

The ownership, occupation and use of land on the South Downs, 1840–1940: A methodological analysis of record linkage over time

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Abstract

Three major complexes of documents are now available for the study of agriculture from the mid-nineteenth to the mid-twentieth centuries. The tithe surveys, already well known, are now joined by the Lloyd George 1910 Valuation Office material, and the National Farm Survey of 1941–3. This paper explores the methodological issues arising from the use, and especially the comparison, of the three sources in the context of a case study from the South Downs in Sussex.

The years between the accession of Queen Victoria and the beginning of the Second World War marked a time of quickening change within English agriculture. If the full impact of modernization within farming had not yet occurred by 1940, the changes associated with the conventional dating of the agricultural revolution were certainly fully in motion from 1840 onwards. To explore changes in the ownership, occupation and use of land during this period, a methodological examination of three primary sources will be undertaken to demonstrate their uses and interrelationships. The sources, relating to cross-sections through time for the years c. 1840, 1910 and 1941–3, are brought together for a case study of a part of the South Downs in Sussex. Such a 'regionally focused, multi-source approach' cannot fail to indicate something about the processes of change as well as its structural and mappable manifestations.¹ However, this paper is more explicitly concerned with the methodological implications of integrating the three sources.

I

The area under consideration is approximately 100 square miles of the South Downs in Sussex between the valleys of the Arun and Adur, bounded by the Littlehampton to Lancing built-up area to the south, and to the north by the junction of the Chalk and Upper Greensand formations of the Downs with the clay of the Sussex Weald. Geologically, the area is dominated by the Upper and Middle Chalk dip slope rising from the coastal plain towards the escarpment. North of the escarpment is the Lower Chalk and the lower scarp-foot platform of Upper Greensand, followed in sequence by a narrow Gault Clay, and by Lower Greensand (Sandgate and Folkestone

¹ S. Wade Martins and T. Williamson, *Roots of Change. Farming and the landscape in East Anglia, c. 1700–1870* (British Agricultural History Society, supplement ser. 2, 1999), p. 4.

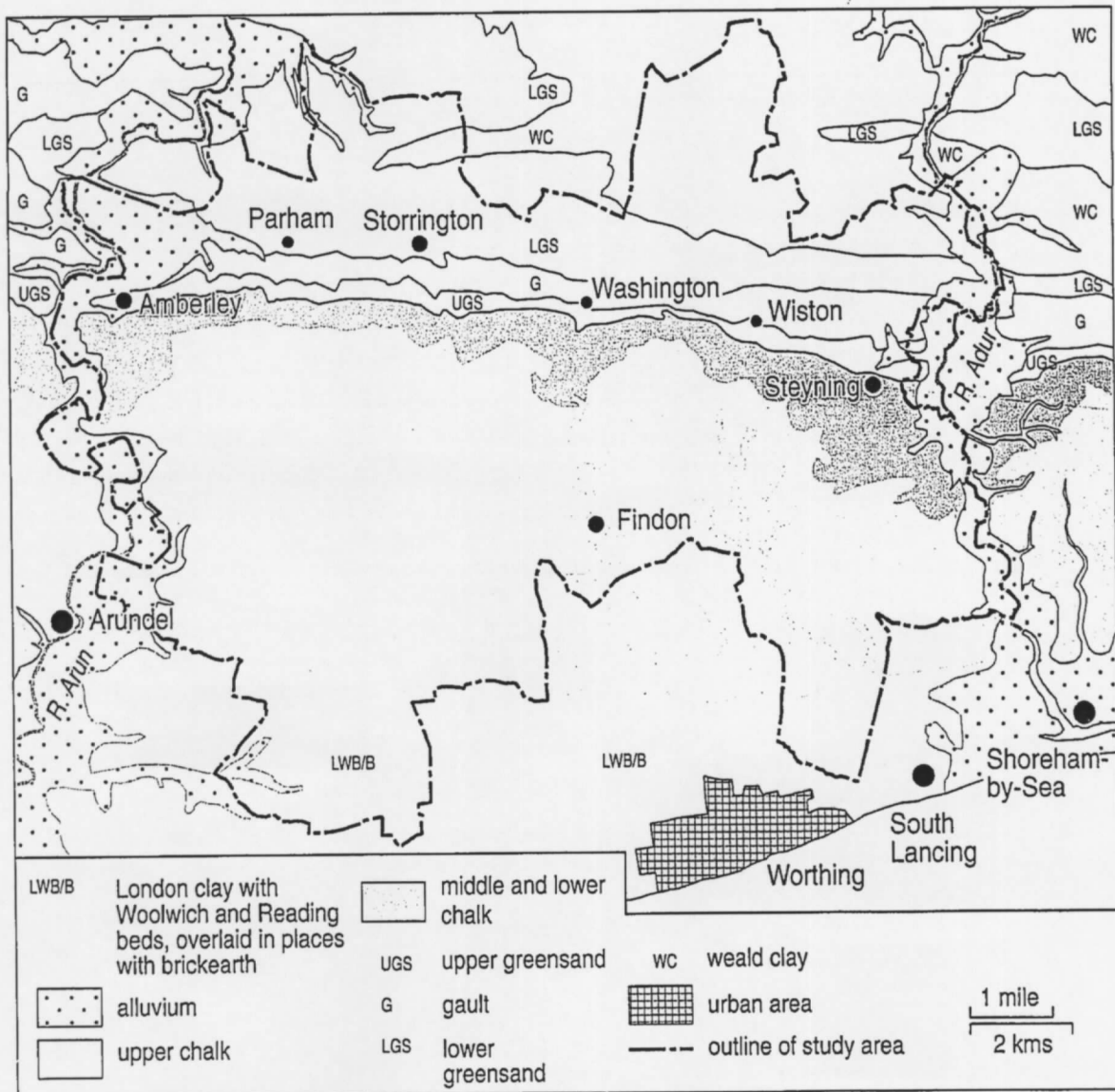


FIGURE 1. The study area showing the South Downs between Adur and Arun valleys

Beds), with patches of Weald Clay and Head. On the western and eastern margins lie the flat, alluvial valleys of the two rivers, where the land is typically only a few feet above sea level (Fig. 1). Very significantly, there is no surface water naturally occurring on the chalk hills, limiting their usefulness for settlement and agriculture. Chalk groundwater emerges at springlines which feed either into the two principal rivers or southwards into smaller rifeles flowing directly into the sea. The chalk soils are generally free working and naturally well-drained with good nitrogen content, except where overlain by acidic Clay-with-flint patches. Modern settlement has concentrated on the gap towns and villages, on higher ground in the river valleys, along the spring line to the north of the escarpment and especially in the south, near the coastal towns.²

² The general character of the downland is captured in P. Brandon, *The South Downs* (1998), esp. pp. 1-19.

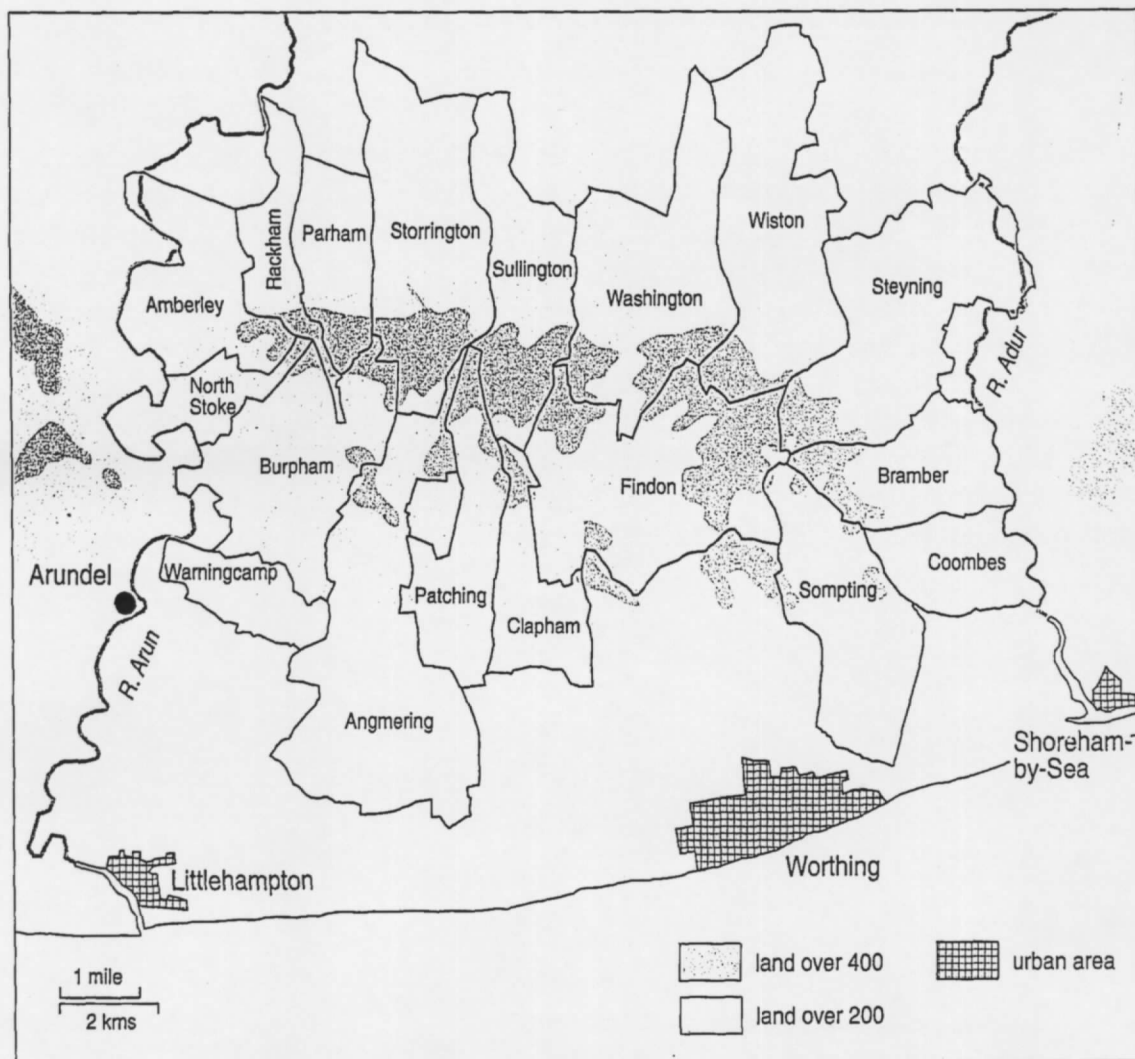


FIGURE 2. The study area showing parish boundaries.

The area comprises 16 modern parishes (Fig. 2). Parish boundaries were rationalized during the study period, with formerly separate parishes being amalgamated and detached parts of parishes transferred to other parishes. Further boundary changes acknowledged urban growth. Such processes of spatial unit transformation were commonplace during this period of urbanization and demographic change. Agriculture was the dominant activity throughout the period, reflecting trends in the national agricultural economy. The 1850s and 1860s saw the firm consolidation of the highly successful integrated system of sheep-corn husbandry for which the South Downs became so well-known. Cattle were grazed in the valley pastures, cereals grown on the lower downland slopes, roots and cereals on the scarp-foot, and sheep grazed on the high Downs. These were Farncombe's 'justly esteemed South Down sheep', which Caird referred to as 'the principal dependence of the Down farmer; and on a farm of 1,000 acres, part sheep

walk and part arable, 800 ewes are considered a fair stock to be kept. They are all of the pure South Down breed, this being the county where that celebrated stock originated'.³

The collapse of cereal markets from the 1870s impacted upon downland farmers, and woodland and scrub was allowed to encroach upon former sheepwalks. By 1901 Rider Haggard found 'but little grass and less corn', and although most farmers clung to sheep and corn through inertia, many smaller producers were undoubtedly very hard hit. Writing on the eve of the First World War, Daniel Hall still noted that 'The true South Down farmer lives by his sheep [but] the Downs farms run large, and general report says that the land is in fewer hands nowadays than it was 20 years ago'.⁴

The First World War led to some prosperity for downland farmers as the acreage under the plough increased in line with the national maximum reached in 1918, the highest figure between 1886 and 1942. The inter-war period was generally unprofitable, although the worst effects of the depression were felt in areas characterized more by arable farming on heavy and intractable soils elsewhere in England. But as the Second World War approached, the lessons learnt in 1914-18 were put into practice: with the desire of the West Sussex War Agricultural Executive Committee to 'lead, inspire and assist' and with the £2 per acre ploughing incentive, downland permanent grassland tops were cultivated, producing fine crops wherever the necessary fertilizers could be applied, and sheep flocks were reduced. In 1939 there had been 78,000 acres of arable in West Sussex, but by 1942, when the limit of arable had been attained in proportion to labour and fertilizer supplies, the area was 125,000 acres. Rough grazings had been reduced from over 40,000 acres to 32,000 acres, and permanent grass from 151,000 acres to 112,000 acres. Further, but less spectacular, increases were achieved in 1943 and 1944.⁵

Land ownership in the study area was concentrated in few hands and the Norfolk, Parham and Wiston Estates remained dominant throughout the period, with most of the land farmed in reasonably large units by wealthy owner-occupiers and tenant farmers who supported the local markets and fairs, but who also enjoyed high status in the wider county community and beyond. This, then, is part of Champion England, with predominantly closed communities, the rural population respectful of parson and squire, and with the rebuilt Arundel Castle a constant icon of the power and prestige of the Duke of Norfolk, premier Duke and Earl Marshal of England.⁶

II

Patterns of land ownership, occupation and land use within this area of the South Downs will be investigated through the three primary sets of records. When taken together, the tithe, Valuation Office and National Farm Surveys

³ J. Farncombe, 'On the farming of Sussex', *JRASE* 11 (1850), p. 76; J. Caird, *English Agriculture in 1850-51* (1852), p. 129.

⁴ Brandon, *South Downs*, pp. 157-8; A. D. Hall, *A pilgrimage of British Farming* (1913), pp. 35-9.

⁵ M. R. Burrell, 'War-time food production: the work of War Agricultural Executive Committees (West Sussex)' *JRASE* 108 (1947), pp. 70-5. Further information on downland wartime farming is available

at West Sussex Record Office (WSRO), WDC/AG4/1/1, papers of J. A. Hunt, West Sussex War Agricultural Executive Committee 1938-43; and photographs of downland ploughing under the £2 acre scheme in the Garland Photographic Collection (e.g. N18212).

⁶ B. Short, 'Landownership in Victorian Sussex', in K. Leslie and B. Short (eds), *An historical atlas of Sussex* (1999), pp. 98-9.

provide detailed snapshots of rural and urban landscapes during a hundred year period of great change in social and economic conditions ... The historical geographer is presented with three massive databases of land and property ownership and of land usage during a period of critical agrarian revolution ... The potential, in fact, for comparative work with the three different groups of records is enormous.⁷

The tithe maps, apportionments and files have, of course, been available to researchers for many years; numerous analyses of land ownership, occupation and land use have been undertaken for single parishes or larger areas. A series of authoritative studies have been published since 1985 and the source is well-known as a result.⁸ For most of rural Sussex, the tithe maps and apportionments provide, at a scale of 3 chains to an inch, detailed information on land use, farm boundaries, land ownership and occupancy. In the case of the study area, tithe maps and apportionments are available for each parish except North Stoke where no map or apportionment exists because the landowner in 1840, Col. Wyndham of Petworth, owned the tithes as lay impropriator. He also owned the living, and a single tenant occupied all the land in the parish.⁹

The tithe maps of Sussex are 'above average both in terms of planimetric accuracy and completeness of content. Almost exactly one-third are sealed as first-class, a proportion exceeded only in Kent and Monmouthshire ... Agricultural land use in Sussex is rather more thoroughly mapped than in most other counties'.¹⁰ The maps are typical in showing field boundaries, water features, roads and paths, woodland, parks and inhabited buildings, barns and other structures. The colours used, mainly brown for arable, light-green for meadow and pasture and dark-green for woodland, differentiate land use. The accompanying apportionments contain the schedules in which each tithe area is listed under the name of its owner and occupier and with a record of its land use. The schedule is then summarized, with the names of all landowners in the tithe district listed alphabetically, together with the names of the occupiers of the various holdings.

The tithe files, recording the consultation process, include 188 reports on tithe agreements in 323 tithe districts in Sussex, with 84 per cent of the reports being the work of John Farncombe, a local tithe agent, and author of the Royal Agricultural Society's 1850 Sussex Prize Essay. Using this material, it is possible, for example, to assess arable, pasture and woodland as a percentage of tithe district area and to make cross-references between tithe districts (normally parishes) and subjects referred to in the files. Thus the files for Burpham note land liable to flood, heavy (clay) soil, chalk, water carriage, market prices, turnips, high farming, good quality pastures,

⁷ W. Foot, *Maps for family history. A guide to the records of the Tithe, Valuation Office and National Farm Surveys of England and Wales* (1994), pp. 4–5.

⁸ See, for example, R. J. P. Kain and H. C. Prince, *The tithe surveys of England and Wales* (1985); R. J. P. Kain, R. E. J. Fry and H. M. E. Holt, *An atlas and index of the tithe files of mid-nineteenth-century England and Wales* (1986); R. J. P. Kain and R. R. Oliver, *The tithe maps of England and Wales* (1995); R. J. P. Kain and H. C. Prince, *Tithe surveys for historians* (2000). Copies of the tithe

maps and apportionments are in both the PRO and county record offices. The tithe files are in the PRO as IR 18.

⁹ North Stoke is now incorporated within the parish of Amberley. We are grateful to the WSRO County Archivist and the Duke of Norfolk's Librarian for information on North Stoke.

¹⁰ Kain and Oliver, *Tithe maps*, pp. 514–5. Tithe maps and apportionments also are available at both the WSRO and the PRO.

poor quality pastures and sheep breeding. There are such comments as: '[In Burpham] breeding of sheep is the general system on the Downs which are not very productive of grass'.¹¹

Methodologies have been developed for dealing with data from the tithe surveys. Boundaries of farm units c. 1840 may be reconstructed, and it is possible to relate the information to other contemporary records, and in particular to the 1841 Census enumerators' schedules, enabling repopulation and reconstruction studies of local communities. Recent application of GIS techniques amplifies the possible correlative data.¹²

Turning secondly to the Valuation Office survey of 1910–15, the archive was created by the implementation of Lloyd George's Finance (1909–10) Act 1910, which provided for the levying of various duties on land, the principal one being Increment Value Duty. This necessitated a comprehensive survey of land values throughout the United Kingdom as at 30 April 1909, carried out by the Board of Inland Revenue's newly instituted Valuation Office. The valuation process was substantially completed by the autumn of 1915. The records of the survey, held by the Public Record Office, are the Field Books (IR 58) and the related Working Sheet Maps and Record Sheet Maps (IR 124). The two generally need to be used together to identify particular buildings and pieces of land. The Field Books contain the information on each hereditament, including the names of owners and occupiers, the valuation figures, descriptions and (in the earlier surveys) detailed plans of farm buildings. A third component of the records, the Valuation Books – abstracts of information which was later transcribed into the Field Books – were offered to county record offices by the Local Valuation Offices via the PRO, and in nearly all cases they accepted them. Those relating to the study area are in the West Sussex Record Office (WSRO, class IR 1–68), together with any extant related working maps for West Sussex (IR 71). The Valuation Books give, for each hereditament, information on owner, occupier, usage and extent, and identification numbers and map references.

For the study area, nearly all the relevant 1910 material is available. Crucially, none was affected by the loss of the Chichester Valuation Office material due to enemy action in the Second World War. Future researchers interested in using the Sussex 1910 material should check availability at an early stage, since the records for areas west of Arundel may be incomplete. The Valuation Books are in WSRO and the relevant Field Books and Record Maps are in the PRO. None of the relevant Working Maps appear to be in WSRO and not all the relevant Field Books and Record Maps are available at the PRO, possibly because some of them are missing or not yet catalogued.

The potential value of this material has also been explored since the mid-1980s. The work illustrates the use of the material to provide information on land ownership and tenure, land occupation, occasional land use on a field-by-field basis, farm layout and the extent of fragmentation.¹³ Comparisons with the earlier tithe surveys should thus allow assessments to

¹¹ Kain *et al.*, *Atlas and index to the tithe files*, p. 103; Burpham files are in PRO, IR 18/10268.

¹² See, for example, A. Henstock, 'House repopulation from the CEBs of 1841 and 1851', in D. Mills and K. Schurer (eds), *Local communities in the Victorian census enumerators' books* (1996), pp. 363–82; A. Pearson and P. Collier, 'The integration and analysis of historical and environmental data using a Geographical Information

System: landownership and agricultural productivity in Pembrokeshire, c. 1850', *AgHR* 46 (1998), pp. 162–76.

¹³ Much of the work is summarised in B. Short, *Land and society in Edwardian Britain* (1997). Sussex material is more specifically addressed in B. Short, M. Reed and W. Caudwell, 'The county of Sussex in 1910: sources for a new analysis', *Sussex Archaeological Collections* 125 (1987), pp. 199–224.

be made of changes in ownership and occupation, land-use patterns and farm fragmentation or consolidation from the beginning of Victoria's reign to the First World War. It is a source of fundamental importance, possibly even superior to the earlier tithe materials in its near-universal coverage of England, Wales, Scotland and the whole of Ireland, and of urban as well as rural hereditaments.

The third great corpus of material to be examined is the National Farm Survey of England and Wales, 1941–3. These records, originating in the urgent need to increase food production identified even before the commencement of wartime hostilities, and to provide the foundations for post-war agricultural planning, offer an unparalleled picture of landownership, agriculture and farming conditions. Contemporaries described the survey as 'a permanent and comprehensive record of the conditions on the farms of England and Wales' and 'a Second Domesday Book' (a title also unfortunately and misleadingly given to the 1910 Valuation Office Survey).

The records of the survey, begun in the spring of 1941 and largely completed by the end of 1943, consist of three distinct elements. The first and perhaps the most important is the Primary Farm Record for every farm over five acres. This provides information on tenure and occupation, the condition of equipment, the ploughing-up of grassland in 1940 and 1941 and, controversially, the management condition of the farm. The surveyors, themselves mostly practical farmers and neighbours, were asked to award an A, B or C classification and to justify lower classifications, including reasons of personal failings – physical incapacity, mental imperfections or weaknesses of the flesh, such as drunkenness. It is hardly surprising that it has taken some time for these records to be released to the public.

The second element is the complete 4 June 1941 agricultural census return for each individual farm, including crop acreages and livestock numbers, rent and length of occupancy. These individual farm returns, unavailable for other years, offer an exceptional quality and depth of information. This census also included two special supplementary returns, one relating to small fruit, vegetables and stocks of hay and straw; and the other dealing with labour, motive power, tractors, rent payable and length of occupancy.¹⁴ The third element is an Ordnance Survey sheet, at either 25 inches to the mile reduced photographically to 12½ inches to the mile, or at the six inch scale, showing farm boundaries. The individual farm records and the maps are classified in the PRO as MAF 32 and MAF 73 respectively, where they are arranged by county and then by parish.¹⁵ Material is available for all the parishes in the study area.

The value of this material is enormous. In its detail and coverage the National Farm Survey has no precise equal in Britain. Although less comprehensive in its spatial coverage than the 'Domesday' of 1910, the quality of the data is incomparably greater. It is more widespread and has more information than the tithe surveys of the 1840s.

Where the information is extant for all three dates, we have benchmarks for the 1840s, 1910 and 1940s against which to measure many aspects of farming change, not the least of which will be detailed studies of landownership and farming structure. However, the material available in the sources was collected for quite different purposes. What is essentially important in the

¹⁴ The background to the survey, and an evaluation of the records is contained in B. Short, C. Watkins, W. Foot and P. Kinsman, *The National Farm Survey, 1941–1943. State surveillance and the countryside in England and Wales in the Second World War* (2000).

¹⁵ Foot, *Maps for family history*, pp. 54–63.

case of the tithe and 1910 material is the ownership and value of interests in land. These were records created for taxation purposes: in the case of the former to reform the manner by which the established church was financed by a tax on agricultural output, and the latter to provide an accurate basis on which taxation could be levied on increases in land values (not just agricultural land). By contrast, the purpose of the National Farm Survey was to provide information to enable wartime agricultural production to be maximized and to lay the basis for effective post-war agricultural planning. The surveys were all expressions of the power of an evolving and progressively egalitarian and interventionist state and were in no sense neutral documents, and these features need to be taken into account in considering their value as historical sources.

III

Every documentary source presents difficulties and challenges. In particular the definitions being used must be understood, the assumptions made by the original collectors of the data must be clarified and the purposes underlying the collection of the information need to be borne in mind. These issues take on even more importance when sifting a mass of data in relating three documentary sources, whose origins are quite different, across a 100 year time span. These central issues, and other related matters, are discussed here.

(i) Selection of holdings

The first major issue was that of reaching a comparable basis for holding sizes derived from the three different sets of records and then deciding whether all land holdings were to be examined, regardless of size, or otherwise what basis for inclusion would be used. To have included all holdings would have produced data, much of which would have related to non-agricultural holdings, but it would be possible to examine all holdings over five acres across the three records, five acres being the minimum size of holding included in the National Farm Survey 1941–3. For the purposes of this study, however, the number of units to be included was further refined by excluding small proprietors and household producers holding under 100 acres, enabling a concentration on the larger scale, more commercial operations characteristic of the traditional sheep-corn economy of the South Downs. In the study area as a whole, the proportion of the land covered by holdings of under 100 acres was 15 per cent c. 1840, 13 per cent in 1910 and 20 per cent in 1940. Comparable national figures are 21 per cent in 1851, 31 per cent in 1915 and 31 per cent in 1944, suggesting that the farm structure of the study area differed significantly from the national average, with a considerably smaller proportion of the area being taken up by small farms. A fuller sociological analysis of the area would, of course, include holdings under 100 acres as typifying those more marginal producers most exposed to changing policies and prices.¹⁶

¹⁶ For further detail on farm size classifications in the study area, and for an acknowledgment of the continuing importance of the small household producer, see J. D. Godfrey, 'The ownership, occupation and use of land on the South Downs between the rivers Arun and Adur in West Sussex, c. 1840–c. 1940' (unpublished D.Phil thesis, University of Sussex, 1999), pp. 28–38. And see also D. B. Grigg, 'Farm size in England and Wales, from early Victorian times to the present', *AgHR* 35 (1987), pp. 179–89.

The picture presented is also confirmed by land ownership in the study area c. 1840, 1910 and 1941-3. At those three dates, 88 per cent, 92 per cent and 84 per cent of the land area was in the hands of proprietors who owned more than 100 acres. These average figures conceal local variations, but the role of those farming less than 100 acres is relatively minor, reflecting the fertility of South Downs agriculture, the success of large-scale sheep-corn farming, and its resulting attractions for aristocratic owners and successful tenant farmers and owner-occupiers.

(ii) *Selection of territorial basis*

A second major methodological issue is the selection of the appropriate spatial basis to be employed. The choice is essentially between the analysis of the study area as a single unit and the individual examination of its constituent parishes. Both approaches have strengths and weaknesses and these require careful attention.

The tithe material was collected on the basis of individual parishes. This has advantages and disadvantages. It certainly allows very straightforward analysis and mapping of data on a parish-by-parish basis. It is immediately clear from the tithe maps what the extent of the parish was c. 1840 and how land ownership, occupation and use within it was organized. A major disadvantage, however, is that units of land ownership, occupation, and farms normally overlap parish boundaries, and material relating to adjoining parishes must therefore be examined to construct an accurate picture of each unit of ownership, occupation and farming enterprise.¹⁷ Approaching the material uncritically on a parish-by-parish basis may result in an overestimate of the total number of holdings, and it is necessary to look across parish boundaries to assess properly the extent and number of units in a given area. Analyses based on tithe surveys are likely to understate the size of holdings that cross the parish boundary and the proportion of smaller holdings in the parish is therefore likely to be relatively overstated.

Another persistent difficulty relates to the changes which have occurred over the years in parish boundaries, as described for the study area above, so that the parish boundaries shown on the relevant tithe map may differ from the boundaries of the same parish c. 1910 and 1941-3. It is therefore sometimes difficult to make precise comparisons between the same parish at different points in time, although this does not mean that broad but useful generalizations and conclusions cannot be attempted. Coppock commented in 1955 that

In some parts of England and Wales it is true that both farm and parish boundaries are remarkably persistent, and that farm areas lie wholly within one parish. But in general the considerable changes in farm boundaries which are continually taking place within the broad secular trend of increasing average farm size, and the parish changes which followed the Divided Parishes Act of 1876 and accompanied the urban expansion of the past hundred years, make it unlikely that farm and parish boundaries will show marked accordance.¹⁸

Coppock concluded from his study of the Chilterns that the limitations of the parish statistics (in his case the annual 4 June returns) would be less severe if the holdings were grouped in broad natural regions, offering an intermediate unit between the parish and the county.¹⁹ Such

¹⁷ J. T. Coppock, 'The relationship of farm and parish boundaries: a study of agricultural statistics', *Geographical Stud.* 2 (1955), pp. 12-26.

¹⁸ *Ibid.*, p. 17.

¹⁹ *Ibid.*, p. 24.

a unit, possibly the pays, is used here. The selected area has many of the characteristics of a pays: its boundaries are clearly defined; there is a single dominant land use, the traditional sheep-corn system of agriculture; the land is in relatively few hands and the farms are normally larger than the national average; the area is relatively self-contained economically, and there is a strong sense of place and local identity.

Conversely, the 1910 material gives details for holdings as whole units, even where their extents overlap parish boundaries. The Record Maps show the boundaries of these holdings and one can measure the amount of land within each parish; indeed, the boundaries need to be demarcated to make sense of the information in the Valuation Books and the Field Books, where the information relating to the whole holding will be included under one parish, usually the one in which the largest portion of the holding lies. Again however, there is a boundary problem, referred to as that of the 'hereditament parish'. Hereditaments (holdings) in any parish that cross parish boundaries may either have a larger area than that actually within the parish boundaries because of the inclusion of land from an adjoining parish or parishes, or else be excluded from the parish entirely because the portion in an adjoining parish is of greater extent so that the whole is included in the adjoining parish. Thus, land may be 'imported' into or 'exported' from a parish for the purposes of valuation, without this being indicated in a precise way in the documents.²⁰

Another problem relates to the fact that the basic spatial unit adopted by the Valuation Office was the 'Income Tax Parish', which might comprise a single large parish or some combination of civil or ecclesiastical parishes. Any work which did not recognize this basic fact could therefore draw highly erroneous conclusions.²¹ However, in the present study, it was not difficult to distinguish between the Income Tax Parishes and civil parishes, and a combination of the use of the Record Maps and the measurement of the areas of holdings which overlap parish boundaries helps further to reduce the problem. Nine of the parishes give their names to Income Tax Parishes and are therefore easily identified in the relevant Field Books, and in other cases the correct volume was identified by means of the hereditament number obtained from the Record Map. The 1941-3 National Farm Survey was essentially organized along similar lines. Although it did not employ such a strange spatial unit as the Income Tax Parish, it did nevertheless record farm details within the parish where the bulk of the farm lay, or where the farmhouse was located. The Ministry used its own addressograph parish lists to allocate farms to particular parishes.²² The strong adherence to boundaries in the tithe material therefore contrasts with the more elastic boundaries of the two other surveys.²³

Examining land ownership, occupation and use in the study area as a whole avoids some of the problems identified above relating to the lack of coincidence between farm and parish

²⁰ Short, *Land and society*, p. 255.

²¹ *Ibid.*, pp. 252-69. Case studies from the South Hams, Devon and from Cumbria are examined. For a comparison of the tithe material and 1910 material which acknowledges some of the difficulties in comparison see M. E. Shepherd, 'The small owner in Cumbria, c. 1840-1910: a case study from the upper Eden Valley', *Northern*

Hist. 35 (1999), pp. 161-84.

²² The parish lists, still closed to the public without specific Ministry permission, are at PRO, MAF 65.

²³ H. Lintott, 'Mapping rural landownership. An evaluation of three national surveys as cartographic databases' (unpublished MA Geography term paper, University of Sussex, 1995), p. 3.

boundaries and enables broad conclusions to be drawn from the study of a reasonably self-contained area which may then be compared with similar work elsewhere. At the same time, however, there is a considerable value in any such study also concerning itself with the most local area – the parish – which constituted the daily living space of rural communities throughout most of the study period. Parish boundaries sometimes did represent the boundaries of land holdings and farms. Their local governance was in the hands of parson and squire. The parishes have distinct physical characteristics, each containing a share of the high downland, but some containing river valley, others coastal plain and yet others the rich soil of the scarp foot zone and the sandy heaths of the Lower Greensand. Thus, the parish remained a real focus for community life and economic activity.

For these reasons, the decision was taken to combine the benefits of both approaches. The material was initially analysed on a parish-by-parish basis, giving the advantage of local focus and intimacy, and the material was thereafter summarized and analysed on a study area basis, providing the opportunity for the required overview, and minimising any problems which may arise from the lack of coincidence of farm and parish boundaries. This approach has the methodological advantage of enabling the process of inter-relating the three documentary sources 16 times at parish level and once at study area level. The value of a locality study based on the pays is thereby also enhanced by the sense of local history and identity arising from an initial parish-by-parish analysis.

(iii) Comparisons in terminology between the three data sets: land ownership

Just as it was necessary to ensure valid comparisons of holding size and spatial unit over the three types of document, so it is necessary to establish to what extent the key terms encountered in the material are used consistently. To enable meaningful comparisons, we must ensure that like is being compared with like. The first relevant issue is landownership; we then move on to examine land tenure, and then agricultural land use.

Because the purpose of the tithe apportionments was to identify landowners' individual liabilities, the recording of ownership was a central feature. Owners were defined as freeholders or very long leaseholders, and the records for the study area reveal few difficulties in this respect. In the 1840s, most of the land was contained within large agricultural estates owned by resident elites, with land in some parishes – for example, Parham, Coombes and Clapham – largely in the hands of a single owner. There were also absentee landowners, but some ownerships were more complicated, and some land was in the hands of executors. Glebe land was attributed to rectors in most parishes, and sometimes the owner of the living also owned the rectorial glebe land.

Landownership was also central to the purposes of the 1910 survey. The valuers were specifically concerned to identify owners of land for the purposes of assessment for possible taxation and this ensured the compilation of very full data. Each hereditament should have its area given and some precision as to landownership ought to be possible. Since the addresses of owners should also be given, it would normally be possible to ascertain the extent of absentee ownership and owner-occupation of land and housing. Similar information on ownership can therefore be extracted from the 1910 records and be used to provide comparisons with the tithe data. During the period 1840–1910, such a comparison demonstrates a consolidation of aristocratic

landownership in the study area, and by 1910 Lord Zouche, for example, owned the whole of the parish of Parham.

By contrast, the National Farm Survey was not designed as a register of landownership. The farm holding and its management were the objects of interest. However, the name of the owner(s) of the farm was to be given if different from the name of the holder, and so, theoretically, it is possible to find details of the owner of every agricultural holding in England and Wales over five acres in size. But as with the 1910 records, the name of the estate agent is sometimes given. Generally, if the name of the landowner of an estate is known, its extent and nature can be worked out from these records and can usually be mapped. But one practical difficulty with mapping this material relates to holdings in multiple ownership, or subject to mixed tenure, where the records may not make it clear how the ownership is divided. While it is possible to calculate how much land was owned by each person, this information cannot be mapped for those holdings which are made up of parcels of land separately owned, but whose boundaries are not given in the records.

In general, the picture presented by the National Farm Survey for the study area continued to be one of large privately-owned estates, with an increasing number of smaller, owner-occupied holdings, including hobby farms. In addition, some land in the study area was owned by local authorities and the National Trust, but ownership by clergymen and church/educational bodies had virtually disappeared by 1941-3.

(iv) Comparisons in terminology: occupation and farms

The tithe apportionments and maps yield information on the occupation of land in the study area c. 1840. The apportionment includes names in a column headed 'occupiers', together with the address and description of the property, its use and area. If the property is owner-occupied, the description 'himself' or 'herself' appears. The precise nature of the legal interest of the occupier is not apparent from the records, neither do they provide information on lengths of tenancies. Some complex arrangements were to be found, and as with landownership, occupied land also commonly extended across parish boundaries.

The 1910 material also allows studies to be made of occupancy. The boundaries of farms and other properties are precisely located on the OS sheets, allowing an examination of the dispersal or concentration of individual farming units, and the degree of fragmentation in any one locality. The manner in which a rented property was held can also be assessed, with information normally available as to whether a property was held by the week, month, year etc., rents, responsibility for rates, repairs and insurance. The 1910 material is therefore richer than the tithe material in the information on land occupation, but, if the purpose of collecting the information is to enable comparisons to be made between the three sets of data, it is not worthwhile abstracting from the manuscripts any more than the minimum information available for 1910, there being no point of comparison on more detailed issues with the 1840 material.

The importance of the National Farm Survey for providing information about occupancy and holdings resides in the Primary Farm Record, which was largely identified by the name of the holder, whether tenant or owner-occupier, as opposed to landowner. Ownership of land is specifically addressed in Section A, 'Tenure', of the Primary Return where two boxes

could be marked indicating whether the holder was an owner-occupier, tenant, or both owned and rented portions of the farm. Following this, the owner or owners of the farm were to be named if the details were different from the name of the holder.²⁴ This allows the identification of units of land occupation, and a distinction to be made from units of land ownership. It may also enable farms to be identified. Farms may be coterminous with units of occupation, but the farm is essentially an economic or commercial concept and not a unit of landownership or occupation. In some cases certain key farm boundaries were omitted from some of the maps, leaving no option but to either omit information for the areas concerned or make some assumptions based on known farm boundaries at other periods and the direction indicated by relevant farm boundaries on adjoining maps. Another potential problem is that information relating to areas of the country where land was taken over by the military during the Second World War may be limited or missing altogether. In the case of the present study area, only relatively small amounts of land were involved and, where there is military use, an indication was often given of pre-war ownership and of the farm to which it belonged.

Because the earlier records do not illuminate the working farm as opposed to the hereditament very clearly, it has to be assumed in the absence of evidence to the contrary, that units of occupation and farms are spatially co-variant. This is the only sensible way to proceed, given the shortcomings of the material, but the use of the unit of land occupation as a surrogate for farm should always be made clear. The 1941-3 material relating to occupation and farm size reveals the existence of large tenant farmers whose families had arrived in Sussex earlier in the twentieth century from further afield. Occupation of agricultural land by clergymen had more or less disappeared, but the War Department now occupied land in the adjoining parishes of Sullington, Washington and Wiston.

(v) *Comparisons in terminology: land use*

The terms used in the tithe material relating to the study area to describe land usage include arable, pasture, grass, meadow, down, 'variable' land, wood, plantation, coppice, park, heath, common, furze, water, chalk pit, and land occupied by railway companies. Kain and Oliver define 'variable' to mean 'convertible', i.e. land ploughed up from time to time.²⁵ The Tithe Commutation Act provided that land which the Assistant Tithe Commissioners considered to have been ploughed within the previous three years for crops, rotation grasses or fallow was to be regarded as 'arable' and that grasslands and leys which had not been under the plough for three years were to be regarded as 'grass', although a misleading picture resulted from the classification of long ley pastures as arable by the tithe surveyors in certain parts of the country, particularly where, as in south-western England and in Wales, ambiguity arose from the practice of laying down ploughland to long leys of three or more years duration.²⁶ By implication, in other parts of the country (including the study area), only ley grassland of less than three years standing is classified as arable, and longer-term grassland as pasture or meadow. This is

²⁴ Short *et al.*, *The National Farm Survey*, pp. 114-23.

²⁵ Kain and Oliver, *Tithe maps*, p. 519, entry for Coombes parish 1841. Such land is shown in brown with green edging.

²⁶ R. J. P. Kain, 'The land of Kent in the middle of the

nineteenth century' (unpublished Ph.D. thesis, University of London, 1973), p. 35; Kain and Prince, *Tithe surveys*, p. 193; Pearson and Collier, 'Integration and analysis', p. 165; Kain and Prince, *Tithe surveys for historians*, pp. 80-1.

confirmed by Henderson's work on land use in the Adur basin in Sussex.²⁷ As will be discussed below, the definition of arable land used in the tithe material relating to the study area is consistent with that adopted in the relevant 1941-3 material, enabling meaningful comparisons to be made.

For grassland, the basic distinctions are between 'meadow' (land used mainly for haymaking, typically low-lying), 'pasture' (land used mainly for grazing, typically on the lower slopes of the hills) and 'down', 'upland pasture' or 'rough pasture' (land used from time to time for grazing, typically on the upper slopes). Sometimes, descriptions such as 'pasture and meadow', 'meadow and pasture', 'pasture and down' and 'grass' are used in the records relating to the study area. Where this occurs, the acreages have been divided equally between the three basic categories of pasture, meadow and, where applicable, down. 'Copse', 'plantation' and 'furze' (which together cover only 410 acres in the study area) have been added to the 2303 acres described as 'wood', although these uses can also be recorded separately, providing added richness of local detail.

Land use was not an essential component of the 1910 survey and any such information was coincidental to its main purpose. It is normally possible to determine general land use such as agriculture, woodland and so on, but sometimes possible to examine use on a field-by-field basis, though this cannot be predicted for any one area without consulting the relevant documents.²⁸ But very typically, the study area has no evidence available in map form relating to land use, and only small amounts of written information. And where relevant information does occur, it is often in a format that cannot easily be analysed (for example, '455 acres of meadow and arable', '2455 acres of down and arable'). The 1910 records for the study area do not provide a basis for meaningful land use comparisons to be made with other periods. For this reason, no further exploration is justified into the definitions of categories of agricultural land use adopted for the purposes of the 1910 survey.

The 1941-3 material includes data on acreages of agricultural land use on individual holdings and on the extent and location of land ploughed up for the 1940 and 1941 harvests. It does not, however, include information on other uses – woodland, industry, residential development and so on – nor does it show information on land use in map form. How then, can the categories of agricultural land use appearing in these records be interpreted to provide a sustainable basis for comparisons with the tithe material? Discussing the definition of arable land for the purposes of the Land Utilization Survey, Stamp observed that:

The difficult question in mapping land use is whether ... long-ley grass should be classed as arable or permanent grassland. The decision reached coincides approximately with the practice in Agricultural Statistics – that where the land has been down to grass for more than three years it is recorded as permanent grass ... Thus, in reading the maps of the Land Utilization Survey ... it should be remembered that the land coloured brown is that which

²⁷ H. C. K. Henderson, 'The agricultural geography of the Adur basin in its regional setting' (unpublished Ph.D thesis, University of London, 1935); *id.*, 'Our changing agriculture: the distribution of arable land in the Adur basin, Sussex, from 1780 to 1931', *J. Ministry of Agriculture* 43 (1936), pp. 625-33.

²⁸ Short, *Land and society*, p. 115. At Ashley Walk (Hampshire) valuers made extensive notes in the field books concerning land use, noting plots as orchard, pasture, rough land, arable, heath etc., whilst on the working copy maps for Hertfordshire, arable and pasture, timber valuations and even numbers and species of trees can be found.

at the time of the survey was actually under crops or had been down to grass for not more than three years.²⁹

Following this approach, one consistent with that adopted in the tithe material, the following categories of land use included in the 4th June 1941 returns for crops and grass for the study area can be treated as coming within the definition of 'arable': corn and legumes, root vegetables, fodder, rape, lucerne, flax, vegetables for human consumption, all other crops, bare fallow, clover, sainfoin and temporary grasses for mowing or grazing. The category of permanent grass for mowing has been regarded as equivalent to 'meadow' in the tithe material; permanent grass for grazing, but excluding rough grazings, has been regarded as the equivalent of 'pasture'; and the rough grazings category has been regarded as the equivalent of 'down' or the other terms used in the tithe records, such as 'rough pasture' and 'upland pasture'. On this basis, the information on land use in the 1840s and 1940s can be assembled for the purposes of the current study and comparisons made between the two.

IV

In this section, the potential use of the three records for studies of the ownership, occupation and use of land will be considered in turn, and interwoven with well-known sources at both national and local levels.

(i) Landownership

Using John Bateman's figures from the 1873 Return of Owners of Land, Rubinstein named 29 individuals whose gross landed incomes exceeded £75,000 in 1883 and whom he describes as 'those super-rich landowners'. The table includes, at 23rd and 29th places respectively, Lord Leconfield and the Duke of Norfolk, both owning substantial amounts of land in the study area. Such families increased their incomes, the value of their estates and their non-landed property during the nineteenth century, widening the wealth gap between themselves and the minor aristocracy and gentry.³⁰

These comments provide a useful frame of reference and set of points of comparison for an examination of the data relating to the study area. In the 1840s, in 1910 and in 1941-3, landownership was characterized by substantial estates. Forty per cent of the land was in the hands of the three largest owners c. 1840, 53 per cent in 1910 and 46 per cent in 1941-3. And 84 per cent of the land was in the hands of owners of at least 1000 acres, compared with 74 per cent in Sussex as a whole and 68 per cent in England and Wales in 1873, confirming that the position in the study area was different from that in the county and the country generally.³¹ More land in the study area was in the hands of large owners in 1910 than in 1840. The big estates grew, but in contrast, the smaller ones shrank. Between 1910 and 1941-3, there was some reduction in the amount of land in the hands of large owners, but their position was still stronger than it had been c. 1840.

²⁹ L. D. Stamp, *The land of Britain: its use and misuse* (3rd edn, 1962), pp. 83-6.

³⁰ W. D. Rubinstein, *Men of property. The very wealthy*

in Britain since the Industrial Revolution (1981), pp. 194-6.

³¹ J. Bateman, *The great landowners of Great Britain and Ireland* (repr. 1971), pp. 510, 515.

Similar comparison between the tithe material and the 1873 Return of Owners of Land for the county of Essex also suggests continuity, with 140 owners of estates of more than 1000 acres in 1840, compared with 144 in 1873, although, as will be discussed below, this appearance of stability concealed significant changes in the identities of the families involved. In Kent, estates were both contracting and expanding between 1840 and 1873, with the net result being an increase from 42 per cent to 50 per cent in the proportion of the county contained in estates of more than 1,000 acres. The territorial expansion of gentry estates seems to have taken place more at the expense of small proprietors and lesser yeomen than of greater yeomen.³²

But the scale of enquiry mattered. Although in Sussex landownership at the local level, as at the national, was still relatively concentrated, as exemplified by the fairly static pattern of landownership in the lower Ouse valley, south of Lewes, between 1840 and 1930, the country around the London-Brighton commuter axis experienced fragmentation of estates from sales. Elsewhere, as in South Devon, comparisons relating to landownership between the tithe material and 1910 reveal different patterns in four adjacent parishes. In two, landownership was very diffused at both dates and little change is revealed. In the third, there was no significant change in the proportion of the land in the parish (about 70 per cent) owned by the three largest owners c. 1840 and 1910, but in the fourth parish, the share of the dominant owner increased from 40 per cent to 64 per cent of the land. Work undertaken on changes in landownership in Cumbria between c. 1840 and the 1910 valuation concluded that small owners declined in number in the proportion of land owned, although aspects of the methodology used have subsequently been criticized.³³

The evidence from studies undertaken elsewhere in Sussex and in the country as a whole therefore suggests some consolidation of larger estates between c. 1840 and 1910, and a reduced amount owned by small proprietors. The evidence suggests that these trends were strongest in areas dominated by a small number of owners. Such evidence is supported by the present study, which demonstrates from the documents studied that, in an area dominated by three large estates, the proportion of the area occupied by estates of over 1,000 acres increased from 51 per cent to 77 per cent between c. 1840 and 1910, while the proportion of the area owned by proprietors of less than 100 acres fell from 12 per cent to eight per cent. Here then, are similar trends to those identified in Kent, Devon and Cumbria, but in a more pronounced form, due probably to the presence in the study area of three particularly dominant estate owners.

Comparative information on changes in landownership between 1910 and 1941-3 is difficult to find. There is evidence that the introduction of more onerous taxes on landownership and succession, and the effects of the wartime deaths of heirs contributed to the break up of large estates in the years immediately after the First World War: Thompson, for example, quotes the estimate of the *Estates Gazette* that, nationally, 800,000 acres changed hands in the five years

³² F. M. L. Thompson, *English landed society in the nineteenth century* (1963), p. 125; Kain and Prince, *Tithe surveys*, p. 242.

³³ S. P. Farrant, 'The role of landowners and tenants in changing agricultural practice in the valley of the River Ouse south of Lewes (Sussex), 1780 to 1930, and the consequences for the landscape' (unpublished Ph.D thesis, University of London, 1977), p. 286; P. Corrigan,

'Changing farm structure in Surrey and Sussex. Some considerations of farm structure with special reference to the influence of urbanisation on the tenure and enterprise structure of agricultural holdings in a selected area of Surrey and Sussex adjacent to the London-Brighton commuter axis' (unpublished D.Phil thesis, University of Sussex, 1974); Short, *Land and society*, pp. 264-5, and Shepherd, 'Small owner in Cumbria'.

between 1915 and 1920, although he attributes this more to profound, long-term changes in the nature of British society and the economy than to the effects of radical measures taken by government. In the course of the twentieth century, the landed gentry suffered more severely from economic adversity than the landed aristocracy, who survived with far fewer casualties, though with much reduced estates.³⁴

The proportion of land in the area in estates of over 1,000 acres decreased significantly from 77 per cent in 1910 to 59 per cent in 1941–3, but the amount of land owned by large estates remained high – it cannot be argued that these figures on their own provide evidence for the breaking up of large estates – and the proportion of land owned by the large estates in 1941–3 is still considerably higher than it was c. 1840. However, much depended on the character and stature of the individual landowners as well as on the structural circumstances within which they operated.

At each of the three dates the largest estate in the study area was owned by the Dukes of Norfolk who, throughout the 100 years, owned about one-quarter of the land in the area as part of their substantial Arundel estate. In 1873 the Duke owned 50,000 acres in England, including 19,440 acres in Yorkshire and 21,446 acres in Sussex.³⁵ In 120 years (from 1860 to 1975) there was but one change in the head of the family, in 1917, when the fifteenth Duke died and was succeeded by his under-age heir. This immense continuity minimized the impact of death duties, although they still involved the sale of the town of Littlehampton on the death of the fifteenth Duke.³⁶ The Wiston estate, the second largest in the study area, remained with the Goring family, their ownership ranging from 11 per cent c. 1840 to 19 per cent in 1910 and 15 per cent in 1941–3. In 1873 they owned 18,500 acres, almost all in Sussex.³⁷ Four members of the family in succession owned the estate during the period, with the Rev. John Goring the owner from 1849 to 1905, a period of 56 years. However, the estate had to accommodate the effects of three deaths during the twentieth century, leading to heavy sales of, for example, 713 acres in 1944 and the eventual leasing of the family mansion to the Foreign Office for use as a conference centre.

If these two estates demonstrate continuity in landownership, change is illustrated by the fortunes of the next two largest estates, that of the Wyndham/Leconfield family at Petworth c. 1840 and 1910, and the Parham estate. The Leconfield land amounted to eight per cent of the study area in 1910, but was all sold off, mainly to sitting tenants, in the 1920s. This land was peripheral to the estate and much of it downland, with limited appeal in the depressed conditions following the general price fall of 1921. Typically, land was sold to sitting tenants, sometimes with the aid of a mortgage granted by the former landowner. The Parham estate, 6,654 acres in 1873, was owned by the Bishop family for 11 generations, but changed hands eight times in the period, being sold by Lord Zouche in 1922 to the Hon. Clive Pearson, second son of the first Viscount Cowdray. Pearson represented the new gentry, his ennobled father being the successful financier and industrialist, Weetman Pearson, and such a change echoes trends elsewhere.³⁸

³⁴ Thompson, *English landed society*, p. 343.

³⁵ Bateman, *Great landowners*, p. 334.

³⁶ VCH *Sussex* V (i), p. 3; and see also T. Hudson, *A History of Arundel* (2000).

³⁷ Bateman, *Great landowners*, p. 188.

³⁸ *Ibid.*, p. 494; Thompson, *English landed society*,

p. 342; Rubinstein, *Men of property*, pp. 217, 244. Rubinstein notes that Lord Cowdray was one of three 'new men' (the others being Lords Leverhulme and Iveagh) whose families owned no agricultural land whatever in 1876 but who were by 1976 among England's largest land-owners.

It was the very wealthiest landowners who were best placed to bear the strains of the agricultural depression and rising taxation, with income from non-agricultural sources, such as mineral deposits or urban property. Both the Gorings and the Dukes of Norfolk benefited from the fact that their estates contained elements of both these valuable categories of land. The number of successions to ownership was limited, and both the fifteenth and sixteenth Dukes of Norfolk were major figures on the national and international stage, open to new ideas and with the confidence and resources to carry through programmes of major reform, while maintaining the traditional values of the English landowning aristocracy. Elsewhere in the Downs, the success of the Glynde estate, owned by H. B. W. Brand, Speaker of the House of Commons, was attributed to the fact that his involvement in parliamentary work and regular residence in London gave him a wider perspective on the development of his own estate. Additionally, the wealth of the Dukes of Norfolk did not solely depend on their ownership of agricultural land in Sussex, but included land in Yorkshire, Surrey, Norfolk and London as well, and with a great deal of urban property in Arundel, Littlehampton, Dorking, the Strand estate in London and, above all, substantial portions of Sheffield. This significant urban, wealth-producing property explains the apparent ease with which they not only weathered the agricultural depression of the late nineteenth century, but also invested in the agricultural estate in Sussex and in the reconstruction of the family seat at Arundel Castle.³⁹

Therefore, the findings from a comparison of the three sources generally support conclusions on landownership reached from studies elsewhere, and suggest that, in an area dominated by large estates, aristocratic owners generally fared better than landed gentry in retaining their position during this period, but that the performance of individual families and estates is also of crucial importance.⁴⁰

(ii) Land occupation

Nationally, by the middle of the nineteenth century, a great majority of farmers were tenants and most of the agricultural land was tenanted. By the late 1880s 82 per cent of occupiers were solely tenants, 14 per cent owned the whole of their land and the remaining 4 per cent owned part of their holdings. About 85 per cent of the total area of crops and grass was tenanted and 15 per cent owned by the occupiers. By 1914 the latter had fallen to 11 per cent. During the 'Silent Revolution' of 1919–21 many agricultural estates were broken up, resulting in a rise in the proportion owned by occupiers to 20 per cent. The National Farm Survey of 1941–3 gave the corresponding figure as 33 per cent.⁴¹

During the period, there was some increase in the amount of owner-occupied land in the

³⁹ S. Farrant, 'The management of four estates in the lower Ouse valley (Sussex) and agricultural change, 1840–1920', *Southern Hist.* 1 (1979), p. 166; J. M. Robinson, *The Dukes of Norfolk* (1995), p. 212; R. Perren, 'The landlord and agricultural transformation, 1870–1900', in P. J. Perry (ed.), *British Agriculture, 1875–1914* (1973), p. 118. Perren cites the Dukes of Bedford and Sutherland as similarly able to transfer wealth from urban/industrial sources to their estates. For more detail on the Arundel and other landed estates at this period see Godfrey, 'The ownership,

occupation and use of land', pp. 451–62.

⁴⁰ For a comparison of the rate of survival of estates into the twentieth century, see J. Waymark, 'Landed estates in Dorset since 1870: their survival and influence', (unpublished Ph.D thesis, University of London, 1995).

⁴¹ Ministry of Agriculture, Fisheries and Food, *A century of agricultural statistics, 1866–1966* (1968), pp. 24–5; H. F. Marks (ed. D. K. Britton), *A hundred years of British food and farming: a statistical survey* (1989), p. 13.

study area, compared with the amount which was tenanted. The proportion of owner-occupied land as revealed in the three sources increased from 18 per cent c. 1840 to 27 per cent in 1910, but then fell to 24 per cent in 1941-3. Nationally, 15 per cent of farmland was owned by its occupiers in the late 1880s and thus rather more land was owner-occupied in the study area than in the nation as a whole, although this position had been reversed by 1941-3.⁴²

The change taking place in the study area between 1840 and 1910 is largely attributable to the decrease in the amount of land occupied by the larger landowners. Between 1910 and 1941-3, there was an increase in the amount of land owned by former tenants who had bought their farms from their landlords. In doing so, purchasers exchanged a low rent for a mortgage, often resulting in increased outgoings. When the Leconfield farms were sold off in the 1920s, some of the new owner-occupiers were immigrants to the area, attracted by the low price of land in Sussex during the inter-war depression. Migration, often from Scotland and the West Country, and often of dairy farmers, occurred also in Essex and East Anglia during this period.⁴³ However, at the same time, more land was being let elsewhere in the study area, producing the net reduction in the amount of owner-occupied land referred to above. Significantly, it was these new owner-occupiers who took over from some of the aristocratic proprietors the leadership roles in the rural economy and society. Between 1900 and 1950, the proportion of the national cultivated area farmed by its owners increased from 13.5 per cent to 37.5 per cent.⁴⁴ But this trend was not reflected in the study area, mainly because of the relatively high proportion of land remaining in the ownership of large estates and let to substantial tenants, the old nineteenth-century system being perpetuated into the modern era.

Turning secondly to the question of farm size, Stamp's analysis of national changes in farm size based on an examination of the Ministry of Agriculture's annual returns from 1885 to 1945, concluded that the average farm size in England and Wales increased by about 10 per cent between the two dates, and that the proportion of holdings of 100 or more acres increased from 18 to 21 per cent during the same period. However, he remarks on the decrease in the number of large farms over the period and the fact that really large farms are surprisingly few: in 1938, there were only 334 farms of over 1,000 acres in England and none in Wales.⁴⁵ The comparative position in the study area is illustrated in Table 1, demonstrating that, while the number of farms over 100 acres fell from 81 c. 1840 to 68 in 1910 and 64 in 1941-3, the land area occupied by farms over 700 acres increased significantly from 33 to 51 per cent, and the area occupied by farms of under 100 acres increased from 15 to 20 per cent of the area. The decline was in the number and total extent of holdings within the 100-300 and 300-700 acre categories.

Nationally, the proportion of agricultural land in England and Wales occupied by farms of over 300 acres was 28 per cent in 1875, falling to 24 per cent in 1915 and remaining at the same figure in 1944.⁴⁶ However, within the study area, comparative figures are 62 per cent c. 1840, 74 per cent in 1910 and 67 per cent in 1941-3, confirming that larger farms were relatively much

⁴² Godfrey, 'The ownership, occupation and use of land', p. 425; Ministry of Agriculture, Fisheries and Food, *A century of agricultural statistics*, p. 24.

⁴³ G. E. Mingay, *Land and society in England, 1750-1980* (1994), pp. 147, 207.

⁴⁴ S. G. Sturmeay, 'Owner-farming in England and

Wales, 1900-1950', in W. E. Minchinton (ed.), *Essays in Agrarian History* (2 vols, 1968), II, p. 283.

⁴⁵ Stamp, *The Land of Britain*, pp. 339, 342.

⁴⁶ Ministry of Agriculture, Fisheries and Food, *Century of agricultural statistics*, p. 8.

TABLE 1. Land occupation in the study area

Holdings (acres)	1840			1910			1941-3		
	No.	Acres	%	No.	Acres	%	No.	Acres	%
700+	12	13,286	33	12	15,995	39	18	20,443	51
300-700	32	11,776	29	29	14,384	35	16	6,663	16
100-299	37	9,412	23	27	5,290	13	30	5,213	13
<100	*	6,251	15	*	5,078	13	*	8,092	20
Total		40,725	100		40,747	100		40,411	100

Note: * Not calculated for the purposes of this study.

more important, and there were fewer small farms. The average size of farms over 100 acres in the study area was 425 acres c. 1840, 525 acres in 1910 and 505 acres in 1941-3. The national dominance of the medium-sized farm of between 100 and 300 acres was certainly not reflected in the study area, where such farms occupied only between 23 per cent of the land area c. 1840 and 13 per cent in 1910. The largest farms expanded in contrast to the national trend, again illustrating an important difference between the situation in the study area and in the country as a whole.

A comparison with land occupation in Kent c. 1840 is also interesting, with nearly two-thirds of Kent farmed in units of less than 500 acres, compared with the study area with 51.5 per cent. The study area contained more large farms and fewer small farms than were to be found in Kent. This finding is supported 100 years later by the summary results of the National Farm Survey which again confirm that the amount of land occupied by larger farms in the study area was greater than elsewhere.⁴⁷

(iii) Land use

As stated above, the tithe records and the National Farm Survey provide good and comparable information on land use, while the 1910 material provides only sketchy information. The value of the tithe material for this purpose has long been recognized and the compilers of the Land Utilisation Survey of the 1930s were well aware of the opportunities presented by the two sets of data for comparative studies over time. The present study therefore adds to such comparative work by drawing on material from the National Farm Survey.⁴⁸

The land use issue which has preoccupied researchers working on the tithe manuscripts is the information which the material reveals about the extent and distribution of arable land in the 1840s. Henderson's early study of the Adur basin, including land in the study area, compared the extent of arable in the 1840s, in 1875 and in the 1930s. It demonstrated that there was more arable around 1845 than in the 1930s but not as much as in 1875. Work on Derbyshire also

⁴⁷ Kain and Prince, *Tithe surveys*, p. 238; Ministry of Agriculture, Fisheries and Food, *National Farm Survey of England and Wales: a summary report* (1946), p. 89; E. W. H. Briault, *Sussex: East and West*, in

L. D. Stamp (ed.), *The land utilisation survey of Britain*, VIII, *South-Eastern England*, parts 83-4 (1942), p. 497.

⁴⁸ Briault, *Sussex: East and West*, p. 12.

indicates that the extent of the arable land nationally in 1875 was slightly greater than in 1840. That there was a peak in arable cultivation in many areas between 1840 and 1875 seems incontrovertible. In the 1840s the high chalk was largely grazing land, and the lower dip slopes had much arable distributed similarly to that of the end of the eighteenth century. But by 1875 there is evidence for the ploughing of considerable areas of the high dip-slopes, in places up to 700 feet or on comparatively steep slopes. This increase in arable was not uniformly spread throughout the Downs but 'depended greatly upon the enterprise of the farmer as well as upon economic and geographical factors. The most extensive areas of arable were still in less exposed situations on the lower slopes'.⁴⁹

After 1875, one effect of the agricultural depression was to reduce the amount of land under the plough, and by 1910 much of the high arable of 1875 had returned to grass and, although the amount of ploughed land in Sussex continued to decline until the middle of the First World War, the figure rose again from 1916 to a peak in 1920. Thereafter, the amount of arable land nationally and in Sussex declined sharply until the circumstances of the Second World War produced an increase in the 1940s. Up until at least 1938, the picture was one of consistent decline, the amount of ploughed land in Sussex falling from 257,683 acres in 1920 to 132,425 acres in 1938. And with this 'falling-down' of arable to poor pasture also went the gradual disappearance of the sheep, 'so long the pride and mainstay of South Downs farming'.⁵⁰

Later changes in the study area between the dates of the Land Utilisation Survey and the National Farm Survey are of continuing decline of the proportion of arable through the 1930s and then an upturn in the 1940 and 1941 harvests as the effects of the Government's plough-up campaign began to be felt, albeit slowly and modestly. The campaign resulted in some 2,000 acres in the study area being returned to crop production for the 1940 and 1941 harvests, as calculated from the Primary Farm Records, which, in percentage terms, represented only about half the government's national target.

The overall figures for the changes in the proportion of arable land in the study area conceal considerable variations between parishes, which may be primarily attributable to differences in land quality as well as management. This suggestion is supported by Stamp in his conclusions drawn nationally from the Land Utilisation Survey:

Another great lesson is that of the remarkable stability of land use ... contrary to public belief. More correctly there has been outstanding stability of land use on the best land and on the poorest lands and a maximum of change, dictated by economic vicissitudes, on land use of intermediate quality ... land which, as Cobbett said long ago, it pays to plough in 'dear-corn' times but which at other times is abandoned to rough grazing or allowed to tumble into grass.⁵¹

The most striking feature of the history of land use in the study area revealed here, is the prominence of arable farming c. 1840 and its relative decline by 1941-3. In the 1840s, farmers

⁴⁹ Kain and Prince, *Tithe surveys*, pp. 172-206; Henderson, 'The agricultural geography of the Adur basin'; Briault, *Sussex: East and West*, pp. 409, 498, 502.

⁵⁰ Briault, *Sussex: East and West*, p. 508. Note that

Briault's figures are for Sussex (East and West) whereas the data quoted by Burrell (see footnote 5) related to the county of West Sussex only.

⁵¹ Stamp, *The land of Britain*, p. 64.

such as Hugh Penfold at Botolphs and Francis Gell at Coombes were growing arable crops on the downland tops, the soil enriched by liming of the heavy acidic clay-with-flints, and much of the lower land was given over to crop production.⁵² By 1941–3, despite the Government's plough-up campaign, the amount of land under the plough was two-thirds of the total c. 1840, and farmers were organising rough shooting on scrubland on the Downs above Sompting where corn had been growing a century before.⁵³

This steady decline in arable production on the South Downs from its mid-nineteenth century peak is well-documented, but this has not prevented the emergence and continuation of a commonly held belief that the Downs were one continuous grassy sheep-walk for hundreds of years until the land was ploughed up during and after the Second World War. Thus Hilaire Belloc writes:

Sussex is Sussex on account of the South Downs. Their peculiar landscape, their soil, their uniformity, give the county its meaning ... Cultivation is rare upon them. They are covered with a short, dense and very sweet turf suited to the famous breed of sheep which browse upon them, and of little value for any other agricultural purpose than this pasturage.⁵⁴

Belloc, Arthur Beckett and S. P. B. Mais, who did so much to create the myth of the landscape of the South Downs in the popular imagination, were celebrating a landscape of the early part of the twentieth century which was affected by agricultural depression and which was arguably atypical in the broader historical context.⁵⁵

V

The potential value of a study which examines a defined area in the light of the three principal sets of records discussed above, supplemented where appropriate by other material, is clear. It should provide fresh insight into the structure of land ownership, occupation and use, the fortunes of the landowning families, the balance between owner-occupation and tenant farming, farm size, the balance between pasture and arable, agricultural improvement and the progress and efficiency of measures such as the wartime plough-up campaigns.⁵⁶

Such a study is now feasible with the emergence into the public domain of the 1910 and 1941–3 records. At least for the three dates analysed here we have for both England and Wales relatively accurate information for the benefit of both private and public sectors, fiscal and legal records comparable to the French cadastres, yielding a systematic description of holdings within given areas.⁵⁷ This paper has therefore addressed the methodology of dealing both with the potential of such a longitudinal survey and the problems which can arise, demonstrating this in a case study which, for the first time, draws together these sources in the context of a specific

⁵² Brandon, *South Downs*, p. 110.

⁵³ Personal communication from Mr Chris Passmore, Applesham Farm, Coombes.

⁵⁴ H. Belloc, *The county of Sussex* (1936), p. 24.

⁵⁵ A. Beckett, *The spirit of the Downs* (1909); S. P. B. Mais, *See England first* (1927).

⁵⁶ For more detailed information on the findings for the study area, see Godfrey, 'The ownership, occupation and use of land'.

⁵⁷ For fiscal and legal cadastral surveys see G. Larsson, *Land registration and cadastral systems. Tools for land information and management* (1991).

locality. While the tithe material and the 1910 Valuation Office material have been compared previously, as have the 1910 and 1941–3 surveys, this study relates all three sources.⁵⁸

In a study such as this, there is a great deal more detail that could be gleaned from additional material, and this has been done in part. But the exercise of relating the three principal sources discussed here on their own provides valuable methodological insights into patterns of land-ownership, occupation and use. Supplementary sources which may prove useful include local directories, Ordnance Survey material, census material, annual agricultural returns and the Land Utilization Survey of the 1930s. Directories will help to identify the names of farms and farmers, the record books which accompany the first edition 25 inch OS maps include parish listings of land use, census material may provide information on size of holdings and numbers of labourers employed, and the Land Utilization Survey yields valuable spatial information on the 1930s situation.⁵⁹ There may also be a wealth of social and cultural information on each of the three dates, setting the role and relations of the large farms discussed here within their pays: after all, the place of the large farm within the local society of 1840 would (arguably) have differed greatly from the situation in 1940.

In most respects, the study undertaken here could be replicated elsewhere, and could indeed be extended through to the present day.⁶⁰ For all the reasons discussed above, it would be unwise to rely on the findings of a comparative study of this nature which related solely to a single parish. A better project would be an area study covering several parishes, so that ownership patterns, farm size and extent and land use, which normally fail to respect parish boundaries, may be observed more fully. Finally, such a study should not pretend to a degree of precision which lies beyond the scope of the data and methodology. An area study, built on the foundation of detailed parish surveys, can allow useful conclusions to be drawn about broad patterns and trends, but it cannot claim to produce precise results.

⁵⁸ For comparisons of the tithe and 1910 material see Short, *Land and society*, pp. 252–69; for a comparison of the 1910 and 1941–3 material see Short *et al.*, *The National Farm Survey*, pp. 178–80; and for a full comparison of all three sources see Godfrey, 'The ownership, occupation and use of land'.

⁵⁹ But for a cautionary note on the use of the census to yield information on farming, see D. Mills, 'Trouble

with farms at the Census Office: an evaluation of farm statistics from the censuses of 1851–81 in England and Wales', *AgHR* 47 (1999), pp. 58–77.

⁶⁰ For a study which compares large farms in South East England between the National Farm Survey, and 1978 and 1998 see N. Walford and R. Burton, *The development of large-scale commercial farming in south-east England* (School of Geography, University of Kingston, 2000).