiduous reader of the *Review*, but participated only intermittently in its conferences, though he was delighted to publish again in the *Review*, in 1992. He was a member of the Advisory Group for the Cambridge Agrarian History of England and Wales from 1956, and one of the original authorial team for volume II. He was appointed Lecturer in Economic History at the University of Leeds in 1948, Reader in 1955, and the first Professor in 1959, and served the University to retirement in 1985. He was elected to the British Academy in 1985.

J. A. CHARTRES



PROFESSOR GORDON MINGAY, 1923–2006

Just three years after his arrival at the infant University of Kent in 1965, Gordon Mingay was appointed to a personal chair in Agrarian History, and became the first, so far unique holder of such a title in Britain. This was a just recognition of the impact of his early books and articles in this area of economic and social history, notably his highly readable *English landed society in the eighteenth century* (1963); *The agricultural revolution, 1750–1880* (1965) which he wrote with J. D. Chambers; and *Enclosure and the small farmer in the age of the Industrial Revolution* (1968). Mingay was to remain at Kent until retirement in 1983, living with his wife, Mavis, in a large, well appointed house at Selling and enjoying a comfortable life-style, one leading some to suspect that he sprang from a privileged background.

In fact, few were aware of the numerous hurdles that he had been obliged to surmount on his way to reaching high academic distinction. Mingay was born at Long Eaton, Derbyshire, but spent his boyhood in Chatham. Due to the war, he was unable to complete his Higher School Certificate before following his father into the Royal Navy in 1942. His wartime experiences included active service on HMS Uganda in support of the landings in Sicily and at Salerno, while after commissioning as a cypher officer in 1944, he was attached to the staff of the Admiral in charge of shore bases during the assault on Normandy. He also served in Far Eastern waters before demobilisation in 1946, but remained on the Navy Reserve for many years with appropriate promotions, reaching in due course the rank of Lieutenant Commander.

In postwar civilian life there followed several years of struggle, buoyed up by the support of Mavis, whom Mingay had married in 1945. First, he had to establish his credentials even to enter university, and this was achieved by dint of part-time study at Chatham Technical College while working for the Kent Education Department. In 1949 he was accepted to enter Nottingham University where his exceptional determination, industry and talents were soon recognised by Professor J. D. Chambers. It was Chambers who directed Mingay towards the study of agrarian history and was initially his mentor. A first-class degree was awarded in 1952 and embraced an outstanding BA dissertation on the estates of the Dukes of Kingston, a piece of work which in the opinion of the external examiner, H. J. Habakkuk, could have earned a B.Litt. at Oxford. A doctorate followed in 1958 which, in view of the paucity of postgraduate awards at

that time, was characteristically hard earned as Mingay acquired concurrently a teaching certificate (with distinction) and coped with the demands of successive posts at Bolton School (1952–3) and Woolwich Polytechnic (1953–7).

Now recognised as a coming man, he was next offered an appointment – with a substantial salary reduction – at the London School of Economics, where he was to remain for eight years until persuaded by his close friend, the late Theo Barker, to move to Kent. Here, he proved to be one of the new university's most prolific authors, producing *The Gentry, the rise and fall of a ruling class* (1976) and *Rural life in Victorian England* (1977), as well as editing a number of important works, perhaps most memorably a two-volume compilation, *The Victorian Countryside* (1981), which presented scholarly essays in an unusually sumptuous format. Nor did Mingay confine himself to rural themes: histories of *Georgian London* (1975) and (with P. S. Bagwell), *Britain and America, 1850–1939* (1971) featured among his publications. All this helped to bring him increasing international recognition, and he received many invitations to travel as visiting professor to foreign universities, especially in the United States but also in Australia, New Zealand and South Africa. He made many new and lasting friendships on his travels.

The flow of scholarly contributions continued unabated for many years after Mingay's retirement in 1983. *The Victorian Countryside*, revised and augmented, appeared as a trilogy: *The Rural Idyll*, *The Vanishing Countryman*, and *The Unquiet Countryside* (1989), in the same year that he earned plaudits for bringing to fruition (thereby ending an hiatus which had lasted nearly thirty years), a massive and authoritative tome, *The Agrarian History of England*, VI, *1750–1850* (1989). Several well-received texts also emerged from his study at Selling. They included *The transformation of Britain 1830–1939* (1987) and *Land and society in England, 1750–1980* (1994), while *A social history of the English countryside* (1990) called forth from one reviewer a comment that captured perfectly the essence of the author's approach to rural and agricultural history. 'Mingay', he wrote, 'sets the emotions of social history in the context of insightful economic reality and the analytical tools of economic history'. His final major book, *Parliamentary enclosure in England* (1997), summed up half a lifetime of research in the area and was welcomed in the pages of *Agricultural History Review* as a succinct and scholarly summary of the causes and consequences of enclosure.

Mingay achieved consistently high levels of productivity while never neglecting his Kent students, several of whom contributed to a *festschrift*, *Land, labour and agriculture, 1700–1914* (1991). This publication reflected the esteem and warmth of feeling which Mingay engendered among others working in the field, being edited by two rising stars in their own right, B. A. Holderness and M. E. Turner. His standing was reflected also by election to the Presidency of the British Agricultural History Society in 1986, following a lengthy period as editor of *Agricultural History Review*.

To be sure, much of the foregoing is common knowledge in academic circles. However, because of a certain reticence or shyness deriving from his genuine modesty, few colleagues were aware of the full range of Mingay's interests. While not given to blowing his own trumpet, he was an accomplished pianist, leading in his younger days a trio, later an eight-piece ensemble, which played the dance halls of the Medway towns. Two of the members of the Gordon Mingay Band later made a living as professional musicians, one with the Ted Heath Band. Fortunately for the future of agrarian history in this country, Mingay did not choose to follow the same path, but he retained an interest in big band music throughout his life. Still less well known, perhaps, is his literary alter ego. A fluent writer, Mingay could change gear much more easily than most academic authors. Even so, it will surprise those who knew him only casually, or on the basis of his scholarly reputation, to learn that he produced in the 1980s and under the pseudonym of Lee Lambert a number of thrillers that were slightly racy in tone. They featured titles such as *The Balinese Pearls*, *The Guaymas Assignment*, and *Blonde for Danger*.

Mingay was a private man with a much wider range of talents than he is usually credited with. He will be remembered by those who knew him well for his keen sense of humour and for the kindliness and underlying warmth which lay just below the surface of his quiet and unassuming demeanour. He died on 3 January 2006, aged 82.[1]

W. A. ARMSTRONG

[1] A version of this obituary appeared in *The Times* on 5 April 2006.

Gordon Mingay: an appreciation

In 1968 Gordon Mingay was promoted to a Chair of Agrarian History at the University of Kent.[2] There was no other such title in the British university system. At one and the same time it promoted him to a position which he richly deserved, but it also defined the man and his academic distinctiveness. In what follows I concentrate on his agrarian history. If readers wish to see his other contributions to economic and social history then they might explore the bibliography attached to the festschrift volume that was prepared in his honour in 1989, and which was published in 1991.[3]

Mingay's distinctive contribution to agrarian history has three overlapping features. First there was Mingay the archival researcher, seeking close detail on the workings of the landed estate in the eighteenth century. Initially this was more concerned with the development of the estate from the landowners' point of view rather than with the intimacies of the estate tenants and the labourers, though these wider issues came out in later works. Secondly there was Mingay the editor of multi-authored works. In this context we think firstly of his organisation and editing of the *Agricultural History Review* from part 2 of 1972 to part 2 of 1983. Has anyone edited the *Review* for longer? In addition he edited Volume VI of *The Agrarian History of England and Wales*. He also co-edited with Eric Jones a prestigious volume of essays in honour of David Chambers in 1967.[4] The volume included Mingay's own essay on the estate steward, one of the subjects to which he made a significant contribution. Thirdly, Mingay was a fine writer of texts in which he synthesised and reinterpreted standard subjects in agrarian history, and recognised the impact of successive generations of researchers. He was well equipped with a very good prose-writing style.

Gordon Mingay was a scholar who didn't jealously guard his ideas against revision and criticism. He was delighted that his contributions aroused the inquiry of others and more or less adhered to that old maxim that while facts and details are sacred, the opinions or interpretations arising from them are open to debate. Perhaps he inherited this from J. D. Chambers who presided over that influential school of rural research at Nottingham of which Mingay was a member. A closer reading of Mingay also reveals a substantial debt to H. J. Habakkuk. This is plainly evident, partly because he tells us so, but also because in his early publications the thread of ideas from Habakkuk is signalled in the text or in the footnotes. Habakkuk was at least the equal of Chambers in influencing the younger Mingay. Their joint influence was recognised by Mingay in his contribution to the First International Conference of Economic History held in Stockholm in 1960.[5] This inaugural conference attracted an illustrious group of established as well as emerging economic historians. It included David Landes, Walt Whitman Rostow, Owen Lattimore, J. D. Chambers, and within the section in which Mingay appeared there was the pick of the contemporary agricultural historians, Wilhelm Abel, W. N. Parker, George Duby, V. M. Lavrovsky and the two members from the UK who were emerging as the landed society historians of their age, Mingay and F. M. L. Thompson. Whenever was the study of English landed society stronger? These things run in cycles and others have taken up the challenge of defining and divining the role of the aristocracy, but have they or others superseded Mingay and Thompson? More like they have given the subject some different twists.

Mingay entered higher education and the profession as a mature student, but he clearly had a precocious talent. Two of his earliest essays appeared years before his PhD was examined and before he planned his immediate future at that Stockholm conference. Moreover, these pieces appeared in two of the premier British journals, the *Economic*

[2] This is a version of an address given at the memorial service for Gordon Mingay which Alan Armstrong convened on 23 June 2006 at the University of Kent at Canterbury. I have omitted the personal stories, not least the fact that Gordon Mingay examined my Ph.D. thesis in December 1973 at the University of Sheffield along with my supervisor B. A. (Jim) Holderness. It was no coincidence that Jim and I edited a festschrift for Gordon in 1991.

[3] J. Whyman, 'G. E. Mingay: a bibliography', in B. A. Holderness and M. E. Turner (eds), *Land, labour and agriculture, 1700–1820: Essays for Gordon Mingay* (1991), pp. xxi–xxiv.

[4] G. E. Mingay (ed.), *The Agrarian History of England and Wales*, VI, *1750–1850* (1989); E. L. Jones and G. E. Mingay (eds), *Land, labour and population in the Industrial Revolution: Essays presented to J. D. Chambers* (1967).

[5] G. E. Mingay, 'The large estate in eighteenth-century England', in *First International Conference of Economic History: contributions and communications* (1960), pp. 367–83.

History Review and the *Agricultural History Review*.[6] The former article was a classic piece that broke new ground. It was on the agricultural depression of the second quarter of the eighteenth century. The long-term impact of this work has been less in outlining something new in economic and agrarian history, for Lord Ernle had already covered the period albeit with the bias that Ernle clearly brought to his work through his own lifetime experiences in the late nineteenth century depression. Rather, what Mingay did was to gather together evidence involving the main economic parameters of prices, rents, and rent arrears, with the human input of the way estates managed these circumstances with their tenants. He did it mainly for a single estate, albeit a good sized landed estate, but with a specific location. Subsequently it was not difficult for others to identify alternative geographies and find different local circumstances leading sometimes to discordant outcomes. While that was not the point of the exercise and the impact of his contribution, nevertheless he developed a model approach combining economic circumstances with the development of management techniques that has been replicated at various levels until finally a national picture could be obtained not only of that second quarter, but also for a longer sweep of time. The second article was on the related issue of estate management but in the quite different circumstances of Kent. Together these articles helped to define Mingay's earliest interests and contributions to our scholarship – eighteenth-century estate management in specific economic circumstances. The origin of this approach came even earlier in his BA dissertation of 1952 which was on the Duke of Kingston's mainly Nottinghamshire estate.[7] These dissertations are the origins of so many careers, but according to Theo Barker's account in the festschrift presented to Mingay, this was a case of serendipity since Mingay's first choices for his dissertation were far removed from estate management.[8]

Out of the BA and those early publications there emerged in 1958 his PhD on *Land ownership and agrarian change in the eighteenth century*.[9] The Duke of Kingston's Midland estate may have been the bedrock for the PhD, but it was a much wider-ranging study, both in terms of geography and of the number of contemporary estates it included. It developed further in that Stockholm conference and it pointed in the direction of Mingay's first major book, his volume of 1963 on *English landed society in the eighteenth century*.[10] This was a piece of closely studied archival investigation. It also formed the cornerstone of a later more popular text, *The Gentry*, which appeared in 1976.[11]

From these early works on landed society Mingay developed a more enduring interest in wider rural society, especially those members of it on the lower rungs of the agricultural ladder. This included two early and major articles in the early 1960s in the *Economic History Review*, one on the size of farms in the eighteenth century, and the other on the Land Tax assessments and the small landowner in the eighteenth century.[12] In 1968 it was followed by one of the earliest pamphlets in the Macmillan series of *Studies in Economic and Social History*.[13] It was on the influence of enclosure on the fortunes of the small landowner. The combined effects of that pamphlet and the articles was to put back into the frame the long-standing debates about the people that the Hammonds had once suggested suffered fatally at the hands of agricultural change, especially those changes arising from enclosures. We return briefly to this later, but for the moment the significance of reawakening this line of inquiry was to bring back into the discussion a particular source, the Land Tax. This was a source which David Chambers in his own time had also revived, and specifically in the context of the small landowners. But Mingay sounded a considerable note of caution over the interpretation and use of the Land Tax. This is where his influence was brought to bear on a generation of researchers that emerged in the 1970s and who specifically took up the Land Tax and specifically related it to enclosure. The brashness, or perhaps the confidence of youth did not allow Mingay's considerable criticism, caution and hesitancy

[6] G. E. Mingay, 'The agricultural depression, 1730–50', *EcHR* 8 (1956), pp. 323–38, and repr. in E. M. Carus-Wilson (ed.), *Essays in Economic History* (3 vols, 1954–62), II, pp. 309–26; id., 'Estate management in eighteenth-century Kent, *AgHR* 4 (1956), pp. 108–13.

[7] G. E. Mingay, *The Duke of Kingston and his estates* (BA diss., University of Nottingham, 1952).

[8] Mingay's original choices were the Thames and Medway Canal, and Whitbread's London Brewery. See Theo Barker, 'Gordon Mingay: The man and the scholar', in Holderness and Turner (eds), *Land, labour and agriculture*, p. xvii.

[9] G. E. Mingay, *Landownership and agrarian trends in the eighteenth century* (Ph.D. thesis, University of Nottingham, 1958).

[10] G. E. Mingay, *English landed society in the eighteenth century* (1963).

[11] G. E. Mingay, *The Gentry, the rise and fall of a ruling class* (1976).

[12] G. E. Mingay, 'The size of farms in the eighteenth century', *EcHR* 13 (1962), pp. 469–88; id., 'The Land Tax assessments and the small landowner', *EcHR* 17 (1963), pp. 381–8.

[13] G. E. Mingay, *Enclosure and the small farmer in the age of the Industrial Revolution* (1968).

about the source to put them off. Instead, working more or less independently, they found ways to use it and in so doing by-passed the considerable doubts that Mingay had advertised.[14] Does this show the value of open and honest debate? Without those doubts perhaps that succeeding generation would not have searched for solutions.

The story has reached the late 1960s and at this stage Mingay was promoted to the personal title of Professor of Agrarian History. He settled less into the life of the archive historian and more into the style of the figurehead which goes with such a title. It is evident in a stream of books, chapters and articles which are essentially interpretive, synthesising the work of others in the profession. He became a very good textbook writer for he had a very engaging text-writing style, and he also became the Editor of this *Review*. We cannot do justice to the range of these contributions but we should list his two volume work on *The Victorian Countryside* to which so many scholars of his generation contributed, and his anthology of Arthur Young's work.[15] He also made a number of contributions to international conferences.[16]

Yet textbook writing dominated in the 1980s and 1990s, though these texts hid some very good ideas. In his last book – a text on parliamentary enclosure – he hid away two gems, gems which still seek an extended appraisal.[17] Briefly he turned his back on the agrarian consequences of enclosure and posed two questions. The first was on the relationship between enclosure and industrialisation in the sense that enclosing land and clarifying ownership rights released that land for mineral exploitation as an alternative to staying in agriculture. The second gem was the question of enclosure at the urban fringe and the clarification of ownership rights so that subsequently urban developers could extend the towns and cities into the countryside.[18]

This was never intended to be a Cook's tour of Mingay's contribution but rather a recognition of his broad legacy. In consequence a lot has been left out, but we cannot conclude without reference to two major contributions.

Mingay edited volume VI of the *Agrarian History of England and Wales*. The volume was planned in 1960 but Mingay was not its intended original and sole editor, it was meant as a joint venture with John Higgs. Mingay became sole editor when John Higgs had to withdraw, and while he was bringing the contributions together he also lost David Chambers and Arthur John. The volume finally came together in 1989 and stands as a tribute to the patience and skills of its editor as it does to the strength of British agricultural history, though at least two reviewers have noted the major omission of a stand alone chapter on parliamentary enclosure.[19] The death of contributors on projects which take a long while to complete is a hazard that editors face. Ted Collins will attest to this with regard to volume VII in the same series. In this case it also exemplifies another skill that Mingay possessed. He readily stepped into the breach left by Holderness's final illness and picked up the organisation and writing of the regional chapters in volume VII with Paul Brassley.[20]

That leaves one major piece of work to consider. In the middle to late 1960s Mingay's talents came to a focus in his joint book with J. D. Chambers, *The Agricultural Revolution*.[21] Theo Barker was in no doubt that Chambers was

[14] J. M. Martin, 'Landownership and the Land Tax Returns', *AgHR* 14, 1966, pp. 96–103; M. E. Turner, 'Parliamentary enclosure and landownership change in Buckinghamshire', *EcHR* 28 (1975), pp. 565–81; J. R. Walton, 'The residential mobility of farmers and its relationship to the parliamentary enclosure movement in Oxfordshire', in A. D. M. Phillips and B. J. Turton (eds), *Environment, man and economic change* (1975), pp. 238–52; J. M. Neeson, 'Common right and enclosure in eighteenth-century Northamptonshire' (PhD thesis, University of Warwick, 1977).

[15] G. E. Mingay (ed.), *The Victorian Countryside* (2 vols, 1981); id. (ed.), *Arthur Young and His Times* (1975).

[16] G. E. Mingay, 'The course of rents in the age of Malthus', in M. E. Turner (ed.), *Malthus and his time* (1986), pp. 85–95; id., 'Agricultural productivity and agricultural society in eighteenth-century England', in G. Grantham and C. S. Leonard (eds), *Agrarian organisation in the century of industrialisation in Europe, Russia, and North America* (Research in Economic History, Supp. 5), pp. 31–47.

[17] G. E. Mingay, *Parliamentary enclosure in England. An introduction to its causes, incidence and impact, 1750–1850* (1997), esp. pp. 41–44.

[18] This was a subject which had also engaged Maurice Beresford, who incidentally died just three weeks before Gordon Mingay. John Beckett and I have also been running with this idea, but alas we are still running and the finishing line is not yet in sight.

[19] M. Overton, 'The critical century? *The Agrarian History of England and Wales, 1750–1850*', *AgHR* 38 (1990), pp. 185–89; M. E. Turner, review of Mingay, *The Agrarian History of England and Wales*, VI, *1750–1850*, in *History and Archaeology Rev*., Spring 1990, p. 75.

[20] E. J. T. Collins (ed.), *The agrarian history of England and Wales*, VIII, *1850–1914* (2000), in which he thanks Gordon Mingay 'for bringing together chapter 5 with a new cast of authors', p. xxxvii.

[21] J. D. Chambers and G. E. Mingay, *The agricultural revolution, 1750–1880* (1966).

very much the junior partner – this was principally Mingay's work – and it has proven to be a remarkably durable piece of work. It constitutes just about the first footnote in countless studies of the English rural scene, but not uncritically so. Members of the profession sometimes love it but also sometimes hate it, but nobody ignores it. One group sees it as an apology for the upper classes in the class struggle, an exposition or an excuse for the mal-distribution of opportunity and income bowing to the great god progress. But a different group sees it as a concentration more on the outcomes or end results of agrarian change. That is not to say that these outcomes ignored the means to those ends, and the casualties arising from those means. On the contrary the work recognises that it was a nasty and brutish period for a significant proportion of society. Mingay, in subsequent texts, also reiterated this. But if someone can produce a piece of work that at one and the same time infuriates, yes, delights, certainly, but most important of all fires imaginations in all directions, then they leave a legacy which will endure. What more could one ask of a scholar?

MICHAEL TURNER

Book Reviews

Britain and Ireland

P. H. W. BOOTH (ed.), *Accounts of the manor and hundred of Macclesfield, Cheshire, Michaelmas 1361 to Michaelmas 1362* (Record Society of Lancashire and Cheshire, 138, 2003). lxiv + 96 pp. £25 to non-members.

This set of accounts for Macclesfield manor and hundred in 1361–2 combines the accounts of a number of officers of the manor and hundred for the accounting year. The officers, including the bailiff of the forest, a parker, reeves and stock-keepers, report on a range of activities all of which are, in some form and variety, familiar from medieval accounts of this and similar kind. It is most especially in the stock-keeper's accounts, as the editor, P. H. W. Booth, reminds us, that the particular interest of these accounts lies, since at this point in its history the lordship of Macclesfield, held by the Black Prince, was closely managed in relation to cattle breeding, a significant enterprise in this period. Thus, most especially in the stock-keeper's money and stock accounts, we are presented with a considerable degree of detail regarding, *inter alia*, the breeding, husbandry and marketing of the lordship's live- and deadstock. The accounts are presented in Latin with facing translation and are accompanied by a detailed introduction. The present edition is one part of a larger campaign by the editor, who has written extensively on the lordship and the county of Chester in the fourteenth century, to publish a range of material, and especially accounting material, relevant to the region and to the lordship, cross-reference to which is frequently made in this edition.

In the introduction, Booth details the descent of the manor and its administrative structures. In the fullest section of the introduction the editor also closely discusses what he terms 'the Macclesfield cattle enterprise'. He locks horns with earlier interpretations of the history and significance of livestock husbandry in the region, which he largely dismisses as 'uncritical', and offers a detailed assessment of the rise and decline of the 'enterprise', together with comment on a range of associated issues, including marketing, the costs of labour, the pasturing of the livestock, and dairying. Booth also describes the relatively limited profits arising from the livestock venture, where, although prices moved according to national trend, the actual prices were relatively low. In 1376, according to Booth, the concentration on cattle husbandry appears to have been abandoned. The editor speculates that the costs relative to profits, and especially labour costs, were a determining factor but he also considers the possibility that poor weather, and its concomitant effects on a hay harvest, may have had its part to play.

The volume is supported by figures illustrating a number of the significant trends outlined in the introduction, maps of the region and of conjectural sites for the vaccaries, and an index. There are two appendices, one usefully summarizing the 'cattle enterprise' data extracted from the accounts from 1353 to 1376, the other, rather more idiosyncratically, adding some further observations and associated commentaries on the 'Great rebellion of Cheshire of 1353', an 'event' relevant to the history of the lordship and also discussed in an set of published accounts edited by Booth.

A developing interest in 'decision-making in agriculture' and most especially the calculations of seigneurial management of husbandry, evident in the work of Campbell, Stone and others, will ensure that this volume will be of benefit to researchers in these areas, as well as those primarily interested in the late medieval history of the region.

PHILLIPP R. SCHOFIELD
University of Wales, Aberystwyth

JOHN LANGDON, *Mills in the medieval economy. England, 1300–1540* (OUP, 2004). xx + 369 pp. 38 tables; 12 plates; 28 figs; 6 maps. £60.

This is a most welcome book. A long-matured work, it is the culmination of some twenty years research that began at the University of Birmingham. Under the inspiring leadership of Rodney Hilton and then principally Christopher Dyer, a succession of postgraduate students pursued themes of largely rural history, firmly based on thorough studies of the copious English manorial documentation and at the same time grounded in an appreciation of the social implications of the nature of the medieval agrarian economy. During the early 1980s Langdon (and subsequently others) turned to the medieval mill as a pre-eminent subject of serious study,

with the aim of superseding the then-prevalent – often fanciful – speculations around the significance and the impact of this most obvious example of early mechanization. The present reviewer's *The mills of medieval England* (1988) was essentially a broad overview of the questions surrounding the mill, of its chronology and its social implications, and of the evidence. Langdon's book now brings a depth of research and analysis that allows our earlier models to be tested, confirmed, and generally modified. It is indeed a triumphant and worthy culmination of that long research effort.

Langdon focuses on the later middle ages, a period when the mill was fully-established. By 1300 the English countryside was filled with watermills and (since the late twelfth century) windmills, and in fact their number would soon begin to fall, accompanying the downturn in the population. The very large sample – 333 manorial mill histories each covering the whole period under study – confirms the trends identified in earlier, smaller samples that watermills were in gentle decline both in number and as revenue earners certainly until the middle of the fifteenth century, whilst the windmill entered a more precipitate decline. Fulling mills and other industrial mills held their position through the period, with a notable take-off in the number of industrial mills at the very end of the middle ages. Langdon's statistical work on a wide range of milling activities goes well beyond such simple analyses, however, and with constant regional breakdowns reflects the complexity of the late medieval economy. The numerous tables and figures reflect how extensive this statistical work was, and are a testimony to the breadth and depth of research that lies behind every chapter of this book.

The mill is interesting in itself as a machine, and there are technical data in plenty. The copious English manorial records often record in astonishing detail the minutiae of the costs of construction and repairs, from which a very full picture of the machines can be drawn, and also of course a fuller appreciation of the technicalities and the financial implications of operating a mill. Langdon uses this matter primarily to support a book which is essentially about the mill in use, about the mill's economic and social meaning. So this is no narrow technological study that neglects people: the owners and operators of mills, and their customers, receive full and satisfying treatment. The traditional perception of the mill as exclusively a jealously-guarded demesne asset has already been shown to be false, and Langdon fills out and develops the picture of diversity, with a significant number of mills effectively independent of the manor and many others held by tenants on lease. Much information on those who took tenancies is presented, and on those poorer men who actually worked the mills. The question of the relationships the different classes of customer had to these mills is crucial: how did suit of mill, the tenant's duty to use his lord's mill, actually work in practice? Langdon's presentation of copious evidence to demonstrate the practicalities of the situation, and the apparent tendency through much of this period for lords to extend or try to extend their powers in this respect, is only one of the many fascinating sections of the book. Each of his chapters ends with a discussion of the implications of his findings, and (parallel with the presentation of important empirical evidence for how this sector of the medieval economy worked) these discussions, of – for example – technical creativity and technological systems, capital fragmentation and reformulation, and the social interactions of milling, take the reader far into important theoretical considerations with significance well beyond the field of milling.

As Langdon points out in his concluding discussion, his study of milling confirms continuity rather than radical change, consolidation rather than discontinuity. The medieval mill was not an agent of social change, he is saying, but rather milling was yet another activity contributing to the reinforcement of traditional economic and social patterns. Though some historians of technology still favour an 'industrial revolution of the middle ages' driven by waterpower and windpower, the medieval mill can be seen in its true colours as a characteristic feature of a pre-industrial society.

RICHARD HOLT
University of Tromsø

R. W. DUNNING (ed.), *The Victoria history of the counties of England. A history of the county of Somerset*, VIII, *The Poldens and the Levels* (Boydell and Brewer for the Institute of Historical Research, 2004). xvi + 246 pp. 71 figs. £75.

This volume covers seventeen predominantly rural parishes in central Somerset, comprising the hundreds of Huntspill, Puriton and Whitley. In this region the low ridge of the Polden Hills divides two wetland areas, the central and southern Somerset Levels. Both consist of low-lying peat moors, overlain towards the coast by alluvial clays. Islands and peninsulae rise above the floodable land on both sides of the Poldens. In the parishes studied here the most extensive are the Sowy island and the High Ham promontory, both to the south beyond King's Sedgemoor.

This area was dominated throughout the middle ages by the great Benedictine abbey of Glastonbury. The settlement pattern is primarily one of large nucleated villages. Several villages along the northern flank of the Poldens have a distinctly rectilinear layout which suggests some level of organized planning. This was

presumably initiated by the abbey, and investigations at Shapwick have suggested that this may have taken place in the tenth century during a major reorganization of the monastic estate. The extent of Glastonbury's contiguous landholdings also enabled it to undertake substantial drainage works, notably the diversion of the River Brue through the central Levels from Meare Pool westwards to a new outlet to the Bristol Channel below Highbridge. This diversion is here dated to the later twelfth century, a little earlier than the date-range proposed by Michael Williams in *The draining of the Somerset Levels* (1970). Not only was the abbey directly involved in reclamation, it also encouraged its tenants to undertake similar works, and evidence of agricultural expansion and the settling of new hamlets and farms reaches a peak in the thirteenth century.

Even before the end of the fifteenth century, however, much of the Glastonbury demesne land was being leased out, arable farming had contracted, and some enclosure had taken place. The suppression of the abbey in 1539 and the division of its estate between individual proprietors brought to an end the traditional large-scale movement of flocks and herds around summer pastures on the Levels, and disrupted the co-ordinated management of the drainage. The new owners and tenants were unenthusiastic about improvements which they feared would prejudice their common rights, and preferred to accept the hazards of regular flooding. Overstocking for fatstock and cheese production in due course caused the grassland to deteriorate, and the value of the moors inevitably declined. Renewed improvements were undertaken through a series of parliamentary acts for division and reallocation of the moors between 1777 and 1807, while comprehensive drainage schemes were initiated for Sedgemoor and the Brue valley, with varying degrees of success. Major works continued into the middle of the twentieth century, with the construction of the Huntspill River and the widening of the King's Sedgemoor Drain.

One of the delights of the VCH is the detail it provides on some of the backwaters and byways of agricultural history. Scattered through the volume is a wealth of information on both traditional and more recent uses of the unimproved moors: summer grazing, reed-beds, osier cultivation, the pasturing of geese, fisheries, duck decoys, medieval turbaries and modern peat extraction. On the higher land, pockets of open fields survived into the eighteenth century, but here too there were distinctive local cultures such as cider orchards.

Occasionally one reads criticisms of the standardized format of the VCH and its encyclopaedic content. Yet its purpose is surely not to address the fashionable questions of a particular time, but rather to provide a solid bedrock of thoroughly researched material which can be quarried according to the needs of its users, along with a record of sources which can be used as a guide by those wishing to investigate further. The range of sources consulted is formidable and, for those of us whose grasp of palaeography and medieval Latin remains somewhat wobbly, the distillation of information from so many unpublished early manuscripts is particularly valuable.

If the Somerset VCH has a weakness, it is its parish maps. In this, as in previous volumes, they are immaculately neat, but limited in ambition, and therefore less useful than they might be. Based mostly upon sources of the 1830s and 1840s, they plot parish boundaries, roads and watercourses, and locate and name settlements; but they reveal little of the agricultural landscape, the extent and distribution of woodland, meadow, parkland, open field and enclosure. VCH volumes from some other counties, notably Oxfordshire, have made effective use of earlier estate maps to portray such information, and it is a pity that this practice is not more widely adopted.

It would be wrong, however, to end on a carping note. This latest Somerset volume is a splendid achievement, and Dr Dunning and his collaborators, Mary Siraut, who contributed six of the parish accounts, and Elizabeth Williamson, who provided the architectural descriptions, deserve our gratitude and congratulations.

JAMES BOND
Walton-in-Gordano, Somerset

SYLVIA PINCHES, MAGGIE WHALLEY and DAVE POSTLES (eds), *The market place and the place of the market* (Friends of the Centre for English Local History, Friends' Paper 9, 2004). iv + 102 pp. £6 incl. p&p from Publications Sales, Friends of the Centre for English Local History, Marc Fitch Institute, 5 Salisbury Road, Leicester LE1 7QR.

This is a collection of articles presented at a conference organized in March 2003 by the Friends of the Centre for English Local History at the University of Leicester. The editors claim to have exercised a very light touch and kept editorial intervention to a minimum. The articles cover a wide range of subjects in widely differing styles. Their wide-ranging nature reminds us that the market is a multifaceted construction. It is not possible to do full justice to each of the articles in a short review.

Graham Jones examines the forms and locations of medieval marketplaces, with particular reference to the relationship between churches and market places in Norwich and Stamford. He also examines Sunday markets (he includes a list), wool markets in Leicestershire, and the possibility that the sites of some fairs have pre-Christian religious origins. Christopher Dyer reminds us that even in the medieval period markets were not

simply places for the exchange of essential foodstuffs, or the only place where they were exchanged. Although the households of the gentry may have increased demand when they were present, markets were maintained by a local population of consumers. His paper is illuminated by numerous examples and reinforced by Jane Laughton's paper on Catesby Priory as a consumer in the first half of the fifteenth century. Using the account rolls, she shows how the priory used a variety of local markets and different personnel to purchase regular and occasional goods. She demonstrates not only that there was a hierarchy of markets, but that significant resources would be put into accessing the right market for a specific product. More illuminating is the use of local traders for substantial purchases, showing their flexibility, and the multiple roles of the Priory's cloth carrier as a trader on his own account and provider of fish and meat.

Dave Postles examines the market place as a social and cultural site that exhibited 'multiple spatiality'. Here different groups came into contact, power was demonstrated and resisted, and civic pride was exhibited, especially in the control of the space within the market and the development of new market places. He argues that the special temporary context that was essential to the functioning of the market provided a focus and cultural resource in which to play out conflicts. The significance of the personal experience of the market place is amply demonstrated by the contribution from Alan Everitt, recording his personal experience of markets, with particular reference to the modern market in Leicester. He reminds us that although the marketplace may have been the main focus of trade, it was not the only place where deals were done. He also reminds us of the importance people attached to their local markets and fairs, something few can now experience. This reviewer remembers that less than twenty years ago his town was transformed on a Wednesday by an influx of animals and country people, and in September children were given the day off from local schools to walk to the Cheese Show. Since then both the market and the fair have moved to sites out of town, and the intimate relationship between the activities, their traditional location and the population has been broken after more than five hundred years.

Andrew Hann explores the modernization of the market places in the eighteenth century, using a cultural and associated economic approach to look at the commodification of market rights, and the introduction of bourgeois civic values into the public sphere of the market. The last two papers examine horse trading. Anne Pegg gives an introduction to Rothwell (Rowell) Horse Fair and includes transcriptions from the toll books for 1686 and 1743–44. Mandy DeBelin provides an examination of the terms used to describe the horses, taken from the records from Banbury, Oxford and Hallaton (Leicestershire).

The value of collections such as this is the opportunity to be informed about areas outside one's normal range of interests. The reviewer wonders whether such books might be more widely read if they could be made available on the internet, but until they are would encourage anyone with more than a passing interest in the market to write to Leicester for a copy.

NEIL HOWLETT
Frome, Somerset

IAN D. WHYTE and ANGUS J. L. WINCHESTER (eds), *Society, landscape and environment in upland Britain* (Society for Landscape Studies, 2004). iv + 179 pp. £28 incl. p&p from Mrs Kathryn Brown, 38 Mill Road, Bozeat, Northants, NN29 7JA.

As the future of the hills and uplands of Britain continues to be fiercely debated both in agricultural and political circles, this volume of thirteen essays is a timely reminder that the mountains and moorlands have long played a dynamic role in the economy and culture of these islands. The book itself concentrates on the post-medieval period and attempts wide coverage of the environmental and ecological changes wrought by developments in agricultural and industrial technologies in the upland regions.

Introductory essays by paleoecologists Margaret Atherden and Richard Tipping are followed by Angus Winchester's detailed account of the management of upland forests in medieval England wherein he shows how the boundaries of forest and chase retreated into the heart of the uplands while numbers of deer dwindled when confronted with the inevitable competition from sheep. Bob Dodgshon's elegant quantitative account of the shift away from traditional Highland practices towards commercial sheep farming, Peter Herring's discussion of Cornwall, and other contributions testify to the profound ecological changes which follow in the wake of changes in the ratio of different upland grazing species. Ecological change also followed in the wake of enclosure, the familiar story of which is covered by John Chapman, while Eleanor Straughton considers common land utilization since enclosure, bringing to bear an international dimension to her chapter. Much of this, of course, is familiar stuff. In like manner, Ian Whyte's essay on the impact of mining and quarrying shows how the environmental impacts are both immediately apparent and darkly more insidious as heavy metals contaminate soil, vegetation, livestock and people. Inevitably, economic and technical advance leads to social change and Mark Brayshay and Andrew Williams reveal that

in Snowdonia long-term continuity punctuated by brief periods of rapid change have transformed both landscape and society. The combined effects of nineteenth and twentieth century estate and farm rationalization, followed more recently by the trauma of Chernobyl and the disastrous consequences of BSE and Foot and Mouth disease, have meant not only elements of ecological change, but a contraction in the number of full time farms in the Llanberis valley from forty seven in 1868 to a mere five in 2001.

Elsewhere in Wales, R. J. Silvester demonstrates how pressure on upland commons from the sixteenth to the nineteenth centuries, be it from overgrazing, encroachment, peat and bracken cutting or even shooting, left physical evidence in some shape or form. Moreover he shows that while the creation of seigneurial forests or the acquisition of lands by monastic institutions can be illustrated from documentary sources, where court rolls and other local records have not survived it becomes nigh-on impossible to describe the utilization of medieval uplands. The survival of huts, enclosures and the bases of buildings can offer some clues, although of course it is by no means certain that many (if any) of these ruins are of medieval or prehistoric provenance. It is extraordinarily difficult, in the absence of datable artefacts, to differentiate between the base of a medieval hut and a nineteenth-century shepherd's shelter. Besides, even if the thousands of surviving huts in different parts of upland Britain were of proven medieval date, we could only intelligently speculate on the nature of the economy they oversaw if we knew with certainty whether they were permanently or seasonally occupied. And what of these allegedly 'medieval' strip cultivation systems increasingly revealed by aerial photography in the hills of mid-Wales? They look suspiciously like early nineteenth-century cultivation ridges to me. In fact a few years ago I stumbled across an abandoned nineteenth-century plough close to one of the sites now claimed to be of medieval provenance!

While agricultural change has its inevitable effects on upland ecology, the influence of collecting and gathering is sometimes ignored or underplayed, and the contribution to this volume by Rotherham, Egan and Ardron on the effects of peat and turf utilization shows just how widespread these practices were in upland Britain. Peat cutting (and to a lesser extent the gathering of broom, gorse, rushes and bracken for a variety of purposes) had significant effects on vegetation, soil and hydrology. It is sadly ironic that those melancholy, dreary and featureless deserts of *Nardus* and *Molinea* which develop after the removal of peat are now considered by the green primitives to be worthy of preservation.

The most interesting and original essay in this collection is contributed by Melanie Tebbutt and is essentially a consideration of the imaginative geographies of the Peak, the association of the northern uplands with freethinking and radicalism and as a metaphor for masculinity with the inevitable homoerotic elements. Contrasting the 'masculine' north with the soft 'feminized' downlands of southern England, Tebbutt shows that the hills were seen as bastions of purity and wholesomeness against the squalor of urban life.

The final chapter, by Guy Robinson, reviews the development and organization of National Parks, Areas of Outstanding Natural Beauty and kindred designated zones and discusses how farmers are being encouraged to contribute to strategies of environmental maintenance and enhancement. Unfortunately, neither Robinson nor other contributors to this useful and well-illustrated volume emphasize the vitally important point that the traditional pattern of the hills and uplands will only be maintained by a thriving farming population who are paid to ensure that the proper balance of sheep and cattle are grazed so as to sustain the botanical integrity of upland swards. What is certain, as the economist Peter Midmore and I have shown, is that for all the talk of the bughunters, twitchers, and *aficionados* of bog and bush, the visiting public want above all to see a well-farmed and husbanded landscape, while the farmers themselves (essentially the creators of that landscape) want, above all, to farm.

R. J. MOORE-COLYER
University of Wales, Aberystwyth

JOSEPH BETTEY (ed.), *Wiltshire farming in the seventeenth century* (Wiltshire Record Society, 57, 2005). xlviii + 376 pp. 14 illus. £20 plus p&p from Wiltshire and Swindon Record Office, Bythesea Road, Trowbridge BA14 8BS.

Wiltshire farming has long fascinated agricultural historians. It features strongly in the many volumes of the *Agrarian history of England and Wales*, particularly because of its marked division into different agrarian landscapes and farming types, and its early participation in agrarian improvements, such as enclosures and the 'floating' of water meadows. It is therefore timely and appropriate that the Wiltshire Record Society should have produced this excellent edition of agrarian sources, edited by the acknowledged expert on the county's early modern farming history.

These sources can be divided into four broad categories. Firstly, there are materials that depict farm and estate management, perhaps the most interesting of which are the detailed farm accounts of large chalkland farms at Norrington and Trow, and the home farm on the Arundell estate at Ansty. The materials also include accounts of

sheep flocks, estate surveys, probate inventories and tithe accounts. The second category comprises local agrarian institutions, notably manorial government, the activities of manorial stewards and the regulation of markets and fairs. Of these, the sources illustrating manorial custom and government are particularly revealing, showing how the communal sheep flocks of the chalk downs were managed, and emphasizing the range of sanctions available against transgressors. The lists of sellers of animals at the fairs of Castle Combe are a rare survival and offer an important insight into the likely volume of business at these sometimes overlooked hubs of the agrarian economy. The third category of sources relate to activities that could be described collectively as 'improvement'. These include records of pre-parliamentary enclosures by agreement on the chalk downs, an important and wide-ranging collection of estate sources and leases relating to the management of water meadows adjoining the Avon, and sources covering the specialist husbandry of woad and rabbits. Finally, there is a section that highlights the effects of these seventeenth-century changes on the labouring population, particularly the fluctuations caused by population increase and squatters, and the subsequent depopulations following enclosure, and the many battles engendered by what Hindle has termed the 'politics of entitlement' to resources and relief.

This is a wide and valuable range of sources, backed up by very careful and knowledgeable editing. This takes two forms. Firstly, there is a useful and important scholarly introduction, sketching out the county's agrarian regions, agricultural techniques and markets, and then concentrating on the nature and diversity of improvement in the seventeenth century. This amounts to an extremely informative overview of the sources, and sets them very effectively into their spatial and chronological contexts. Secondly, each of the sources has its own short introduction, explaining the nature of the source, the location of the farming enterprise by which it was created, and any other relevant details about its authors or notable features of its content. These two elements add considerably to the historical value of these materials, particularly to those coming to such sources for the first time.

There are only two possible criticisms of this collection, both of which the editor acknowledges, and neither of which is easily surmountable. The first is that most of the sources are drawn from the more extensive archives of the larger estates. The second is that these archives are more common on the larger holdings of the sheep-corn downs than they are of the wood-pasture vales, where ownership (and source survival) was more fragmentary. This creates a slightly lop-sided perspective of the county's agriculture, even if it emphasizes the importance of its regional differentiation, and one of the fundamental problems inherent in the study of agrarian history. Nevertheless, this volume is an important and highly impressive edition of farming sources. It should be required reading for students of agrarian history and the local history of the county alike. It will also be very useful for comparative purposes to those early modern historians with subject interests outside Wiltshire, and for those interested more generally in material life in seventeenth-century England.

H. R. FRENCH
University of Exeter

DORIAN GERHOLD, *Carriers and coachmasters. Trade and travel before the turnpikes* (Phillimore, 2005). xvii + 270 pp. 82 illus; 19 maps. £19.99.

For a number of years Dorian Gerhold has been producing thoughtful and exhaustively researched publications dealing with various aspects of travel and transport in early modern England and in so doing has significantly revised our views of that subject. Those brought up on Defoe, Thoresby and Celia Fiennes whose dramatic and even ghoulish descriptions of the horrors and pitfalls of road transport coloured the perceptions of many a schoolboy a generation or so ago, are offered a convincing corrective in his present book. Marshalling a wide and catholic range of sources, from Chancery and Exchequer records, probate inventories and diaries to newspapers, letters and handbills, Gerhold demonstrates the existence of a dense connection of carrying services around London long before the development of the early turnpikes. These apart, burgeoning regional and local services helped extend industrial and cultural links with the capital and ultimately with the increasingly integrated world economy. In this respect the carriers and coachmen forming Gerhold's *dramatis personae* were of fundamental and increasing importance throughout the century after 1650.

In describing the development, organization and logistics of the carrying trade and the early stage coach network, the author takes us into a frenetic world of ostlers, innkeepers, warehousemen, drivers, bookkeepers, petty thieves and highwaymen all of whom waxed and waned as the transport economy grew. As two-wheeled carts were increasingly replaced by four-wheeled wagons (introduced from Flanders) in the seventeenth century, and slowly but surely the draught capacity of horses improved, so road transport became increasingly regular and reliable. True, some goods continued to be conveyed by water, via river or coastal systems, but the bulk of transport flows had been transferred to the roads by 1700, and as the years went by a variety of improvements both in the quality of road surfaces and the technicalities

of wagon and stage construction meant that unit costs of transport began to decline. It is important, however, not to fall into the error of over-estimating the degree of improvement of road surfaces before the mid-eighteenth century. As Gerhold is at pains to point out, the persistence of the packhorse train, capable of travelling thirty or even forty miles per day, arose from the relatively rough surfaces of the earlier roads which, in effect, *made* the packhorse economic. In considering the detailed *minutiae* of packhorse, wagon and stagecoach operational costs, Gerhold maintains that the packhorse was substantially displaced as roads improved in the eighteenth century. Perhaps; but not so in Wales (and, I suspect, other upland areas of Britain) where packhorses were regularly in use in the late *nineteenth* century, in some cases providing a means of transport for young sprigs of the gentry en route for Shrewsbury School. Incidentally, Gerhold's narrative largely ignores Wales, counties to the west of Offa's Dyke appearing as blanks on his maps. Perhaps I have a bit of an axe to grind here, but I can't help wondering why it is that despite obvious cultural differences, Wales is treated as an almost totally foreign land when it comes to essays on economic history!

Unless readers should think that this book is solely about matters technical and economic (and there is plenty of this, with massively detailed appendices dealing with costs, fares, timetables and the like), Gerhold colours his tale with accounts of the sort of people who travelled, of the personal wealth of the carriers and coachmen and of the enormous range of materials which were being hauled around the country. Particularly fascinating is his coverage of the minor irritations of travel in his period. As a frequent user of the train and the bus, I feel for those fastidious unfortunates who, unable to hire a complete coach, were obliged to share with others whose habits and personal hygiene left much to be desired. I shall reflect upon his work the next time I seethe in a railway carriage at the ring tones, I-pods and laptop computers which seem to be necessary impedimenta of today's travellers.

This book probably represents the most comprehensive account of travel and transport in early modern England which has been written to date. It is by no means an 'easy read' and perhaps a little judicious editing would have led to examples being used a shade more selectively and to some of the occasionally heavy-handed writing being eliminated. But this is carping criticism of a masterly piece of research which brings the subject up to date and lays the platform for all future studies in the genre.

R. J. MOORE-COLYER
University of Wales, Aberystwyth

MARIE-LOUISE LEGG (ed.), *The Diary of Nicholas Peacock, 1740–1751. The worlds of a County Limerick farmer and agent* (Dublin: Four Courts Press, 2005). 256 pp. 8 illus. £45.

Nicholas Peacock's diary concentrates primarily on his activities as a farmer and land agent in County Limerick in the years before and after his marriage in 1747. This edition should be of considerable interest to agricultural historians on both sides of the Irish Sea. Peacock was from the cadet branch of colonists who had followed Cromwell's army in the 1650s. He acted as land agent to other English settlers, the Hartstonges, even if his frequent distraints against tenants' cattle, as well as his attempts to conceal his employer's estate from the creditors, illustrate the starker outlines of the Irish rural economy. The same point is emphasized by the dramatic price fluctuations highlighted by Legg in her introduction, even if the diary makes little direct reference to the two severe winters and food shortages of the years 1739–40 and 1740–1. As Legg also shows, Peacock's farming activities were diverse, and he was able to exploit the good alluvial soils of the area to grow oats, wheat and barley, as well as peas, beans, vegetables and good quality flax for fine linen production. He also raised sheep, cattle and horses. This agrarian production was sold at local fairs and markets, and paid for in a multiplicity of currencies that indicate Ireland's chronic shortage of specie at this time, as well as by a series of intricate exchanges and credit relationships.

Through these years, Peacock's over-riding concern was to get married, partly for financial reasons, and partly because of his desire to have a wife to run the farming household. After a failed attempt in 1740, and a relatively hard-drinking bachelor lifestyle thereafter, he succeeded in his object in 1747, with his marriage to Catherine Chapman, 'ye begining of ye date of my happyness', and the end of his serious drinking. Marriage brought extra spending on furnishings and clothes, and (in due course) the expenses of childbirth and rearing.

Rural accounts of this type are rare throughout the 'three kingdoms' in the eighteenth century, and are particularly unusual in Ireland, which is also less well served by estate accounts and correspondence. This makes the publication of this diary particularly worthwhile, and valuable for agricultural historians. It also provides two other opportunities. Firstly, it allows an important comparison between the Irish and English agrarian economies, and in the institutional practices and transaction methods of those two economies. Secondly, despite the relatively cryptic entries, it offers a glimpse into the Irish rural society, and the co-existence of the lower rungs of the Protestant ascendancy with Irish Catholic tenants. Peacock's diary suggests that this relationship

was reasonably harmonious, as he allowed his labourers and workmen to visit a nearby holy well on St. Patrick's day, attended a Catholic wedding and accommodated a Catholic priest on one occasion.

The editorial standards are high throughout this volume, and the introduction provides valuable context, on Peacock's origins, his family connections, and some of the important facets of his activities as agent, farmer, local officer and husband. There is also a useful glossary of terms, which reveals the meanings of unfamiliar agrarian and dialect terms (such as 'callops', from the Irish *colpa*, full-grown horse or cow). This edition of Peacock's diary merits careful reading by historians interested in the rural economy and rural life in this period, and extends our understanding of both by some measure.

H. R. FRENCH
University of Exeter

W. P. GRIFFITH, *Power, politics and county government in Wales. Anglesey, 1780–1914* (Anglesey Antiquarian Society, 2006). xii + 452 pp. 22 illus; 3 maps. £26 incl. p&p from Mr David Wilson, AAS Publications Officer, Stone Science, Bryn Eglwys, Llanddyfnan, Llangefni, Anglesey, LL75 8UL.

The evolution of county government in nineteenth-century Britain has received relatively little attention from modern scholars. Yet the sources for such a project are vast, especially for the period after the 1840s when central government insisted that greater attention be paid to the preservation of locally-generated records. The appearance of a heavyweight study on the form and reform of county administration in nineteenth-century Anglesey which draws on this almost ignored repository of contemporary documentation is thus very welcome.

In twenty chapters stretching across four hundred pages, William Griffith sets out to chart the history of county administration from the onset of the French revolutionary wars to the eve of the Great War. Throughout the first hundred years of the period, the prevailing theme in Anglesey was the endless struggle to find men willing – let alone competent – to carry out the business of local government. The reasons for the shortage of manpower are not far to seek. A well-placed anecdote highlights the grim reality of what service in the country magistracy actually involved, sitting all day in damp clothes in a cold room listening to trivial cases (p. 66). In Anglesey the internecine squabbling of the local gentry was an additional factor, and in the 1840s reduced the apparatus of local administration to a near standstill.

So few magistrates were active that the bench relied heavily on its professional employees, and in one of the most illuminating sections of the book, Griffith details the work of officers such as the clerk of the peace and the county treasurer. Nevertheless, by 1860, with additional functions (such as policing) being heaped on their shoulders, questions began to emerge as to whether the quarter sessions as currently constituted was really the best body that could be found to deal with county administration.

Despite the wide political consensus on the need for some kind of change, it was not until the mid-1880s that pressure mounted for reform. At this point, the advent of a democratic franchise, together with mounting radical attacks on the existing aristocratic magistrates and the new importance of particularly 'Welsh' issues in politics – issues suitable for local settlement such as licensing – focused attention on local government reform.

The chapters on the new county council elected in 1889 are full of interest. Griffith calculates that the new bodies galvanized attention in Wales to a far greater degree than they did elsewhere: 70 per cent of seats in Wales were contested compared with an average of 54 per cent for England and Wales as a whole, and voter turnout was an impressive 80 per cent (p. 267). Public interest in county government declined somewhat after the initial outburst of enthusiasm, but this had the desirable effect that the council remained very stable in terms of personnel, its predominantly agricultural nature reflecting the core industry of the island. The new councils also reflected local preferences in other ways, notably in their championship of the Welsh language. Not only did the Council take on the local railway company when it threatened to dismiss monoglot Welsh-speaking employees, but it was careful to ensure that its literature relating to vital new services such as midwifery appeared in both languages.

Griffith concludes his account with a survey of the work of the council after 1889; a chapter on the 1902 education act; and an interesting examination of the magistracy on the eve of the Great War. Although the gentry and aristocracy still held places on the bench they were, as Griffith says, by now 'a marginal irrelevance' (p. 396) and the active portion of the magistracy was made up of farmers. The magistrates' bench had come to resemble the new county council.

For all its strengths there are times when a broader 'social history' context would have been valuable. There is a lot more here about the finance of local administration than there is about the society which the quarter sessions helped administer. As a consequence, local government sometimes seems a strangely disembodied institution. We get little impression of the impact on Anglesey society of events ranging from the French wars to the cattle plague crisis of 1865–7 and the tithe war of

the late 1880s, even though the responses of the quarter sessions are faithfully chronicled.

More use might also have been made of the extensive reports of quarter sessions business which appeared in local newspapers. Particularly during crises such as the cattle plague, members of the bench often took it upon themselves to be representatives of their particular localities, lending the session the air of a county parliament. Similarly, the press offers a rich source of comment concerning the activities of the magistrates, and there were various stages during the century when complaints about 'justices' justice' in relation to the game laws might form the starting point for a wider critique of county government as a whole.

It would be wrong to end on a negative note, however. Griffith has managed to produce a big and important book on a subject of considerable interest. It is a study that can, and hopefully will, become a model for the history of county government in other parts of Britain.

MATTHEW CRAGOE
University of Hertfordshire

MICHAEL HOLLAND (ed.), *Swing unmasked. The agricultural riots of 1830 to 1832 and their wider implications* (FACHRS Publications, 2005). 19 tables; 32 illus; 7 figs; 14 maps. ix + 312 pp. £20 incl. p&p; data CD £10 incl. p&p, both from Family and Community Historical Research Society Ltd., Unit 4, 5 West Hill, Aspley Guise, Milton Keynes MK17 8DP.

The Swing rising of 1830, a series of locally based riots rather than a nationally co-ordinated rising is famous for its scale and for the involvement of the agricultural labourers, a group not normally known for its political mobilization. During this brief but dramatic moment, which coincided with a year of wider political crisis, labourers and craftsmen protested over agricultural machinery, low wages, high rents, tithes, poor relief, and Irish labour, as their varied forms of protest – arson, machine-breaking, threatening letters, impressment, intimidation, coercion, the use of mobile bands of activists – were replicated nationally in neighbourhood after neighbourhood. The Swing protestors broke the machinery that they blamed for causing winter unemployment; some 400 machines were destroyed. Historiographically, of course, the rising is indelibly associated with George Rudé and Eric Hobsbawm's classic, *Captain Swing* (1969 and 1973), one of the most influential history books of the 1970s.

The rising has many facets. One of the most interesting aspects of 1830 is the evidence of fleeting successes. Farmers did surrender their machinery for destruction or stopped using it. Wages were in fact raised and rents lowered – until the inevitable repression, for one should not forget that the riots resulted in 19 executions and nearly 500 transportations. Swing also allows the historian to examine the actual tactics employed by the supposedly politically inarticulate, the notable range of forms of mobilization and negotiation: the menacing (and contagious) hill-top fires, the delegates who met and parleyed with magistrates and farmers, the bands of labourers who went from farm to farm, pressing for an increase in wages or smashing machines, the emergent local leaders, self proclaimed military men such as the various 'Captains' and the man known ominously as the 'Counsellor'.

Michael Holland's *Swing unmasked* is clearly a labour of love. Produced by a team of local researchers, members of the Family and Community Historical Research Society, it consists of an introductory chapter, core chapters on Swing in Surrey, Shropshire, Essex, Derbyshire, and Berkshire, and then some more peripheral studies on associated (and probably not associated) topics. The strengths of this sort of project are obvious: local knowledge, exhaustive research, and an infectious enthusiasm. The weaknesses, however, are no less apparent: repetition, the inclusion of unnecessary background material, the threat of mere antiquarianism, a certain organizational unruliness (for instance, a chapter on the cholera riots of 1832), a plethora of appendices, and a lack of awareness of some key academic publications on their very subject matter. Indeed the gaps in secondary reading are rather worrying, for one of the claimed contributions of the volume – to demonstrate Rudé and Hobsbawm's underestimation of the sheer scale of Swing – has already been anticipated by Griffin in an article in *Southern History* (2000), and the team's 'new work' on the transportation of prisoners does not cite the fascinating study by D. Kent and N. Townsend, *The convicts of the Eleanor: protest in rural England, new lives in Australia* (2002), which traced a cohort of Berkshire, Hampshire, Wiltshire, and Dorset rioters to their transportation and experiences in Australia, and which is useful for this and many other aspects of Swing.

These criticisms aside, collectively the essays in *Swing unmasked* provide a wealth of detail about the forms of protest employed by the Swing protestors – several of the contributors deal with threatening letters, machine breaking, and arson. Their research certainly confirms earlier demonstrations that Hobsbawm and Rudé underestimated the extent of this rural protest, even if the collective effort is somewhat short on analysis. Those interested in the last major rising of the agricultural labourers should not yet discard their copies of *Captain Swing*.

BARRY REAY
University of Auckland

NIGEL E. AGAR, *Behind the plough. Agrarian society in nineteenth-century Hertfordshire* (University of Hertfordshire Press, 2005). x + 193 pp. 34 illus. £12.99.

No one could accuse this book of being too narrow in its scope or content. It offers a very wide-ranging analysis of many aspects of rural society in nineteenth-century Hertfordshire covering topics such as population change, enclosure and agricultural development, employment, housing, diet, poverty, farm machinery, village life and social relations. Its structure is therefore largely thematic although it also follows the broad chronological sweep of agricultural change in the nineteenth century. The book is attractively produced and well illustrated with many maps of enclosures and forests and photographs of rural workers.

One of the main contentions of the book is that the pattern found in rural Hertfordshire was not so different from other counties to make it atypical of the (southern) English experience as a whole. Although contemporary farming writers tended to by-pass the county in favour of more famous pioneering high farming regions, Hertfordshire's agricultural history largely replicated the blueprint set by other arable counties. Its prosperity over the middle decades of the century was underpinned by the increased use of scientific and market-orientated farming methods (Chapter 4). The impact of mechanization was slow, with the dominance of cheap labour and horse-power ensuring farm machinery was not fully embraced until the twentieth century (Chapter 5). Male day labourers, who were poorly paid, their families poorly housed and their diet meagre and inadequate, dominated the farm labour force (Chapters 6, 11, 12). This led some of them to join the short-lived labourers' union in the early 1870s (Chapter 13) whilst others left the land and joined the flight to the local towns (Chapter 2). Yet there are some crucial exceptions to Hertfordshire history in this period that break the mould. The most important was the presence of a thriving domestic industry in the south of the county – strawplait. This industry employed a very high proportion of the county's women (although their numbers are likely to be under-estimated in the census due to the blinkered nature of recording married women's work), offering them a degree of autonomy and influence not found in other counties (Chapter 10). Agar argues that it also protected working class families against the worst ravages of poverty and insecurity and offers an explanation for the relative absence of serious rural disorder (with Swing and anti-poor law riots making little impact in Hertfordshire). The industry faced competition from cheap foreign exports in the last quarter of the century, and coupled with the depression in agriculture, the county's prosperity was badly hit.

Agar's enthusiasm and knowledge of the region are obvious throughout and he has produced a book that offers a useful and interesting broad account of Hertfordshire's rural history in the nineteenth century. The academic reader may find some gaps. I found the lack of local data on population and employment structures for example left many questions unanswered. However this book adds to our general understanding of rural society at the local level and will undoubtedly appeal to a wide audience.

NICOLA VERDON
Sheffield Hallam University

MARK FREEMAN (ed.), *The English rural poor, 1850–1914* (Pickering and Chatto, 2005). Five volumes (xliii + 354 pp.; v + 412 pp.; v + 402 pp.; v + 436 pp.; v + 429 pp.). £450.

The English rural poor have always been overshadowed by their urban, industrial counterparts in the historiography of Victorian and Edwardian England, despite the state of rural life and labour being a key cause for concern for contemporary commentators and politicians. This handsomely-produced five-volume set aims to redress this neglect by reproducing forty three pamphlets, books, reports and extracts from the period 1850 to 1914, all of which address, in various ways, the condition of the English rural poor. The set is edited by Mark Freeman, well qualified for the task being the author of the recent monograph *Social investigation and rural England, 1870–1914* (2003). Freeman provides a concise 35-page general introduction to the volumes, as well as a brief one to two page overview of each source in turn. The content of the volumes has been arranged in chronological order. Thus Volume I concentrates on pre-1872 material, Volume II spotlights the agricultural labourers union of the 1870s, Volumes III and IV include sources from the 1880s and 1890s respectively, and finally Volume V features the Edwardian rural poor. The sources are reprinted in their original typeface and setting, enhanced by modern digital techniques for a clean presentation. The selection of material has been informed by several criteria: first, the documents are 'rare' or difficult to obtain, second, they are short(ish) in length, and third, they represent a range of different English regions. Thus we find reports from government inquiries such as J. H. Tremenheere's on agricultural gangs and Arthur Wilson Fox's on work and wages, essays by well-known writers such as Thomas Hardy and Richard Jefferies, social investigations by B. S. Rowntree, Maud F. Davies and H. H. Mann, alongside more quirky material like a 1865 pamphlet *How to supply the agricultural labourer with good beer at a low price* or the 1874 National Agricultural Labourers Union melody book. Many of the sources are obscure and

little-known but others are much more familiar and have been widely utilized by historians of the rural poor. Indeed the inclusion of some may seem a little surprising in that they are so well-known and fairly easily available. The same reasons are given for the exclusion of celebrated rural autobiographies (such as those by Walter Rose and Flora Thompson) which may have been an oversight. However, bringing together such a diverse and rich body of literature for the first time can only be welcomed as it provides a treasure trove for the academic researcher and interested amateur alike.

Although the volumes have been arranged chronologically there are three prominent themes: the moral and material condition of the rural poor, the political consciousness of the rural labourer, and the depopulation of the countryside. The state of rural housing and education, the availability and remuneration of work, hiring conditions, female and child labour, the influence of beer houses and access to land dominate the first category. Although the focus of concern altered over the decades, moral censure of the rural poor remained a prominent feature of the whole period. One example, the employment of women outside the home, is typical. Charles Whitehead in 1870 claimed that outdoor work was unsuitable for women as 'A woman who works constantly in the fields cannot fulfil her social duties; she cannot attend properly to the wants of her husband; she cannot do her duty by her children' (I, p. 279). The sentiment is echoed by Rowntree in 1914: 'A woman's place is in the home, looking after her house and children, and no social condition can be regarded as satisfactory which compel her to neglect these fundamental duties in order to eke out the inadequate wage of her husband' (V, p. 357).

The emergence of the rural poor as an important constituent in the political arena is chronicled through the rise of agricultural trade unions in the early 1870s, the enfranchisement of the male rural population in the 1880s, the formation of parish councils in the 1890s and the 'land question'. Many commentators, fearful of the appearance of modern strike tactics and alarmed by the potential of democratic change, call for the reinstatement of a paternalist model of social relations in which labourers, farmers and landlords 'are a compact threefold cord' (II, p. 135). Others were more welcoming and optimistic about political change. Jefferies saw genuine village self-government as leading to 'the sentiment of independence' where men 'work, strive and save, that they may settle at home' (III, p. 113). But whilst there was cause for optimism, many sources point to the continuation of poor pay, lack of recreation and disinheritance from the land itself as contributing to the drift from the countryside. Rowntree still stressed in 1914 that 'there is no doubt that as a class' agricultural labourers were the 'worst paid' in Britain 'and it is high time something was done to raise their status' (V, p. 356). Allotments, higher wages, co-operative farming, sanitary housing and pension provision were all touted as possible remedies by various authors but, as Mann argued, the cry of 'back to the land' rang hollow as long as life chances and expectations of rural people remained so low in the early twentieth century.

Do we get to hear the 'true' voice of the rural poor themselves? The vast majority of sources are written by the social, political and economic elites of the day: rural clergy, landowners, farmers, JPs, land agents and so on. Some clearly are sympathetic to the plight of the rural poor and sought to undermine the idyllic representation of the English countryside. But as Freeman argues in his introduction, most of the sources offer an 'external' perspective on the rural poor. Even the handful of sources which purport to be written by agricultural labourers such as *A few words on courtship and marriage* by A Hampshire Agricultural Labourer (1867) or *The strike in the agricultural districts* by the self-proclaimed 'Owd Warwickshire Lad' (1872), probably were not. The autobiography of George Mitchell is however reprinted in full in Volume 2. Thus the collection needs to be approached critically. What the volumes provide is a fascinating representation of many facets of rural labouring life between 1850 and 1914 which is invaluable to anyone with an interest in this period. At £450 for the set, it will be out of reach for most academics and university and public libraries too. This is a shame, as these volumes deserve to reach as wide an audience as possible to highlight the continued centrality of the rural world to Victorian and Edwardian England.

NICOLA VERDON
Sheffield Hallam University

KEIR WADDINGTON, *The bovine scourge. Meat, tuberculosis and public health, 1850–1914* (Boydell Press, 2006), ix + 226 pp. £50.

This book is not entirely about agricultural history as it is partly focused on animal disease and public health. The main actors in the story are the scientists, doctors, vets, politicians and health reformers involved in the long fight against tuberculosis, and not farmers. In the late nineteenth century there was, according to the author, more than a general anxiety about the relationship between food and disease, an important part of which centred on the relationship between this disease in cattle and man. Most studies of human tuberculosis have concentrated on the transmission of the bovine form in the milk supply. But the disease can also be visibly present in the organs and lymph nodes, though

not in the muscle tissue, of infected animals slaughtered for meat. As butchers removed any obvious signs of tuberculosis before sale, its presence was invisible to the customer. There was intense debate about the threat of human infection from such meat, and whether cooking made it safe to eat.

Precise detection of the disease in animals and man became possible after the isolation of the tubercule bacillus by Robert Koch in 1882, but effective methods of control were slow to emerge. They depended on the agreement by scientists and acceptance by the public that the disease in animals could infect humans. For the next twenty years there was general acceptance that this was so. However, Koch challenged this interpretation in his speech to the International Medical Congress in London in 1901 when he expressed the view that bovine tuberculosis rarely caused the disease in humans. If this were so, it reduced the urgency to eliminate the disease in cattle and to reform the food industry, as well as providing an excuse for those who did not want the expense of either. The question was settled finally in 1911 by the report of the Royal Commission on Tuberculosis, which established its own scientific laboratories to examine the matter with controlled experiments.

At the same time as the scientific debate raged, central and local government were engaged in trying to reduce the serious mortality from pulmonary tuberculosis. The situation facing those trying to impose effective controls was, as is demonstrated by the author, one of complete muddle and confusion. As there was little general agreement among the scientific community because thinking was subject to change and revision, civic authorities and food reformers could have no clear plan of action. Part of their effort was devoted to cleaning up the milk supply, but even this was not always easy. Although urban authorities inspected local cowsheds and eventually banned the sale of milk from animals showing obvious signs of the disease, they had far less control over milk sent in by rail. Controlling the meat supply was even more difficult as most butchers had their own small private slaughterhouses, where inspection was difficult and concealment of the disease was easy. Attempts to control it at its source were also frustrated. Even after tuberculin testing of milk was able to detect the disease in cattle that showed no symptoms, such testing was not compulsory. In addition, the absence of compensation for slaughtered livestock made it difficult to do anything much to reduce its farm incidence before the Second World War. A conservative estimate, made in 1942, was that 65,000 people in England and Wales still died from milk-borne bovine tuberculosis between 1912 and 1937, though it seems unlikely that beef was ever a major vector.

Even when local authorities started to take action to detect the disease in animals after slaughter, the lack of any generally-agreed standards of inspection meant meat passed fit for human consumption in one locality could be condemned in another. The medical and veterinary professions saw the introduction of the municipal abattoir as part of the solution, while butchers strongly resisted attempts at increased inspection. This was partly because it was impossible for them to pass the blame for the disease and the question of compensation back to the dealers and farmers who sold infected cattle. Butchers saw inspection of their premises and attempts to force them to use public abattoirs as attempts to force them to bear all the cost of the disease.

In an impeccably documented study, the author presents us with a convincing analysis of the relationship between all the warring interest groups engaged in the meat politics of the late nineteenth and early twentieth century. He guides the reader through the welter of confusion and contradiction that enveloped the whole debate and shows how the emerging veterinary profession used the disease to gain a larger role in public health. Amongst the medical profession, local Medical Officers of Health also used the disease as a platform from which to reinforce their efforts to reform the meat and milk businesses. Whilst the tuberculosis question may have been uppermost in the minds of all health professionals, it did not drive either farming or the food industry. For all of those in the meat industry it became just another problem to cope with. Farmers were mainly worried about foreign competition and its effects on prices and profits. For those in the meat trade it took its place alongside complaints about swine fever regulations, legislation over shop hours, attempts to enforce the marking of home- and foreign-produced meat, fear of the power of the American Meat Trust, and the security of foreign supplies. The main thing that this important book does is to leave the reader in no doubt about the importance of this disease and its control to our general understanding of British livestock farming and food history.

RICHARD PERREN
University of Aberdeen

JONATHAN BROWN, *Farming in Lincolnshire, 1850–1945* (History of Lincolnshire Committee, 2005). xi + 295 pp. 15 tables; 43 figs. £29.95 (hbk); £14.95 (pbk) plus £4 p&p from Society for Lincolnshire History and Archaeology, Jews' Court, Steep Hill, Lincoln, LN2 1LS.

This is the second book in a new series by the History of Lincolnshire Committee. The book focuses on farming in the county from 1850 to the end of the Second World

War. It is a well-written, clearly presented account of a period of significant change in agriculture which makes extensive use of primary sources, particularly the agricultural returns, parliamentary reports and the estate papers of local landowners.

The book is divided into two parts; the first (pp. 5–82) looks more generally at the county, with chapters on the farmers, the landowners and workers, the pattern of farming and the nature and practice of farming. The second, more substantial section (pp. 83–273) presents a broadly chronological account of agricultural change during the period under study, starting with the 'high farming' era before looking at the great depression, then asking the question 'what became of high farming?' prior to investigating the period 1896 to 1930. Chapter 10 backtracks slightly to consider 'New Farming, New Farmers, 1925–1940', while the final chapter considers the Second World War. The book might therefore be considered somewhat conventional in its approach, but Brown remains aware of the potential limitations of his own self-imposed straitjacket and avoids the trap of simply fitting his data to the chronological categories he has chosen. He effectively highlights the diversity of the county without ever segmenting the analysis to the point where valid generalizations can no longer be made.

The book provides interesting insights into the strategies adopted by farmers from the final quarter of the nineteenth century in an effort to maintain profitability during what were generally difficult times for those arable regions of England distant from the growing markets of the industrializing towns. Brown presents an authoritative account of the development of potato production in the county along with an interesting discussion of the early days of bulb production. He also considers at length the varying fortunes of the principal cereal crops and the mixed husbandry that had underpinned the prosperity of much of the county during the high farming era.

The author's own background in the county comes through clearly in the comfortable manner in which he blends geography and history within his account without ever over-simplifying or classifying the changes he explains. Criticisms of the text are relatively minor. Extensive use is made of an interesting range of photographs, particularly from the collection of the Museum of English Rural Life. However, none of these is referred to directly in the text, and in some cases (Figure 24 for instance) photograph and text relate to different time periods. The photographs appear to decorate rather than illuminate the text. I also felt that handwritten labelling on graphs (Figure 19) should have been replaced by a more professional-looking typed text.

A more important reservation lies in what this book does not cover. Compared to the farmer, little is said about the agricultural workforce. Nor does the book say much about the wider rural community or the social changes which took place over the period. Farming is placed in something of a vacuum, with physical geography and the economic and political factors which determined profitability its only significant influences. The book can therefore more readily be categorized as 'agricultural' rather than 'rural' history. Nevertheless, this book is an authoritative account of changes in farming in Lincolnshire over the period and should prove an extremely useful reference in discussions of agricultural developments between the mid-nineteenth century and the Second World War.

CHARLES RAWDING
Edge Hill University

Elsewhere and General

JACQUES M. CHEVALIER and W. ANDRÉS SÁNCHEZ BAIN, *The hot and the cold. Ills of humans and maize in native Mexico* (University of Toronto Press, 2003). xxii + 301 pp. 1 table; 18 figs; 1 map. £42.

Indigenous systems of subsistence agriculture, especially the slash and burn system, have often been misunderstood and criticized by agricultural scientists. Chevalier and Sánchez Bain argue that to understand the agricultural system practised by the Nahua and Popoluca peasants of southern Vera Cruz in Mexico, one needs to know about the cultural context in which it is enmeshed, especially the world view and underlying principles that are based on the hot-cold principle or what has been called humoural medicine. Their analysis reveals the extensive knowledge of crops, especially maize, the agricultural cycle, and the environment that are part of this system.

The first chapter places this study against a background of an ongoing debate in anthropology and the history of medicine concerning humoural medicine in Latin America. One side of the debate, as represented by the anthropologist George Foster, argues that the Greek Hippocratic system diffused from Spain during the conquest. The system is based on a classification of all things (plants, medicines, bodily states) into qualities of hot and cold, which includes both physical temperature and innate or metaphorical qualities. Health is based on a balance of hot and cold and illness is caused by an imbalance. Treatment is usually based on a principle of opposition. Although the Greek system included qualities of wet and dry as well as hot and cold, Foster argues that these have largely dropped out of the Latin American versions. The other side, as represented by the Mexican anthropologist and Nahuatl scholar, Lopez

Austin, argues that a pre-Hispanic system of hot-cold thinking existed and pervaded people's world view, not only of their health but also their relationship with the land and its inhabitants, including plants, animals and spirits. Chevalier and Sánchez Bain deconstruct and critique the assumptions of Foster's argument and support the existence of a pre-Hispanic indigenous system of hot-cold reasoning, as well as wet-dry categories, with which the Spanish system became syncretized, and which continues to persist in contemporary life.

In Chapter two, the authors review various studies that have been made of hot-cold systems in Mesoamerica. One criticism of these studies is that they view hot and cold categories as a system of classification, which implies that a hot or cold value is a static property of the item and in turn cannot account for inconsistencies in the classification. They propose a different dynamic model based on an indigenous perspective of three principles: equilibrium, periodicity or cyclic movement, and solar-driven growth. Equilibrium refers to balance and moderation of hot and cold things and avoidance of extremes. Cyclic movement involves the heating and cooling that form part of the daily activities and bodily rhythms (for example, blood and the body heat up during the day when one is working and cools off at night when one is resting or sleeping) and alternation between wetness and dryness. The third involves heliotropic or solar-driven movement implicated in daily cycles and the life cycle, moving from aquatic beginnings at birth, which is cold, through stages of reproductive heat and finally death, which is hot. These three principles govern not only the ills of the body, but also those of the land, including milpa (maize plots). Furthermore, they interact and influence each other.

Chapters three to six elaborate on these principles through a sophisticated ethnographic study of the Nahua and Popoluca. The authors document how the hot and cold qualities permeate the world view, the agricultural system, and mythology, as well as the health system, and how all these interact with each other. It is the pervasiveness of these qualities through so many aspects of life that support Austin's argument for the pre-Hispanic existence of the hot-cold system. Chevalier and Sánchez Bain's significant contribution is showing how the hot-cold principle underpins the agricultural system as well. 'Ills of the body and land are governed by the same principles and also interact: growth and health factors among humans affect and are affected by the milpa condition'. (p. 167). These chapters are perhaps the most interesting ones to agricultural scientists and historians. The agricultural cycle is accompanied by various ritual measures some of which involve food and sex prescriptions related to qualities of hot and cold. For example, a man must not sleep with his wife for seven nights before planting. This abstinence will increase the heat in one's body, which in turn affects the seeds and the soil.

Chapters seven and eight are explications of the mythology of the birth and life of the corn god, who people believe 'secures the sustenance and well-being of humans and to whom prayers are still recited' (p. 173). Cycles of corn planting and harvesting as well as the cutting, burning, and drying processes of slash and burn are synchronized by hot and cold characteristics of both human and divine bodies that are spelled out in the myths. The stories trace the deity's birth as a child, his pilgrimage to the burial ground of his father and his quest for immortality. The authors analyze these myths using what they call the 'interpretive method', which is based on semantic and linguistic analysis of the terms used in the myths and of informants' statements. Through the extensions of these terms as tropes and metaphors the myths are shown to symbolize the agricultural cycle. The myths replicate the basic three principles explored in previous chapters: those of thermal balance, cyclic periodicity and the 'progressive movement of life from its aquatic beginnings toward later stages of reproductive health, old age, and death' (p. 173). The hot-cold balance is not only a naturalistic system as Foster has proposed but is also a spiritual one. Hot-cold reasoning is manifested in healing rituals, agricultural practices, and mythology. Furthermore, the conduct of the corn god exemplifies the moral values that humans must follow which involve hard work and sacrifice. The corn god will provide food for humans, who in turn must feed and reproduce the corn. The authors extend their analysis with comparisons of terms and myths to classical Nahuatl, the language of the Aztecs, to suggest that some of the themes explored through myth may be variations on linguistic usages dating back to pre-Hispanic times.

Chapter nine returns to a further critique of Foster and the debate on the origins of the hot-cold system as manifested in Mesoamerica. The authors propose that the syncretic process which occurred during the Spanish conquest continues today in encounters with biomedicine where the resilience and adaptability of the indigenous culture is manifested and hot-cold reasoning 'continues to shape people's ideas about health and illness' (p. 244). Will hot-cold reasoning continue to shape peoples' ideas about agriculture? Although the authors do not do so, the argument could be extended to the confrontation with scientific and commercial agriculture. Will these syncretic processes permit both traditional agricultural practices and the hot-cold reasoning underlying them to survive, enabling Mexican peasants to deal not only with conflicts with biomedicine, but with the agricultural changes occurring today in Mexico?

This book is a rich ethnographic study which will be rewarding reading for graduate students and specialists in the fields of culture and agriculture, medical anthropology, and Latin Americanists.

SHEILA COSMINSKY
Rutgers University, Camden, NJ

WILLIAM D. GODSEY JR., *Nobles and nation in central Europe. Free imperial knights in the age of revolution, 1750–1850* (CUP, 2004). xi + 306 pp. £48.

This splendid study might be characterized as a work of cultural archaeology, which seeks to reconstruct the vanished 'geo-cultural landscape' (p. 72) occupied by the central European nobility of the early modern era. The book's protagonists are the one hundred families of the free imperial knights of Electoral Mainz – the stronghold of the imperial knighthood of the Holy Roman Empire. They were denizens of a world 'that stretched from the North Sea to Vienna, that was suffused by corporate, dynastic, local, and religious allegiances, and that was characterized by a common, cosmopolitan culture' (p. 13); and they shared an 'early modern ideal of nobility that prized purity above antiquity, quarterings above patrocliny, and virtue above ethnicity' (p. 1). But with the dissolution of the imperial knighthood in 1803, and of the Holy Roman Empire itself three years later, this traditional vision of nobility came under assault, and the members of these families struggled to recast their claims to pre-eminence in a world of nascent nation states.

Godsey's book illuminates the various ways in which the imperial knights of Mainz sought to reinvent their identities during the revolutionary era and its aftermath. In the early nineteenth century, some leading Protestant aristocrats began to define themselves as pillars of the *Uradel* ('ancient nobility') of the German nation. Most notable among this group was Karl Freiherr vom Stein, Prussia's first minister in 1807–1808 and hero of the Prussian resistance to Napoleon, whom Godsey dubs 'the first noble German' (p. 248). By contrast, most Catholic knights, who had held a monopoly on economic resources and political influence associated with the 'noble Church' (*Adelskirche*) in Germany, rejected the new ethnic nationalism of the revolutionary era. After the outbreak of the revolutionary wars in 1792, many Catholic nobles from Mainz, including the future Austrian Chancellor Clemens von Metternich, moved to the Habsburg Empire, where they found a more congenial cultural and political milieu.

Those who neither emigrated nor embraced ethnic nationalism struggled to come to terms with their new circumstances. Godsey notes that 'the revolutionary era resulted in a spatial sea-change for the imperial nobility, which in the end found itself confined in all but incidental ways to the territory of the German Confederation' (p. 78). He cites the example of Prince-Primate Baron Carl Dalberg, who came to be viewed by subsequent generations as a 'traitor' to the German nation for having allied himself with Napoleon (pp. 72–3). Before the French Revolution, nobles like Dalberg had held estates scattered across modern-day Germany and France; they had 'lacked modern cultural loyalties,' instead espousing an 'imperial patriotism' exalting the traditional corporate structures of the Holy Roman Empire.

Perhaps the book's most fascinating dimension is its account of the rise of the concept of the German *Uradel* – a term coined at the end of the eighteenth century referring to 'nobility traceable in the male line to a progenitor in medieval times or earlier' (p. 59). In early-modern central Europe, Godsey writes, nobility had been conceived as reflecting 'virtue', which stemmed from the purity of aristocratic extraction in both the paternal and maternal lines, rather than from the antiquity of the male line alone. Hence aristocratic lineage was equally prized on the mother's side of the family as on the father's. The most exclusive eighteenth-century aristocratic institutions had required their members to possess thirty-two 'quarterings' – i.e. at least five generations of purely noble ancestry. The new noble ideal reflected a 'decisive masculinization'. In the words of one treatise from the 1790s, 'The fair sex obtains and loses nobility only through marriage … because the woman is only a zero, whose worth depends on the number set in front of her. This number is the man'. Godsey concludes, 'Here, the noble trend paralleled or perhaps anticipated developments already noted for bourgeois women, whose social and legal position deteriorated in the transition to the late modern era' (pp. 59–60).

The concept of the *Uradel* was equally significant for politics as for gender relations. By establishing 'a connection between the "national" and the noble past', this concept 'offered the nobility a fresh and valuable form of legitimacy', enabling aristocrats to justify themselves 'in national-historical and national-cultural terms rather than those of a discredited society of estates or the old noble nation' (p. 59). Godsey thus persuasively refutes the argument of scholars such as Heinz Reif that the German 'concept of nobility underwent no fundamental alteration around 1800' (p. 13).

Although the nobility of the Habsburg Empire continued to profess 'the traditional corporate and pedigreed understanding of their estate' (p. 253), aristocratic identities elsewhere in German-speaking Europe underwent a profound transformation during the early nineteenth century. Those nobles who accepted the new German nation as their 'lodestar', Godsey declares, found

themselves 'trapped within boundaries that they did not determine'. He concludes provocatively: 'As the meaning of "nation" continued to mutate, so did that of "noble", such that by the twentieth century the quality of nobility had fatally come to depend not on quarterings or even culture, but on race' (p. 254).

MATTHEW LEVINGER
United States Holocaust Memorial Museum, Washington DC

OLIVER MARSHALL, *English, Irish and Irish-American pioneer settlers in nineteenth-century Brazil* (Centre for Brazilian Studies, University of Oxford, 2005). xii + 323 pp. 5 tables; 15 illus; 2 maps. £20 incl, p&p from Centre for Brazilian Studies, 92 Woodstock Road, Oxford, OX2 7ND.

The title suggests the author is going to deal with a rather large topic over a long period of time. In fact he reports on the migration of only a few thousand English and Irish to Brazil between the years 1868 and early 1873. These migrants represent therefore a very small percentage of total English and Irish migration to temperate overseas lands during the nineteenth century and also a very small percentage of European migration to Brazil. Some 104,000 Europeans, including a few from the USA, moved to Brazil between 1864 and 1873 (p. 21), numbers modest in comparison to the inflow in the decades that followed. What then is the significance of these few that they deserve a special study? Their total failure to succeed in Brazil is the answer. Some wished to return home as soon as they set foot in Rio de Janeiro, others after they arrived in the government-sponsored colonies in which they were to live. Many died of disease and starvation, while others who endured great privations did finally manage to return to England thanks in good part to the activity of the British minister to Brazil and to the charity of the well-established British merchant community in Rio de Janeiro who together raised the money to pay steamship fares. This book is a very well-documented study of a badly conceived immigration scheme with the would-be immigrants as victims.

The blame can be widely spread. The Brazilian government was seriously at fault. Its recruiting agents in England were dishonest in their glowing descriptions of the life to be had in Brazil. The three government colonies to which these immigrants were destined, all in southern Brazil, were without easy communication to markets so that commercial agriculture was impossible. The promised paid employment on public works to tide the immigrants over until their first crops matured did not materialize. There were neither doctors nor schools. In brief, the immigrants who actually went to the colonies soon realized there was little prospect of achieving a reasonable standard of living. The British government could have taken an interest in the manner of recruitment. It must have known that only a few years earlier some European governments – including those of Switzerland and Prussia – had either cautioned against or forbidden emigration to Brazil. Only at the very end of the sad affair did it help in the task of repatriation. The immigrants, too, although all were poor, uneducated, even illiterate, might have made more of an effort to inform themselves about the country in which they were proposing to spend their lives. Some on arriving in Brazil were surprised to find the locals speaking Portuguese, not English.

In the Epilogue, Marshall briefly describes the colonies as they are today. All have grown greatly in population to become towns. Principe Dom Pedro, now known as Brusque, has emerged as a centre of the textile industrial, but Assunguy and Cananéia remain backwaters, still handicapped in their development by poor transportation. Some descendants of the settlers have not moved away but when interviewed revealed only a very hazy recollection of their ancestry. The Brazilian government did learn one lesson from this tragedy: the arrival back in Rio of so many destitute settlers looking for a way home was 'clear evidence' (p. 178) that the state agricultural colonies were failures.

Marshall could have set this study in the larger context of European migration to southern Brazil during the nineteenth century. Some immigrants from other European countries did suffer badly and their home governments did intervene, yet, over time, Italians, Germans, Swiss, other Europeans, and Japanese had a major impact on the human geography of southern Brazil. Was their key to success a combination of better preparation and accompanying agents familiar with Brazil who could speak the immigrants' language as well as Portuguese? The English and Irish settlers were left to flounder in the colonies with no knowledge of Portuguese, expected to cultivate crops with which they were unfamiliar and to deal with an incompetent and/or corrupt local bureaucracy. The book would have benefitted from more and better maps. Map 1, simply entitled 'England', shows a strange collection of towns unless one is to assume they are the towns from which the settlers came. Map 2 would have been improved by the inclusion of provincial (now state) boundaries. Detailed maps of the location of the three agricultural settlements would have been useful.

J. H. GALLOWAY
University of Toronto

ENRIC SAGUER (ed.), *Els últims hereus. Història oral dels proprietaris gironins, 1930–2000* (Barcelona: Generalitat de Catalunya, 2005). 466 pp. No price given.

Enric Saguer's edited volume traces the main changes that occurred in the lives of a small group of landowning families in the Catalan province of Girona from the 1930s down to the present day. The analysis centres around a series of interviews conducted by Saguer's mainly young research team – the Asociació d'Història Rural de les Comarques Gironins – with 35 *hereus*, heirs to family estates, in the districts of La Selva, l'Empordá, and La Garrotxa. Over half of their sample were over seventy years of age, whilst less than 15 per cent were under 50. Biographical profiles were constructed under the headings of education, marriage, professional activities, and mobility. Traditionally, landowners in this part of north-east Spain rented out part of their estates to sharecroppers (*masovers*), often on emphyteutic leases granting rights in perpetuity, while themselves occupying the family farmstead (*masia*). From the 1950s, however, this particular form of sharecropping went into rapid decline. Many landowners sold off their estates; others chose to farm them directly. Some *hereus* found alternative employment in tourism or the liberal professions. The present study contains examples of all of these options although, as the contributors concede, their limited sample may not be entirely representative.

Sharecropping in Girona – a province dedicated to cereal farming, olives, and viticulture – came under threat in the last quarter of the nineteenth century, owing to competition from cheap wheat imports, industrial oils, and the spread of phylloxera across the Pyrenees. By the early twentieth century, land ownership had already lost much of its appeal, a situation that was not improved by the intense social conflict over farm leases during the early Second Republic, and the collectivization of large estates in the civil war period. From the 1950s, lease holding arrangements were complicated by declining fertility. A number of the farms surveyed were left without heirs. Later, the expansion of higher education in Spain, meant that many *hereus* went to university (20 out of the 35 questioned were graduates), where some of them studied law or medicine rather than agronomy. Meanwhile, not a few of the wives whom they had met during their studies in Barcelona or Madrid, were unhappy with the outmoded roles that were assigned to them.

This book builds on previous research by Rosa Congost, Llorenç Ferrer, Ramon Garrabou, Jordi Planas, Saguer, and others covering such topics as the formation of the *hereu* and the often antagonistic relations between landowners and *masovers*. One advantage of its oral history approach is that it provides readers with a wealth of hitherto unpublished details on the nature of recent changes. Between the 1960s and the early 1980s, as the relative prices of traditional crops declined, many of the *hereus* in the sample switched their production to more remunerative livestock farming. However, the high cost of substituting capital for labour together with the need to achieve economies of scale threatened to destroy the entire inheritance system. Many farms were abandoned at this stage. Salvation finally came – for some at least – in the guise of mass tourism to Spain's Costa Brava. Although not everyone was in a position to take advantage of the opportunities presented by the burgeoning tourist sector, many of our *hereus* were tempted into converting their picturesque *masias* into restaurants, hotels, or second residences for city dwellers. One consequence of all these developments, as the authors inform us, was an erosion of the social and political roles of the *hereu* who, a century ago, had formed part of Catalonia's hegemonic class.

This collaborative volume is the latest in a series of monographs on Catalan ethnology, supported by the Generalitat de Catalunya. With its excellent illustrative material, including some nice old photographs, it contributes greatly to our understanding of Spain's rich and diverse agricultural history.

JOSEPH HARRISON
University of Manchester

STEPHEN B. BRUSH, *Farmers' bounty. Locating crop diversity in the contemporary world* (Yale UP, 2004). xix + 327 pp. 26 tables; 30 figs. £25.

Since the beginnings of crop domestication, the world's farmers have selected, modified, and experimented with genetic resources. Agricultural history is, in part, a story of experimentation by farmers, eager to find varieties that meet their social and cultural needs and solve their agronomic problems. Stephen B. Brush's book offers an assessment of the processes that have generated rich diversity within most cultivated crops. Brush warns that contemporary economic and ecological forces may threaten this diversity, but he also reminds us that crop evolution is a dynamic and continuing reality. The natural and human forces that have generated crop diversity in the past are still at work today.

Farmers' bounty is, for starters, a thorough and comprehensive review of recent literature on crop diversity. Brush summarizes and makes accessible recent writings from many disciplines: cultural ecology, human ecology, economic botany, agricultural economics, and molecular biology, among others. This book offers a valuable review of the literature.

Brush identifies several central questions about crop diversity, and these reappear throughout the book. Why

is there so much diversity? Why is diversity concentrated geographically near the 'centres of origin' of crop species? How is diversity affected by economic growth and globalization? What are the prospects for conserving diversity in a world dominated by industrial models of agriculture?

These are important questions – never answered, perhaps, but examined thoughtfully from multiple perspectives. Brush's empirical orientation offers a nuanced perspective on current debates over the 'ownership' and 'exploitation' of genetic resources. The author notes that it is a natural and ancient human impulse to trade and exchange crop varieties, to modify them, and to experiment with them in new settings. In short, the same impulses that now seem to threaten diversity are the ones that have historically given rise to it.

Brush emphasizes the human role in creating crop diversity. Ecological pressures alone do not account for the profusion of crop varieties. As Brush points out, cultural imperatives and human needs have driven the creation of diversity. Specific characteristics are sought for food or ceremonial purposes, for processing purposes, for aesthetics, to alleviate labour constraints, and so on. Biotic and abiotic stresses are only a subset of the forces that have contributed to diversity.

Brush stresses that diversity itself has value to both consumers and farmers. Rational farmers may prefer to cultivate a portfolio of varieties, rather than a single variety. Similarly, consumers and societies value diversity for itself. (Think, for example, of the attraction of a fruit market selling dozens of different apple varieties, rather than a single one.)

These themes are thoroughly addressed and copiously referenced. Overall, the book will be an important source for anyone with interests in this field. The writing is lucid, and the book is full of nuggets of information (e.g., about how Andean farmers use high-quality local potatoes as a part of wages, to attract workers in a tight labour market). At times, the organizational structure of the book is unclear; some ideas are repeated unnecessarily. Nevertheless, the book will be of great interest to readers with backgrounds in anthropology or rural sociology. It should be entirely accessible, however, to readers coming from other fields. *Farmers' bounty* includes useful tables and data, but those looking for comprehensive statistics on crop diversity might be better advised to look elsewhere, for example at the (now somewhat dated) FAO publication, *State of the world's plant genetic resources for food and agriculture*.

For the audience of this journal, it is perhaps worthwhile to note that *Farmers' bounty* is not primarily historical in focus. Although Brush notes the historical context for diversity, his focus is primarily on the developing world in the twentieth century. As the title suggests, the book also focuses on farmers' contributions to crop diversity, with relatively little attention to the role of scientists in either conservation or breeding.

This latter omission seems primarily linked to Brush's limited interest in *ex situ* collections of genetic diversity. He seems less interested in seed collections, existing out of the physical and human ecology in which they originate, and more curious about the interactions between crops and the cultures that cultivate and consume them.

Another omission, perhaps necessary, is that the book largely skirts the growing literature on molecular understandings of diversity. Molecular biology and its tools have increasingly challenged our understandings of crop diversity. Many named varieties may differ only in a few alleles. Should we care about diversity of varieties, or of alleles? Brush would argue that the genes themselves are silent, while varieties are constructed along with human knowledge. But perhaps this distinction will fall as our understanding of genetics increases.

What will be the value of varietal diversity in a world in which genes are moved routinely across species lines? What will be the meaning of crop diversity if individual genes can be identified and stored, independent of varieties? Will new biological tools make crop diversity more or less valuable? What are the implications for conservation? What are the implications for the future of farming? Brush folds this discussion into a few pages towards the end of the book – perhaps reasonable, considering that a full treatment of these topics would be book-length. Nevertheless, considering the author's erudition and perspective, it would be illuminating to know more about how he views these changes.

DOUGLAS GOLLIN
Williams College

Apology

It has been drawn to our attention that the 'subject index of eleven entries' described as 'ludicrously inadequate' in John Moore's review of Michael A. Faraday (ed.), *Worcestershire taxes in the 1520s* (Worcestershire Historical Society 19, 2003) in *AgHR* 54 part one (2006), p. 164 is in fact a subject index for an 11-page appendix to the volume and not the subject index of the volume as whole. The main subject index contains some 190 headings and sub-headings, including entries for the six categories which the reviewer specifically identifies as absent. We apologize for this wrongful impression of the contents of the book.

Conference Report: The Society's Spring Conference, April 2006*

by Anne Meredith

The society travelled to the south west for its annual conference. Professor Mark Overton with Drs Henry French and Mark Rothery organised the conference, held from 3–5 April at the University of Exeter and supplied, in addition, beautiful spring weather. The grounds of the university were very attractive but it will be the views over the Devon countryside that will linger in people's memories.

Dr Ben Dodds, University of Durham opened the conference with a paper on 'Medieval agricultural production from tithe records'. In this paper Dr Dodds explained how tithe records for parishes in Durham and Hampshire were enabling him to investigate the responsiveness of farmers to changes in grain prices. It has generally been accepted that the medieval farmer, through cultural or economic considerations, was not responsive to market signals. However Dr Dodds showed that there was a relationship between changes in price and crops output, though the relationships were not clear cut. The paper moved onto considering some of the possible explanations for the changes in production. Dr Dodds concluded by stating that the medieval peasant farmer was in fact responsive to changes in the market but that there appeared to be constraints preventing him from maximizing his production.

After dinner Dr Paul Brassley, University of Plymouth, spoke on 'Theories of technical change and artificial insemination in pigs'. This paper – which, as befits an after dinner paper, had its lighter moments – did address serious questions in respect of the place of theory to the study of agricultural history. Dr Brassley outlined the development of pig artificial insemination (PAI) from the 1950s to the present day. His paper then explored various aspects of the development of PIA: techniques, authorities, discourses and media. In respect to authorities he showed how the key players moved from scientists, through government authorities to professionals and finally to commercial breeding companies. He concluded the paper by asking how theory can assist the historian in his or her research and illustrated this by looking at how various theories assisted in the analysis of the forces at work in the development of PIA.

The second day of the conference opened with the New Researchers' Session. Clare Greener, University of Exeter, in her paper on 'Market gardening in nineteenth-century Devon' provided the only paper on Devon. Market gardens were in general small scale operations worked by family labour. This meant that Ms Greener had to consult a wide range of sources to identify market gardens and those who worked them, for instance trade directories, censuses, and landowners' records. Despite the fragmented nature of the sources, she was able to demonstrate the geographical distribution of market gardens in the county and also show the expansion of market gardening at the end of the nineteenth century. The question and answer session that followed this short paper clearly showed the wide ranging research that she had undertaken and the contribution her research makes to our knowledge and understanding of the development of horticulture.

The second new researcher's paper was given by Bill Shannon, University of Lancaster, who moved the session north to Lancashire as he examined 'Early modern reclamation and enclosure in the Lancashire mosslands'. Mr Shannon outlined his research on the enclosure of mossland using a case study for the area of Altcar/Downholland/Formby. He explained how at the close of the middle ages, landlords were beginning to 'approve' (enclose and reclaim) mosslands as they realised that the mosses could be of economic value. As the mosses had

* The author would like to thank all the speakers who gave her summaries or copies of their papers. Naturally any errors are the author's.

had previously had little value, their boundaries were often unclear. Mr Shannon used a contemporary map to illustrate this and to explain the dispute procedures landlords had to follow to establish ownership of the land. The speaker pointed out that this meant that the land was enclosed well before parliamentary enclosure and that the records only potentially survive where there was a dispute over ownership. The conference appreciated the opportunity to examine contemporary maps and see how the landscape changed as a result of enclosure.

Professor Bruce Campbell, The Queen's University of Belfast, then gave a paper on 'Crop yields, environmental conditions, and historical change, 1270–1470'. In this paper Prof. Campbell reported on a project, primarily funded by the ESRC, to create a database will be created of data available on crop yields for the period 1270–1430. The project is drawing together existing and some new data sets so that composite information can be presented for the period. Prof. Campbell provided examples of his initial analysis and explored how the yield ratios reflected environmental factors. For example the great European famine of 1316–17 could be seen clearly in the grain yield records for Bolton Priory estate in the West Riding of Yorkshire. The author's interest in exogenous factors (such as weather, climate and disease) on crop yields means that the project will also explore the relationship between data collected by dendrologists (for example tree ring growth) and yields to investigate how weather impacted differentially on grain yields and tree growth.

The final paper for the morning was presented by Professor Nadine Vivier, Universite du Mans, who spoke on 'Debating the cadaster in France, 1790–1930: a project for land taxation, boundary definition, or mapping the state?'. In this paper Professor Vivier provided an overview of the cadastre from its inception as a land tax in the Duchy of Milan to its operation in inter-war France. As Professor Vivier explained, the cadaster could be examined from several angles: political, legal, financial and geographical. The impact of political change came through clearly in Prof. Vivier's paper. For example in 1807 it was decided that maps would be drawn up for each cadastre and registers created showing the parcels of land and who owned them. After Napoleon's fall in 1815 the political environment changed and the changing fortunes of the cadaster and its mapping could be seen in relation to political changes.

The conference excursion addressed the theme of diversification in response to the current farming crisis by visiting two farms of considerable historic interest in the Exe Valley. Aishe Farm, near Silverton, dates to the fifteenth century and in recent years has been extensively restored as a private house. Mr Andrew Baker explained how the farm is cultivated according to new and traditional farming methods according to principles promoted by LEAF (Linking Environment and Farming). Across the valley at Fursdon, the excursion took tea in the coach house of the Fursdon Estate and met Mrs Katriona Fursdon who spoke about the difficulties of maintaining a small Devon estate of considerable antiquity and historical importance.

Next morning the conference resumed with a paper given by Dr Nicola Verdon, Sheffield Hallam University and Professor Alun Howkins titled 'Sustainable and adaptable: living-in farm service in southern and Midland England, 1850–1920.' This showed how farm service continued after 1850 contrary to the accepted view that it disappeared from these areas of England in contrast to the 'marginal' areas of the north and west of England and Scotland. The two speakers drew on their detailed analysis of census enumerators' books (from seven counties) and contemporary written material to clearly show the scale of its survival and how it responded to changes in agricultural and employment practices. For example, the growth in dairying from the mid-nineteenth century appeared to have encouraged the use of farm servants. The two speakers showed clearly how county level statistics obscured local variations and that the study of sub-regions showed a wide variety in the continuance of farm service into the twentieth century.

Professor Mark Overton, University of Exeter, in his paper 'By-employment in early modern England' drew the conference's attention to the 'models' of work in this period and how research on inventories undertaken by Prof. Overton and Dr Jane Whittle demonstrates that the empirical evidence does not always 'square' with the models. In the paper Professor Overton outlined the key models that are used to examine work, and then identified a series of issues that should be explored in relation to work in early modern England. For example the role that woman and indeed the household played in by-employment rather than concentrating solely on the role of men. The evidence from 8,000 inventories from Kent and Cornwall were then used to illustrate the wide range of activities that households engaged in (such as food processing and retailing) and explore the relationship between the various activities; farming was the activity most likely to be combined with an another activity but not always. Another aspect that emerged from the inventories was the entrepreneurial activities of men with evidence that men were not adverse to diversification in their commercial activities. Professor Overton concluded that the purpose of a model was to identify the most important features of something. However in respect to work and by-employment he felt

that the models were failing to take account of the key features that emerged through the inventories.

Dr Edward Bujak, Harlaxton College, gave the final paper of the conference in which he explored 'Landowners, radicals and the land question in Victorian east Suffolk.' In this paper he highlighted the activities of John Tollemache who, in the 1840s, inherited a run-down estate (Hellingham) and proceeded to create a model estate complete with cottages, gardens and allotments. According to Dr Bujak, his style of landownership could be regarded as benevolent paternalism, with the cottages and the gardens encouraging industrious habits and attracting a good workforce. Tollemache took this one step further by offering to rent up to three acres of land to his workers. Dr Bujak at this point explored the relationship that Tollemache – a neo conservative – had with the radical land reform movement which was campaigning for land reform so that agricultural labourers could have their own piece of land. It became clear from Dr Bujak's paper that Tollemache supported the voluntary provision of smallholding by landowners and he countenanced some compulsory powers as an incentive to 'persuade' landowners to make voluntary provision. This was in contrast to other land reformers such as Jesse Collings who wanted local authorities to be given compulsory purchase powers. It was a thought-provoking paper that raised questions and issues about reform at the end of the nineteenth century.

After lunch the conference, stimulated and enthused, dispersed and left the Devon sunshine!

THE AGRICULTURAL HISTORY REVIEW

edited by
R. W. Hoyle *and* J. R. Walton

Volume 54
2006



PUBLISHED BY
THE BRITISH AGRICULTURAL HISTORY SOCIETY

Published by the British Agricultural History Society, Department of History,
The University of Exeter, Amory Building, Rennes Drive, Exeter, EX4 4RJ
Typeset by Carnegie Publishing, Chatsworth Road, Lancaster
Printed and bound by Alden Press, Oxford
ISSN 0002–1490

Articles:

Farewell to the peasant republic: marginal rural communities and European industrialisation, 1815–1990	FERNANDO COLLANTES	257
The case of John Dyer's fat-tailed sheep and their tail-trolleys: 'a thing to some scarce credible'	JOHN GOODRIDGE	229
Farm service, seasonal unemployment and casual labour in mid nineteenth-century England	NIGEL GOOSE	274
Assarting and the dynamics of Rhineland economies in the ninth century: Scarae at Werden, Weissenburg and Prüm Abbeys	CHRISTINE GRAINGE	1
The Bishop and the Prior: demesne agriculture in medieval Hampshire	JOHN HARE	187
The circulation of Scottish agricultural books during the eighteenth century	HEATHER HOLMES	45
From ideals to reality: The women's smallholding colony at Lingfield, 1920–39	ANNE MEREDITH	105
Children's labour in the countryside during World War II: a further note	R. J. MOORE-COLYER	331
The development of irrigated agriculture in twentieth-century Spain: a case study of the Ebro basin	VICENTE PINILLA	122
Scottish environmental history and the (mis)use of Soums	ALASDAIR ROSS	213
Agricultural workers in mid nineteenth-century Brighton	JUNE A. SHEPPARD	93
Female agricultural labour on the Dixon Estate, Lincolnshire, 1801–17	DONNA J. ULYATT	79
Smallholdings in Norfolk, 1890–1950: a social and farming experiment	SUSANNA WADE MARTINS	304
Parliamentary enclosure and changes in landownership in an upland environment: Westmorland, *c.*1770–1860	IAN WHYTE	240
Between fact and fiction: Henry Brinklow's Complaynt against rapacious landlords	MARGARET YATES	24
Annual list of publications on Agrarian History, 2004	PETER McSHANE	142

Book Reviews

Nigel E. Agar, *Behind the plough. Agrarian society in nineteenth-century Hertfordshire*	NICOLA VERDON	353
John Barnatt and Tom Williamson, *Chatsworth. A landscape history*	DAVID HEY	166
Gérard Béaur, Christian Dessureault and Joseph Goy (eds), *Familles, terre, marchés. Logiques économiques et stratégies dans les milieux ruraux (XVIIe-XXe siècles). Actes du colloque France-Québec-Suisse, Paris, novembre 2002*	GEORGE GRANTHAM	180
Jonathan Bell, *Ulster farming families, 1930–1960*	K. J. JAMES	171
Joseph Bettey (ed.), *Wiltshire farming in the seventeenth century*	H. R. FRENCH	348
James Bond, *Monastic landscapes*	JANET BURTON	159
P. H. W. Booth (ed.), *Accounts of the manor and hundred of Macclesfield, Cheshire, Michaelmas 1361 to Michaelmas 1362*	PHILLIPP R. SCHOFIELD	344
Jonathan Brown, *Farming in Lincolnshire, 1850–1945*	CHARLES RAWDING	355
Stephen B. Brush, *Farmers' bounty. Locating crop diversity in the contemporary world*	DOUGLAS GOLLIN	360
Jacques M. Chevalier and W. Andrés Sánchez Bain, *The hot and the cold. Ills of humans and maize in native Mexico*	SHEILA COSMINSKY	356
Michael Clayton, *Endangered species. Foxhunting – the history, the passion and the fight for survival*	R. W. HOYLE	173
Fernando Collantes Gutiérrez, *El declive demográfico de la montaña española (1850–2000) ¿un drama rural?*	JOSEPH HARRISON	182
R. W. Dunning (ed.), *The Victoria history of the counties of England. A history of the county of Somerset*, VIII, *The Poldens and the Levels*	JAMES BOND	345
Christopher Dyer, *An age of transition? Economy and society in England in the later middle ages*	MARGARET YATES	162
Michael A. Faraday (ed.), *Worcestershire taxes in the 1520s. The military survey and forced loans of 1522–3 and the lay subsidy of 1524–7*	JOHN S. MOORE	164

Giovanni Federico, *Feeding the world. An economic history of agriculture, 1800–2000*	CORMAC Ó GRÁDA	183
Michael Freeman, *Victorians and the prehistoric. Tracks to a lost world*	PETER J. BOWLER	168
Mark Freeman (ed.), *The English rural poor, 1850–1914*	NICOLA VERDON	353
Lawrence Garner, *Dry stone walls*; Tom Williamson, *The archaeology of rabbit warrens*	R. J. MOORE-COLYER	173
Dorian Gerhold, *Carriers and coachmasters. Trade and travel before the turnpikes*	R. J. MOORE-COLYER	349
William D. Godsey Jr., *Nobles and nation in central Europe. Free imperial knights in the age of revolution, 1750–1850*	MATTHEW LEVINGER	358
Keith Grieves, Nick Mansfield, George Sheeran, Winifred Stokes, Melanie Tebbutt, Andrew Walker and John Walton, *Rural and urban encounters in the nineteenth and twentieth centuries: regional perspectives*	PETER DEWEY	169
A. J. Gritt and J. M. Virgoe with C. P. Brownrigg (eds), *The memoranda books of Basil Thomas Eccleston, 1757–1789*	MICHAEL WINSTANLEY	166
W. P. Griffith, *Power, politics and county government in Wales. Anglesey 1780–1914*	MATTHEW CRAGOE	351
Jonathan Harwood, *Technology's dilemma. Agricultural colleges between science and practice in Germany, 1860–1934*	PAUL BRASSLEY	181
Philip Heath (ed.), *Melbourne, 1820–1875. A diary of John Joseph Briggs*	ROGER T. DALTON	168
Michael Holland (ed.), *Swing unmasked. The agricultural riots of 1830 to 1832 and their wider implications*	BARRY REAY	352
John Langdon, *Mills in the medieval economy. England, 1300–1540*	RICHARD HOLT	344
John S. Lee, *Cambridge and its economic region, 1450–1560*	CHRISTOPHER DYER	163
Marie-Louise Legg (ed.), *The Diary of Nicholas Peacock, 1740–1751. The worlds of a County Limerick farmer and agent*	H. R. FRENCH	350
Christian D. Liddy and Richard H. Britnell (eds), *North-east England in the later middle ages*	CHRISTOPHER DYER	161

Oliver Marshall, *English, Irish and Irish-American pioneer settlers in nineteenth-century Brazil*	J. H. GALLOWAY	359
John McKendrick Hughes (ed. John R. Hughes), *The unwanted. Great War letters from the field*	HUGH CLOUT	180
Jean-Marc Moriceau, *Histoire et géographie de l'élevage français du moyen âge à la révolution*	HUGH CLOUT	178
Colin Pearse, *The whitefaced drift of Dartmoor's 'prapper' sheep: commemorating the fiftieth anniversary of the Whitefaced Dartmoor Sheep Breeders' Association*	JONATHAN BROWN	172
Sylvia Pinches, Maggie Whalley and Dave Postles (eds), *The market place and the place of the market*	NEIL HOWLETT	346
Stephen Randolph Gibbons, *Captain Rock, night errant. The threatening letters of pre-famine Ireland, 1801–1845*	CHRISTINE KINEALY	167
Viljo Rasila, Eino Jutikkala and Anneli Mäkelä-Alitalo (eds), *Suomen maatalouden historia, I, Perinteisen maatalouden aika, Esihistoriasta vuoteen 1870*	W. R. MEAD	177
Amanda Richardson, *The forest, park and palace of Clarendon, c. 1200–c. 1650. Reconstructing an actual, conceptual and documented Wiltshire landscape*	OLIVER RACKHAM	160
Enric Saguer (ed.), *Els últims hereus. Història oral dels proprietaris gironins, 1930–2000*	JOSEPH HARRISON	360
T. C. Smout, Alan R. Macdonald and Fiona Watson, *A history of the native woodlands of Scotland, 1500–1920*	OLIVER RACKHAM	164
Robin Stanes, *Old farming days. Life on the land in Devon and Cornwall*	R. J. MOORE-COLYER	175
David Stone, *Decision-making in medieval agriculture*	BRUCE M. S. CAMPBELL	158
Richard W. Unger, *Beer in the middle ages and the renaissance*	WILLIAM H. TEBRAKE	176
Keir Waddington, *The bovine scourge. Meat, tuberculosis and public health, 1850–1914*	RICHARD PERREN	354
Ian D. Whyte and Angus J. L. Winchester (eds), *Society, landscape and environment in upland Britain*	R. J. MOORE-COLYER	347

Tom Williamson, *Sandlands: The Suffolk coast and heaths*	ELIZABETH GRIFFITHS	175
Abigail Woods, *A manufactured plague? The history of foot and mouth disease in Britain*	PAUL BRASSLEY	170
Apology		361
Obituaries:		
Professor Maurice Beresford FBA, 1920–2005	J. A. CHARTRES	335
Professor Gordon Mingay, 1923–2006	W. A. ARMSTRONG	338
Gordon Mingay, an appreciation	MICHAEL TURNER	340
Conference Reports:		
The Society's Winter Conference, 2005	JOHN R. WALTON	185
The Society's Spring Conference, April 2006	ANNE MEREDITH	362