

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 Abbots, 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 ls. 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 3s. 6d. to 5s. per week, adult general farm hands 11s. to 13s. weekly in summer and 9s. or even less in winter, whilst

head ploughmen, cowmen or shepherds would earn 15s. per week, although it was also possible to earn an extra 7–10s. 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 total-ing 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 of no. labs. (1) to no. labs.(2)	Index of Casual-ization (2)/(1)	Paupers as % Method 2 labs			
	No. Labs (1)	Living-in %	Living-in		Total							
			Employed	No. Labs (2)		%						
										Paupers/unempl.		
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*.

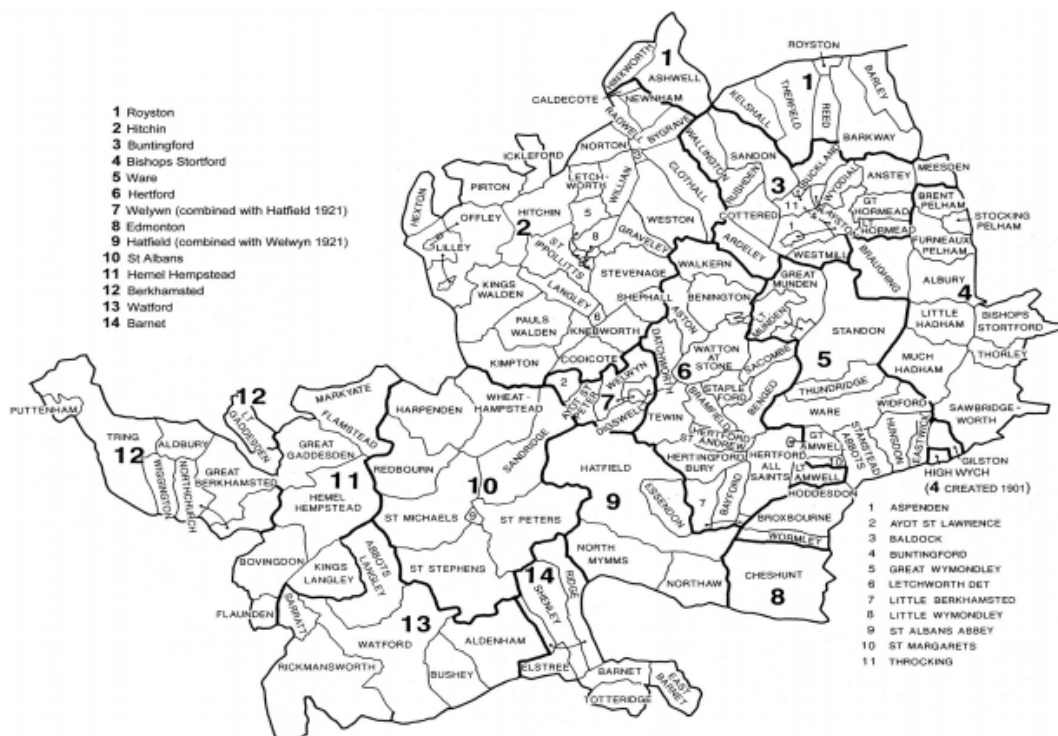


FIGURE 1. Hertfordshire Poor Law Unions and Registration Districts

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

<i>Registration District</i>	<i>Population Growth 1801–51 (%)</i>	<i>% Occupied Males in Agriculture 1851</i>	<i>% Population Urban 1851</i>
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.

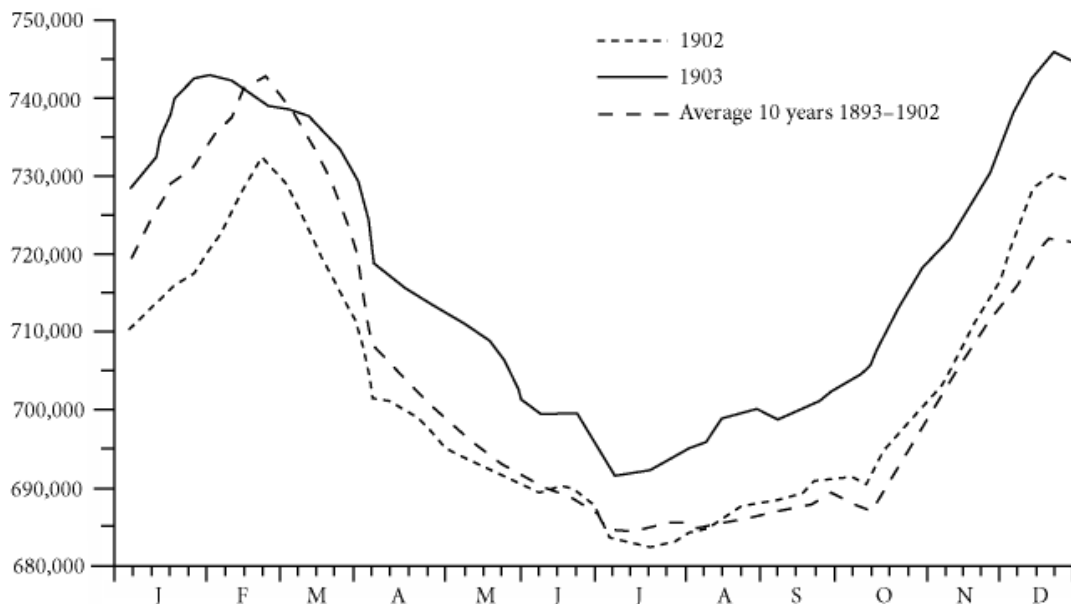


FIGURE 2. Total numbers of paupers (indoor and outdoor) in England and Wales on the last day of each week of the years 1902 and 1903, and the average for the ten years 1893–1902.

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		% Pop. Relieved		Ratio		Sex Ratio Adults	
	1 Jan		1 July		1 Jan		1 July		1 Jan	
	1 Jan	1 July	1 Jan	1 July	1 Jan	1 July	1 Jan	1 July	1 Jan	1 July
Berkhamsted	0.50	0.36	1.38	1.38	194	164	4.65	4.50	1.03	39
Bishop's Stortford	1.29	0.89	1.44	1.44	164	145	6.97	6.73	1.04	58
Hatfield & Welwyn	1.32	1.05	1.26	1.26	175	140	5.53	5.06	1.09	41
Hemel Hempstead	0.70	0.53	1.33	1.33	145	137	3.93	3.54	1.11	46
Hertford	0.81	0.64	1.27	1.27	107	99	4.80	4.49	1.07	50
Hitchin	0.83	0.58	1.42	1.42	177	144	7.07	6.66	1.06	49
Royston	1.10	0.68	1.61	1.61	199	160	6.35	5.94	1.07	46
St Albans	0.90	0.74	1.21	1.21	113	99	4.03	3.68	1.09	43
Ware	1.22	0.87	1.40	1.40	141	115	7.24	6.78	1.07	50
Watford	1.15	1.02	1.12	1.12	163	153	5.72	5.18	1.10	42
Hertfordshire	0.99	0.73	1.35	1.35	155	134	5.80	5.42	1.07	47

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		1 Jan	1 July				
Northamptonshire	6.3	0.73	0.55	1.32	106	83	17,839	26,243	1.47	0.86
Northumberland	14.8	0.46	0.43	1.07	87	75	10,850	14,505	1.34	2.32
Nottinghamshire	24.5	0.46	0.45	1.02	113	96	9158	19,647	2.15	2.07
Oxfordshire	5.7	1.00	0.65	1.54	117	89	14,906	22,421	1.50	0.62
Rutland	14.7	0.98	0.69	1.42	152	122	1494	2897	1.94	0.53
Shropshire	28.7	0.64	0.54	1.18	93	87	12,353	26,444	2.14	0.92
Somerset	10.3	0.81	0.64	1.26	93	84	24,046	38,678	1.61	1.02
Staffordshire	23.8	0.47	0.44	1.08	100	95	10,270	24,326	2.37	4.01
Suffolk	6.3	1.26	0.85	1.49	137	117	35,092	45,828	1.31	0.53
Surrey	8.0	1.06	0.91	1.17	96	91	11,070	20,217	1.83	0.75
Sussex	8.0	1.28	0.99	1.29	149	122	22,595	37,880	1.68	0.72
Warwickshire	14.5	0.43	0.37	1.16	98	94	11,982	22,949	1.92	3.10
Westmorland	44.9	0.67	0.61	1.11	79	80	2325	4392	1.89	0.88
Wiltshire	3.1	1.21	0.83	1.45	100	68	24,619	33,003	1.34	0.59
Worcestershire	11.0	0.47	0.40	1.17	95	93	9696	15,786	1.63	1.99
Yorkshire E. Riding	39.4	0.45	0.45	1.00	91	78	10,293	19,098	1.86	1.17
Yorkshire N. Riding	37.1	0.43	0.42	1.04	83	87	10,854	18,680	1.72	0.72
Yorkshire W. Riding	25.2	0.27	0.24	1.10	108	108	17,355	36,993	2.13	4.93
England	15.3	0.71	0.58	1.23	102	90	620,259	1,045,035	1.68	1.56
Wales	48.5	0.29	0.26	1.10	75	71	40,472	65,285	1.61	1.34
England and Wales	17.2	0.68	0.56	1.23	102	90	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 thus 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 under-reporting 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 I. 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	%	Empl.	No. Labs(2) Pauper/ unempl.	Living-in	%
Barnet	Chipping Barnet	38	0	0.0	186	4	190	0
	East Barnet	12	4	33.3	63	0	63	8
	Elstree	13	3	23.1	60	0	60	7
	Ridge	112	22	19.6	70	0	70	25
	Shenley	77	12	15.6	212	0	212	15
	Totteridge	35	2	5.7	34	2	36	3
Sub-total		287	43	15.0	625	6	631	58
Berkhamsted	Aldbury	51	10	19.6	117	16	133	10
	Frithsdon	72	16	22.2	109	1	110	16
	Great Berkhamsted	60	7	11.7	80	1	81	9
	Little Gaddesden	30	3	10.0	67	0	67	3
	Northchurch	81	23	28.4	176	0	176	23
	Puttenham	18	3	16.7	37	0	37	3
Bishop's Stortford	Tring	271	32	11.8	324	14	338	32
	Wigginton	55	6	10.9	129	0	129	8
	Sub-total	638	100	15.7	1039	32	1071	104
	Albury	102	7	6.9	160	11	171	7
	Bishop's Stortford	122	4	3.3	128	1	129	5
	Braughing	152	10	6.6	253	18	271	10
Brent Pelham	Great Hadham	183	21	11.5	135	0	135	21
	Little Hadham	149	6	4.0	192	15	207	10
		42	0	0.0	73	6	79	0

Registration District	Parish	Method 1			Method 2				Proportion farms with at least one	Index of Casualization (2)/(1)
		No. Labs (1)	Living-in	%	Empl.	No. Labs(2)		Total		
						Pauper/unempl.	%			
Edmonton	Furneux Pelham	81	1	1.2	161	9	170	1	0.6	2.10
	Stocking Pelham	43	1	2.3	34	7	41	1	2.4	0.95
	Sawbridgeworth	168	13	7.7	328	10	338	14	4.1	2.01
	Thorley	42	5	11.9	79	0	79	5	6.3	1.88
Sub-total		1084	68	6.3	1543	77	1620	74	4.6	1.49
Edmonton	Cheshunt	182	10	5.5	367	12	379	12	3.2	2.08
	Sub-total	182	10	5.5	367	12	379	12	3.2	2.08
Hatfield	Ayot St Lawrence	33	7	21.2	23	0	23	7	30.4	0.70
	Ayot St Peter	42	14	33.3	51	1	52	14	26.9	1.24
	Digswell	32	10	31.3	44	0	44	10	22.7	1.38
	Essendon	27	6	22.2	61	0	61	7	11.5	2.26
	Hatfield	284	33	11.6	697	10	707	51	7.2	2.49
	Northaw	58	13	22.4	127	2	129	13	10.1	2.22
	North Mimms	102	16	15.7	193	3	196	17	8.7	1.92
	Welwyn	56	16	28.6	135	3	138	16	11.6	2.46
	Sub-total	634	115	18.1	1331	19	1350	135	10.0	2.13
	Hemel Hempstead	Bovingdon	116	47	40.5	197	3	200	52	26.0
Flamstead		204	33	16.2	307	0	307	40	13.0	1.50
Flaunden		19	7	36.8	59	0	59	9	15.3	3.11
Great Gaddesdon		129	37	28.7	223	0	223	38	17.0	1.73
Hemel Hempstead		264	78	29.5	498	5	503	80	15.9	1.91
Sub-total	Kings Langley	114	22	19.3	209	3	212	22	10.4	1.86
	Sub-total	846	224	26.5	1493	11	1504	241	16.0	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	%	Empl.	No. Labs(2)		Total			
						Pauper/ unempl.					
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
Sub-total	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
		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)						
					Empl.	Pauper/unempl.			Living-in	%	
	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 casualization at least one	Index of Casualization (2)/(1)		
		No. Labs (1)	Living-in	%	Empl.	No. Labs(2)				Living-in	%
						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	%	Empl.	No. Labs(2)					
						Pauper/unempl.	Total		Living-in	%	
St Albans	St Albans (parish)	0	0	0.0	0	0	0	0.0	0.00		
	St Michael (urban)	26	3	11.5	75	0	75	3	100.0	2.88	
	St Michael (rural)	119	33	27.7	168	3	171	46	68.2	1.44	
	St Peter	11	3	27.3	32	0	32	3	33.3	2.91	
	St Stephen	198	48	24.2	352	5	357	53	72.4	1.80	
	Out-hamlets	170	28	16.5	310	0	310	40	41.9	1.82	
	Harpenden	177	36	20.3	360	0	360	41	44.4	2.03	
	Redbourn	126	29	23.0	308	1	309	34	64.0	2.45	
	Sandridge	255	52	20.4	185	3	188	57	80.0	0.74	
	Wheathampstead	169	29	17.2	385	3	388	47	40.7	2.30	
Sub-total		1251	261	20.9	2175	15	2190	324	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

