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BARRY HARRISON

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Conference Report
Book Reviews

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Detailed

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LOCAL POPULATION STUDIES SOCIETY
Week-end Conference, 14-16th July, 1995
Lansdowne Campus, De Montfort University, Bedford

THE RURAL POPULATION
Programme

FRIDAY JULY 14TH
4.30 - 5.30 pm  Registration, with tea available
6.15 pm  Evening Meal
7.30 pm  Introduction
7.45 - 9.15 pm  Dr Peter Dewey (Royal Holloway)
                 The English Agricultural Labourer, 1850-1914

SATURDAY JULY 15TH
8.00 - 8.30 am  Breakfast
9.15 - 10.40 am  Dr Nigel Agar (Continuing Education Dept, Cambridge University)
                 The 19th century Bedfordshire Agricultural Labourer
10.45 am  Coffee
11.15 - 12.40 am  Catherine Crompton (Open University)
                  Village Self-Sufficiency in services: 19th century Hertfordshire
1 pm  Lunch
2.15 pm  Annual General Meeting
3.30 pm  Tea
4.00 - 5.15 pm  Workshops: two parallel sessions:
                 Nigel Agar - Official Reports as Evidence
                 Catherine Crompton - Directories and Census Enumerators' Books
6.15 pm  Evening meal
7.30 - 9.00 pm  Christopher Pickford (County Archivist, Bedfordshire)
                 Sources for Bedfordshire Villages, from 1750

SUNDAY JULY 16TH
8.00 - 8.30 am  Breakfast
9.15 - 10.40 am  Leigh Shaw-Taylor (Cambridge Group for History of Population)
                 Customary Rights and Non-wage Income, with some reference to gender perspectives
10.45 am  Coffee
11.15 - 12.40 pm  Dr Nigel Goose (University of Hertfordshire)
                  Computerising the 1851 Herts CEBs: a progress report
1 pm  Lunch
      Conference disperses 2 pm.
FURTHER DETAILS

Availability:
Non-members are welcome to attend the conference on the same terms as LPSS members. Non-resident participation is also welcome.

Location
The Lansdowne Campus is situated in Lansdowne Road, a quiet Edwardian street in walking distance of Bedford Town centre and bus and rail stations. There is adequate parking for conference members close to the residential blocks. We shall have sole use of the latter during the conference. The lecture accommodation is on the same site. Conference members will be sleeping (at single rates) in double rooms, but will not have to share, unless they wish to do so. Those registering will be sent a location map. The University offers facilities suitable for those with some categories of disability - please enquire on the booking form.

Meals
These include tea or coffee on arrival and in breaks, full English breakfast and cafeteria service at lunch and the evening meal. Vegetarian meals will be available if notified.

LPSS Bookstall
This will be in business throughout the generous breaks during the conference: a splendid opportunity to get reductions on a wide range of purchases.

Costs
Full residential rate: £112 per person.
Full non-residential rate: £60 per person, including lunches, evening meals and tea/coffee.
Non-residential rate, Saturday only: £35, including lunch and evening meal.
Sunday only: £15, including lunch.

Cheques should be made payable to Local Population Studies Society and crossed. Receipts will be issued. Please address your forms and cheques to the Conference Secretary:
Dr D R Mills, 17 Rectory Lane, Branston, Lincoln, LN4 1NA (Tel: 01 522 791 764), to be received not later than Wednesday, 28th June 1995. (Telephone enquiries can also be addressed to Christine Jones, 01 438 358 229).

To: Dr D R Mills, 17 Rectory Lane, Branston, Lincoln, LN4 1NA.
From: (Name(s), please print) ____________________________________________________________________________ M/F ____________________________________________________________________________
Address: ____________________________________________________________________________
(Phone) ____________________________________________________________________________

Please reserve for me/us ________ place(s) at the LPSS Bedford conference, 14-16 July 1995.

Please delete as appropriate:
Residential rate - £112
Full non-residential - £60
Non-residential Saturday - £35
Non-residential Sunday - £15

Amount of cheque: £_______
Vegetarian meals: Yes/No
Disability (give details if relevant)

Signed ____________________________________________________________________________ Date ____________________________________________________________________________
Innocent Espionage
The La Rochefoucauld Brothers’ Tour of England in 1785
NORMAN SCARFE

Visiting England in the early months of 1785, François and Alexandre and their tutor, saw landscapes still visible today; but the world of momentous industrial invention and optimism that they envied, as patriots, is one we can now only envy them for knowing and admire them for recording. Their stamina and acumen are as notable as the readiness of the English industrialists to demonstrate the latest technology – stocking-frames in Leicester, cotton-processing and wool-spinning machines in Derby, plating in Sheffield; they seemed unlikely to take commercial advantage of their recent espionage. Crowded Birmingham was ‘vast, handsome’; Manchester ‘after London, the most town we’ve seen in England’ (pavements broad, street-lighting good). With the brothers, feel yourself rejoicing in the surface of the old Bath Road, enduring Bridgewater’s subterranean canals to the very coalface – and relishing the comforts and stabling in village inns. Their gardens at Liancourt were famous, but they admired Blenheim, Nuneham Courteney, the Goldney estate at Clifton, the cedars at Wilton and Chelsea; Kedleston was ‘delicious to see’. Their London walk in the novel ‘area’ between house-front and pavement, and the performance of Pitt and Fox well as Mrs Siddons.

NORMAN SCARFE presents the three (previously unpublished) sources of the book in his own spirited translation. A distinguished historian of buildings and landscape (author of two of the famous Shell Guides), his earlier book on the La Rochefoucauld travels, A Frenchman’s Year in Suffolk, is its third printing.

63 black and white illustrations • 288pp • £25/$45
...
Field Systems and Demesne Farming on the Wiltshire Estates of Saint Swithun’s Priory, Winchester, 1248–1340*

By BARRY HARRISON

Abstract

Manorial compotia are used to describe the demesne agriculture of Winchester Cathedral Priory on its chalkland manors in Wiltshire between 1248 and 1340. The demesnes are found to have been operated largely within the two-field systems of the vills even where, at first sight, the use of independent furlongs seems to be suggested. The disadvantages of this system were partly offset by the priory’s near monopoly of pasture, hay and timber resources, as well as by the absence of sub-manors and freeholds. Nevertheless, productivity is found to be low – although no lower than on other demesnes in the same district – but some evidence of intensification through the use of legumes and relatively high stocking ratios has been found for certain cereals on a few manors where market sale rather than monastic supply was the main object of arable farming.

Medieval farming practices in Wiltshire are better known than those of other Wessex counties thanks largely to a long tradition of local journal and record publications, and to the thoroughly researched parish surveys in the on-going Victoria County History. The emphasis has admittedly been on demesne rather than on peasant agriculture, but that is perhaps inevitable given that the main sources are the surveys, custumals, account rolls and court rolls of great estates, particularly those of bishops and large monastic houses. The details of Wiltshire demesne farming are not, however, particularly well known since there has been a tendency in recent years for historians to use Wiltshire material for studies primarily concerned with broad questions relating to the performance of the national economy: agricultural productivity, investment policy, technological change and marketing. Detailed work on farming practices at the local level has indeed been undertaken with impressive results for the later medieval and early modern periods but comparisons with the earlier period, before the Black Death, tend to be based either upon much older work or upon the parish surveys in the Victoria County History. The editors of the latter have certainly consulted the full range of primary sources but they have not been able to do more than dip into them at particular points in time. Thus, manorial account rolls, to take one example, have not been examined for several successive years to establish the actual patterns of cropping on the demesne fields and furlongs.

In this article we shall examine the demesne agriculture of a group of manors for which numerous account rolls have survived for the period 1248 to 1340. Since most of the demesne land lay in common fields on all of these manors, this study

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* I am indebted to the Dean and Chapter of Winchester Cathedral for permission to work on their muniments in the cathedral library.


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should be relevant to the agricultural practices of the peasantry as well to those of
the lord.

Winchester Cathedral Priory, dedicated to Saint Swithun, held eleven manors in
Wiltshire most of which had been acquired in the late Saxon period. By the thirteenth
century seven of these estates were under the control of the priory's central financial
officer, the receiver, and it is for these alone that account rolls survive in any
numbers. Wroughton and Little Hinton lie just under the north-facing escarpment of
the downs, overlooking the Vale of White Horse; Overton lies further south in the
upper Kennet valley; Alton Priors lies on the north side of the Vale of Pewsey while
the nearby manor of Patney lies entirely within the vale; Enford is situated in the
upper Avon valley, and Stockton in the Wylye valley (Fig 1). Except for Patney, all these manors lie wholly or partly
on the chalk. The remaining manors belonged to priory obedientaries, the anni-
versary and the chamberlain. Few account rolls survive for these although there are surveys in the priory's custumal.3
The manor of Woolstone in Berkshire belonged to the hordarian, but there is a
good collection of account rolls for the early fourteenth century and its geographical situation is similar to that of a couple of the receiver's manors.4 Woolstone will therefore be studied along with the seven Wiltshire manors.

Thirteen sets of accounts covering all the receiver's manors have survived for the following years: 1247/48, 1266/67, 1279/80, 1281/82, 1282/83, 1298/99
1306/7, 1308/9, 1310/11, 1311/12, 1314/15, 1315/16 and 1317/18. Accounts for single manors survive for some other
years but there is never a sequence of them except in the case of Woolstone for
which seven accounts survive for the years between 1308/9 and 1338/39.5 In addition to the account rolls, there is a fine custumal covering most of the estates of the receiver and obedientaries. It is a fourteenth-century compilation based on thirteenth-century originals for individual manors only a few of which are dated.6 For our eight manors only Woolstone (1221) is dated, but a comparison of rent totals in the custumal and the account rolls suggested that the Wroughton entry was drawn up a little before 1248 and the others between 1248 and 1279. There are also many court rolls for the Wiltshire manors but they provide little information about agricultural practices. Two of the manors were not accounted for after 1300: Little Hinton was transferred to the hordarian at some time between 1299 and 1307, while the arable demesnes of Patney were leased to the tenants shortly before 1299.

The high quality of information provided in the St Swithun's accounts has long been appreciated.7 The 1247/48 account roll is clearly a fair copy drawn up with a view to preservation, but all the other rolls are written in a variety of hands and covered with cancellations, inter-
polations, calculations and injunctions to manorial officers. For our purposes their chief value lies in the detailed recording of year-by-year sowings in the demesne fields and furlongs of each manor, along with a good deal of information about the extent and utilization of pasture, meadow and woodland, which can be supplemented by information from the custumal and, to a lesser extent, the court rolls.

3  Dean and Chapter of Winchester, Muniments: Custumal of the Church of Winchester, 186 ff.
5  See note 3. References will be abbreviated to Custumal followed by folio number.
The eight manors which are the subject of this study all coincided with vills, although three of them included a dependent hamlet. Within these vills there were no other lords and hardly any freeholders: the arable fields and pastures were exploited exclusively by the prior and his tenants. The tenants were either villeins holding one or two virgates of land, the virgate varying between sixteen and twenty acres, or cottars holding half-virgates. On several
TABLE I

<table>
<thead>
<tr>
<th>Manor</th>
<th>Tenant lands in custumal (acres)</th>
<th>Approximate size of demesne in 1280 (acres)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wroughton</td>
<td>704</td>
<td>600</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>608</td>
<td>930</td>
</tr>
<tr>
<td>Woolstone</td>
<td>658</td>
<td>620 (1330s)</td>
</tr>
<tr>
<td>Overton</td>
<td>360</td>
<td>720</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>528</td>
<td>620</td>
</tr>
<tr>
<td>Patney</td>
<td>464</td>
<td>130</td>
</tr>
<tr>
<td>Enford</td>
<td>640</td>
<td>1130</td>
</tr>
<tr>
<td>Stockton</td>
<td>468</td>
<td>400</td>
</tr>
</tbody>
</table>


The limitation of the tenants to their open-field holdings must be due at least in part to the lack of room for expansion by the late thirteenth century. There is little evidence of rising rent-rolls on the Wiltshire estates comparable to the rapid expansion of rents on some of the priory’s Hampshire estates located in the woods and heathlands on the Surrey and Berkshire borders. The only example of assarting on any scale is recorded at Alton Priors in 1260/61 when £4 were spent on digging and planting 323 perches of ditch around the assart of Chesmede, recently cleared of land everywhere except for Patney. Indeed, the predominance of demesne may have been even greater since the figures given above take no account of areas which were occasionally cropped but not part of the regular rotation fields. To judge by the custumal the tenants seem to have had few opportunities to farm areas of land outside the fields, their holdings usually being restricted to virgates or half-virgates in the two fields. Even at Woolstone where the villeins held between them ninety-five acres ‘on the hill’ in addition to their virgates in 1221, the early fourteenth-century accounts show that the same area (now called Clyfelondes) belonged to the lord and was taken back into demesne whenever he wished to sow it. Such ‘outfield’ areas seem to have been a lordly monopoly in Wiltshire, as they were on the North and South Downs, rather than shared with the tenantry as they were on the chalk and limestone uplands of eastern Yorkshire.

It will be evident from Table I that the ratio of demesne to tenant land was very high on these manors; the demesne was roughly equal to or in excess of all other manors the custumal tells us that the lands of each tenant were divided equally between two fields. The ratio of demesne to tenant land cannot be calculated precisely because the custumal entries were usually drawn up twenty years or more before the earliest sequence of accounts in the 1280s and because it is not always possible to work out the amount of demesne land sown in each of the fields: particular crops were sometimes sown in several fields without the acreage for each being given. Since, however, neither the level of tenant rents nor the area of demesne sown underwent any very dramatic changes between 1248 and the 1280s, and since it is usually possible to work out the area of demesne in each of the fields from at least one of the three accounts between 1279/80 and 1282/83, the figures given in Table I can be used as a rough guide.

8 Custumal: Wroughton f 1249–1277; Alton Priors f 1277–1321; Patney f 906–939; Overton f 1192–1217; Enford f 1132–1197; Woolstone f 1777–1809.


FARMING ON THE ESTATES OF ST SWITHUN’S PRIORY, WINCHESTER

wood, which was subsequently ploughed by tenant boonworks. Wood existed on all the manors but they were generally quite small and entirely under the lord’s control. The extensive tracts of clay-with-flints which give rise to large areas of wood, and associated hamlets and isolated farms, in the Chilterns, the North Downs and northern Hampshire, do not occur in these parts of Wiltshire. The only woods of any size appear to have been at Wroughton, where they probably lay just under the chalk escarpment, and at Stockton where they lay on a small clay tract high up on the downs. At Wroughton 178 perches of hedge (haye) were made around the wood in 1307/8 and at Stockton no less than 287 perches in 1279/80. Smaller enclosures were made around woods at Overton (1314/15) and Enford (1317/18). For the lord, much of the value of the woods lay in coppice timber which was usually sold for around 10s per acre, although considerable investment was required to fence off the coppiced areas to allow for the regeneration of the timber. Thus, at Stockton 129 perches of haye were made to fence off the coppice enclosures in 1304/5 and another 151 perches in 1310/11. On most estates timber needed for buildings within the manorial complex had to be imported from elsewhere. Only Stockton seems to have had enough timber for its own purposes and for export to other manors.

There is nothing to suggest that the tenants had any rights in the woods other than what the lord would allow them for a price. They were generally allowed to pannage their pigs in the woods for a short period during the autumn on payment of a small sum, but they seem to have had no general grazing rights, and the privilege of taking wood for house-building and fencing (husbote and haybote) was restricted to a few favoured individuals.

If the woodlands were not available for peasant exploitation, the same seems to have been true of the meadows. Hay was in chronically short supply on many of the manors: the reeves of Alton Priors, Overton and Enford had to make large purchases on an almost annual basis from the better favoured manors of Wroughton, with meadows in the Vale of White Horse, and Patney in the Vale of Pewsey. The exact size of demesne meadows cannot be ascertained from the sources but payments were regularly made for mowing ninety-three acres at Wroughton between 1304/5 and 1323/24 while on the small manor of Patney most of the meadows were kept in hand after the leasing of the arable, and sales of hay rose as high as £25 in some years. Woolstone was also quite well endowed with vale meadows, with annual sales of hay regularly worth over £5 and sometimes much more. How far the tenants had a share of the meadows is uncertain, but it is perhaps significant that on most manors the virgates were described exclusively in arable terms. Only at Woolstone was a small area of meadow a normal concomitant of the virgate, although elsewhere a few individuals are occasionally credited with a little meadow. On most manors the villeins and sometimes the cottars owed some mowing services although most of the work appears to have been done by hired labour. Meadow was very rarely let to the tenants, and unless there were common meadows which our sources do not reveal,

11 Acc 59 Alton Priors 1260/61. 
13 Acc Roll IV 1307/8 Wroughton; Acc Roll I 1279/80 Stockton.
14 Acc Roll VIII 1315/16 Overton; Acc Roll IX 1317/18 Enford.
15 Acc 1 Stockton 1304/5; Acc Roll VI 1310/11 Stockton.
16 Custumal f 177v–178r: Osbert de Stowelle, who held two virgates, had husbote and haybote in the lord’s woods at Alton Priors.
17 Details of the Patney lease are given in Acc Roll III 1298/99 Patney. Large sums received from the sale of hay are on Acc Rolls V 1308/9 and VIII 1311/12 Patney.
19 Custumal f 177v–178r.
Table 2: Size of demesne flocks at Michaelmas, 1309

<table>
<thead>
<tr>
<th>Manor</th>
<th>Wethers</th>
<th>Ewes</th>
<th>Hoggets</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wroughton</td>
<td>140</td>
<td>144</td>
<td>72</td>
<td>356</td>
</tr>
<tr>
<td>Little Hinton (1299)</td>
<td>-</td>
<td>372</td>
<td>78</td>
<td>450</td>
</tr>
<tr>
<td>Woolstone</td>
<td>257</td>
<td>290</td>
<td>113</td>
<td>660</td>
</tr>
<tr>
<td>Overton</td>
<td>654</td>
<td>727</td>
<td>351</td>
<td>1732</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>-</td>
<td>419</td>
<td>104</td>
<td>523</td>
</tr>
<tr>
<td>Patney</td>
<td>-</td>
<td>45</td>
<td>-</td>
<td>45</td>
</tr>
<tr>
<td>Enford</td>
<td>401</td>
<td>831</td>
<td>316</td>
<td>1548</td>
</tr>
<tr>
<td>Stockton</td>
<td>378</td>
<td>-</td>
<td>97</td>
<td>475</td>
</tr>
</tbody>
</table>

Sources: Acc Roll V 1308/9 Wroughton, Alton Priors, Overton, Enford and Stockton; Acc Roll III 1298/99 Little Hinton; Acc Roll II 1282/83 Patney; PRO, SC6/756/9/1 Woolstone.

It is possible that tenants had to buy their hay either from the lord or in local markets. It may be significant that when the tenants of Patney took over the arable demesne, they also found it necessary to lease two of the lord's meadows and parts of two more.21

The other resources of the St Swithun's manors that need to be considered before passing on to the arable fields are the downland pastures. These were not as extensive as one might suppose since the open fields often extended far into the chalk uplands. Indeed, as many historians have emphasized, the pastures and arable needed to be in close proximity to facilitate the systematic folding of sheep on the arable.22 The priory maintained large flocks of sheep on most of its Wiltshire manors (Table 2) in a ratio of about two sheep to an acre of fallow land.

The size of peasant flocks can rarely be estimated with any precision. On some manors where the villeins or cottars performed customary services at the lord's sheephouse and fold, they were allowed to graze thirty or thirty-two of their own sheep per virgate of land held, or sixteen sheep for half a virgate, but it is clear that their flocks were a good deal larger than this.23 Sheep could be grazed in excess of the quota on payment of a herbage or faldgable rent to the lord. Herbage was paid for 250 such sheep at Little Hinton in 1298/99, for 206 at Alton Priors in 1310/11 and for 158 at Overton in 1315/16 to mention only a few examples.24 Even this does not tell the full story. A memorandum attached to the custumal entry for Stockton states that the holder of each virgate of land was entitled to 'common' with no less than 64 sheep, a total of 1120 sheep in all, nearly three times as large as the demesne flock in 1309.25 Since one half of the allocation per virgate related to sheep grazing in the lord's pasture and fold, the rest must have been on a 'common' exclusive to the tenants and distinct from the demesne pastures. In addition to the downlands, the tenants also enjoyed rights of grazing over the arable fields after the harvest, and over the fallows throughout the year. The court rolls sometimes record fines levied for grazing on the arable at the wrong times, as at Enford in 1310/11 where the whole vill was fined for turning stock on to the North Field before...
FARMING ON THE ESTATES OF ST SWITHUN’S PRIORY, WINCHESTER

Michaelmas. It is, however, unlikely that the tenants were able to graze their stock on the lord’s demesne furlongs which often accounted for more than one half of the entire field area. Regular sales of stubble to the tenants suggest that even gleaning could only be had at a price. Grazing for cattle on the richer pastures does not seem to have been available anywhere as a common right of the tenantry. On all manors pasturage for oxen, cows and bullocks was provided by the lord in return for a herbage rent. The large number of cattle on which herbage was regularly paid, ranging from forty to fifty at Little Hinton and Alton Priors to sixty to seventy at Wroughton, Overton and Patney, suggests that the tenants had little in the way of alternative resources.

The most crucial aspect of pasture farming for lord and tenants alike was the systematic folding of sheep on the fallows of the arable fields. The nightly concentration of up to one thousand sheep on each acre of fallow both manured and consolidated the thin chalk soils and alone made it possible to secure good cereal crops from the uplands. The concentration of sheep required for folding made it desirable, from the lord’s point of view, to use the tenants’ flocks as well as his own. At Enford, Overton, Alton Priors and Stockton, where the priory’s sheep farming was on a grand scale, most of the villeins and cottars were bound to place their sheep in the lord’s fold although they were allowed access to the lord’s pastures in return. This was clearly a popular arrangement since, as we have seen, many tenants were prepared to pay faldgable for sheep above the fixed quota. In general, however, the arrangement rarely worked the other way around: only at Overton were the cottars allowed to have the lord’s fold on their own land and then only for the fourteen days between Christmas Eve and Epiphany. It is very likely that tenants co-operated in folding since few would have had enough sheep to manure their arable systematically, but our sources do not, from their very nature, have much to say about transactions which did not involve the lord.

II

Details of fields in which demesne crops were sown are set out in Table 3. This gives the names of the rotation fields, the area of demesne land in each field and the dates for which this can be determined. Table 4 lists those areas outside the rotation fields which were sown occasionally, along with the areas and dates. Table 3 demonstrates that the priory’s demesne arable lay almost entirely in the open fields of the vills and that these were usually arranged into two cropping units. H L Gray firmly established the Wiltshire chalklands as an area of two-field systems, and subsequent work has multiplied the number of examples. Some three-field systems did emerge but mostly only in the late Middle Ages and the sixteenth century. Demesne farming within generally two-field systems has also been established for other areas in Wessex and for the Yorkshire and Lincolnshire Wolds, but not for the Chilterns and the North and South Downs where demesnes were wholly or largely consolidated.

All the Wiltshire demesnes of the priory, except for some of those at Wroughton, lay in the two fields of the vill although in

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26 Dean and Chapter, Winchester, Muniments: Court Roll, Enford 1311.
28 ‘Faldgable’ was paid on 250 extra sheep at Little Hinton: Acc Roll III 1298/90 Little Hinton; on 158 at Overton: Acc Roll VIII 1315/16 Overton; on 206 at Alton Priors: Acc Roll VI 1310/11 Alton Priors.
29 Custumal f 121v.
### TABLE 3
Rotation fields and the areas of demesne sown in them

<table>
<thead>
<tr>
<th>Manor</th>
<th>Rotation fields</th>
<th>Area sown (acres)</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wroughton</td>
<td>East Field</td>
<td>188</td>
<td>1280</td>
</tr>
<tr>
<td></td>
<td>East Hackpen</td>
<td>144</td>
<td>1280</td>
</tr>
<tr>
<td></td>
<td>West Field &amp;</td>
<td>270–303</td>
<td>1283–1313</td>
</tr>
<tr>
<td></td>
<td>West Hackpen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little Hinton</td>
<td>East Field</td>
<td>346–488</td>
<td>1283–1299</td>
</tr>
<tr>
<td></td>
<td>West Field</td>
<td>447–583</td>
<td>1280–1282</td>
</tr>
<tr>
<td>Woolstone</td>
<td>East Field</td>
<td>268–302</td>
<td>1332–1336</td>
</tr>
<tr>
<td></td>
<td>West Field</td>
<td>293–347</td>
<td>1327–1339</td>
</tr>
<tr>
<td>Overton</td>
<td>West Field &amp;</td>
<td>466</td>
<td>1282</td>
</tr>
<tr>
<td></td>
<td>West Fyfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>East Field &amp;</td>
<td>260 +</td>
<td>1283</td>
</tr>
<tr>
<td></td>
<td>East Fyfield</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patney</td>
<td>South Field</td>
<td>389–412</td>
<td>1280–1315</td>
</tr>
<tr>
<td></td>
<td>North Field</td>
<td>302–426</td>
<td>1281–1315</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>East Field</td>
<td>84–102</td>
<td>1281–1287</td>
</tr>
<tr>
<td></td>
<td>West Field</td>
<td>42–84</td>
<td>1248–1282</td>
</tr>
<tr>
<td>Stockton</td>
<td>North Field</td>
<td>533–597</td>
<td>1280–1316</td>
</tr>
<tr>
<td></td>
<td>South Field</td>
<td>482–612</td>
<td>1283–1315</td>
</tr>
<tr>
<td></td>
<td>East Field</td>
<td>197–282</td>
<td>1280–1282</td>
</tr>
<tr>
<td></td>
<td>West Field</td>
<td>167–181</td>
<td>1283–1299</td>
</tr>
<tr>
<td></td>
<td>Middle Field</td>
<td>122</td>
<td>1318</td>
</tr>
</tbody>
</table>

**Sources:** Based on all extant accounts for the named manors: Acc Roll 1247/48; Acc Roll I 1266/67; 1279/80; Acc Roll II 1281/82, 1282/83; Acc Roll III 1298/99; Acc Roll IV 1306/7, 1307/8; Acc Roll V 1308/9; Acc Roll VI 1310/11, 1311/12; Acc Roll VII 1313/14, Acc Roll VIII 1315/16; Acc Roll IX 1317/18, 1323/24; Acc I Stockton 1304/5; Acc 1 Little Hinton 1292/73; Acc 3 Wroughton 1304/5; Acc 39 Alton Priors 1260/61, Patney 1271/72 and 1275/76. Woolstone based on PRO, SC6/756/19/3–9.

### TABLE 4
Demesne fields cropped occasionally and the areas sown within them

<table>
<thead>
<tr>
<th>Manor</th>
<th>Name of field</th>
<th>Area (acres)</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wroughton</td>
<td>East Hull</td>
<td>107</td>
<td>1282</td>
</tr>
<tr>
<td></td>
<td>West Hull</td>
<td>126</td>
<td>1283</td>
</tr>
<tr>
<td></td>
<td>Moreshull</td>
<td>14–20</td>
<td>1248–1324</td>
</tr>
<tr>
<td></td>
<td>Brecha</td>
<td>11</td>
<td>1348</td>
</tr>
<tr>
<td></td>
<td>Brokfurlong</td>
<td>9</td>
<td>1316</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>Brecha</td>
<td>11–23</td>
<td>1248–1283</td>
</tr>
<tr>
<td>Overton</td>
<td>South Field</td>
<td>14–39</td>
<td>1311–1318</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>Wodebrek</td>
<td>26–40</td>
<td>1261–1283</td>
</tr>
<tr>
<td></td>
<td>La Breche</td>
<td>34</td>
<td>1282</td>
</tr>
</tbody>
</table>

**Sources:** as for Table 3.

A few places they were supplemented from time to time with furlongs lying outside the fields which were sown mostly with oats and at long intervals. These 'outfields' often bear names compounded with -brech, -brek or -broc suggesting land newly 'broken' from the pastures, cropped for a year or two and then allowed to revert to grass. They do not compare either in size or in regularity of cropping with the great 'outfields' found in parts of Kent and Sussex, nor are they associated with the continuous cropping of the better land or 'infield'. At Wroughton the arrangements were sophisticated enough to allow

32 Bishop, 'The rotation of crops'; Brandon, 'Arable farming in a Sussex scarp-foot parish'; Baker, 'Field systems of southeast England'.
a considerable degree of independence for
demesne agriculture. Here East Field and
East Hackpen, and West Field and West
Hackpen were always cropped together.
The Hackpens may have constituted a
second set of common fields but it is more
likely that they were entirely demesne
although following the same rotation as
the common fields near the village. The
tenants seem to have had no grazing rights
over the arable at Hackpen other than
those occasionally rented to them by the
lord, and it is therefore likely that they had
no arable land there either. Some of the
‘outfield’ furlongs were of considerable
size: over one hundred acres were some-
times sown in East Hull and West Hull,
while the much smaller furlong of Moreshull
was frequently sown during the period of
the accounts. The Wroughton arrange-
ments were, however, quite exceptional
and it may be significant that, even here,
the lord still chose to operate within the
constraints of the village open-field system
and cropping regime.

Some insights into the rationale of
the two-field system might be gained by a
consideration of the proportions of differ-
cent crops sown on the demenses. Table 5
shows the percentages of different crops
sown in two sample years, 1281/82 and
1308/9. This shows that the emphasis of
demesne arable farming varied considerably
from manor to manor although not from
year to year, since the balance of crops is
much the same at the two dates. Wheat
was the dominant crop at Alton Priors,
Woolstone and to some extent at
Wroughton, while oats were of major
importance at Little Hinton. Barley was
nowhere the leader although it was import-
ant on all the manors outside the northern

33 In a consecutive series of accounts for Wroughton 1306/7, 1307/8
and 1308/9, both East and West Hull were unsown in 1306/7 and
1307/8, but in 1308/9 West Hull was sown with wheat and East
Hull with barley and oats; Moreshull was unsown in 1306/7, sown
with barley in 1307/8 and again unsown in 1308/5; Acc Rolls IV
1306/7 and 1307/8 Wroughton and Acc Roll V 1308/9
Wroughton.

An imbalance of winter and spring sown
crops might be satisfactory for the lord
who could balance the deficiencies of one
manor with the surpluses of another, but
what of the peasantry who shared the same
fields and were presumably subject to the
same rotations? A rare insight into peasant
agriculture is provided by a number of
church accounts which detail the corn
tithes paid from the lord’s demesne and
from the lands of the parishioners. Several
such accounts have survived for the par-
ishes of Overton, Alton Priors and Enford,
all of which were impropriated to
St Swithun’s Priory (Table 6).34

As one would expect, the cropping prac-
tices of the peasantry differed somewhat
from those of the demesne. The par-
ishioners were primarily interested in
growing wheat and barley, the main bread,
drink and possibly cash crops, while the
manors required large quantities of oats to
feed the cart horses employed in long-
distance traffic to Winchester, to distant
markets and to other manors of the priory.
However, the strong balance in favour of
spring-sown crops at Overton and Enford
was as much a feature of the parish as of
the demesne so that the two-field system

34 Acc Rolls III 1298/99, IV 1306/7, V 1308/9, VI 1310/11, and
1311/12, VIII 1315/16 Overton Church; Acc Rolls IV 1306/9,
VIII 1315/16, Acc Rolls 1320/21 and 1322/23 Enford Church; Acc
Rolls III 1298/99, V 1308/9, VI 1310/11, VIII 1315/16 Alton
Church.
TABLE 5
Percentages of demesne sown with various crops 1281/82 and 1308/9

<table>
<thead>
<tr>
<th>Manor</th>
<th>Percentage of demesne sown with</th>
<th>Wh*</th>
<th>Be</th>
<th>Ba</th>
<th>O</th>
<th>Dr</th>
<th>Leg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1281/82)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wroughton</td>
<td></td>
<td>45</td>
<td>7</td>
<td>19</td>
<td>27</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Little Hinton</td>
<td></td>
<td>23</td>
<td>3½</td>
<td>5</td>
<td>5½</td>
<td>5½</td>
<td>1½</td>
</tr>
<tr>
<td>Overton</td>
<td></td>
<td>26½</td>
<td>13½</td>
<td>19</td>
<td>28½</td>
<td>10½</td>
<td>2</td>
</tr>
<tr>
<td>Alton Priors</td>
<td></td>
<td>64</td>
<td>2</td>
<td>21½</td>
<td>10½</td>
<td></td>
<td>2½</td>
</tr>
<tr>
<td>Patney</td>
<td></td>
<td>34½</td>
<td>24</td>
<td>24</td>
<td>10</td>
<td></td>
<td>7½</td>
</tr>
<tr>
<td>Enford</td>
<td></td>
<td>28</td>
<td>18</td>
<td>30</td>
<td>21</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Stockton</td>
<td></td>
<td>24½</td>
<td>6½</td>
<td>24½</td>
<td>42</td>
<td></td>
<td>2½</td>
</tr>
<tr>
<td></td>
<td>(1308/9)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wroughton</td>
<td></td>
<td>45½</td>
<td>7½</td>
<td>29</td>
<td>16½</td>
<td></td>
<td>1½</td>
</tr>
<tr>
<td>Woolstone</td>
<td></td>
<td>53½</td>
<td>7</td>
<td>7</td>
<td>24½</td>
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<td>8</td>
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<tr>
<td>Overton</td>
<td></td>
<td>33½</td>
<td></td>
<td>26</td>
<td>26½</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Alton Priors</td>
<td></td>
<td>70½</td>
<td></td>
<td>21½</td>
<td>7</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Enford</td>
<td></td>
<td>29</td>
<td>11</td>
<td>32½</td>
<td>20½</td>
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<td>7</td>
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<td>Stockton</td>
<td></td>
<td>25</td>
<td></td>
<td>30½</td>
<td>30</td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

* Wh (wheat), Be (beere), Ba (barley), O (oats), Dr (dredge), Leg (legumes – peas, beans, vetches).

Sources: Based on Acc R.oll II 1281/82 for all seven manors; Acc Roll V for all manors except Woolstone; Woolstone PRO, SC6/756/9/3.

TABLE 6
Percentages of tithe paid on various crops in three parishes

<table>
<thead>
<tr>
<th>Parish</th>
<th>Percentage of tithe paid on</th>
<th>Wh*</th>
<th>Be</th>
<th>Ba</th>
<th>O</th>
<th>Dr</th>
<th>Leg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overton (1310/11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demesne</td>
<td>18</td>
<td>8½</td>
<td>40½</td>
<td>23</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Parish</td>
<td>22½</td>
<td>6½</td>
<td>54</td>
<td>2½</td>
<td>8</td>
<td>6½</td>
<td></td>
</tr>
<tr>
<td>Alton Priors (1310/11)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demesne</td>
<td>62</td>
<td>–</td>
<td>28</td>
<td>9½</td>
<td>–</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td>Parish</td>
<td>45</td>
<td>1½</td>
<td>48</td>
<td>1</td>
<td>1½</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Enford (1315/16)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Demesne</td>
<td>34</td>
<td>9</td>
<td>42</td>
<td>12</td>
<td>–</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Parish</td>
<td>20</td>
<td>4</td>
<td>62</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

* Abbreviations as for Table 5.

Sources: Acc Rolls III 1298/89, IV 1306/7, V 1308/9, VI 1310/11 and 1311/12, III 1315/16 Overton Church; Acc Rolls IV 1306/9, VIII 1315/16, Acc 59 1320/21 and 1322/23 Enford Church; Acc Roll III 1298/89, V 1308/9, VI, 1310/11, VIII 1315/16 Alton Church.

favoured the interests of both parties. At Alton Priors, on the other hand, the two seasons were in much better balance for the parishioners than for the demesne, and one can only conclude that a two-field rather than a three-field system was maintained in the interests of the lord. The two-field system was not, of course, wholly inflexible since well over 50 per cent of the demesne arable was usually sown (Table 7).

These figures relate only to sowings in the rotation fields, omitting outlying areas which were not regularly sown. Such areas were, as we have seen, of some importance at Wroughton but of minor significance elsewhere. Such flexibility as there was generally arose from the cropping of part of the fallow field, normally with legumes. The areas sown with these crops were often quite small, ranging from just a couple of acres at Enford to between ten and twenty acres on the vale manors. Only at Woolstone was a significant proportion of the fallow cropped in this way, usually thirty to forty acres but rising to nearly fifty in 1338/39.35 There is some tendency for the proportion of legumes to rise even on the downland manors (Table 5) but only to a modest extent, and it is interesting to note from the church accounts that legumes were grown as much by the peasantry as by the lord. Evidently the use of

FARMING ON THE ESTATES OF ST SWITHUN’S PRIORY, WINCHESTER

TABLE 7
Acreage of demesne sown in three sample years compared with the estimated size of the demesne

<table>
<thead>
<tr>
<th>Manor</th>
<th>Area of demesne sown (acres)</th>
<th>Approx size of demesne (acres) in 1280s</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1247/48</td>
<td>1281/82</td>
</tr>
<tr>
<td>Wroughton</td>
<td>289</td>
<td>394</td>
</tr>
<tr>
<td>Little Hinton (1299)</td>
<td>215</td>
<td>476</td>
</tr>
<tr>
<td>Woolstone</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Overton</td>
<td>389</td>
<td>466</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>368</td>
<td>336</td>
</tr>
<tr>
<td>Patney</td>
<td>99</td>
<td>58</td>
</tr>
<tr>
<td>Enford</td>
<td>487</td>
<td>585</td>
</tr>
<tr>
<td>Stockton</td>
<td>254</td>
<td>288</td>
</tr>
</tbody>
</table>

Sources: Based on Acc Roll 1247/48; Acc Roll II 1281/82 and Acc Roll V 1308/9 for all manors except Woolstone. Woolstone based on PRO, SC6/756/9/3.

The fallow field for this purpose was not an exclusive privilege of the lord.

One manor, Stockton, exhibits some unique characteristics which were to lead by 1318 to the adoption of a three-field system. From 1248 onwards not far short of one half of the demesne in the fallow field (seventy to ninety acres) was regularly sown with barley. Indeed, nearly all the demesne barley was sown there, and a three-course rotation was being effectively operated within a two-field system. From 1308/9 onwards the accounts describe sowings in furlongs rather than in fields, and it is not until 1317/18 that we learn that the furlongs had been reorganized into three fields by that date. The Middle Field was then sown with 122 acres of barley, drudge and peas, the East Field with 140 acres of wheat and oats, while the West Field lay entirely fallow. It was once thought that such changes from two- to three-field systems were common earlier in the Middle Ages, reflecting an intensification of land use as the supply of newly assarted land ran out, but it has recently been demonstrated that such changes were in fact rare and that the advantages were fairly marginal. There was certainly no clear advantage in terms of the demesne land available for sowing at Stockton: it remained at much the same level as it had been since at least 1247/48. It looks as though the introduction of a third field was no more than a formal recognition of a practice dating back half a century or more. It might be argued that there was no real change at all, that ‘Middle Field’ could just be a new name for a number of furlongs without any geographical coherence and constituting one of the three ‘seasons’ like the ‘leynes’ of Sussex. This is unlikely, however, since from 1310/11 onwards the Stockton accounts name specific furlongs lying in East Field and West Field (three or four in each) which appear as part of Middle Field in 1317/18. In addition, some of the furlong names (Westlangelonde and Estlangelonde) suggest adjacent blocks of land.

It is rarely possible to determine whether the demesne lands in each of the open fields lay in blocks or intermixed with the strips of the tenants. Recent work

on cropping arrangements in Sussex, Oxfordshire and Huntingdonshire has demonstrated that, even within regular common-field systems, the demesnes in each field might be entirely integrated or located in just a small proportion of the furlongs, although in one case there is a suggestion that this might only have been achieved by exchange and purchase in the thirteenth century. Unfortunately, our accounts provide little detail about individual furlongs within the fields but what there is suggests that demesne and tenant lands were often intermixed. At Woolstone two acres of demesne arable ‘lying among the villeins’ lands’ was let out to one Stephen of Canterbury in 1336, to which was added in the following year two more acres of demesne ‘lying among the lands of the freemen’. The strongest evidence comes from Stockton (1310/11) where five furlongs sown with wheat in the West Field (eighty-two acres) were all said to lie ‘next to the villeins’.

This is not to say that the demesnes were scattered in strips all over the fields. On most of these manors furlongs were probably not numerous since the smooth chalk hills threw up few natural obstacles to limit furlong-size. The demesne crops of Stockton were sown on only about a dozen furlongs altogether. In any case, considerable blocking of demesne land might well occur automatically given the great size of the demesnes relative to the tenant lands. On most manors the demesne in any one furlong was likely to account for at least half of the land, and it would therefore not be difficult to plough, manure, reap and graze it in severalty. Only at Patney did the tenant lands greatly exceed the demesnes, and it may have been partly for this reason that the demesne arable was leased to the tenants shortly before 1298/99.

Where the position of the open fields can be located with any certainty they seem to have lain entirely on the chalk uplands and particularly on the calcareous loams or ‘redlands’ of the inidle chalk, even where good vale land was available. At Little Hinton, the West Field included eight-five acres of demesne next to the Ridgeway in 1247/48 and the custumal mentions arable demesne let out to tenants at Lameressland (Lammy Down) at an elevation of over 200 m. At Enford some of the villeins were obliged to carry manure from the lord’s courts to the furlongs above Wolterdene (Water Dene), Westersdene (Wexland Dean) and to other locations high above the dry valleys. At Stockton land above the dry valley of Halrecumbe lay in the East Field, while at Overton a large part of the East Field lay on Wytehill (White Hill above Lockeridge Dene). At Wroughton a whole suite of fields lay at Hackpen immediately below the Marlborough Downs. The evidence is admittedly fragmentary but it is confirmed by the parish surveys in the Victoria County History which time and again locate the arable on the lower and middle reaches of the chalk hills. Such a location was no doubt vital to the efficient operation of the sheep–corn husbandry characteristic of the region. One factor behind the leasing of the Patney arable may have been its location entirely within the Vale of Pewsey: one of the fields leased consisted of sixty-six acres ‘on the sand’ (in sabulone) and the other sixty-nine acres ‘on the clay’.


Acc Roll 1247/48 Little Hinton; Custumal f 170r.

Custumal f 114v.

Acc ROLL V 1308/9; VI 1310/11, 1311/12; VIII 1315/16; IX 1317/18 Stockton; Acc ROLL VII 1314/15 and VIII 1315/16 Overton.
TABLE 8
Mean rates of sowing given in all accounts between 1280 and 1318

<table>
<thead>
<tr>
<th>Manor</th>
<th>Number of accounts</th>
<th>Bushels per acre</th>
<th>Wh*</th>
<th>Be</th>
<th>Ba</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enford</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Wroughton</td>
<td>14</td>
<td>1½</td>
<td>3</td>
<td>2½</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Stockton</td>
<td>12</td>
<td>2</td>
<td>2</td>
<td>2½</td>
<td>2½</td>
<td></td>
</tr>
<tr>
<td>Overton</td>
<td>11</td>
<td>1½</td>
<td>3</td>
<td>2</td>
<td>2½</td>
<td>2½</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>10</td>
<td>1</td>
<td>1½</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little Hinton</td>
<td>4</td>
<td>1½</td>
<td>1½</td>
<td>2</td>
<td>2½</td>
<td></td>
</tr>
<tr>
<td>Patney</td>
<td>3</td>
<td>1½</td>
<td>1½</td>
<td>2</td>
<td>2½</td>
<td>4</td>
</tr>
<tr>
<td>Woolstone (1309–39)</td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

* Abbreviations as for Table 5.

Sources: Based on Acc Roll I 1279/80; Acc Roll II 1281/82, 1282/83; Acc Roll III 1298/99; Acc Roll IV 1306/7, 1307/8; Acc Roll V 1309/9; Acc Roll VI 1310/11, 1311/12; Acc Roll VII 1313/14, 1314/15; Acc Roll VIII 1315/16; Acc Roll IX 1317/18; Acc I Stockton 1304/5; Acc I Wroughton 1304/5.

(In argillo), locations probably unsuitable for fertilization by sheep-folding.45

III

In spite of the constraints of operating within township open-field systems, one might expect the rather flexible arrangements described above to have encouraged a more intensive cereal husbandry than seems to have been the norm in the Wessex downlands, where extensive arable and sheep-corn regimes have been identified as the characteristic types of demense farming in the century before the Black Death.46 Accurate estimates of productivity require long series of consecutive accounts – generally lacking for the St Swithun’s manors – but enough work has been done on other southern English estates to provide a framework within which our imperfect data can be usefully considered.

Mean sowing rates for the priory’s Wiltshire manors are given in Table 8. These rates were very low compared with other estates in a similar geographical situation. Sowing rates were almost twice as heavy on the bishop of Winchester’s Wiltshire manors between 1271 and 1299.47 Nevertheless, comparable yields per seed sown were achieved as Table 9 demonstrates. The figures in Table 9 are a useful indicator of broad differences between manors but they are too random and imprecise to allow any firm conclusions. Furthermore, the value of calculations of yield per seed has been questioned in recent work as tending to produce a misleading picture of uniformity over widely differing regions. The calculation of yields per acre seems better to reflect diversity of practices and to locate more intensive regimes which would otherwise remain largely hidden.

For such calculations consecutive accounts are required, and the only two sets covering all the priory’s Wiltshire estates (1281/82 and 1282/83; 1314/15 and 1315/16) have been used in Table 10. For Woolstone in Berkshire, such data are available only for 1335/36 and 1336/37 (Table 11). Taking Tables 9–11 together, gross yields per seed compare favourably with other estates in southern England. The yields of all main crops were a little higher than those on the Westminster Abbey estates in Essex and Hertfordshire between 1271 and 1324; about the same as the Sussex estates of Battle Abbey in the later fourteenth century; considerably

45 Acc Roll III 1308/9 Patney.
47 Titow, Winchester Yields, p 42.
### TABLE 9
Typical gross yields per seed as given in all accounts between 1280 and 1318†

<table>
<thead>
<tr>
<th>Manor</th>
<th>Gross yields per seed (bushels)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WH*</td>
<td>Be</td>
<td>Ba</td>
<td>O</td>
</tr>
<tr>
<td>Enford</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Wroughton</td>
<td>4</td>
<td>3</td>
<td>3½</td>
<td>2</td>
</tr>
<tr>
<td>Stockton</td>
<td>4½</td>
<td>3</td>
<td>4</td>
<td>2½</td>
</tr>
<tr>
<td>Overton</td>
<td>6</td>
<td>4</td>
<td>2½</td>
<td>2½</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>1½</td>
</tr>
<tr>
<td>Patney</td>
<td>7½</td>
<td>4</td>
<td>4</td>
<td>2½</td>
</tr>
<tr>
<td>Woolstone (1309–39)</td>
<td>5</td>
<td>3½</td>
<td>6</td>
<td>1½</td>
</tr>
</tbody>
</table>

† In round figures as given by accounting officials. Except where stated, ten accounts have been used.

*Abbreviations as for Table 5.

Sources: Acc Rolls I 1279/80; II 1281/82; III 1282/83; IV 1289/90; V 1308/9; VI 1310/11; VII 1314/15; VIII 1315/16; IX 1317/18; Woolstone: PRO SC6/756/g/5–9.

### TABLE 10
Gross yields per seed and gross yields per acre, 1282–83 and 1315–16

<table>
<thead>
<tr>
<th>Manor</th>
<th>1282–1283</th>
<th>1315–1316</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wheat</td>
<td>Barley</td>
</tr>
<tr>
<td></td>
<td>Gross yield per seed (bushels)</td>
<td>Gross yield per acre (bushels)</td>
</tr>
<tr>
<td>Enford</td>
<td>2.55</td>
<td>3.97</td>
</tr>
<tr>
<td>Wroughton</td>
<td>2.98</td>
<td>4.55</td>
</tr>
<tr>
<td>Stockton</td>
<td>2.39</td>
<td>4.62</td>
</tr>
<tr>
<td>Overton</td>
<td>1.72</td>
<td>3.34</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>3.48</td>
<td>3.66</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>3.84</td>
<td>5.31</td>
</tr>
<tr>
<td>Patney</td>
<td>4.26</td>
<td>5.79</td>
</tr>
<tr>
<td></td>
<td>2.67</td>
<td>6.96</td>
</tr>
<tr>
<td>Wroughton</td>
<td>2.93</td>
<td>6.76</td>
</tr>
<tr>
<td>Stockton</td>
<td>3.90</td>
<td>9.35</td>
</tr>
<tr>
<td>Overton</td>
<td>2.41</td>
<td>5.17</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>4.38</td>
<td>6.76</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>3.55</td>
<td>7.11</td>
</tr>
<tr>
<td>Patney</td>
<td>3.50</td>
<td>7.54</td>
</tr>
<tr>
<td></td>
<td>2.14</td>
<td>7.44</td>
</tr>
<tr>
<td>Wroughton</td>
<td>2.15</td>
<td>6.36</td>
</tr>
<tr>
<td>Stockton</td>
<td>2.05</td>
<td>6.10</td>
</tr>
<tr>
<td>Overton</td>
<td>1.49</td>
<td>4.22</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>1.45</td>
<td>2.94</td>
</tr>
<tr>
<td>Little Hinton</td>
<td>2.54</td>
<td>10.17</td>
</tr>
</tbody>
</table>

* Data for 1311–12.

Sources: Acc Roll II 1281/82, 1282/83; Acc Roll VII 1314/15 and VIII 1315/16.
TABLE II
Gross yields per seed and gross yields per acre at Woolstone, 1336–37

<table>
<thead>
<tr>
<th>Crop</th>
<th>Gross yield per seed (bushels)</th>
<th>Gross yield per acre (bushels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>5.06</td>
<td>5.06</td>
</tr>
<tr>
<td>Barley</td>
<td>6.42</td>
<td>12.65</td>
</tr>
<tr>
<td>Oats</td>
<td>1.78</td>
<td>3.53</td>
</tr>
</tbody>
</table>

Source: PRO, SC6/756/9/7-8.

higher than the Wiltshire manors of the bishop of Winchester between 1271 and 1299; and not far short of the levels obtained on a large group of Norfolk estates between 1275 and 1324. Given the low sowing rates on the St Swithun’s manors the yields obtained per seed seem to have been more than satisfactory for an area where demesne agriculture generally lay towards the extensive end of the intensive–extensive spectrum. However when yields per acre are considered, it is evident that the priory’s estates cannot match the intensity of production characteristic of some other groups. The Westminster accounts show yields almost twice as high for wheat and four times as high for barley, while on the Battle and the Norfolk demesnes the differences were even greater.

Although the general level of yields per acre was rather low on the St Swithun’s manors, the picture was by no means uniform with some places showing much higher yields in particular crops. Yields of barley were high at Stockton in both sets of accounts and, for the later period, at Alton Prior and Woolstone as well, while on the Battle and the Norfolk demesnes the differences were even greater.

Although the general level of yields per acre was rather low on the St Swithun’s manors, the picture was by no means uniform with some places showing much higher yields in particular crops. Yields of barley were high at Stockton in both sets of accounts and, for the later period, at Alton Prior and Woolstone as well, while the yield of oats per acre was unusually high at Wroughton at the later dates. To some extent high yields per acre may be related to a deliberate policy of intensification through thicker sowings. The improved wheat yield at Enford by 1315 and 1316 may be associated with a change in the sowing rate from two bushels to two and a half bushels per acre from 1299 onwards. At Stockton a similar upwards movement may be connected with the high barley yields which characterized this manor. In general, however, most movements in sowing rates were downwards and when upward movements in sowing rates do occur in one crop they are usually accompanied by downward movements in others. Indeed, the poor yields of wheat at Overton, of barley at Enford and of oats at Enford and Overton may all be connected with reductions in sowing rates between 1284 and 1344.

Thicker sowings were not, of course, the only means by which the land could be made to yield heavier crops, and there is evidence that conscious attempts were made to improve productivity by other methods in a few locations. The excellent yields of barley and wheat at Stockton must owe something to the regular cropping of a large part of the fallows, culminating in the adoption of a three-field system, while the heavy yields of barley at Woolstone can probably be connected with the regular cultivation of a large area of legumes. Heavier inputs of labour for tasks such as weeding may also be a factor given the heavy and numerous customary services available on the priory’s manor, but unfortunately the lack of works’ accounts renders accurate calculations impossible. Fluctuations in the number and types of livestock, and therefore in the quantity of manure available, might also be expected to reveal some evidence of farming strategies. Livestock figures for a number of sample years are given in Table 12. In general the number of stock overall and on the individual manors remained quite stable unless temporarily disturbed by epi-

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TABLE 12
Number of stock of different kinds of five Wiltshire manors* at Michaelmas 1248, 1280, 1299, 1309 and 1318

<table>
<thead>
<tr>
<th>Year</th>
<th>Cereal acreage</th>
<th>Working stock horses</th>
<th>oxen</th>
<th>Other stock cows and bulls</th>
<th>young cattle</th>
<th>sheep</th>
<th>swine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1248</td>
<td>2099</td>
<td>16</td>
<td>168</td>
<td>37</td>
<td>24</td>
<td>4769</td>
<td>123</td>
</tr>
<tr>
<td>1280</td>
<td>2696</td>
<td>25</td>
<td>158</td>
<td>33</td>
<td>28</td>
<td>1900</td>
<td>143</td>
</tr>
<tr>
<td>1299</td>
<td>1865</td>
<td>37</td>
<td>158</td>
<td>32</td>
<td>46</td>
<td>4868</td>
<td>149</td>
</tr>
<tr>
<td>1309</td>
<td>2035</td>
<td>44</td>
<td>159</td>
<td>28</td>
<td>30</td>
<td>4735</td>
<td>193</td>
</tr>
<tr>
<td>1318</td>
<td>2052</td>
<td>47</td>
<td>167</td>
<td>48</td>
<td>56</td>
<td>5448</td>
<td>224</td>
</tr>
</tbody>
</table>

* Manors of Enford, Wroughton, Stockton, Overton, Alton Priors.
Sources: Acc Roll 1247/48; Acc Rolls I 1279/80; III 1298/99; V 1308/9; IX 1317/18.

TABLE 13
Livestock units per 100 cereal acres on five Wiltshire manors, 1248–1318

<table>
<thead>
<tr>
<th>Manor</th>
<th>Livestock units* per 100 cereal acres in 1248</th>
<th>1280</th>
<th>1299</th>
<th>1309</th>
<th>1318</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enford</td>
<td>40.2</td>
<td>21.9</td>
<td>44.4</td>
<td>35.1</td>
<td>47.0</td>
</tr>
<tr>
<td>Wroughton</td>
<td>40.1</td>
<td>29.6</td>
<td>48.9</td>
<td>49.0</td>
<td>42.6</td>
</tr>
<tr>
<td>Stockton</td>
<td>28.7</td>
<td>19.5</td>
<td>28.7</td>
<td>26.2</td>
<td>31.3</td>
</tr>
<tr>
<td>Overton</td>
<td>72.5</td>
<td>23.8</td>
<td>59.8</td>
<td>48.5</td>
<td>48.6</td>
</tr>
<tr>
<td>Alton Priors</td>
<td>28.3</td>
<td>23.3</td>
<td>29.6</td>
<td>30.7</td>
<td>45.0</td>
</tr>
<tr>
<td>All manors</td>
<td>36.7</td>
<td>21.5</td>
<td>43.1</td>
<td>35.5</td>
<td>44.4</td>
</tr>
</tbody>
</table>

* Livestock units = (horses x 1.0) + (oxen, cows and bulls x 1.2) + (immature cattle x 0.8) + (sheep x 0.1) + (swine x 0.1).
Sources: as for Table 12.

Demic disease such as devastated the sheep flocks in 1280. At first sight there appears to be some increase in the ratio of horses to oxen, but this is almost entirely due to one manor, Enford, where half the oxen were replaced by horses between 1282 and 1299.

To compare the stocking of these manors with that of other groups and to relate stocking to productivity, livestock units per 100 cereal acres have been calculated (Table 13), using the method devised by B M S Campbell. The stocking rates seem to be quite favourable compared to those calculated for other areas. Campbell has suggested mean rates of 41.9 (1250–99) and 44.1 (1275–1324) for a large sample of estates throughout the country, figures very much in line with those for the priory's Wiltshire estates. However, the figures for individual priory manors show considerable variations from the mean due largely to the uneven distribution of sheep flocks which are concentrated at the two manors of Overton and Enford. At Wroughton on the other hand – a manor with extensive vale pastures – oxen were largely responsible for the high stocking ratio, and at Alton Priors the number of oxen was increased from about thirty to fifty between 1282 and 1318. It is on these manors that some relationship between stocking ratios and yields can be detected. At Alton Priors the increase in cattle numbers between 1309 and 1318 coincided with a reduction in the sown acreage by nearly one-quarter and with greatly improved yields of all main crops. At Wroughton, always heavily stocked with cattle, a similar reduction in the area sown with oats from 1309 coincided with a substantial rise in oat yields. However, on manors where sheep were the major element there is virtually no correlation between stocking ratios and grain yields. Stockton which had high barley yields has a very low stocking ratio, while Overton which had the highest stocking ratio of all experienced very poor yields. In spite of the evidence for the systematic folding of sheep over the demesne arable, arable and sheep farming do not seem to have...
been regarded as parts of an integrated system.

There are thus signs that the priory was concerned to encourage productivity initiatives on some manors and in connection with some cereal crops, using a wide variety of methods — thicker sowings, cropping of fallows, the use of legumes and heavier stocking ratios based on cattle. Yet, it has to be said that the general pattern remained extensive throughout the period of the surviving accounts. The scope for innovation was no doubt limited by the necessity of working within a long-established framework of settlement and field arrangements both of which militated against the development of consolidated demesnes. However, somewhat similar conditions existed elsewhere — on the downland estates of Battle Abbey, for example — without preventing considerable arable intensification.

Kathleen Biddick's work on a number of manors belonging to the bishop of Winchester in the early thirteenth century has shown that much of the grain produced on the demesnes was consumed by the bishop's household and the manors themselves. The bishopric is seen as practising a satisfier strategy, in which production for the market was a secondary consideration, in contrast to some other ecclesiastical institutions where at least a proportion of the estates, with good access to markets and shipping, was geared to the production of cereals for sale. Furthermore, there seems to be a close correlation between production for sale and the adoption of intensive systems of cultivation. The satisfier strategy was even more evident on the St Swithun's manors as Table 14 demonstrates.

In spite of their low level, sales of corn from the Wiltshire manors were consider-ably higher than sales from the priory's estates as a whole due to well above-average sales from a few manors. At Stockton 51.6 per cent of the wheat and 27.8 per cent of the barley produced was sold, while wheat sales were even higher at Little Hinton and Patney before they were disposed of at the end of the thirteenth century. The high yields and sophisticated cropping system seen at Stockton may well be connected with its function as a sale manor.

The importance of corn sales for the economy of the priory as a whole may well be obscured by the accident of documentary survival. Accounts for the receiver's manors have survived in some numbers, and it was this officer who was responsible for the supplies of grain used in the monastery. The obedientaries, who held about one-third of the manors, required cash rather than produce to defray the expenses of their offices. Thus, the hordarian, who held the manor of Woolstone and took over Little Hinton from the receiver, was responsible for providing the priory kitchen with a cash sum of 13s 4d per day for the purchase of foodstuffs not available on the manors.

Very few manorial accounts for the obedientaries' estates have survived, but at the one manor for which we have a good

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series (Woolstone) no less than 72 per cent of the wheat and 42 per cent of the barley produced was sold on average during the period 1309–39. This was also a manor with unusually high yields, high stocking ratios and large-scale cultivation of legumes. A similar picture of adaptive and innovative strategies on a few manors, within a large complex of estates generally characterized by extensive farming, has emerged from recent studies of some demesnes of the bishop of Winchester.\textsuperscript{53}

IV

In this study it has been argued that the arable farming patterns found on the Wiltshire estates of St Swithun’s Priory were developed within the limits of township fields, organized under traditional two-field systems, and located within an anciantly settled and heavily manorialized countryside in which there was little scope for demesne consolidation and for further large-scale assarting. Although the prevailing field systems were skillfully manipulated to provide a degree of flexibility in cropping arrangements and considerable independence of peasant agriculture, the rather low yields and stocking ratios on most manors suggest little intensification of the priory’s arable regime during the period of the accounts. On a few manors, however, evidence of higher yields, new cropping practices, heavier stocking and an emphasis on the production of some cereals for sale point to a more enterprising approach and show that the priory’s policies were not entirely conservative. The number of such examples is admittedly small although there is reason to believe that it might have been greater than the surviving accounts suggest. For the most part, however, the priory seems to have been satisfied with such levels of cereal production as were deemed necessary to provision the monastery and to meet the running costs of the manors.

Contract and Consumption: Labour Agreements and the Use of Money in Eighteenth-Century Rural Ulster

By VIVIENNE POLLOCK

Abstract
Based on three long sets of farm accounts, this article examines the records of hire of 130 male and female servants to evaluate changes in contractual arrangements and in rates and methods of payment, and to consider commercial integration of hired labour and, by extension, financial agreements between employer and employee by assessing the nature and cost of items acquired by workers and set against their wages. The survey revealed distinct changes over time in the ways in which workers were hired and paid, apparent in the growing distinctions in the conditions offered to individual workers and, significantly, to male and female workers, suggesting that employers sought to maximize returns on labour through the imposition of increasingly money-defined and time-specific terms and conditions of service. Examination of items set against wages not only informed an inventory of material possession and purchase but also stressed the degree to which paid work was used to fund independent economic activity; while the transfer of debt and obligations between individuals highlighted both the role of employers and the perception of the family as an economic unit in enabling and underwriting a variety of commercial and financial transactions.

The broad history of economic development in rural Ulster in the eighteenth century describes a region with a varied and energetic economic base, framed by the establishment throughout large swathes of the countryside of a valuable, export-orientated domestic linen industry, a general expansion in the market importance of both land and agricultural produce, and the widespread strengthening of local and national trade and communication networks. These developments did not occur evenly, but were expressed in marked internal variations in the nature and direction of commercial activity. Some regions, such as the 'linen triangle' of north Armagh, east Tyrone and west Down, became important for high-quality finished cloth production; others, like the Foyle valley hinterland of the port of Derry, relied more on the export of spun linen yarn. Where commercial agriculture was concerned, some regions, such as north Down, concentrated on market gardening; others, like west Tyrone, concentrated on beef production, whilst others, like the Lecale region of south Down, became key grain producers. In more economically-remote parts of Ulster where major specialization was more difficult, such as the comparatively resource-poor and increasingly marginal north-west, commercially-inspired enterprise may have been generally smaller in scale and greater in local diversity but was no less resourceful nor cash-dedicated for that.

The degree to which specialization...
became apparent signifies the deepening penetration of money-based economies throughout Ulster, and the subsequent creation of a commercial environment wherein even the most peripheral regions were driven to respond on some level or another. For the most part, the body of published work which informs this picture necessarily concentrates on the establishment, appearance and general outcome of economic activity during this period. This approach, and the evidence and arguments it yields, is of obvious importance and value, particularly in the case of Irish historiography, where our understanding of the underlying structures and circumstances of economic behaviour is still patchy and immature. At the same time, however, it feeds an analysis of the rural economy which, in contrast to the actuality of life in the Ulster countryside, is oddly underpopulated and impersonal. This is not to say that working people do not inhabit these surveys. It is instead to suggest that, while they may be called as witnesses or deployed as illustrations, in terms of the mechanics of their position within the prevailing economic climate and especially in terms of their relationships with other members of the economic matrix, they tend either to be regarded as anonymous, uniform groups or else ignored completely.

This situation has been some way balanced by localized case studies, such as Kirkham's investigations of the Magilligan region of north Ulster, which have done much to fill in the detail of the annual round of finding and making a living. By identifying the extent of the dual economy in particular, they have indicated at least obliquely a much wider degree of commercial sophistication and involvement than is popularly supposed to have existed in marginal, pre-industrial rural societies. More significantly, perhaps, they have started to raise questions about the social and interpersonal criteria which fuelled commercial behaviour. For example, whilst its workings are not examined intimately, Kirkham's global identification of the existence of a 'family' economy is clearly of importance in our understanding of the human side of eighteenth-century entrepreneurial action and reply.

This understanding can only be strengthened by returning to contemporary sources and reading them in the light of current historical perspectives as documents which can illuminate the cumulative processes of getting and spending amongst ordinary people. Whilst general surveys offer a somewhat static description of commercial activity, specific evidence relating to rural Ulster in the eighteenth century – in the shape of estate papers, farm and household accounts, wage books and so on – can define more dynamically a pattern of material survival maintained as a matter of course by a considerable degree of commercial integration and consumer power. In many respects, this situation has strong parallels with interpretations of the rural economy in colonial America which present the rural population living within an enforcing commercial structure in which contractual arrangement was a necessary component of the economy, and where


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farmers and country dwellers were driven to meet opportunity and need with an expedient and commercially directed mixture of subsistence activity and market enterprise. 4

There is, however, a danger that in emphasizing this aspect of the rural economy we ignore the existence of other less prominent but no less potent forms of arrangement. In an important recent article Mick Reed criticized the widespread acceptance that even the nineteenth-century English agricultural economy was powered exclusively by entrepreneurial exchange and dominant central markets. 5

In doing so, he stressed the survival, even into the twentieth century, of numerically significant groups of household producers or 'peasants', more actively concerned with making a living than with maximizing profit, and whose main interest was not selling but subsistence. However, because very few were able to achieve total self-sufficiency, 'exchange was always necessary and production had to be directed to this end to some degree'. 6 Drawing heavily on analyses of economic development in North America, he subsequently presented a reinterpretation of the British rural economy which essentially stated that although circumstances may have forced many small farmers and tradespeople to adopt commercial positions, the networks through which essential goods and services passed to, from and between these people did not constitute a market 'in any meaningful sense' but were instead part of a system of reciprocal personal obligations. 7

Reed was not calling for the reidentification in nineteenth-century rural England of a golden age of self-sufficiency and cash-untarnished mutual assistance. But he was pointing out the need for historians to develop a much greater awareness of the variety of ways in which people in rural areas may have organized their economic strategies, and for a greater sensitivity to the differing considerations which may have driven and defined their actions and responses. His arguments have been picked up by other historians of rural England. The polemic was continued in a recent article by Alun Howkins, 8 which severely criticized the tendency to neglect evidence of the complex reality of actual economic behaviour in order to construct persuading general definitions of economic position and organization. Like Reed, Howkins' analysis focused on the character and structure of rural labour in late nineteenth- and early twentieth-century England and was concerned overwhelmingly with the need to assess more precisely the nature of the commercial and contractual relationships which bound individuals not only to one another but also to the wider social and economic frameworks which surrounded them.

This is, of course, much easier said than done. The types of people that these debates are concerned with—the small farmers, cottiers and labourers which made up the bulk of the rural population—left little that can be read as personal testimony to the living pattern of their daily existence. In the case of Ulster, the general dearth of

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5 M Reed, '"Gnawing it out": a new look at economic relations in nineteenth-century rural England', Rural History, 1, 1990, p 83. 6 Ibid., p 84.

7 Ibid, p 91.

what might be termed individually-specific sources, such as household inventories, probate lists and the like, especially for the first half of the eighteenth century, renders the material life of everyday people even more invisible. However, sufficient evidence does survive in the shape of farm accounts and records of farm labour to open a window on at least part of their world.

Three sets of farm accounts have been chosen for close examination here. Two refer to County Down — those of the Orr family of Glassdrummond on the coast of the county, which run from c. 1730 to c. 1780, and those of the Martins of Ballyvooley near Banbridge, which cover the period c. 1779 to c. 1818. The third set refers to the Holmes family of Moyar near Benburb in County Tyrone and runs from c. 1753 to c. 1822.

In Ulster terms, the Orrs were medium farmers, whose holding was assessed in 1753 as containing 33 acres, 1 rood and 30 perches. Although very little of their routine farming activity is revealed in their accounts, we know they kept cattle and sheep, grew barley and flax, practised some level of commercial dairying and had some involvement in leather tanning. They also dealt in nets (presumably hempen herring nets), had interests in linen yarn production and by 1745 had apparently sub-let several small parcels of land. Between 1730 and 1780 records were kept on a total of thirty-eight hired servants, of whom thirteen were women and twenty-five men.

The Holmes’ accounts are far more extensive in terms of the range of commercial farming they describe. Itemized work sheets of the men they employed reveal precisely a mixture of tillage farming, while the inclusion of breeding records for both cattle and horses suggests a keen interest in livestock management. Holmes was also involved in interest-bearing money-lending activity, had substantial dealings in beef and yarn, and devoted a considerable amount of land to sub-letting. Between 1778 and 1820 he kept accounts with twenty-two hired servants, of whom nine were women. In addition, work records indicate the existence of a further nine labourers whose payment was assessed at a daily rate, while accounts against individuals reveal the existence of a further five women servants and one male servant.

Whilst a vicarial tithe of £9 12s payable on the harvest at Ballyalymore in 1782 points to fairly extensive commercial operations on at least part of their holdings, little of substance regarding the size or working of the Martins’ farm is revealed in their accounts. Scattered references to the nature of work received against debts—shearing at harvest, threshing, drawing dung and lime—confirm the tillage side of their agricultural activities, while notice of the provision of such goods and services as ‘little pigs’, ‘cows bulled’, milk, cheese, and horse work is testimony to a range of livestock farming. Enough potatoes were grown to be sold commercially — in May 1792 a total of 112 bushels were listed to nine named individuals. Potato ridges were also sold, and there are also several references to riggs being included as part payment of wages. Whilst no mention is made of the sale of linen cloth or yarn, the hiring of women specifically for spinning, references to the payment of individuals not only in the form of flax and flax seed but also in weaving and stamping cloth, and
the bringing in of what appear to have been weaving apprentices, indicate an involvement in linen production which went beyond the mere growing of flax. Only one reference exists to a formal sub-letting agreement — that of Rupert Murdock for a rental of 4 gns a year in the early 1780s and paid in sums of £2 3s 7d ‘in full’ for terms due in May 1781 and November 1781, and 2 gns in March 1783 for the term due in May of that year. No information was given to the size or nature of this letting. Apart from obtaining potato ridges of varying lengths, there is no mention of employees receiving payment in the form of land or houses and gardens or of setting payments for work against rent. This does not mean that sub-letting was not part of the framework of land use on the Martins’ holdings. But it does suggest that this arrangement was not part of the direct financial relationships which bound the Martins and their servants and hired labour.

The vagueness of the Martin accounts in terms of the nature of the family’s business activity is offset by the wealth of information they provide in other respects. The bulk of their records comprise detailed named accounts of the payment of no less than forty-four male and twenty-one female servants, plus payment to two partly-named servants — one male and one female — and notice of hiring (but no record of payment) of a further two servants, again one male and one female. Added to these are records kept on Will Martin, who took his ‘dyet’ for one year at 4 gns in May 1780 and on John Martin, who came to the farm in November 1790 and who was reckoned to be worth 28s in 1793–4; reference to Tom Martin, reckoned to be worth £4 over four years; passing reference to payments made to Margaret Martin ‘when she was living in John Martin’s’; and a short note of payments received in 1792 and 1793 ‘for the use of Margaret Martin’s children from Samuel Jordan’.

In all, therefore, these three wage books give us details of over 130 male and female members of the rural employed, a sample of sufficient size to allow some fairly detailed conclusions to be drawn about the nature of the economic arrangements which existed between those who sold and those who bought labour in eighteenth-century Down and Tyrone. The first area to consider concerns the range of agreements under which servants and labourers came to work for their employers. The most common, undoubtedly, was that whereby skills and labour were exchanged for a set period for a set reward. The length of agreed employment was usually six months — a ‘half-year’ as this was generally written — reckoned from ‘Old May’, that is 1 May and ‘All Saints’, 1 November. These were highly significant dates in the farming calendar, signalling the end and beginning of summer and winter and the productive and preparatory processes associated with these seasons. They were also, traditionally, the dates when rents and other demands calling for some form of cash reckoning fell due. In the case of men, any variation of half-yearly winter and summer employment generally occurred within the framework of May and November limits: for example, Miles McDowell agreed with the Martins for a third-year (that is, one-third of a year) from July 1798 and a quarter-year from February 1799, giving conclusion dates of 31 October and 31 April respectively. Women’s agreements, however, whilst mainly upholding the May/November principle, were more prone to move away from the norm: for example, Peggy Young agreed with the Orrs for a quarter-year from July 1796, Peggy Lennon with the Holmes for a quarter-year from June 1796, Molly Kerr with the Martins for one year from 1 January 1808, and so on.

Much greater variation occurred in sys-
tems of payment, in respect of both differences between individuals and differences over time. In the earliest of the wage books – that pertaining to the Orrs – work agreements in the 1730s and 1740s tended to describe a method of payment where individuals received a set sum, plus goods and plus 'arles', or 'earnest' money. Thus, John Stirling was hired 'half a year for £11 4s 1½d for a half-year in November 1782 'to be five days in the week with me and one day with Peg Martin'. In November 1792 Martin hired Barney McQuaid for four days in the week for a half-year at 5d per day; in May 1799 he hired Sam Magill for four days in the week for a half-year for £2 5s 6d. Felix Maloney, hired in November 1805 for a half-year for £3 8s 3d, continued his hire in May 1806 for a further half-year at half-time at 7d per day. Whilst Nat Holmes also moved towards a system of payment involving the calculation of wages on a daily basis, in his case this shift was associated with an expansion in sub-letting agreements whereby certain individuals received homes and gardens in return for working for Holmes 'when called' at a given rate per day. There is nothing in any of Martin's records to suggest that his new reliance on daily paid labour was associated with work which might be set against rent, or work which was an integral part of a rental agreement.

The shift towards reckoning rewards for hire solely in terms of money and solely in terms of specific amounts of paid work within the period of hire not only indicates the growing commercial precision of the relationship between farmer and farm worker, it also implies the development of a distinctly monetarist attitude to that relationship on the part of rural employers. Something similar can be seen in the way in which many present-day employers have arranged to reduce actual labour costs by translating into wages the gross commercial value of non-money rewards such as cars and creches, and by adjusting contracts so
that wage payments refer as minutely as possible to the time requirements of the services they wish to buy.

It is impossible to take this argument further in the case of the eighteenth-century male workers we are concerned with here, whose hire agreements generally make no formal reference to production goals. But we can see it underpinning the contracts of some of Martin's women workers, for example that of Mary McCullough, hired for 16s 8d to spin four and a half hanks a week for half a year from November 1789. Later agreements are even more explicit: for example, Margaret Johnston was hired in May 1803 for £1 4s to spin five dozen of yarn a week and six of tow, and in November 1804 for only 20s to spin five dozen of yarn. Molly Cubison, brought in in May 1805, and Molly Kerr, brought in in June that year, were both hired for half a year to spin four and one-half dozen of yarn per week. But Molly Cubison, hired first, was to receive only 20s for this, whereas Molly Kerr, hired later, was to receive £1 25 9d. These examples suggest that not only the quantity but also the quality of yarn produced was a determinant of wage rates. In doing so, they introduce the concept of performance-related pay into the equation, thereby underlining further the apparent desire of the rural employer to extract to the fullest the value of his investment in the skill and time of others.

The idea of performance-related pay was, of course, not new. The records of several of the individuals brought in by Martin reveal that the level of their reward was determined in hindsight by his judgement of the value of their contribution. In the case of Tom Martin, for example, Martin wrote that he thought he was worth 'in the first year nothing, in the second £1, in the third £1 5s and in the fourth £1 15s'; John Martin, on the other hand, was considered to be worth only £1 8s in the fourth year of his engagement. As these individuals may well have been kin apprentices, their records should be read with a certain amount of caution. It is unlikely, however, that Sally McBurney, hired for a half-year in May 1802 for £1 25 9d, or £1 4s if she pleased the mistress' enjoyed the power of negotiation that blood may have brought. She had, nevertheless, an apparently more secure agreement than her sister Nancy, who came in in 1806 with no reference to remuneration made other than Martin's note to 'allow her £1 9s 9d in wages and rather more if she is a good girl'.

Further elaboration of the financial relationship between employer and employee is highlighted by Martin's systems of accounting for missed time and missed work in his allocations of payment. One method was simply to shift forward the starting date of a new contract to accommodate any absences under the old one. Thus Pat O'Neal, hired for a half-year on 27 November 1815 and again for the following half-year, was said to have started his next contract not on 27 May 1816 but on 4 June 1816. Another method was to allow extra days worked against the number of days owed. Thus Martin wrote of Hugh McCormick that 'during the last two half years he was absent ten days of which I got two in Harvest. He is therefore due eight days [so] having at first entered Nov. 21st I say now he entered Nov. 29th'. Just how Hugh was able to produce an extra two days work on a contract which expected him to work every day in the first place is not explained. A third method, which also throws up visible anomalies, was to deduct time owed in the form of cash due. Thus Molly Kerr lost 2s 3d - 5d per day - from half-year wages of £1 14s 1½d for being absent ten days, while Pat O'Neal, hired for £4 for the half-year, was docked 11s 7d for three weeks' absence - equivalent to 3s 10d per week or about 6½d per day. At the same time, Hugh McCormick lost 10d per day's
absence from half-year wages of £3 8s 3d – as did Mick Grimes from half-year wages of £5.

The loss of 10d a day for being absent seems unnecessarily punitive when day labourers were being hired for 7d per day in the case of Martin’s contract with Felix Malone, or 6½d per day as was usual with Nat Holmes’ hired men. And it seems equally unfair that Peggy Morrow, hired for half a year in 1792 for only 15s, should have had her wages reduced by the comparatively large sum of 3s 8d from being behind in spinning a mere eleven dozen of yarn. Closer examination of these figures indicates that Molly was fined 4d for each hank of yarn unspun – the going rate per hank for outside spinners – while being paid the equivalent of only 2d for each hank she spun as an inside worker. This extrapolation suggests that some deductions for missed time or short work may have been calculated on the basis of the theoretical cost to the employer of replacing goods or labour rather than the real cost of wages over-paid to penalized workers, a sophistication of accounting which would not only explain the glaring inconsistencies in the relative weight of fines imposed on absentee male workers but which also further exposes the increasing ingenuity of the exploitative strategies imposed by rural employers.

Whilst lack of specific information regarding the actual nature of contracted work makes it impossible to construct a detailed picture of differentials in wage rates between individuals and differences in rates of pay over time, the number of cases available for survey does allow some broad conclusions to be drawn. The first concerns the general increase in labourers’ pay indicated by a comparison of the Orr accounts and the Martin accounts. The highest wage recorded by Orr in the 1730s was that agreed with Brian Digeny, hired in November 1732 for 25s 6d plus 1 lb of wool and 1d in arles. This compares fairly well with the rate paid Art O’Sloane, hired in 1733 for 20s and half soles, and William Cunning, hired for four months from Midsummer 1733 for 15s and 1 lb of wool. In contrast to this, Martin’s top rates in the 1790s were £2 3s agreed with Bryan McQuaid for the half-year beginning November 1792 and £2 5s 6d agreed with Dan Kennedy for the half-year beginning May 1795. Wage rates then appear to increase significantly until the turn of the century, with Martin agreeing to pay Sam Magill £2 5s 6d to work four days in the week for a half-year in November 1798 and in May 1799. But there are still acute discrepancies in these records. Whereas Miles McDowell’s wages of £1 14s 1½d for four months in 1798 and £1 5s for three months in 1799 suggest a rate of just over 8s a month, in 1800 he agreed to work five months for only £1 8s apparently accepting a drop in pay of almost 3s a month. The records of another of Martin’s regulars, Mick Grimes, suggest, however, that whilst wage rates may have dipped sharply as the century opened, they then took a distinct turn for the better. Grimes first appears in the accounts in November 1802 when he agreed £3 for the winter half-year; in 1806 his pay had increased to £2 5s 6d for working half-time for the half-year from December; in November 1811 he agreed for £5 for the half-year, a rate he kept without change until December 1814 to make him the highest paid of all the labourers Martin counted with.

The apparent improvement over time in the wages of the top-paid did little to reduce the marked differentials in payments to male employees. If anything, these expanded during the eighteenth century, with differences of less than two-fold recorded by Orr to about 1750 increasing to differences of up to five-fold seen in the Martin records in the early 1800s. We may assume that in large part these differentials represented differences between adult and
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child rates, with men invariably paid significantly more than boys. We may also assume that different types of work and different qualities of worker attracted different rates of payment. At the same time, evidence suggests that levels of reward were also influenced by other, less immediately obvious, factors. Otherwise why should Thomas Harken have been able to pay off dues of 10s accruing to Martin on his son’s account at a rate of 6½d per day for work such as potato digging at the same time that this employer was agreeing a daily rate of only 5d per day for contracted adult workers such as Thomas Harcourt and Barney McQuaid?

There is a temptation here to suggest that work which might be translated into cash payment as part of a long-term contract tended to be credited at a lower rate than work performed on an ad hoc basis as part of a short-term arrangement. In other words, reduced reward may have been accepted by workers in return for security of reward. The other factor to be taken into consideration is, of course, that payments for long-term hire included a measure of board. The accepted historical view of payments for hired labour holds that summer wages were generally depressed to take account of the increased cost of feeding servants during the hungry months before harvest. There is some limited evidence of this in the early records of James Orr: for example, Sanders Morris worked for 15s in the winter half but for only 9s for the summer half of the year May 1758 to May 1759. In general, however, changes of this type appear as part of a more prolonged upward curve. For example, Molly O’Neal hired with Orr for four half-years from November 1755 and received 15s and a shift for the first two periods of six months, and 18s and a shift for the second two. In similar fashion, Barney Monaghan hired with Martin for three consecutive half-years from November 1801 for wages of 11s 4d for the first, 14s 6d for the second and 15s for the third. The apparent absence of seasonally-weighted payments suggests that a much more general mechanism than actual calculated cost was applied to include the benefit of keep in wages. If this was so, the tendency to rely more and more on daily paid labour may have been fostered at least in part by the inability of employer or employee to make direct references in rewards negotiated over time to either the true cost of hiring or the true value of being a live-in servant.

Differences in the payment of male workers, while striking in their individual extent, are not as visibly clear-cut as those which existed in the payment of male and female workers. Payments agreed with women are revealing on a number of counts. Firstly, differentials between individual female workers became nowhere near as intense as differentials identified between individual men. In general, payments to women varied by just over two-fold, but rarely further. In other words, whereas some men were eventually paid as much as five times other men, no women were paid more than three times other women. A second clear distinction was the much lower rate of increase in women’s wages. Payments to the two women hired by Orr in 1733 stood at 13s and 4 lb of wool and 17s for the half-year, and compared well to those agreed with the two men he brought in, which stood at 20s and leather soles and 15s and 1 lb of wool. By the 1750s the top wages of the women Orr employed had increased to between 18s and £1, plus goods – again comparing well to his top wages for men. By the late 1770s, however, women were still receiving between £1 and 1½ gns in top half-year payments, a rate which shows no sign of significant increase until after the turn of the century, when top wages of between 1 and 1½ gns began to be recorded. This was far below half-yearly top rates for men, which were by then reaching £3 and
more. Further evidence of this imbalance in the payment of men and women is found in rare references to female daily rates. Again, these were well below those accorded men. For example, Thomas Harkin's two days 'in mud' counted for 13d against his son's dues to Martin, while Mary Harkin's two days 'on land' reduced the debt by only 6d. And we have already seen how Molly Kerr’s absence from employment was valued at only 5d per day, whilst male absences were deemed to be worth 10d per day.

It was, however, extremely unusual for women's work to be given a daily value, and at no time were women contracts expressed on a daily basis by any of our three farmers. It appears, therefore, that the shift towards the recruitment of farm labourers working from their own home, so visible where men were concerned, occurred to a much lesser extent in the case of women. To echo a previous point, women may have survived longer as live-in servants simply because they were cheaper to feed than men, and their hire as such subsequently less exposed to commercial strain from begrudging employer-hosts and resentful worker-visitors. It is, however, more probable that the unusually strong continuation of this type of hire in the case of women derived from the nature of female farm employment which, if also bound to the day-through-day maintenance of farmhouse and farm family, would have been extremely difficult to separate into individual values of stated tasks and time. Certainly, the fact that employers brought home as live-in servants even women nominally hired only to spin, whose agreements uniquely referred to set payment for set production, suggests that women generally had in practice a much wider domestic work brief than that expressed in their formal agreements.

The growing definition of these differences in the payment and hire of men and women – the much lower payment made to women generally, the much smaller rate of increase over time in women's pay, the much smaller differentials in the pay of different women, and the apparently greater uncontracted informality of women's work – not only indicates the gathering presence of gender-based bias in calculating the exchange value of human activity, but by highlighting the comparative weakness of women in pay negotiations, it also serves to confirm the comparative strength of men. And the development of this inequality is, it is suggested, further sign of the increasing desire of rural employers to strike the most financially effective balance between payment and production, and the adoption by them of increasingly competitive strategies of reward and exploitation as a means to this end.

II

The farm records reveal that, for the people who worked for the Orrs, the Martins and the Holmes, ways of ensuring access to the means of material survival, as articulated in the relationship between farm employer and hired servant, were much more complex, much more commercially directed and much more explicitly divisive than traditional views of pre-industrial rural societies would suggest. This interpretation is supported, with certain key qualifications, by the information they extend on patterns of consumption defined within this relationship – the spending side of equations of economic reality in eighteenth-century Ulster.

The list of expenditure set against wages is certainly remarkably diverse. In the first place, for a sample of consumers largely made up of farm labour receiving subsistence, the number of entries featuring food, household utilities, tools and other items of production, and employing other people is somewhat unexpected. Meal and potatoes are perhaps the commonest pro-
visions cited, but wheat, butter, beef, fish, apples, pork, cheese and milk are also mentioned. Flax and flax seed, hemp, bark, seed oats and barley, honey and malt are recorded in varying degrees, while the purchase of wheels, parts of wheels, wheel repair and toothed 'hacks' figure regularly in women's reckonings. Hired servants bought pigs, big and little, and geese; they paid for shearing, harrowing, ploughing, drawing dung and, in one instance, drawing lime. Nails, locks, oil, soap, boxes and bands for boxes and chests, candles, cream of tartar, ginger, hooks and spade shafts are other acquired commodities which fall into this category.

A second category consisted of payments for professional services and taxes: these included sums accounted to weddings, christenings, religious devotion, doctors' services and medicines such as physicks [sic], blisters, emetics and, presumably, liquorice and liquorice balls (all of the last invariably bought by women); and cess, tithe and hearth tax. Several mentions of stamping were made in the accounts of female servants by all three employers, whilst Martin inscribed the only reference to a male servant using this service in his note that Dan Mulree had been debited with 2s 8½d 'to pay his stamper for marking'. The Martin notebook is also interesting in terms of the large numbers of entries made in respect of education. While agreements with several of his employees included a set number of weeks schooling as part of their initial contract, additional notices are found in respect of Jack McCall, John Martin, and Mick Grimes. Not only men paid for or received education. Peggy Lennon devoted 10d of her wages in 1792 'to schooling for Margaret', while Molly Kerr and Sally McBurney both diverted 1s 1d of their summer wages 'to the singing master' in 1805. Expenses such as the 6½d Art O'Sloan used for a 'pilgrim's progress' and the 1½d Hugh Harvey spent on 'ink and an ink bottle', together with the purchase through wages of books, either for the employee personally or, in the case of Molly O'Neal, 'for her brother' should perhaps also be included in this category.

The next category refers to luxury goods and leisure. These included the two staples of extravagance - tobacco and brandy, with the former featuring much more prominently than the latter and revealing very little bias in terms of sex or, from what we can assume, age - but other items, such as nuts, whiskey, rum, ribbons and shoe buckles, are also mentioned. Interestingly, no reference to the purchase of either tea or sugar is made in any record. The regularity with which cash was advanced to attend fairs and markets confirms the importance of these occasions in the social and commercial life of the countryside. Some of the money brought by servants and labourers may well have been spent frivolously, particularly the small sums of pennies and halfpence often referred to in such notices. But the frequent inclusion of relatively large sums indicates that major expenditure was also planned. The other much-frequented social occasion was racing, mentioned in connection with the withdrawal of money from wages in all three account books. Unlike fairs and markets, this appears to have been the exclusive preserve of male servants. Christmas and Easter Sunday and Monday are also frequently nominated as the reason for cash advances. The practice of naming both the event and the venue of expenditure also reveals the degree of mobility customary among the labouring population. The Orr records refer to regular trips to Kilkeel, Dundrum, Rostrevor and Newry; the Holmes' servants travelled to Dungannon, Moy, Armagh, Charlemont, Killey and Belfast, while Martin's Ballyvooley contingent went even further afield with trips to Dromore, Banbridge, Newry, Rathfriland, Moira, Tandragee and
Belfast, as well as regular visits to the 'Ban' fair, the 'Con' fair and the 'Bann' market.

The commonest named purchases at fairs and markets were clothes and shoes. Indeed, items of apparel appear as by far the most money-exhausting category of consumption, representing the bulk of goods set against wages in many accounts. The acquisition of clothing was reckoned in a number of ways. One of the most common was to count the cost of materials and making, but new clothes were also bought from local shops or suppliers. In the case of Martin's employees, this appears for the most part to have involved an establishment run by a Mr and Mrs Kerr - one account actually cites a sum of 3 ½d 'spent in Mrs Kerr's shop'. At the same time, references to sums paid 'to the tailor' and to payments for clothing to other named individuals, such as Mr Hanning, indicate that the Kerrs did not have the Ballyvooley monopoly in outfitting. Small items of apparel, such as caps for women and hats for men, gloves, stockings and kerchiefs also appear regularly and, in terms of wages, were also relatively costly. Margaret Johnstone's account in 1803 included sums of 1s 4d and 1s 7½d described as 'cash to the hosier', while the ubiquitous kerchief, in reality a type of linen neck square, seldom cost any of Orr's female servants less than 3s.

A high standard of dress is revealed not only in the cost of finished items, but also in the range of textile used in clothes-making, which included fine and imported materials such as shaloon, muslin, white linen, cambric and chenille as well as more serviceable stuff, plaiden, druggest, frieze and serge. Further evidence of the weight of investment demanded by clothing is found in references to the cost of 'old' items, such as the 'old coat and breeches' acquired by Michael Grimes for 2s 8d, or the 4d for an old hat recorded beside the 1s 5d for a new hat in John Martin's account in 1793. But perhaps the clearest indication of the value of clothing is made by Martin's deliberate inclusion of a gift of old stockings in his reckonings with Will Morrow in 1795 and Hugh McCormick in 1796. In both cases the cost of these stockings was carefully noted as 3½d, as if the entry should stand as clear evidence of transfer of title of the items concerned. And why should people not want to keep such lines of possession firmly registered at a time when new stockings could cost as much as four or five days' wages?

If covering the legs was expensive, clothing the feet was even more so. Whilst the cost of footwear varied considerably according to type and presumably size, gaining possession of even the lightest leather pumps meant an outlay of at least 1s in the 1730s with 'double' pumps, that is, pumps made with a double skin of leather around the foot, costing about 2s. Brogues then cost up to 3s, rising to a height of 8s 8d for a man's pair in 1806. A number of purchases of 'shoes' are recorded in the Martins' accounts: these cost as much as brogues and sometimes significantly more, as in those bought by Molly Kerr for 5s 2d for leather and a further 1s 7½d for making. It is, therefore, not surprising that more shoes were mended than made, with soles, half soles, top pieces, heels, wedges for heels and leather nails all commonly cited, together with the expense of putting them on or in. But even this did not come cheaply, with soles for brogues recorded at 1s in 1790 and rising to over 2s by the turn of the century; and neither by then did second-hand shoes, as witnessed by the 4s ½d paid for a pair by Michael Grimes in 1803.

The final category of expenditure set against wages consists simply of cash. It is clear that employees demanded and got as a matter of course numerous cash subs from their employer. James Martin was especially precise in this matter in his habit of noting that one or another person had received cash 'to him- or her-self', or
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appending such explanations as 'cash from my father', 'from the mistress', 'from Eben' (his brother) and so on against deductions. Several of his entries consist of aggregates of halfpennies – for example, Margaret Johnstone's wages were reduced by 6d in respect of 'halfpence from the mistress' – or refer to change returned out of money advanced, as in the note written beside the sum of 9d due from Lawrence Lavery which explained 'in Dromore gave 1s 1d of which he returned 4d'.

Another type of cash advance, common to all three record books, consisted of sums to named individuals, presumably for goods received or services rendered outside the employer/employee nexus. It was also common for family members – usually but not always a mother or father – to be given or sent cash sums on account. At times this act may have taken the form of an employee accepting the debt of a family member, as in the case of James Duff, whose wages were reduced by 11d 'for cash due by his sister which he undertook to pay' or Bryan McQuaid, who paid 7s 6d 'by his father's note' in 1783. A further type of cash advance, also common in the Martins' accounts, consisted of top-up payments to outside suppliers and creditors. Thus, Molly Magill received 1s 1d 'to help pay for shoes', Patrick Kennedy 12s 5d 'per account of Mr Kerr', Michael Grimes 2s 7d 'to his rent', Brian McQuaid 1s 1d to 'cash given on a potato rigg' and so on.

The existence of these types of cash advance suggests that rural employers adopted, or were certainly expected to adopt, a quasi-banking role, in which employment with them was used to secure goods and service either on personal credit or in the knowledge that the employer would pick up the bill and hold it against future wages. This service ran in tandem with their role as direct distributors of cash. As we have seen, money was regularly advanced for local fairs, holidays and special occasions, sometimes in large sums but more often in terms of pennies. And, of course, some employees 'spent' very little during their terms of employment, leaving them with almost all their wages to collect as cash when their contracts expired.

Rural employers also acted as direct suppliers of goods and services, houses and land. Was there any difference in the cost of items obtained from outside sources, and those obtained from the employer and their value deducted from pay? In other words, was there any measurable financial benefit in receiving wages in kind? One is tempted to say not a lot, although this judgement must immediately be qualified by reference to the points made earlier regarding the increasing preference of employers to articulate initial contracts in money alone. A distinction should be drawn, however, between formal agreements promising specifically named goods as part of an overall wage, and the practice whereby the money values of goods received informally during a term of employment were set against wages.

Discriminating between the employer acting as direct supplier and the employer acting as agent or debt collector for an external supplier is not easy. However, the fact that it was almost unknown for the exchange of meal, potatoes and butter to be described as 'cash' transactions between farmer and servant allows us to assume that such goods generally came 'from the farm'. Examination of the prices charged for these provisions revealed considerable differences in deducted value. These differences sometimes reflected the difference between retail and wholesale price. For example, James Orr felt able to sell a half-piece crock of butter weighing 59 1/2 lb for only 2 1/2d per lb, while invariably charging his employees 4d per lb for the much smaller amounts which they obtained from him.

The price of meal and potatoes, on the other hand, does not seem to have been
much influenced by the quantities involved. Fluctuations in the amount charged for these commodities appear instead to relate to the time of transaction. The price of oatmeal especially was particularly prone to seasonal variation. For example, Holmes’ account with Robert Shannon describes the cost per score rising from 3s 4d to 3s 8d, then falling to 3s 5d over a period of, apparently, three months, while Martin’s account with Owen Campbell in 1789, especially instructive by virtue of its inclusion of actual dates, shows the cost of a score of meal falling from 2s 6d to 2s 2d between 27 June and 30 June, and then falling further to 1s 10d on 20 November. Even more striking is the change in price revealed in Martin’s reckoning with Mick Campbell in 1782, which records a charge of 2s 8d per score on 12 June and 2s 4d on 13 June – a variation in cost over one day equivalent to almost the whole of the daily wage of the purchaser. Although the cost of potatoes shows a greater degree of stability, in terms both of seasonal and annual variations, than the cost of meal, similar rapid shifts in price are visible – as witnessed by Owen Campbell, who was able to buy potatoes from Martin at 6½d per bushel on 5 April 1789, but was made to pay 8d per bushel for those he obtained on 20 April.

The extent of these short-term swings in the cost of meal and potatoes makes it impossible to compare the prices charged to our labourers with the more broadly-based price series which exist. Indeed, it throws the value of these constructed series severely into question. Evidence relating to prices charged by Holmes, Martin and Orr to individuals who were not their employees, however, suggests that, apart from ensuring access to regular supplies, being a hired servant made very little difference when it came to paying for provisions. Rather than enjoying the benefit of buying goods at long-term cost price, or being granted the pre-industrial equivalent of a worker’s discount, farm employees appear to have been treated like any other customer in being expected to pay the going market rate which applied to the goods they received.

This may, of course, sometimes have worked to their advantage, in that goods ‘bought’ when market prices were low continued to be costed at that rate, regardless of the price which prevailed when the bill was finally settled, it being quite common for accounts to run for numbers of years, and to grow to lengths which seemed far to outpace wages. Tom Kennedy’s record for the winter half of 1796, for example, showed an aggregate debt of £4 3s 6d to be set against a payment per term of £2 10s. Eleanor Hughes and Elizabeth Richardson ended up owing Nat Holmes £4 16s 1d and £6 5s 11d respectively in 1807, while Felemy Sloan amassed a bill of 31s with Orr in 1746 against agreed wages of 15s. This type of borrowing appears never to have been translated into a formal money debt – in the shape of, for instance, a signed agreement of debt or separate IOU – nor to have attracted penalty in the shape of interest. But both these arrangements were made to account for and to exploit money lent to other individuals. Several IOUs for sums ranging from 1 gn were signed with James Martin, while Nat Holmes was certainly careful to charge interest on sums extended as part of his money-lending activities – one such account with Robert Holmes, which charged £1 3s on a payment of £11 10s 5d, suggests the application of an interest rate which reached almost 10 per cent.

The ways in which our employers were accustomed to account for money owed and money received confirm their experience in the complicated world of eighteenth-century finance. Robert Holmes’ part-payment of the £11 10s 5d referred to above was recorded as comprising £4 19s 7½d in notes, £1 14s 1½d in cash and £1 10s in six-shilling pieces. When
James Martin bought Robert Kerr's field, his receipt named two cash sums of £6 5s 1½d and £2 5s 6d, 12s in respect of oats supplied, and £18 4s 7½d promised in notes. His account of money in from David Hanning, a local draper and retailer, was divided into a deliberate, long list of sums given in cash and sums given in banknotes. Orr's records of outstanding debts show a similar degree of complexity and carefulness. In 1742, for example, he counted with David Candlice, again one of the local suppliers, and noted that 'all is clear, only he oweth James Orr 15 11d and the remainder of the cow's price 12s and 18s for his daughter's wages, which comes to one-third of the cow's price'. In 1746 he counted with Mary Reed to record that 'she is owing me 18s 4d ... of the above account received 8s, more 3s 4d, 3 days shearing 1s, and Peggy for spinning on the big wheel 7½d'. Similar articulations of debts cleared and obligations met with a mixture of work, notes, cash and commodities appear throughout all three sets of records. One of the most interesting of these is an account of a marriage contract of £20 between James Martin and David Shaw. Payment of this was made entirely in goods, save two payments of 11s 4½d recorded as 'cash per Eben' and 'cash per myself'. The range of goods described—from a horse at £10 4s 9d, a bed and furniture at £5 13s 9d and a pillion at £1 10s, to a stone of flax and ten bushels of potatoes at 10s 10d each, to 'drugs to Mr Manning and Mr Fleming 15 5d' and 'stamping a handkerchief 10d'—proves that no sum was too small and no commodity too common to be brought to formal account between two equals.

III

Examination of these three sets of wage books reveals a world that, even for small farmers and their servants, was commercially sophisticated and financially literate. While continuing to be framed by traditional limits and timing, patterns of hire displayed a high degree of discrimination and flexibility in the relationship between employer and employee and the increasing tendency for this relationship to be articulated and rewarded in terms of its effective money equivalent. Patterns of payment define a multi-faceted role for employers acting as distributors of cash, credit, commodities and service both to individuals directly, and as underwriters of exchanges between individuals, and between individuals and external suppliers and providers. Patterns of consumption describe the variety of these exchanges, showing the extent to which not only material but also social behaviour was shaped by cash-bearing participation in the market place. The commercialization of the daily life of labourers and servants was most visible in their standards of dress, but is also apparent in their purchase of schooling and education, of professional services and medicines, of treats and seasonal luxuries and, perhaps obliquely but no less conclusively, by their reluctance to attend gatherings such as races and fairs without at least a few pennies to act as spending money.

They also describe a society where individual freedom within the market place was secured at least in part by the ability of workers to provide for and exploit a measure of independent materially-productive activity within the employer-employee relationship. Moonlighting—either for oneself or another employer—was frequently named as reason for absence from work. And the acquisition through wage labour of key items of production—seed, tools, livestock, agricultural services, flax, spinning wheels and, as is suggested in some cases, even looms—acts as a more explicit assertion of economic autonomy. At the same time, evidence of the easy transfer not only of these resources but also of debt and credit, goods, provisions, cash and land between close family members
indicates that the struggle for material survival was also vitally supported by kin acting in concert.

It is this aspect of the economic behaviour of our farmers and farm labourers which most matches Reed's identification of systems of reciprocal personal obligation within networks of commercial exchange. However, apart from all three employers' lack of elaboration with interest or with formal statement of the long outstanding accounts of their servants and tenants, no other sign of the existence of these non-exploitative exchange arrangements can be found to support his argument. On the contrary, changes in hire payments and especially in hire agreements suggest that the economic relationships which are portrayed in the wage books studied here tended to become much more commercially perceptive and financially loaded as the eighteenth century progressed.

It should, of course, be stressed that these documents focus for the most part on economic relationships between unequals. Although patterns of consumption suggest a certain democracy of market acquisition in terms of items purchased and labour dispersal, the fact remains that these patterns are defined in records which deal exclusively with contracts between masters and servants. The mutuality that they imply, therefore, cannot but be overshadowed by the hierarchy they state. There is, nevertheless, little reason to believe that material recording the dialogue of getting and spending between unrelated social or economic equals would reveal a much greater informality of effort and exchange. The relationship between production and consumption, and the transfer of goods, skills and services between those who had and those who wanted, necessarily demand a balancing of account by some means or other. The written record of rural life in pre-industrial Ulster indicates that, for the most part, these accounts were balanced by translating the value of exchange into its cash equivalent. Families may have helped each other out without counting the cost too exactly, but they did so within a society whose economic framework was shored up by commercial considerations and underpinned by the use of money.
Formal Agreements and the Enclosure Process: The Evidence from Hampshire*

By JOHN CHAPMAN and SYLVIA SEELIGER

Abstract
Writings on enclosure after 1700 often concentrate largely on the parliamentary movement, and any discussion of non-parliamentary aspects tends to ignore the distinction between the different processes involved. Amounts and types of land are rarely specified with any precision. An extensive survey of Hampshire casts some light on the progress of enclosure by formal agreement, one specific type of non-parliamentary enclosure. It is shown that this type of enclosure occurred more frequently and covered more land than previously thought, forming a testing ground for techniques employed by parliamentary act. Estimates are given, from the statistics collected, for the acreage involved, and the types of land are shown. The temporal and spatial distribution of formal agreement enclosure is analysed, and a comparison with the extent of parliamentary enclosure is made. Finally, the importance of piecemeal enclosure in Hampshire is highlighted.

It is generally accepted that some 75 per cent of England escaped the effects of parliamentary enclosure, but the extent and timing of other methods of enclosure have remained a matter of controversy. In much of the literature of the enclosure movement there tends to be an assumption, sometimes explicitly stated, that the story of enclosure during the eighteenth and nineteenth centuries is to all intents and purposes that of the parliamentary movement, and that these other methods were largely a feature of earlier centuries. Wordie, for example, allows a mere 1 per cent of the area of England for enclosure by agreement after 1760 and, on the basis of evidence from Durham and Leicestershire, suggests that 'between 1700 and 1760 the enclosure by agreement movement had run out of momentum', though he gives a figure of some 3 per cent for such enclosures during the whole century. The comments of Kerridge are similarly dismissive since, although he states that 'through the eighteenth century and the first half of the nineteenth, parliamentary enclosures were accompanied by divisions and enclosures neither ratified nor authorized by Act of Parliament', he then says that 'in 1700 about one-quarter of the enclosure of England and Wales remained to be undertaken'. By implication, virtually the whole of his quarter would be accounted for by the parliamentary movement. Gonner's calculations point in the same direction, for he estimated that the parliamentary enclosure total needed to be raised by only 3 to 5 per cent to allow for other types of enclosure after 1750.

On the other hand, a minority of writers have argued for the importance of non-parliamentary means. McCloskey, for example, suggests that enclosure other than by private act was a major factor during these centuries. Yelling draws attention to the significance of piecemeal enclosure, though he implies a regional separation, for he states that 'in most piecemeal enclos-

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ure districts there is no extensive coverage of parliamentary awards that can be used to provide a regional framework for the study of enclosure history. Butlin stresses the importance of enclosure by agreement, at least in the first half of the eighteenth century.

Part of the problem lies in the absence of precise and detailed statistics relating to non-parliamentary enclosures, which might form the basis for testing the validity of the opposing views. A few authors, such as Hodgson and Mills, have offered figures for the numbers of non-parliamentary enclosures in specific local regions, but even these have normally shrunken from providing acreages, especially of the types of land involved. The difficulty is further compounded by the fact that non-parliamentary enclosure was not a single process, and the distinction between the different types has rarely been made explicit in the literature.

A classification of enclosures on the basis of legal criteria was provided by Gonner in the early years of this century, but such a definition does not adequately reflect the differences in landscape or holding layout which may be produced. From a practical viewpoint, it is important to distinguish between piecemeal enclosure, often carried out over a long period of time with the tacit approval of the other parties to the system, enclosure by a landowner or landholder who succeeded in consolidating all the land into one hand, and enclosure by formal agreement amongst all the parties with an interest in the land. The first of these tended to perpetuate holding fragmentation; the second left the landholder with complete freedom of action. Formal agreements, on the other hand, produced effects which were very similar to parliamentary enclosure, with a substantial degree of replanning in most cases. Many, indeed, followed closely the procedures of the parliamentary process, with full powers to interpret the agreement and carry out reorganization being delegated to commissioners, who were then charged with drawing-up a formal award. An agreement drawn up in proper legal form provided a degree of security which was lacking in informal piecemeal enclosures, and also avoided some of the heavy costs involved in piloting a private act through Parliament. It had the further advantage over an act that the time taken to complete the enclosure was likely to be substantially shorter, without the inevitable delays involved in the formal parliamentary process. The parliamentary route did not avoid the wrangling and horse-trading necessary to achieve an agreement, since a high measure of consensus was necessary between the lord of the manor, the tithe owners and the principal landowners before it was worth attempting to procure a private act. The advantages of parliamentary action were, therefore, not always obvious unless there was limited but determined opposition, or there was some specific legal barrier, such as the minority or lunacy of one of the major parties, which might have been held to invalidate an agreement. In the circumstances, it is not surprising that formal agreements

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7 Gonner, Common Land and Enclosure, p 53.


9 See, for example, correspondence relating to the Preston Candover Act of 1820 in Winchester Cathedral Archives (hereafter WCA), T3A/1/3/5/7.
played a significant role in the enclosure process even during the eighteenth and nineteenth centuries when the parliamentary alternative was firmly established.

Formal agreements, as here defined, were legally binding documents indicating the consent of all the parties involved in the enclosure. They were a common feature of various parts of the country, and undoubtedly played a significant part in the enclosure movement of several south coast counties. The remainder of this paper explores the significance of this particular aspect of non-parliamentary enclosure as it affected the historic county of Hampshire (excluding the Isle of Wight) during the eighteenth and nineteenth centuries.

There is nothing in the Hampshire material to suggest that the use of agreement or act was determined by anything other than legal necessity. Private owners such as Sir Chaloner Ogle and Sir Charles Mill appear to have used agreements where possible and acts where they had to, and their names appear indiscriminately in both types. Occasionally such private owners were pushed into the expense of an act when an agreement ran into difficulties. At North Stoneham it had been agreed in 1736 to enclose the common, but difficulties arose when John Dummer, whose legal guardian had signed on his behalf during his minority, repudiated the agreement on attaining his majority. A revised agreement was patched up, but Sir Richard Fleming, the original lord, had died in the mean time, leaving the estate in the hands of his brother, a lunatic. In the circumstances, the parties prudently sought a confirmatory act in 1744 to avoid any further challenges. The opposite case occurred at Wonston, where a proposed parliamentary enclosure was abandoned when it proved possible to come to a unanimous agreement. Indeed, the threat of parliamentary action was sometimes used as a lever to persuade the parties to settle their differences, as at Itchen Stoke.

Representatives acting on behalf of institutions tended to take a cautious line and prefer an act, though they were nevertheless represented amongst the parties to agreements. The Dean and Chapter of Winchester, one of the principal lords of the manor in the county, showed an overwhelming preference for the use of an act, but were nevertheless involved in the agreement at Baughurst, possibly because, by 1856, the general enclosure legislation had given some legal backing to the idea of enclosures by agreement. Officials representing other institutional owners were similarly inhibited, though this did not necessarily prove a complete barrier to enclosure by this means. Correspondence between Ralph Etwall and the bursar of Corpus Christi College, Oxford, in 1789 over the Longstock enclosure shows considerable doubt in the mind of the latter over his right to commit his successors, though he eventually overcame his doubts, encouraged by the willingness of Magdalen College, Oxford, another of the interested parties at Longstock, to go ahead.

The various published lists have tended to obscure the contribution of formal agreements to the enclosure history of Hampshire. The fact that the parliamentary enclosure lists of both Tate and Taverner contain appendices of formal agreements showing only one and two respectively,
may mislead the unwary.\textsuperscript{15} Naish's unpublished thesis offers a rather more comprehensive picture, mentioning twelve agreements for the period 1706–55 and three for 1755–91, but this covers only the chalklands, and gives no detailed breakdown into open field and other types of land.\textsuperscript{16} Jones also restricts his comments to the chalklands, and there is confusion in his account between agreements to convert common downland to other uses in common, and those creating land in severalty.\textsuperscript{17} A number of what are at first sight enclosure agreements are actually agreements to convert common down to common arable, such as that for Meonstoke in 1679, or to allow reseeding of land which was then to revert to common, as at Chilbolton in 1623.\textsuperscript{18}

Present investigations have uncovered a total of sixty-four formal enclosure agreements within Hampshire, thirty-eight of which took place during the eighteenth century and a further ten during the nineteenth.\textsuperscript{19} If the convention established by Tate and Turner is followed, six of the eighteenth-century and one of the nineteenth-century agreements would be regarded as parliamentary, since subsequent to the agreement they were confirmed by a private act.\textsuperscript{20} For comparison, there were thirty-nine parliamentary enclosures during the eighteenth century, including the six confirmed agreements, and 123 in the nineteenth, including the single confirmed case.\textsuperscript{21} In other words, over 53 per cent of formal eighteenth-century enclosures in Hampshire were, in effect, by agreement, and 45 per cent involved no recourse to Parliament at all. Even for the nineteenth century, almost 7 per cent were achieved without invoking any acts of Parliament, private or general.

Unfortunately, it is not possible to present a complete picture of all enclosures by private agreement. There is, obviously, a possibility that some formal agreements have not survived, or have not yet been discovered. However, a parish-by-parish survey has revealed the means of enclosure for almost all the open-field systems which existed in 1700, and only a handful remain where a lost formal agreement is a possibility.\textsuperscript{22} Not all the awards seem to have survived, a feature not unknown even amongst parliamentary enclosures, and several agreements probably never involved a formal award, since the land may merely have been staked out in the field. Furthermore, some awards which do exist omit some of the essential details, usually because they allot an unspecified 'residue' to the principal owner. The Herriard award of 1737, for example, omits the acreages of two of the five allotments and records the surrender by one owner of unspecified common rights, thus leaving the other in unfettered possession.\textsuperscript{23} In consequence, analysis of the whole group is not possible, and the statistics presented in Appendix 2 refer only to the twenty-three awards...
FORMAL AGREEMENTS AND THE ENCLOSURE PROCESS

dating from after 1700 for which acreage and ownership details are complete. The surviving agreement enclosures of the eighteenth and nineteenth centuries could be argued to be representative of the whole, since those agreements without figures have descriptions of land and owners that are indistinguishable from those which do contain them. There are only three instances of agreements in this period where there is no direct surviving documentation of any kind, their existence being referred to in passing in other sources. It seems reasonable to treat the existing awards as representative of the whole, since survival or otherwise appears to have been a matter of chance.

Thus, a rough estimate of the amount of land affected by formal agreements after 1700, excluding those later confirmed, may be produced by multiplying the total number, forty-one, by the mean acreage per agreement, 523.28. On this basis it may be suggested that formal agreements accounted for some 21,454 acres in Hampshire, or 2.23 per cent of the whole county area. Against this, the parliamentary movement covered 138,291 acres, or 14.42 per cent. Once again, the significance of agreements to the eighteenth-century enclosure movement is stressed if this period is treated separately. The acreage dealt with by agreement may be estimated at 16,745 or 1.74 per cent of the county, while acts of Parliament of the same period disposed of 46,368, or 4.83 per cent.

From these figures it will be apparent that formal agreements, on average, tended to deal with smaller acreages than acts. In comparison to the mean figure of 523.28 acres for the surviving awards, the parliamentary mean is 880.40. Such a result is hardly surprising, since it might be expected that there would be a general tendency for unanimous agreement to be easier to achieve where the area and the number of individuals involved were smaller. However, the mean area for agreements is nevertheless substantial, and it is interesting to note that none of them involved very small acreages, as was sometimes the case with parliamentary enclosures. Only three agreements covered less than 100 acres, the smallest being Nea Common in Christchurch with 40.5; parliamentary awards, on the other hand, fell under 7 acres at Petersfield, and four involved less than 15. It seems highly likely that for such very small areas formal agreements were unnecessary: they could usually be dealt with informally, as at Lower Common, Stamshaw, or Hum Bottom, Ringwood. Where this was not possible, then the full power of the parliamentary process was necessary to achieve the required result.

As far as the type of land enclosed is concerned, the situation was very far from that implied by Jones, who states that agreements were primarily for waste and acts for open field. In fact, agreement enclosures show an almost equal balance between open field and pasture, 49 per cent as against 46, in marked contrast to Hampshire parliamentary enclosures where the proportion of open-field land was a mere 27 per cent, with pasture making up 63. It might seem logical to attribute these differences to the different nature of the two processes, since it would be reasonable to postulate that agreement should be much easier to achieve for open-field land and meadow. The splitting of such lands into individual ownership offered fewer

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44 The parliamentary figure was produced by totalling all allotments in all actual awards, and substituting estimates for those where no award exists. The county acreage (958,856) is derived from John Bartholomew and Son's Gazetteer of the British Isles, 9th ed, Edinburgh, 1966 reprint.

45 All these figures were derived by totalling the individual allotments in each award.


47 Jones, Agriculture and the Industrial Revolution, pp 26-31.

48 In each case the missing percentages are made up of common meadow and of old enclosures which were redistributed.
problems and opportunities for dispute than the division of the commons. Apart from possible difficulties over compensation for tithes, which could always be overcome by the simple expedient of continuing to pay them in kind, field division was relatively straightforward, since all rights were in proportion to the existing strips. In contrast, rights on the common might be claimed under a wide range of different headings and might be exercised over the same piece of land, forcing would-be enclosers to value, for example, fuel-gathering rights against pasture-rights, a far more complex problem which was likely to make voluntary agreement much more difficult.

One factor in this difference would appear to be simply a chronological one. Agreement enclosures were predominantly eighteenth century rather than nineteenth century in date, and nationally even amongst parliamentary enclosures field enclosures tended to dominate during the eighteenth century. More detailed examination of the temporal patterns confirms this argument. Eighteenth-century agreements show a slight majority for field land, 53 per cent arable against 45 common and waste, and eighteenth-century parliamentary awards for Hampshire show an essentially similar pattern, with 57 per cent and 37 per cent respectively.

Contrasts between the profiles of agreement enclosures and those by parliamentary act or order emerge in other respects. As would be expected, the former affected noticeably smaller numbers of allottees, with a mean of only 12.7 against the latter's 35.1. Once more, the range is also markedly different: as can be seen from Appendix 2, the agreements involved between 3 and 53, and only two exceeded 20. In contrast, parliamentary enclosures ranged from 1 to 369 allottees, and 59 per cent involved 20 or more. As was indicated earlier, parliamentary awards with few allottees tended to reflect doubts about the powers of particular individuals to enter into legally-binding agreements on behalf of their successors rather than an inability to come to an amicable arrangement: the single-owner enclosure at Hartley Wintney appears to have arisen from a desire to clarify the legal status of the common, the lord of the manor being awarded all the ordinary allotments and purchasing all the land sold to raise expenses.

II

A striking feature of the formal agreements is that they offer marked patterns both spatially and temporally. Spatially (Fig 1) they avoid almost entirely the heathlands of the county; temporally, they show a series of upsurges and troughs of activity, with peaks in the 1730s and '40s, and in the 1790s (Fig 2). Taken together, the picture presented accords very well with that produced by parliamentary enclosures. In crude terms, the latter affected the chalklands first, spreading to the south only during the Napoleonic War period and reaching the heathlands of the east of the county later still, largely after the General Enclosure Act of 1845. The predominantly eighteenth-century agreements fill in many of the gaps left in the chalklands by the contemporaneous parliamentary phase and, interestingly, the handful of later agreements show a more southerly and easterly tendency, reflecting the similar shift in the centre of gravity of the parliamentary movement. They thus reinforce the geographical pattern presented by the parliamentary movement, indicating that there

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30 After the General Enclosure Act of 1845 most enclosures were by 'Order', subsequently confirmed by Parliament, rather than by the earlier procedure of individual private acts.
31 The incomplete Herriard award of 1737 involved only two parties.
32 HRO, Q23/2/64.
was a genuine spatial spread of enclosure itself through time, rather than mere differences in the date of take-up of different methods of enclosure in different areas.

Ease of access to urban markets was clearly of no significance in determining the pattern, for the eighteenth-century agreements conspicuously avoided the coast and the immediate vicinity of the growing urban centres of Portsmouth and Southampton, even though both open-field systems and common wastes were numerous in these areas. Nor were these early-enclosed areas particularly favoured with inland waterways or turnpikes. A case might be made for Portsmouth exerting a limited influence, for Portsea Island lost
two of its communal systems, at Fratton and Milton, to seventeenth-century agreements, and a further one, Copnor, apparently to piecemeal enclosure before 1700. However, the Portsmouth system itself took a further 140 years to disappear, succumbing piecemeal to urban expansion rather than agricultural influences, and beyond the confines of Portsea Island no impact can be detected.33

A stronger case can be made for the influence of localized agricultural improvements. The progress of agriculture in the chalklands prior to 1750 is well attested, and Kerridge has argued persuasively that significant changes in agricultural methods and systems had affected the Wiltshire chalklands in the seventeenth century.34 The tight clustering of the early Hampshire agreements on the adjoining Hampshire chalklands would fit logically with such arguments: landowners wishing to take advantage of these new methods would have had an obvious incentive to enclose by whatever means seemed most convenient to them.

The foregoing discussion has concerned itself with the eighteenth and nineteenth centuries, but it may be noted that the available evidence strongly suggests that formal agreements had their greatest impact on Hampshire during this period. The parish-by-parish survey mentioned earlier indicates that the overwhelming majority of field systems existing in 1600 were still present in 1700. The same applies, though with a rather greater margin of uncertainty, to common pastures and wastes.35 Though

33 Chapman, 'Common lands of Portsea Island'.
34 Kerridge, The Agricultural Revolution, especially pp 42–51.
35 Chapman and Seeliger, Enclosure in Hampshire.
Formal agreements and the enclosure process

Further investigations may well add to the fifteen seventeenth-century agreements referred to here, it seems highly unlikely that these can be more than doubled, which is what would be required to equal the eighteenth-century total. There is, indeed, good reason to suggest that it was the 1690s which saw the use of formal methods become well-established, for four of the seventeenth-century agreements were made in this decade, and that thereafter formal agreements and acts persisted side-by-side until the nineteenth century, with the latter being used prior to 1800 only in more complex or legally difficult situations. Though enclosure by act was dominant in the eighteenth century, to ignore agreements is to underestimate the amount of formal enclosure by almost a third in areal terms: in terms of numbers of individual enclosures, agreements were even more significant, for they made up approaching half the total. Concentration on the acts also tends to distort the picture of the type of land enclosed: in proportional terms, field land was more likely to be dealt with by private agreement, and common pasture and waste by act over the two centuries under consideration.

Though these results apply specifically to Hampshire, they present a picture significantly different from the one given by the existing literature for the county, and the question must be posed as to how far such patterns might be reflected elsewhere. There is certainly evidence of substantial numbers of formal agreements in Dorset, and published work indicates even more for Wiltshire.\(^{36}\) It is also clear that there are more agreements in Sussex than shown on Tate's list.\(^{37}\) Though it is not possible to offer a comprehensive picture in the present state of knowledge, it is quite clear that an enclosure movement by formal agreement was in progress in the southern counties during the eighteenth and nineteenth centuries, and it seems reasonable to speculate that it was roughly proportional in numbers to the incidence of parliamentary enclosure in each county. Evidence from elsewhere in England makes it clear that such a picture was not unique to the southern counties. The lists produced some years ago by the then Cumberland County Record Office give no fewer than sixty agreements as against 127 parliamentary enclosures, and Lyons has recently offered evidence from Lincolnshire.\(^{38}\) Whether it was confined to the peripheral counties or extended to the midland core cannot yet be determined, but in either case significant questions are raised about the nature of eighteenth- and nineteenth-century enclosures. If the midlands were largely unaffected, agreements elsewhere would go some way to balance the preponderance of enclosures by act there, and indicate that the enclosure movement was far less regionally concentrated in the eighteenth century than has been postulated. One would also need to ask why the midlands found it necessary to adopt the act of Parliament, very largely for open-field land, when other areas of the country were contemporaneously making use of a cheaper and generally quicker means of achieving precisely the same ends. If, on the other hand, enclosure by agreement was equally active there it would imply that enclosure in some counties was almost entirely a product of the eighteenth century.

As a final comment, it must be stressed that the above analysis applies only to enclosures carried out by a formal agree-

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\(^{36}\) The Dorset total was derived from a search of the catalogues in the county record office. R. E Sandell, 'Abstracts of Wiltshire enclosure awards and agreements', Wiltshire Record Society, 25, 1969, provides totals for Wiltshire.

\(^{37}\) W. E Tate, 'A handlist of Sussex inclosure acts and awards', East and West Sussex County Councils, Record Publication, 1, 1940.

There is, in fact, increasing evidence that much enclosure in eighteenth- and nineteenth-century Hampshire was carried out without either a formal agreement or an act of Parliament. Instances of lords of the manor or their tenants enclosing by bringing whole townships into their own hands occur in the literature, as do examples of fields disappearing by simple decay and neglect of communal rights. It seems highly likely that the neglected formal agreements are themselves merely the tip of a far greater hidden iceberg of eighteenth- and nineteenth-century enclosures.

APPENDIX I

**Hampshire agreements**

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FORMAL AGREEMENTS AND THE ENCLOSURE PROCESS

APPENDIX I (continued)

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All references to documents are to the Hampshire Record Office, unless otherwise stated: for the reference to Naish, see footnote 16.
## APPENDIX 2

### Hampshire agreements with acreages

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Aspects of Horse Breeding and the Supply of Horses in Victorian Britain*

By RICHARD MOORE-COLYER

Abstract
The draft power and hauling capacity of the horse remained of fundamental importance to the economy and defence of Victorian Britain. This article seeks to examine various aspects of the supply of horses in the Victorian era. It shows, moreover, that lack of attention to selection in the female line resulted in both a quantitative and qualitative shortfall in the supply of some categories of horses, while overseas exports substantially depleted stocks of breeding animals for agriculture, trade and the Army. Shortage of supply and inefficient purchasing arrangements threatened the continuity of army remounts, and various official agencies, prompted by German successes in the Franco-Prussian War of 1870–1, reviewed the situation. The reports of the House of Lords committee of 1873 and subsequently of the Royal Commission on Horse Breeding of 1888 were little more than platitudinous and refused to recommend government involvement in equine improvement, despite the efforts of continental counterparts in this direction. However, the establishment of the Remount Department as a special branch of the Army in 1887 brought about qualitative improvements in military horses, as did the various stallion improvement schemes and premium arrangements put into motion by the Royal Agricultural Society, the Hunters Improvement Society and other official bodies. These were aimed at the generality of horses and laid the basis for twentieth-century licensing arrangements. By the beginning of that century, however, Britain was a net importer of horses and was to remain so for the next three decades.

For all the triumphalist articles in the contemporary agricultural and engineering press applauding the achievements of steam and mechanization, the horse remained the fundamental unit of power in Victorian Britain and was to retain its pre-eminence into the first decade of the present century. Agriculture, the extractive and manufacturing industries, urban and rural transport systems, and the civil and military authorities all relied, to a greater or lesser extent, on the draught power or carrying capacity of the horse. This being the case it might reasonably be assumed that a burgeoning and potentially lucrative home market would have stimulated farmers and breeders to strain every sinew in an effort to produce sufficient horses of the type and quality required. For a variety of reasons, however, contemporary sources suggest that the production of certain categories of horses fell short of meeting demand and this, combined with inadequacies in quality and conformation, meant that by the late 1880s, ‘... this country has been left for the most part with the inferior and unsound animals ... and the result has been the gradual but marked deterioration in the general breed, for which England at one time was famous’. Nevertheless, despite this, and other adverse observations of commentators noted below, the collective effort of British and Irish breeders seems, from a quantitative standpoint at least, to have gone a long way towards supplying some sectors of the general market. Assuming an average lifespan of twenty years, the annual replacement rate moved from around 100,000 in the 1870s to somewhere in the order of 150,000 twenty years later, and

* The author is obliged to the Editor and two anonymous referees for their helpful comments on an earlier draft of this paper.


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although there was a steady increase in gross imports throughout that period, the fact remains that British and Irish sources contributed to overall supply in a major way (Appendix). It is the main purpose of the present article to examine various aspects of the production of horses for the market in the later decades of the nineteenth century. As a point of departure attention will be focused on some general breeding problems and a review of some of the more important non-Thoroughbred horse types and their functions, leading eventually to a consideration of the supply of horses for the Army.

I

It was generally acknowledged in the early nineteenth century that although breeding of Thoroughbreds for the turf had reached the 'point of perfection', production of the saddle-horse had been, and continued to be, left largely to chance, with little care and attention being devoted to the selection of either parent. The choice of mares as dams of riding or harness animals was especially neglected, moving John Lawrence to write in 1809 that this was '... a prime cause of failure in casual and misinformed breeders'. Almost a generation later the same sorts of comments were being voiced. John Wilkinson, employing forms of language comprehensible to equine experts but almost impenetrably obscure to others, noted that a mare was only used for breeding when she was of little use for anything else, '... disregarding the fact that she may have a large head, ewe-neck, upright shoulders, calf-knees, long crooked pasterns, long slack back, weasel waist, short drooping quarters, short thighs, curby or cow hocks with dishing speedy cutting or slouching action'. By 1860 country gentlemen were being urged to encourage the improvement of brood-mares as a patriotic duty, while the deeply-seated tradition that '... anything in the character of a mare that has been a valuable animal on the farm will, in spite of her present condition, answer perfectly well for stock purposes' continued roundly to be condemned by the pundits.

On the male side of the breeding equation, a growing obsession with style and action among potential purchasers of riding- and harness-horses led to an over dependence on the use of Thoroughbred sires, irrespective of the fact that many of those available were both unsound and too light of bone to produce offspring of quality and endurance. To many smaller farmers, cheapness of stud fee was a primary criterion in choosing a Thoroughbred sire for their mares, while to the gentlemen breeder an exquisite and unblotted pedigree was of far greater significance than suitability of conformation. That most of the travelling Thoroughbred stallions in the country were rejects from racing yards appears to have been conveniently ignored both by farmers and breeders, while the practice among local stallion show judges of awarding premia to animals in high condition, which often obscured conformational inadequacies, merely aggravated the situation.

In the time-honoured manner, these various genetic solecisms were ascribed by many to ignorance. Ignorance there may certainly have been, but it would be naive in the extreme to neglect a variety of other factors involved both in the lack of atten-

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1 W Youatt, The Horse, 1831, p 220.
2 J Lawrence, The History and Delineation of the Horse, Albion, 1809, p 113.
tion to quality in horseflesh and in the alleged shortage of horses of various types in the last quarter of the nineteenth century. Leaving aside for the present the fact that many of the best breeding stock in the country had been sold to foreign purchasers in the decades before 1870, it must be remembered that for the working farmer the breeding of horses was a risky and time-consuming operation. Even where a man estimated that he could gain a modest profit in breeding saddle-horses for sale to dealers or well-heeled hunting folk, the interval between coming to the decision to breed and making his first sale of a three-year old horse was a lengthy one. If, for example, he had three mares suitable for breeding, he would have to maintain these mares, their foals, yearlings, two- and three-year olds before enjoying his first sale income. Not only would this represent a major commitment in time but, in view of the ruinous effect of horses on pasture land, it would reduce the numbers of other grazing animals which he could sustain if his acreage were limited. On undrained land, held at a low rental and unsuited to sheep and cattle, a farmer might afford to keep a mare or two, but a combination of land improvement (leading to increased rents) and advancing labour costs, would make the proposition less attractive. After all, where land had been drained and fenced, it would be the height of folly to use it for maintaining horses when it could be occupied by the increasingly profitable cattle and sheep. Even on the small family farm, the bastion of horse breeding in the earlier nineteenth century, when stagecoach- and post-mares, unable to stand the pace, were retired to stud at eight or nine years of age when their breeding potential was at its best. On the other hand, as increasing numbers of these animals were assigned to slower omnibus and van work, they continued at their labours until well past their reproductive prime. While this does not excuse the seeming indifference to the qualitative and conformational aspects of the breeding mare, it helps to

11 Ibid, 99 1395-9, 3446.
12 Ibid, q 2140.
13 Youatt, The Horse, p 221.
14 BPP, 1873, XIV, q 2300.
explain the frequently articulated complaints of the reproductive inefficiency of some classes of mares in the later nineteenth century.

Farmers and breeders may, or may not, have been aware of the association between working life and breeding potential. They were, however, only too aware of the obligation of providing a warranty when selling a horse to a dealer, an obligation which served as a further disincentive to breeding. A custom, rather than a codified law, the signed warranty indemnified the dealer against purchasing an unsound horse: in principle a perfectly reasonable expectation. Problems arose, however, when a less than scrupulous dealer, unable to find a market for a particular horse, managed to persuade a veterinary surgeon to pronounce the animal unsound on some trivial pretext, whereupon it was returned to the unfortunate vendor in return for the original purchase price. As Henry Phillips, a much-respected dealer and Army contractor explained to the 1873 select committee of the House of Lords on horses, 'I have known hundreds of cases where people are obliged to take back a supposedly perfectly sound animal in consequence of the opinion of some veterinary surgeon'. Such were the abuses of the system that as time went on those farmers, who had not eschewed horse breeding on account of the existence of the warranty arrangement, came to refuse to abide by it. Indeed, even the dealers themselves began to realize that the continuance of the warranty threatened their sources of supply, so that by the mid-1870s it was largely abandoned in favour of 'vetting' in the presence of buyer and seller.

II

Of the various horse types produced in the country, among the more important was the cart-horse, principally used in agricultural and urban haulage. The heavy demand from urban and industrial concerns for this class of horse meant that prices rose to unprecedented levels in the 1860s, causing organizations like the General Omnibus Company to investigate a cheaper alternative in the form of the French Percheron. The General Omnibus Company and large traders like Pickfords, whose haulage business was expanding dramatically, had been prepared to pay well over the odds to secure heavy horses with the overall effect that others requiring the services of these animals were faced with steeply increasing prices. 'The agricultural horse', declared William Shaw in 1873, while in adequate supply, '... has never been known to be so dear since England was a country as they [sic] are at the present time'. The directors of the London and North Western and London and South Western Railways doubtless agreed with Shaw’s general remarks since, in 1872, they were faced with prices of £50–55 for horses which had cost £35–44 six years previously. The effect of industrial demand and demand for local transportational tasks on heavy-horse prices was also being felt down on the farm where the high capital costs, heavy annual depreciation and questionable reliability of steam-operated equipment ensured a continued role for the horse in heavy and lighter draught work. Yet, while the high cost of work-horses was an undocumented burden for many farmers, it had the very distinct advantage of encouraging some of them to breed their own animals. Like the forthright Holderness farmer, John Thompson, many were forced to maintain brood-mares to produce working geldings for the simple reason that useful specimens

15 Ibid, q 175.
16 Ibid, q 175.
17 Ibid, q 1076.
18 Ibid, q 71–2.
were too expensive to purchase on the open market.\(^9\)

The relative contributions to heavy-horse supply made by farmer-breeder like Thompson, and the specialist pedigree men discussed below are difficult to assess. It might justifiably be assumed, however, that farmers intent upon breeding their own draught-horses would, at some stage, purchase foundation-mares from breeders at the apex of the pedigree triangle and make use of the services of travelling stallions as sires of working offspring. Having embarked upon this course their primary objective would be to secure their own draught resources and to sell any surplus to the non-farm sector. In view of the comments made earlier respecting the profitability of the grazing ruminant compared to the horse, the degree to which this activity was viewed as a serious contributor to net farm income as opposed to a mere opportunistic ‘windfall’ might well prove a fruitful area for specialist research into the economics of horse production on the Victorian farm.

In any event, the farmer intent upon breeding his own replacement draught animals would be concerned to select a sire suited to the requirements of his farm, which would depend upon soil type, topography and the system being pursued. While he might express some interest in the details of the pedigree of a particular travelling stallion, the animal’s conformation and capacity to generate power would be uppermost in his mind. Since he needed to farm at a profit, the particular published virtues of its breed or the purity of pedigree of an individual would be of little relevance compared to the suitability of that individual to sire draught replacements appropriate to the situation of the farm. What is undeniable is that, however cavalier or slipshod his attitude towards choosing sires for breeding saddle-horses (more often than not an opportunistic activity), the farmer would have viewed the selection of sires for draught replacements in a serious and professional manner.

Essentially the farmer, the drayman and the haulier had access to three distinct home-bred heavy-horse types: the Suffolk, the Clydesdale and the Shire. By the mid-nineteenth century usually designated the Suffolk Punch, the Suffolk horse had evolved in the eponymous county where it had long been distinguished by its low shoulder which allowed it to generate great power by throwing much of its weight into the collar. Throughout the early decades of the nineteenth century, infusions of both Thoroughbred and Flemish blood had transformed the compact and rather slow Suffolk ‘sorrel’ into a horse combining the qualities of strength with those of speed and action.\(^{20}\) The Earl of Stradbroke, with a lifetime’s experience of breeding heavy horses, declared in 1873 that the Suffolk Punch was now the pre-eminent cart-horse of eastern England due, in large measure, to the steadfast efforts made by farmers for several generations to improve the breed by careful selection and inbreeding of the local type.\(^{21}\) As the Suffolk horse was being created on the lighter lands of eastern England, so the Clydesdale was emerging in southern Scotland. Noted initially as a fast-working horse in light draught conditions, the Clydesdale was carefully nurtured by farmer-breeder, who created a quality light draught animal much in demand in the manufacturing towns of Lanarkshire and the northern counties of England.\(^{22}\) With the progress of the nineteenth century the Clydesdale horse, both the lighter and heavier type (the latter deriving from crosses with the Shire), attracted the interest of foreign buyers, so

\(^{9}\) Ibid, q 2117.

\(^{20}\) Youatt, The Horse, p 38; D Low. Elements of Practical Agriculture, Edinburgh, 1814, p 526.

\(^{21}\) BPP, 1873, XIV, q 229x.

\(^{22}\) Low, Practical Agriculture, p 571; R Forsythe, The Principles and Practice of Agriculture, Edinburgh, 1804, pp 384–5.
that a flourishing export trade with Europe and North America came into being in the 1880s.\textsuperscript{23}

To a considerable extent, both the Suffolk Punch and the Clydesdale became overshadowed, if not eclipsed, by the virtually ubiquitous Shire horse in the later decades of the nineteenth century. Indeed, travelling Shire stallions had been so widely used in Clydesdale country by the 1880s and 1890s that the local breed had been converted from a light to heavy draught type similar in many ways to the Shire itself. In like manner, Shire stallions had been widely used in other parts of Britain, typically in Montgomeryshire where they almost totally transformed the local undersized draught type.\textsuperscript{24} Derived originally from the massively strong Old English Black Horse of the eastern Fens, the Shire had evolved on the limestone soils of the midlands and, by the time the stud book was opened in 1878, the breed was to be found the length and breadth of the country. So great was the popularity of the animals and so buoyant the home and overseas demand both for breeding stock and working specimens, that 'a young Shire is always as good as a Bank note'.\textsuperscript{25}

If the critical comments of John Wilkinson, John Lawrence, William Youatt, and their fellow pundits were well-founded as far as saddle-horses were concerned, their stringent condemnations did not apply to the breeders of the British heavy horse who, in general, resisted transient fashions and concentrated on producing the horses of power and substance required for agricultural draught work. In stark contrast to the breeding of saddle-horses, the pedigree Clydesdales and Shires whose pure or crossbred offspring provided the primary power sources on farms throughout Britain were produced essentially by specialist breeders of great knowledge and experience. Be he in the lowlands of Scotland, the Fylde of Lancashire, the limestone country of Derbyshire or on the fens of Lincolnshire and Cambridgeshire, the heavy-horse breeder had no illusions about the importance of maintaining the quality of his product. As home demand edged up prices and the expanding market in North America siphoned off some of the second quality animals, the heavy horse began to reach a standard of quality yet to be superseded. Men like J H Truman of Whittlesea, Arthur Pratt of Suffolk and Andrew Montgomery of Netherhall, all of whom bred and exported large numbers of Shire, Suffolk and Clydesdale horses, were immensely influential in encouraging their fellow breeders towards the pursuit of excellence. Although the lucrative transatlantic market required a horse of somewhat different conformation from that demanded by the home agricultural and haulage industries, the propagandist activities of Truman and his son (who settled in Illinois and did much to foster American interest in the Shire horse), and men like the breeder and publicist Sanders Spencer of St Ives, Huntingdonshire, managed to persuade others that the British market rather than fickle overseas outlets would produce the greater profit in the longer run.\textsuperscript{26} In effect, then, the draught-horse sector was in good heart and there was a sufficiency of animals of good quality for both agricultural and non-agricultural purposes, albeit at steadily increasing prices. As long as the farm, the urban haulier and the extractive industries required equine draught power, elite breeders of Shire and Clydesdale horses would be assured of a profitable market. Some working farmers


\textsuperscript{24} K Chivers, 'The supply of horses in Great Britain in the nineteenth century', in F M L Thompson, ed, \textit{Horses in European Economic History: A Preliminary Chapter}, British Agricultural History Society, 1983, p 35.


\textsuperscript{26} The subject of the North American export market for heavy horses is currently being studied by the author.
might have been reluctant to pay the stud fees demanded by the owners of premium heavy stallions, but others were keen to upgrade their stock, while North American demand, particularly for Clydesdale horses, was to develop dramatically in the 1880s and to provide, for a few years, a welcome and highly-profitable sales outlet.

The heavy horse, be it Shire, Suffolk or Clydesdale, trudging its way down country lane or urban thoroughfare, increasingly competed for road space with coach-horses as the growing propriety of the Victorian middle classes brought about an increasing demand for travel in stylish turnout. As family coaches became lighter and more sophisticated, and their occupants increasingly concerned with style and fashion, so the eighteenth-century coach-horse, a nondescript type, '... clumsy-barrelled, cloddy-shouldered, round-legged [and] ... as fat as an ox', came to be replaced by an animal of pace and motion.27 Pace, in particular, became something of an obsession and the selection of horses for their speed, at the expense of steady dependability and endurance, attracted the disapproval of many contemporary observers, with William Youatt, in typically no-nonsense mood, observing, 'The rage for rapid travelling is the bane of the postmasters, the destruction of the horse, and the disgrace of the English character'.28

In Youatt's younger days men had been quite satisfied for their coaches and carriages to be drawn by the old-fashioned Cleveland Bay, a distinctive breed local to Yorkshire and Durham which carried neither cart-horse nor Thoroughbred blood, and was used with equal facility for riding, draught and carriage work. However, as fashion increasingly dictated high-stepping action and lighter form, Cleveland Bay mares were repeatedly covered by Thoroughbred sires to produce the Yorkshire Coach Horse, a procedure leading inevitably to a decline in stocks of the original breed.29 This decline was further accelerated by overseas exports of Cleveland Bay stock, especially to Germany where they helped in the creation of the Oldenburg and Hanoverian horses, and to Holland where Dutch breeders used the Cleveland to breed harness-horses, of which many were imported to Britain later in the nineteenth century.30 So rapid was the reduction in numbers of the original Cleveland Bay horses that whereas in the 1840s and 1850s up to twenty stallions would compete each year for premia at the Cleveland Agricultural Show, there were only five entrants of indifferent quality in 1872.31 Indeed, it was the buoyant demand from America for both the older type and the Yorkshire Coach Horse that saved the breed from extinction before the opening of the stud book in 1884. But by this time most of the best animals had travelled overseas and the bulk of the coach-horses used in Britain by the closing years of the century were imported European stock, many of them descended from Cleveland-type horses exported several decades previously.32 Not, according to the auctioneer Edward Tattersall, that foreign breeders had managed to effect much improvement. They were docile and fine-tempered indeed and, like so many foreign imports, impressively 'showy', but in contrast to the good old hardy British stock, were incapable of being driven hard since '... the next morning they are quite unfit to come out; they have lost all their action and courage'.33

Testifying to the dearth of quality riding-horses and hackneys in England in

27 Youatt, The Horse, p 32.
28 Ibid, p 35.
the 1870s, Henry Thumall, for some fifty years a respected judge at agricultural shows in eastern England, claimed that to a great extent this was ‘... owing to the goodness of the roads [since] farmers always drive now when they used to ride 30 years ago. Any little scrubby thing will draw a dogcart to market safely, but when a 15 stone man rode to market and then came back after dinner, he liked to ride a pretty good horse’. He might have added that many of those attending market and rounding off the day with ample draughts of spirits-and-water tended increasingly to use the railways for at least part of the journey to and from their farms and hardly needed to bother with a classy driving- or riding-horse. All the same, among those and others who continued to maintain riding-horses, it was widely accepted that quality was declining consequent upon the insistence on extravagant action, and the widespread use of poorly-formed Thoroughbred sires. However much Jockey Club members and men of the turf like Admiral Henry Rous might claim that the value of a riding- or driving-horse increased in direct proportion to its level of Thoroughbred blood, the fact remained that much of this blood derived from reject racing stallions often little better than useless hacks. The general-purpose riding- and harness-horse, variously termed the ‘hackney’ or ‘roadster’, embraced a variety of types ranging from the 15–16 hand animal capable of pulling a light carriage or van with high-stepping action, through to the riding cob of a genotype carrying a greater or lesser proportion of Thoroughbred blood. The celebrated Norfolk Roadster, developed in the later eighteenth century, was typical of the first type, and provided an ideal harness-horse, of which many specimens were exported to Kentucky and Virginia to produce trotting-horses, and to France where they were crossed with local cart-mares to yield heavyweight carriage beasts. In the mid-nineteenth century two Thoroughbred stallions ‘Champion’ and ‘Phenomenon’, both noted for their scope and action, were taken into Yorkshire and mated to a variety of carefully selected Roadster mares to produce ‘a superior looking breed of roadsters to the original Norfolk breed’. As with the Norfolk stock, these horses, more suited to the saddle than the harness, were extensively exported so that by the 1870s many of the best specimens had travelled overseas and quality animals were difficult to acquire either by individuals requiring a general-purpose horse or by city cab proprietors seeking replacement stock. Exports of quality breeding stock, and the use of cheaply-obtained nondescript sires was as much instrumental in the alleged qualitative decline of the English hunter as it was with the riding- and harness-horse. In the eighteenth century, when the countryside was generally more wooded and the going tougher, emphasis was placed on producing an endurance rather than a speedy hunter so that a strong, short-legged cob-type horse was considered the ideal. But as ‘scientific’ hunting evolved under the influence of Osbaldestone, Assheton-Smith and others, speed across country became the essential hallmark of the hunter and to develop this speed Thoroughbred sires were used on stout and well-formed common mares. This was perfectly acceptable where care

34 Ibid, q 2400.  
36 Ibid, q 3366; for Rous and his life see R. Mortimer, The Jockey Club, 1958, p 79.
was taken to select a sire with a staying pedigree, suitable conformation and freedom from hereditary defects. It was, however, extremely difficult to find these qualities enshrined within a Thoroughbred stallion since during the evolution of the breed virtually no attention had been paid to conformation and endurance in the pursuit of ever-increasing speed. The upshot was that while many hunters were quite capable of short bursts of high speed on hard going, they found it difficult to sustain a day’s hunting with 12 stone on their backs, and by the end of the season were so worn out as to be virtually valueless.\(^4\) In view of the association between the breeding of hunters and the supply of cavalry remounts this was seen by many as a serious problem. Contemporary critics, apparently oblivious to the relative economics of cattle and horse breeding, and the changing mode of travel of farmers, were baffled by the care and attention devoted to the selection of bulls and the seeming indifference to the choice of stallions as sires of potential saddle-horses and hunters. Hunting, after all, was a ‘patriotic’ occupation encouraging sterling qualities in Englishman and English beast, and the farmer should be a key player in the hunting field. Of course, ‘no-one would deem it right or proper for any farmer dependent on his farm for means of support to appear day after day at the covert side’, but he would nevertheless do as much good educating a young horse in the hunting field ‘... as he would be at home engaged in the most drudging occupation on the farm’.\(^4\)

\(^4\) J Burke, ‘Breeding and management of horses on a farm’, JRASE, 5, 1845, p 510.

\(^4\) J Paterson, ‘The breeding and rearing of horses for the farm, road and field’, Trans Highland and Agricultural Soc, 4th ser, 14, 1882, p 26. The expansion of hunting fields, the demands of the railways and individuals for saddle- and light van-horses were considered by some to account for the shortage of hunters, which could only be obtained at a premium. In some parts of the country, expanding interest in hunting (as in Cornwall and Anglesey) had stimulated breeding, while elsewhere, in Cumberland and Lancashire, for example, the enthusiasm of local agricultural societies had produced the same effect (BPP, 1873, XIV, qq 853, 3183).


\(^4\) For details, see, for example, R J Moore-Colyer, ‘Gentlemen, horses and the turf in nineteenth-century Wales, Welsh Hist Rev, 16, 1993, pp 47–63.


The British light cavalry establishment, traditionally reliant on hunter-type horses for remount supplies, had been allowed to decline numerically in the post-Waterloo years. Qualitatively, the unsatisfactory condition of cavalry horses had been questioned by Wellington himself while, despite the insistence of the 1844 Queen’s Regulations that they be improved, deterioration, both of horse type and training efficiency, had reached such a level that a greater part of troop horses were unfit for war service.\(^4\) Remarkably though, little official action was taken to rectify this lamentable situation and for all the concern expressed by pundits, parliamentary commissions and regimental purchasing officers, the government remained seemingly indifferent until later in the nineteenth century, taking the sanguine view that in the event of war, the patriotism of the English gentry would ensure the supply of officers’ horses of suitable stamp.\(^4\)

Essentially, the Victorian Army employed four specific horse types, leaving aside the cobs and ponies used for carrying supplies for infantry units. Mounted regiments, comprising heavy and light cavalry, required respectively horses of 15.2 to 15.3 hands capable of supporting at least 17 stone in weight, and animals of similar size able to carry up to 15 stone. Meanwhile, the horse artillery sought heavy cavalry-type beasts suited to harness work, and the field artillery active draught-horses of sufficient substance to draw a burden of one ton at a steady six miles per hour.\(^4\) By the 1840s and 1850s such horses were being purchased at between two- and three-years old and trained to full work by the age of five, after which it was hoped
that they would remain sound and serviceable for at least a further fifteen years. The policy, on the part of cavalry purchasing officers, or agents acting on behalf of the artillery, of buying at three-years old worked well enough in peacetime since general horse dealers, seeking material for the home or overseas markets, were normally only interested in four-year old animals. In time of war, however, the Army, keen to purchase any available horse, came face-to-face with the dealers in competition for the older animal. Prior to 1857, the military authorities were permitted only to spend a maximum of £26 5s 0d on a remount horse so that the confrontation was usually resolved in favour of the dealer, and regiments were left with the rump of the poorer animals, a point brought forcibly home during the Crimean War. By the end of that war the government was sanctioning prices of up to £36 for artillery and £30 for cavalry remounts, yet the continuance of the wartime policy of buying four-year old horses to reduce rearing costs and, indeed, the abandonment of three-year old purchase, meant that competition with dealers remained fierce. Besides, as the latter bought up both breeding-mares and geldings for export into the European market, so the availability of army horses declined, and continued to decline as domestic demand for carriage-, riding- and harness-horses intensified.

As evidence given before the House of Lords select committee of 1873 makes abundantly clear, overseas demand throughout the 1860s had created a shortage of horses which, in view of the time-lag between the birth of a foal and its introduction to work, was felt with some severity by 1872 and was reflected in a steep increase in prices. John East, in partnership with Henry Phillips as one of the largest army purchasing agents in the country, was forced to concede that foreigners or their agents were almost invariably able to offer higher prices than home buyers in the market for four-year old horses. On one occasion Colonel Edward Price of the Royal Horse Artillery had accompanied Phillips and East on a buying expedition which involved travelling 2827 miles to acquire a mere seventy-five horses, and with only £36 per head to spend 'the foreigners took them away from under my eyes'. Overall, maintained East, the purchase price of certain types of army horses had risen 30 per cent between 1862 and 1872, while Edward Tattersall cited evidence to show that the sales prices of 'inferior' non-Thoroughbred stock had increased by more than half, and those of 'superior' non-Thoroughbreds had more than doubled in the same period.

The alarming realization that the Germans, in a remarkably short space of time, had managed to mobilize one million horses for the Franco-Prussian War of 1870-1 stimulated the lethargic British government to set up the select committee of the House of Lords on horses in 1873. Under the chairmanship of the youthful Lord Rosebery, a man of distinguished intellectual attainments who was eventually to become leader of the Liberal Party and Prime Minister, the select committee assembled almost 400 pages of evidence concerning the supposed supply crisis. While it seemed that the hunter-type horse from Britain or Ireland was available in reasonable numbers (provided French purchasers stayed out of the market), witnesses were virtually unanimous in the view that the country would be hard-put to raise 2500 cavalry and 5000 artillery horses of acceptable quality in the course of six months, and even then many of these would have to be acquired abroad, with all the attendant risks. The contractor

47 BPP, 1873, XIV, q 1750.
48 Wilkinson, 'The supply of horses', p 93.
49 BPP, 1873, XIV, q 1026.
50 Ibid, q 1830.
51 Ibid, qq 2068-71.
responsible for buying the artillery horses used in the 1872 autumn manoeuvres admitted that some three-quarters of these animals came from France and Belgium, and that he would be ‘put to my wits end’ to obtain sufficient horses on the home market.

Witnesses before the select committee were not slow to come forward with suggestions for solving the problem of horse supply. Prohibiting equine exports, providing an ‘abundance of money’ to subsidize prizes at agricultural shows and thereby to encourage competition among farmers and breeders, together with modifying warranty customs and limiting the requirement for dealers’ licences were among some of the proposals. On the question of rationalizing the home supply of military horses, opinion was polarized into two camps. The Crimean War veteran General Robert Wardlaw, drawing on twenty-five years’ experience of buying cavalry horses in Ireland, articulated a widespread view when he suggested that the government should revert to the traditional practice of acquiring remounts at three-years old and rearing them in a depot or stud farm before despatching them to regiments. By this means, competition from foreign purchasing agents would be circumvented while farmers, spared the cost of an extra year’s keep of their saddle-type horses, would be encouraged to sell to the Army at a discounted price. Adopting this policy would ensure that the Army had a ready reserve of horses at various stages of training. Although the logic of this argument was not lost on the committee, they listened with equal interest to other witnesses who pointed out the high cost of the establishment and maintenance of depots and, for that matter, of the government maintaining its own stock of quality stallions which might be used for siring cavalry and artillery remounts. In tones which strike a familiar note in the 1990s, the committee roundly dismissed the notion of any sort of government interference in the smooth running of the horse market. ‘In a country like Great Britain, interference in such matters as this is justly unpopular, even when practicable’, and as far as the purchase of horses at three or four years of age was concerned, ‘this should be considered simply with a view to what is expedient for the Army, and not in any way with the object of encouraging or discouraging breeding in the country. And it is not disposed to recommend the formation of Government military studs ... for the supply of the English service’. In effect, beyond commending the zeal of some local agricultural societies, hinting that the government might consider supplementing the prize money offered by those societies, and effect minor changes to legislation regarding taxes on farmers’ riding-horses, the committee took a generally negative view. Unconvinced, even, by the expert evidence testifying to the overall deterioration of equine quality in Britain, the committee was opposed to the establishment of some formal means of ridding the country of unsound travelling stallions. It was all very well for witnesses to applaud the official government licensing system operating in France, but, ‘... there is not the requisite machinery in England, and even if there were, it is questionable if such a compulsory examination would not be regarded, and perhaps with some justice, as a piece of “paternal government” and as an interference with the liberty of the subject’. This view would continue to prevail until the late 1880s when the annual reports of the Royal Commission on Horse Breeding highlighted the scope of the disease problem, and the urgency of taking positive

32 Ibid, q 1723.
33 Ibid, q 348-9.
TABLE 1
Imports and exports of horses (quinquennial averages)

<table>
<thead>
<tr>
<th>Years</th>
<th>Exports</th>
<th>Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>1851–55</td>
<td>2375</td>
<td>4387</td>
</tr>
<tr>
<td>1856–60</td>
<td>2594</td>
<td>2274</td>
</tr>
<tr>
<td>1861–65</td>
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<td>1540</td>
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<td>1871–75</td>
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<td>1876–80</td>
<td>3606</td>
<td>17010</td>
</tr>
<tr>
<td>1881–85</td>
<td>6619</td>
<td>11027</td>
</tr>
<tr>
<td>1886–90</td>
<td>8117</td>
<td>13458</td>
</tr>
<tr>
<td>1891–95</td>
<td>14575</td>
<td>21896</td>
</tr>
<tr>
<td>1896–1900</td>
<td>32807</td>
<td>43755</td>
</tr>
</tbody>
</table>

Sources: Figures for 1871–1900 are taken from the Agricultural Returns; those for 1851–70, BPP, 1873, XI, Customs House Returns, appendix. Although the law did not require all horses to be entered at the Customs House before shipment, officials considered the return to be 'reasonably accurate'. The 1851–55 average is inflated by 12,800 horses imported during the Crimean War, 1853–4.

TABLE 2
Percentage distribution of imported horse types

<table>
<thead>
<tr>
<th>Years</th>
<th>Stallions</th>
<th>Mares</th>
<th>Geldings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1888–92</td>
<td>6</td>
<td>18</td>
<td>76</td>
</tr>
<tr>
<td>1893–97</td>
<td>2</td>
<td>33</td>
<td>65</td>
</tr>
<tr>
<td>1898–1900</td>
<td>2</td>
<td>39</td>
<td>59</td>
</tr>
</tbody>
</table>

action by precluding from public service any stallion afflicted with one or other of a range of hereditary disease conditions or unsoundnesses.

By this time, Britain had become a net importer of horses, the great majority of which were mares and geldings (Tables 1 and 2). The important transatlantic trade in breeding stock, and more especially of heavier horse types, was virtually halted by the financial panic of 1893 and by the succession of droughts besetting the midwestern American states in the early 1890s. Although this market was to recover for a few years before the outbreak of the Great War, and stallions and mares of the Clydesdale, Shire and Suffolk breeds continued to be exported to South Africa, Australia and elsewhere, the heady days of the 1880s when shiploads of breeding stock left Tilbury, Liverpool and Glasgow almost on a daily basis were never to return. Yet, mares, stallions and geldings still departed these shores in considerable numbers, mainly for the European market (Tables 3 and 4). Stallions of the English Thoroughbred breed continued in demand from the racing fraternity in France, breeding females of pace and action for military and leisure use found their way to studs in Germany, Holland and Russia, while worn-out 'bus- and carriage-horses were unceremoniously despatched to the Belgian meat market. Meanwhile, as the internal structure of the British economy adjusted to the creation of world markets in many commodities, horses continued to be required to fuel that economy. As a universal source of power the internal combustion engine remained little more than a future possibility while steam-powered industry, for all its marvels, still required the draught animal for feeding goods and raw materials into the system. Railway marshalling yards, coal-mines, the iron industry, short-haul transport systems, urban mass transport and local travel still relied heavily upon the horse, while steam-operated field machinery on the farm remained restricted to specialized niches. Accordingly, the exports of horses from Britain were offset by the importation of mares and geldings, principally from North America, to help meet the demands of the commercial and leisure economy and to contribute substantially to the needs of army supply (Table 2).

So far as the Army was concerned, the paranoia of the early 1870s had largely receded a decade later, and it was agreed that the peacetime establishment of 11,700 horses could be sustained by replacements from home supplies, although it was accepted that in the event of war recourse to American or European markets would be inevitable. Despite the inherent risks involved, and the fact that farmers were

"Cathcart, 'Half-bred horses', p 138."
TABLE 3
Destinations of exported horses

<table>
<thead>
<tr>
<th>Years</th>
<th>Percentage exported to USA</th>
<th>Canada</th>
<th>Germany</th>
<th>France</th>
<th>Holland</th>
<th>Belgium</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>1888–92</td>
<td>6</td>
<td>5</td>
<td>10</td>
<td>17</td>
<td>17</td>
<td>29</td>
<td>16</td>
</tr>
<tr>
<td>1893–97</td>
<td>2</td>
<td>-</td>
<td>6</td>
<td>18</td>
<td>21</td>
<td>48</td>
<td>7</td>
</tr>
<tr>
<td>1898–1900</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>16</td>
<td>15</td>
<td>36</td>
<td>5</td>
</tr>
</tbody>
</table>

TABLE 4
Percentage distribution of home-bred exported horse types*

<table>
<thead>
<tr>
<th>Years</th>
<th>Stallions</th>
<th>Mares</th>
<th>Geldings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1888–92</td>
<td>16</td>
<td>33</td>
<td>51</td>
</tr>
<tr>
<td>1893–97</td>
<td>2</td>
<td>18</td>
<td>80</td>
</tr>
<tr>
<td>1898–1900</td>
<td>2</td>
<td>31</td>
<td>77</td>
</tr>
</tbody>
</table>

* Subsequent to 1880 many of the 'home-bred' exports were themselves derived from stock previously imported from Europe.

unlikely to respond positively to any call in wartime to produce horses specifically for the Army, the authorities took a generally sanguine view. It went without saying that, "... as long as our navy is efficient we can draw our supply of remounts in wartime from all over the world at prices with which the English farmer cannot possibly compete, and it is hardly worth their while to breed horses in order to be in the market in the event of our navy failing to keep the waterways open". With the establishment of the Remount Department as a separate branch of the Army in 1887, the old system of purchasing horses through the medium of agents or regimental colonels was abandoned in favour of direct purchasing by the Inspector-General of Remounts. Animals so acquired were drafted to the remount centres at Woolwich and Dublin and first used on manoeuvres when they reached six years of age.

Whereas this arrangement ensured a uniform policy as to the quality of horses and their training, it did not address the central questions of horse supply and the fact that the Remount Department was only allowed to spend a maximum of £40 each for its horses — a figure several pounds below the value of a decent mount on the open market. The various stallion improvement schemes and premium arrangements operated by the Royal Agricultural Society, The Hunters Improvement Society and The Royal Dublin Society, although helping to eliminate hereditary unsoundness and to establish a basis for twentieth-century licensing procedures, did little to stimulate home-based horse breeding outside the Thoroughbred fraternity. When Britain blundered into the Boer War, frenetic efforts were made to procure equine replacements for the large numbers lost from sickness and chronic unfitness, by importing from Canada and the USA, to which countries the government also resorted shortly after the outbreak of the Great War. That they were obliged to requisition 140,000 horses from English farms and stables in the autumn of 1914 merely highlights the point that the 'patriotism of the English gentleman' could no longer be relied upon to furnish remounts in times of war. But this yielded ample opportunities for dealers in the Empire and elsewhere, and in excess of one million horses, principally from North America, Australasia and India, were shipped towards the Flanders mud. To the relief of all, the arme blanche proved totally inappropriate to a form of warfare in which the machine gun and explosive shell reigned supreme. The cavalry horse would henceforth be

57 Eden, 'Army remounts', p 6.
58 Tylden, Horses and Saddlery, p 23.
largely relegated to ceremonial duties, while the artillery horse, plunging through spent shell cases and shattered human torsos, would soon be replaced by motorized vehicles. Horses would become as irrelevant to modern warfare as the celebrated sentence, included in the Queen’s Regulations of 1895 at the insistence of the duke of Cambridge, ‘officers entering captured enemy balloons need not wear spurs’.

APPENDIX

Horse numbers in the United Kingdom (quinquennial averages)

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<tr>
<th>Years</th>
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a: Agricultural Returns; b: BPP, 1873, XIV, appendix A: Board of Inland Revenue Return; c: Thompson, 'Nineteenth-century horse sense'.
Farm Servant vs Agricultural Labourer, 1870–1914: A Commentary on Howkins

By RICHARD ANTHONY

IN A RECENT article in the Review, Alun Howkins has made another valuable contribution to the on-going debate on the socio-economic structure of those who worked on the land in Britain. His article follows a continuing theme which Howkins has pursued for some time, that workers involved in agriculture were a varied and complex group, a fact which has been ignored by many historians of late nineteenth-century rural Britain. At the forefront of his writings has been an emphasis on regional diversity, with a call for a full incorporation of the history of all parts of agrarian Britain.

This article is intended as a commentary on Howkins' views on the position of farm servants. In his article Howkins argues that the definition of 'British farm workers' needs reassessing for the period 1870–1914. His re-definition is based on a number of points raised both by Howkins and others since the mid-1970s:

1. The conventional tripartite model of landlords, tenant farmers, and landless labourers does not fit many sections of agricultural society.
2. Historical literature has been and remains biased towards male workers in the south and east of England.
3. A large number of those who worked on the land were peasants and servants as opposed to 'farm labourers'.
4. Servants and peasants differed from the traditional 'labourer' in their socio-economic position in society.
5. The prime causes of differentiation for servants were patterns of hiring and payments in kind.
6. Historians have tended to ignore individual and covert conflict between landowners, farmers, peasants, servants, and labourers.

Throughout this commentary the focus will be on lowland Scotland, notably the area south of the Forth-Clyde line. Lowland Scotland is a particularly good area to examine because it contained a wide range of different types of agricultural structure, both in terms of farm size and product specialization, and because its hired labour force was dominated by farm servants. In 1908 the average size of farm in lowland Scotland was 87 acres, although this varied from over 200 acres in the south-east to approximately 50 acres in the north-east.

Carter's work on the north-east of Scotland remains one of the most important contributions to modern British rural history in recent decades. Carter charted the history of the 'peasants' and farm servants in this area, and the ensuing rise of capitalist 'muckle' farmers and the demise

3 Anthony, 'The market for farm labour', p 26. Lowland Scotland is defined as all of mainland Scotland, excluding the following counties: Caithness, Sutherland, Ross and Cromarty, Inverness, Nairn, Moray, and Argyll.
of the peasantry by the end of the nineteenth century. The problem for Howkins and others is that Carter links the position of farm servants in the north-east with that of peasants, with the local dominant culture being a peasant one. In the period which Howkins considered (1870–1914), this was not replicated to any degree elsewhere in lowland Scotland, where farms were larger and production more capitalist in its nature. This is most clearly demonstrated in the failure of certain collective ‘institutions’, such as the ‘clean toon’, to occur in other parts of lowland Scotland. In fact, farm service exhibited a diverse nature. Outside the north-east the classic farm servant, who lived in the farm steading and ate in the farmhouse was not predominant, although he/she did exist in large numbers in the south-west. In the south-east hiring in family units was the norm and there is little evidence of single hiring. Howkins does indeed make the point that hiring patterns varied, but many still associate the word ‘servant’ with a live-in single worker. In southern Scotland the majority of farm servants lived in cottages as part of family groups.

What was the socio-economic position of these farm servants? Lowland Scottish farming was dominated by landowners and tenant farmers: in 1908 88 per cent of land and 90 per cent of holdings were farmed by tenants. Approximately 50 per cent of holdings were over 50 acres, which contained the vast majority of land farmed. Most production was capitalist in its nature, and was based on the inputs of landowner, farmer and worker. In Scotland farm servants formed the third part of the conventional tripartition. The vast majority of them had no expectation of the ownership of land, whether outright or as a tenant. They were, at the turn of the century, landless farm workers, with only limited links to the community of farmers who employed them. The critical change in the structure came during the twentieth century with the spread of owner-occupation amongst farmers, the so-called ‘silent revolution’. The social position of farmers and workers varied across regions and farms and there is evidence of a growing social gap between employers and workers by the end of the nineteenth century.

Undoubtedly the relations of masters and servants are not the same as they used to be ... in many places farmers are indifferent to their servants, while the servants do not take the interest which it is desirable that they should take in their master’s affairs. In districts such as the Carse of Gowrie, where the farms are large the relations are rather graphically described by one of the servants as ‘peace and nothing more’. On the other hand, I think it certain that where small farms prevail, e.g., about Dunblane, the relations are more cordial, there being no such gap between the social position of master and man as upon the large farms.

Howkins regards farm servants, as a group, as socially different from landless proletarians. Exactly who is the ‘agricultural proletarian’, the straw man that Howkins admits he is creating, is unclear. Perhaps this is an abstract creation in an effort to sound radical. Scottish farm servants were predominantly landless workers, who worked for capitalist employers, that is, farmers who aimed to make a profit. Yet Howkins claims farm servants were differentiated from labourers through patterns of hiring and payments in kind.

The most extensive contemporary survey of Scottish farm servants, undertaken by the Board of Trade in 1907, found that perquisites accounted for 28 per cent of weekly wages. However, such a statistic hides widespread regional variations. In the north-east perquisites were a third of total wages, while in the south-

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6 Anthony, 'The market for farm labour', chs 3 and 6.

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6 Anthony, 'The market for farm labour', chs 3 and 6.
east they were approximately 15 per cent. They were declining and less important part of wages than cash. During contract negotiations, perquisites were often based on local custom, and the real negotiating points were the position in the labour hierarchy an individual would attain and the resulting level of cash payment. For those on nearly full cash wages in the south-east, perquisites were dominated by the provision of tied housing, particularly cottages, which had developed from the requirements of capitalist farmers for a secure labour force during the late eighteenth and early nineteenth centuries. For a modern comparison, in East Anglia during the early 1970s, Newby estimated that farm workers received 11 per cent of their wages in kind and as tied housing. Howkins never clarifies exactly how a payment of a minority of wages in kind, including tied housing, makes farm servants any less 'landless proletarians' than the agricultural labourers of East Anglia. The provision of board and lodging to single workers in the north-east and south-west was actually used by farmers to emphasize their superior economic position: servants were often given poorer food and ate at different times.

The system of hiring associated with farm servants had two important facets, long-term contracts and set-term dates. The termination of contract dates focused negotiations for future employment conditions on particular times of the year. This included not only the actual hiring fair dates, but also the months prior to the fair. Servants in southern Scotland stayed on a farm for an average of three to four years. The result was that most negotiations took place outside the hiring fair, on the farms where servants were presently employed. Following the successful bargaining, servants were then in secure employment for the next six or twelve months. This removed the pattern of structural conflict that Howkins has identified for eastern England. Bargaining was evenly weighted between employer and worker, and both had their 'reputations' in the labour market to consider. However, farm servants were still landless 'proletarians', and they respected the economic position of the farmer as their employer.

This is not to say that conflict did not take place; it certainly did. There has emerged a tradition in recent literature, of which Howkins admits he is a part, stressing the underlying positions of conflict between farm labourers and their employers. It is too easy to take limited evidence of conflict and suggest that it was the norm. Research on farmer-worker relations in early twentieth-century southern Scotland indicates that, even in areas of large average farm size, conflict was uncommon, and was usually small-scale, and limited to specific issues. This stems from the fact that the hiring system encouraged servants to remain with their present employers until the end of the term and then move on to another employer; for individual disputes, conflict was not the

10 BPP, 1910, LXXXIV, Report on an Enquiry by the Board of Trade into the Earnings and Hours of Labour of the Workpeople of the United Kingdom. V: Agriculture in 1907, p 31.
14 Carter, Famdf, pp 157–8; Anthony, 'The market for farm labour', p 284.
answer for a farm servant, moving on was.19

However, farm servants did prove capable of proletarian collective action, a fact demonstrated by the emergence of the Scottish Farm Servants' Union in Aberdeenshire during the early 1910s, an area associated with 'peasant culture'.20 The Scottish Farm Servants' Union proved just as successful as its English counterpart, the National Agricultural Labourers Union, and it organized a major farm servant strike in East Lothian in 1923. Not surprisingly, its major areas of support were ones of large average farm sizes close to unionized urban and mining districts (the Lothians, Fife, and the counties near to Glasgow).

What was the difference between the Scottish 'farm servant' and the English 'agricultural labourer'? Farm service basically meant a particular form of labour contract, but certainly in lowland Scotland it was associated with a primarily cash relationship between employers and workers, and the possibility of overt collective action. The most important consideration for rural historians is not 'what label to give the landless rural workforce', but what was their socio-economic position and how did this affect their relations with each other and their employers? Some farm servants had a relatively 'proletarian' relationship with their employers, with extensive labour hierarchies, cash wages and socially distant employers (as in the south-east of Scotland). For others it meant, living on the farm, having meals with the farmer and his family, often with the possibility of progressing to a tenancy of their own.21 The challenge for historians is to extend the study of farm labour out of the workplace and into the communities that workers lived in: only by a detailed understanding of these communities as well as the values of employers, can we hope to understand what went on in the labour market.22

Here we have much to learn from the work of sociologists, particularly Newby whose work is often misconstrued by historians.23 Newby asked three basic questions:
1. What was the situation at the place of employment?
2. How did workers relate to their immediate communities?
3. What were the wider opportunities for workers economically and socially?

In answering these questions the historical literature has undoubtedly been southern and male oriented. It is good that some of the southern historians have now recognized the weaknesses in the national applicability of their work.24 Research is beginning to emerge from other regions stressing a more complete view of rural employment and the communities in which the workers lived.25 The present danger is of getting caught in a sterile labelling debate concentrating on who is a 'landless agricultural proletariat', 'servant' or 'peasant'. Those who worked on the land lived in a myriad of social, economic, cultural and political conditions. Let us expand our understanding of them rather than creating straw men and women.

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21 D W Howell, Land and People in Nineteenth-Century Wales, 1977, ch 6; Carter, Farmlifs.
Farm Servant vs Agricultural Labourer, 1870–1914: A Reply to Richard Anthony

By ALUN HOWKINS

I AM DELIGHTED with Richard Anthony’s careful and clear corrective to my over simplistic remarks about Scotland. Nevertheless, I would wish still to hold to my general points. Firstly, my ‘straw man’ was and is a device, but ‘he’ remains an essentially real figure in much writing at least about, or derived from a model based on, southern and eastern England. My central concern here was with predictive model building. The notion of ‘proletarian’ in a social history sense is usually ultimately derived, whether those who use it like it or not, from Marx. As such it brings with it a load of intellectual baggage about political and social behaviour. As a result many of those who use the concept have sought, hitherto in vain, for ‘proletarian’ behaviour, especially a recognizable socio-political consciousness. This is to misunderstand the concept, at least in a Marxist sense. To Marx the key elements of a ‘proletariat’ were not only the extraction of surplus value or the lack of anything to sell but labour power (landlessness in our case), but also the socialization and division of labour. Simply being ‘poor’ or ‘a worker’ is not the same as being a ‘proletarian’ in this sense. It is in Marx’s sense that I would use the word. It is clear from the most cursory examination that farm work was socialized and divided, if at all, only on large cereal farms in the east of England and Scotland, and then, sticking my neck out, only for a brief historical period say between the 1850s and the 1920s. As I said it is perhaps striking that these areas, the Lothians and East Anglia, produced the most tenacious ‘proletarian’ organizations.

Secondly, and in a more general sense still, my interests at one level are clearly at variance with those of Anthony. As my intellectual origins are at least in part in sociology these thoughts led to my concern about how we can build a model of a predictive, or at least explanatory, kind (a project I take to be a central part of social history) which deals with the socio-political behaviour of the rural workforce. Put crudely, at a time (c 1880–1920) when the majority of the British working class were organizing their own institutions and were increasingly militant, why did a significant group (the rural poor) remain outside this process? While not wishing to deny local and specific factors, this lead in turn to my schematic sense of three kinds of ‘worker’, just as earlier it led to my notion of ‘structural conflict’. This is not to deny conflict but rather to seek perhaps different forms of conflict which might find expression outside ‘organized’ labour disputes. I cannot see that anything Anthony says conflicts with this unless it be a general distrust of explanatory and predictive models.

The main thrust of Anthony’s criticism lies in my treatment of farm service. While farm service clearly has many regional and local manifestations it remains obviously different from a social situation where hiring by the week is the norm and where the worker lives in a community separate from the workplace. For example, as Anthony says of Scotland ‘bargaining’ for hiring and yearly wages while based on a farm is very different (as it was in, for example, Northumberland where similar practices to those described by Anthony...
were often the norm) from weekly off-farm hiring. Further, the social separation of the servant from his peers (even on large family hiring farms) and the fact of living on the farm, even if not in the house, were seen by contemporaries in England at least as creating 'bonds' between master and man which were not there elsewhere. Wages in kind obviously vary in value and in social and cultural nature, but Wilson Fox's 1900 and 1905 figures for East Anglia are very different from Newby's 1970s figures, showing a variation from less than 3 per cent to about 8 per cent, the latter only for men in charge of horses. Wilson Fox also notes that most farms paid nothing in kind although piecework payments were common. This is supported by my own oral material for Norfolk. All I would suggest is that farm service creates different kinds of social relationships from those of 'farm labour' which produce different kinds of conflict or perhaps, as Pretty suggests for parts of Wales, virtually eradicate conflict.

Finally, Anthony argues for seeing farm work in a community context: here I agree absolutely. The work/wage relationship is clearly not the only one which effects behaviour. Nevertheless, I am enough of a 'social scientist' to want to see this relationship investigated, and 'modelled' — something conspicuously missing from my essay.

1 A Wilson-Fox, Wages, Earnings and Conditions of Employment of Agricultural Labourers in the United Kingdom, 1905.
How societies in the past achieved economic take-off is an issue of considerable interest and concern for historians and academics in general. That it is a complicated matter almost everyone agrees, if for no other reason than that such economic take-off has proved elusive for so many countries today. Nor are these questions limited solely to recent centuries. Examples of such economic take-off are by no means restricted to the industrialized world, and could often be very wide-ranging over time and geography. Indeed, it can be argued that studying these earlier cases - take-off in embryo, as it were - will provide a clearer picture of the sequence of events leading to new levels of economic development.

Medieval England is, in many ways, an ideal society to study in this regard. Its economic development was at a relatively early stage, yet, as with the rest of Europe, it was undergoing a fairly remarkable economic transformation up to the end of the thirteenth century in particular. Furthermore, the documents for this period in England survive in remarkable numbers, not only in the famous example of Domesday Book but also in the wealth of manorial records from the thirteenth century onwards, which are unique for Europe, if not the world, at this time. Nevertheless, although there are certainly some notable achievements, systematic work on this wide-ranging and diverse body of material has only just begun. Of particular interest is the emergence of large, multi-personnel projects, relatively new for the medieval period, that have begun to apply increasingly stringent approaches to the surviving documentary material.

The book under review here, A Medieval Capital and its Grain Supply, comes from just such a collaborative effort. The overall project, called 'Feeding the City', has been jointly organized by Bruce Campbell, from the Queen's University of Belfast, and Derek Keene, from the Centre for Metropolitan History (Institute of Historical Research, University of London). Its primary aim is 'to investigate the impact of London's [medieval] demand for food and other supplies on the agriculture and on the distribution systems of the metropolitan hinterland', the assumption being that the 'growth or otherwise of cities, of the urban systems of which they were a part, and of the agriculture that supported them, were inextricably linked'. An impressive array of data, ranging over the thirteenth and fourteenth centuries, has been collected by two full-time researchers, James Galloway and Margaret Murphy. Of primary importance for the project are demesne farming accounts and inquisitions post mortem (detailing manorial land and other assets, especially again those of the demesne), both of which sources survive in very large numbers for the period under review. Also, the project incorporates large amounts of data from urban records, particularly those dealing with merchants who were prominent in organizing London's food supply.

A critical issue for such projects are the boundaries that the organizers decide to set for themselves, and here the project requires careful scrutiny. For the purposes of the first part of the project and the volume under review here, one of the crucial decisions was to set the study in a fairly narrow time-frame around the year 1300. This was an eminently sensible choice, since the beginning of the fourteenth century marked a time of peak economic activity and population growth and thus...
provides a very useful datum line to assess economic activity before and after.\(^1\)

On the other hand, the geographical limits were much more problematic, partly because, in some ways, it involved second-guessing the results. Ideally, in order to provide as much area as possible to test the project's theoretical hypotheses, it might have been advisable to set the area covered as widely as possible, surveying, say, all of south-east England, with its western and northern boundaries stretching from Hampshire through Oxfordshire and Northamptonshire round to Cambridgeshire and Norfolk. Clearly, funding and other concerns led Campbell and Keene to opt for a more limited geographical coverage, focusing on the ten counties (in clockwise order) of Kent, Surrey, Berkshire, Oxfordshire, Northamptonshire, Buckinghamshire, Bedfordshire, Hertfordshire, Middlesex and Essex, which the authors have designated as the 'London region'. In effect, the emphasis geographically is very much upon the Thames basin, since seven of the counties border on the Thames, while another — Hertfordshire — is linked by a tributary, the Lea. Conversely, Bedfordshire and Northamptonshire, not being connected to London through inland waterways, seem peripheral, as indeed the data ultimately suggest.

In addition to this geographical limitation, the project also has a rather single-minded focus on the demesne sector. While this is largely forced by the survival of sources, the almost complete absence of the peasant sector in the data is particularly problematic, especially as that sector fanned something like two-thirds of all cultivated land. For the purposes of the study, the authors have assumed that local practice would dictate that, within a particular region, both sectors would operate more or less in concert in terms of farming methods, and thus the patterns revealed by an analysis of demesne farming could be taken 'as broadly diagnostic of the rural economy as a whole'.\(^2\) While Campbell et al clearly recognize the fragility of this assumption,\(^3\) on many occasions, however, the potential differences between sectors gets pushed back too far from the analyses (as I shall discuss below).

Nevertheless, from the start, one can say that A Medieval Capital is very impressive. Although it deals with the supplying of grain only to London, it is obviously an important topic and one that certainly deserves a full-length treatment. Of particular note is the sheer mass of reading background that is brought together by the authors. The detailed knowledge of the historiography of grain supply, not only of medieval England but also from a wide range of other areas and time periods, is readily apparent and provides a solid theoretical grounding for the project. In fact, the 'Feeding the City' team takes a rather narrower theoretical framework than one might expect, in that they have opted to analyse their results predominantly from the perspective of Johann Heinrich von Thünen's early nineteenth-century model, which postulated that pre-industrialized cities created specialized zones of agriculture around themselves that were determined largely by transport costs.\(^4\) Such a tight theoretical focus does, however, tend to enforce methodological discipline, which is a particular strength of this work.

Another strength of the volume is its clarity. The methods used in this work are primarily those of historical geography and are consistently presented in an imaginative and thoughtful way. As a result, the monograph is a mine of interesting and stimulating material. Nor is it at all a timid work. The authors are certainly willing to comment on large and controversial issues, particularly in chapter IV and part of chapter V, when they extrapolate from their calculation of the London region's food-producing capabilities to reassess the overall population of England c. 1300 and also (more indirectly) of London itself. Somewhat surprisingly, their conclusions go against the current trend of revising these figures upwards and claim that the population of England overall was unlikely to have been more than 5,000,000 and that of London probably not much more than 80,000.\(^5\)

In terms of analysing London's effect upon the countryside, the core of the book revolves around the detailed assessment of crop data from the demesne accounts of 204 manors. As might be expected, the patterns of crop production and disposal did display great complexity. Broadly speaking, von Thünen's model does seem to apply, especially in regards to production, in that crops like wheat, which bore transport costs more easily, were the specialties of demesnes much further away from London. Of particular interest was the concentration of demesnes along the upper Thames, especially from Henley down to London, which produced very notable levels of rye or rye-mixtures (that is, maslin and 'mancorn' — wheat-rye and rye-barley combinations respectively), which were clearly destined for lower-class consumption in the capital.\(^6\) Similarly, the proportion of grains actually...
sold showed a marked response to metropolitan influences, although the influence here was less obvious than for production because of the tendency of many of the demesnes in the account sample, especially those from monastic or collegiate estates, to transfer much of their grain directly to estate headquarters, thus bypassing the market.

There were some areas in the region, however, where the influence of London upon agriculture was seemingly either non-existent or distinctly ambiguous. One was the Nene valley in northeastern Northamptonshire, a high productivity area which seemingly displayed a much stronger connection to the ports of the Wash through the pull of overseas markets. More intriguing is the case of Kent, the most impressive grain-producing area in the London region, particularly in its eastern parts, but one, which despite its close proximity to London, seems not to have been tightly connected with the London market at all. This was most clearly evident in price data, which showed Kent often having grain prices 30 per cent or higher than those prevailing in London. For most of the book the authors are remarkably coy about the reason for this, and only in the conclusion are they forthright in bringing up one of the more likely reasons — overseas demand. If so, then we have the curious situation that overseas demand might have been playing a stronger role in the mobilizing of agricultural production of Kent that the presence of London virtually next door. The authors clearly did not want to get into the implications of this in this particular volume, but it leaves a decided question mark in the study.

One of the more intriguing analyses in the book concerned the influence of transport costs. The functioning of the Thames as an important water transport artery, with principal termini at Henley upstream of London and Faversham downstream, is clear not only in the crop production and disposal distributions, but also in the activities of London cornmongers which were very strongly Thames-oriented. As an expression of this, the 'Feeding the City' team inventively mapped transport costs from London, in the form of isopleth lines of equal transport cost from London (like isometric lines on an ordnance map). Due to the notable cost advantage of water transport, these isopleth lines were elongated along the Thames and around much of the coast of south-east England. Clearly demesnes that had relatively easy access to water transport had a great advantage over those that were relatively land-locked in being able to compete in the London grain market. Although the exercise did not take into account such complexities as those introduced by peasant farming (discussed below), it is path-breaking as a way of vividly illustrating the impact of medieval transport costs.

There are many other good things in this book. In chapter VIII the authors provide an excellent overview of the different strategies adopted by different types of estates (royal, lay, ecclesiastical) regarding the disposal of grain, whether consumed on the manor, transferred directly to estate headquarters, or sold on the market. Surprisingly it was episcopal estates who sold the greatest proportion (59 per cent) of their grain on the market, followed fairly closely by royal (52 per cent) and lay estates (49 per cent). Conventional and collegiate estates — not so surprisingly — came last by a good margin (26 per cent), opting instead to transfer rather more grain directly to their monastic or collegiate headquarters. Although the contradiction between production for subsistence (emphasizing the need for a stable output) and for the market (tending to encourage the increase in output) introduced a complicating factor for demesne agriculture, geographically some areas clearly produced more for the market than others, most notably northern Kent and along the Thames valley upstream from London with a notable cluster of market-oriented demesnes around Henley. Here the Henley-Faversham axis along the Thames had a notable effect, particularly for very marketable grains like barley and wheat, but it certainly was not enough to shift demesnes overwhelmingly towards market production, and, even within a few miles of London, some estates chose to maintain subsistence-oriented policies on their demesne. Nevertheless, market activity was strong enough to maintain a vibrant market structure in London itself. Chapter VI, although misleadingly entitled 'Links between Producers and Consumers' (since the links discussed are between producers and cornmongers rather than the actual consumers themselves), nevertheless provides much useful and fascinating information about, among other things, the numbers and status of cornmongers, the average size of their transactions, the seasonal patterns of sales and prices, the distribution and size of granaries, trading regulations, credit arrangements, and market information and intelligence. The end result of this

16 Ibid, p 155.
17 For example, Britnell, Commercialisation, p 118.
18 Ibid, pp 156-70.
20 Particularly the dean and chapter of St Paul's Cathedral in London: Med Cap, p 149.
excellent chapter is to show how much the grain market (at least as practised by commongers) resembled that described by F. J. Fisher for London three centuries later.\footnote{Med Cap, pp 107–10.}

But useful as this analysis of demesne agriculture and commonger activity is, is it nonetheless an illusion as far as describing the total economy? For one thing, the self-reinforcing nature of the materials and assumptions employed in this study are all too obvious. It is hardly surprising that a combination of demesne accounts and extents from inquisitions post mortem (emphasizing large-scale farming), an analysis of commongers (emphasizing well-to-do corn dealers largely based around London’s dock-side markets) and the geographical limits chosen (effectively the Thames basin) would give an interpretation of the grain trade as being largely water-borne, reasonably large-scale and commercialized. Indeed, it is interesting that the presence of commongers in London declined just at about the same time as the decline of direct demesne farming,\footnote{Ibid, p 82.} suggesting perhaps that commongers could not maintain the same links with the more locally oriented demesne leasees than they had formerly with estate owners and their administrators. The possibility is, then, that the interconnected nature of the sources used by the ‘Feeding the City’ team, far from giving a broader view of the metropolitan grain trade, is simply tending to reinforce a more detailed view of a particular sector of that trade.

This problem is especially marked in the authors’ transport-cost analysis, which is based on the assumption that transport services were commercialized to the degree that they were seen as ‘real’ costs across all sectors of society. While this possibly applied to water-borne transport, where the owners of boats may have considered them as pre-eminently cash-raising assets that were not tied to other more subsistence-oriented activities,\footnote{This may be a debatable assumption, since it implies a considerable degree of professionalization on the part of boat operators on the inland waterway system. Yet, as with carts, the ownership of such boats seems to have been very dispersed and often connected with other activities than carrying, as at Ramsey, where the 15 boats recorded in the lay subsidy return of 1290 were scattered among 15 owners, many of them fishermen: J A Rafis and M P Hogan, eds, Early Huntingdonshire Lay Subsidy Rolls, Toronto, 1976, pp 47–56.} it is much less clear for land transport. First of all, although the ‘Feeding the City’ team comments on the frequency of horse-hauled carts on demesnes,\footnote{Med Cap, pp 56–9.} these facilities were swamped by those owned by peasants, probably by at least five-to-one and possibly very much more,\footnote{\textit{Med Cap}, pp 107–10.} and a similar domination also probably occurred between peasant and urban sectors.\footnote{Ibid, p 82.}

Secondly, it is likely that these peasant transport resources were usually very underemployed, since they were viewed by peasants as convenient accessories to the peasant holding in general rather than being primarily for the market.\footnote{\textit{Med Cap}, p 193.} Certainly, they were idle for much of the year, and so, for example, could easily satisfy the often very heavy transport demands for purveyance campaigns.\footnote{\textit{Med Cap}, pp 231–5.} In terms of hauling his own grain and other goods to market, however, it is likely a peasant’s carting facilities in effect were very nearly costless for most of the year.\footnote{\textit{Med Cap}, p 193.} Such a situation would put them in a very favourable situation-market-wise against those for whom transport costs were very real, such as...
commmongers and possibly demesne owners whose carting facilities may have been overstretched. It may even have undercut the advantage of water transport, since peasants might have been willing to go quite long distances to take advantage of favourable price differentials. If so, for the peasant sector, transport-cost isopleths around London would be much more like von Thünen's concentric circles (and with a much more gradual cost gradient) than the 'Thames-distorted version created by the 'Feeding the City' group. This would also reconcile evidence recorded in 1305 for very heavy cart traffic into London that the authors felt constrained to explain away in their emphasis upon a water-borne supply route for London.

Perhaps the most important aspect of all of this is that it emphasizes very much the dual-sector nature of London's grain supply. Indeed, away from access to water transport, the peasant sector may have been so competitive that it effectively froze out the demesne sector, hence the fact that in the presentations by the 'Feeding the City' people, the intensity of demesne agriculture, especially for the lower-price grains, seems to fade away relatively quickly away from access to water transport. Where demesne production probably held its greatest advantage over the peasant sector was for the overseas trade, where advantages of high-level contacts, the ability to supply very large amounts of grain, easy access to water transport, and a greater propensity to bear capital investment (such as for storage areas) may have been important. Hence, it may be no accident that the high productivity areas for demesne farming as a whole across England seem to be found along the coast in places like eastern Kent, eastern Norfolk, north-eastern Northamptonshire and Holderness, all with good access to overseas markets. On the other hand, the relative weakness of London to mobilize demesne production in its immediate hinterland to the extent, say, of eastern Kent may simply reflect the competitive situation that existed between demesne and peasant agriculture around London. This does not diminish the importance of London as a force for mobilizing production, but it does make it critical to realize that it was acting on (at least) two separate sectors in two distinctive ways. Indeed, recognition of this point raises the possibility that the impact of London was far greater than that indicated by the 'Feeding the City' people, in that taking the two sectors together, or even the peasant sector alone, the area influenced was much more widely diffused than indicated in this volume. As a result, we are increasingly in danger of focusing too narrowly on a sector which - after all - may be very unrepresentative of medieval English farming as a whole.

To avoid this pitfall, we need to inspect the possibilities of examining peasant agriculture much more effectively and systematically than we have in the past. One of the unfortunate effects of A Medieval Capital is that it imparts a certain pessimism about the possibilities of studying medieval peasant agriculture. Yet, there is good reason for optimism. Aside from work that has been done on aspects of peasant agriculture, there are many possibilities for future work. As one example of a particularly ignored source in terms of systematic study, peasant inventories have the potential of transforming our knowledge of medieval peasant farming. Occurring in court records of every type, often as the result of confiscations for felonies or debts, peasant inventories often supply considerably useful data. A few have been able to supply yield data, and many more list sown crop acreages and

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19 As indicated by manorial accounts, which often show demesne carts working year-round without any appreciable break: Langdon, 'Economics', p 33.
21 This is most obvious in the fifteenth century, from such sources as the Southampton brokerage books, which show people with carts and pack-horses making impressively long journeys (for example, O Coleman, ed, The Bookage Book of Southampton, Southampton Record Series, vols IV, VI, 1960-1, esp pp xxiii-xxxvii), but earlier purveyance accounts also impart a strong sense that small-scale carriers were well accustomed to travelling long distances, as for the 20 carter who were hired to take provisions for the king's army from Nottingham to Berwick-upon-Tweed in 1301: PRO, E101 580/3, m 4.
23 Med Cap, p 31.
25 Perhaps most strikingly seen in the 'Feeding the City' team's analysis of demesnes in the top decile percentage-wise for specialization in the various grains produced on demesnes (pp 14-15) and in their analysis of cropping intensity as an inverse relationship to the amount of winter-sown crops grown (pp 129-32).
animals. Although it would take a great amount of work, a systematic search of manorial rolls, coroners' rolls, eyre rolls, extents of debts, even central court records, would certainly provide a sample in the hundreds if not thousands. At the very least they provide a potential source of comparison with the demesne material, and, as innovative techniques for measuring early modern yields from probate inventories have emerged in recent years, it may be possible to do more with peasant inventories than currently seems likely.

These must only remain possibilities for the moment. *A Medieval Capital* proves in an exciting and imaginative way what can be done on medieval agriculture with sufficient data. At the very least, the connection between agricultural and urban development has been well established in this study and has provided valuable clues as to how early societies could achieve some elements at least of economic take-off. Finally, even if it should turn out that the findings of *A Medieval Capital* are less broadly applicable than the authors would like us to believe, the book does provide a first-class analysis of what was happening in the demesne sector, making it all the easier for future work on peasant agriculture to site its findings effectively.

*A good example found recently in the coroners' rolls by the author while looking for transport information concerned the confiscated lands and chattels of Roger son of Nicholas de Wodecote of Woodcote (in Ashby de la Zouch, Leicestershire), who, in early August, 1336, held 24 amble acres, of which three were sown with wheat, three with barley, and ten with peas. His stock consisted of two oxen, two horses, and two cows (PRO, JUST 2/25, m 2).

*In my study of draught animals, for instance, it was relatively easy to gather together a sample of 52 peasant inventories, mostly taken from secondary sources: Langdon, *Horses, Oxen*, p 178.*

Annual List and Brief Review of Articles on Agrarian History, 1993

By RAINÉ MORGAN

 Casting the net wider this year to include articles from books as well as periodical literature results in a bumper catch, including a number of historiographical essays. Amongst them, Sheail (309) draws attention to the emotive beginnings of research in ecological and environmental history, and the need for a new approach to provide a more balanced view of the human impact upon the natural world. Bellamy et al (24) discuss ways in which the study of popular culture can be used to redress the bias towards the elite that has dominated historical writing, Phythian-Adams (274) proposes an agenda for studying underlying structures of society at the local level, and Beynon (30) considers the use of social class as the basis for a general conceptual framework through which to analyse social change. There is a growing volume of literature on the use of information technology. Dunn et al (105) focus upon CAL (computer assisted learning) in their annual review of developments. Although few packages offer much for higher education the Microcosm multimedia programme is noted for its pioneering technology. Methods for digitizing primary source material are described by a number of practitioners including Helsper et al, Thorvaldsen, van Horik and Welling (169, 338, 354, 366), and Schenk (305) examines the use of CAD and GIS systems for the reconstruction of large-scale historical field systems and land use. The wealth of information available to historians on the world-wide computer network 'at the click of a mouse' is described by Southall (330) while at the level of the individual project Bouchard (40) presents a new computer-based method involving family reconstitution to measure degrees of literacy in the past.

Research by prehistorians on early landscapes and human impacts highlights the mounting interest in the dynamics of long-term environmental change and the vital contributions of pollen analysis in reconstructing the past. A pollen sequence from Oxfordshire, for example, discussed by Day (95) demonstrates that ancient woodland cannot be assumed to represent relics of original post-glacial woodland cover. Pollen analyses also underpin Whittington and Edwards' challenge (371) to the belief that the Roman army had a minimal impact on the environment of northern Britain, while Barber et al and Dumayne's palynological studies (12, 104) contribute to the long standing debate over the level of deforestation at this time. The environmental impact of prehistoric mining in Wales, particularly in relation to the use of woodland, is investigated by Mighall and Chambers (242) using pollen data. Similarly, Thompson and Stevenson (345) chart the decline of heather in upland Britain and Ireland since 1400 in relation to livestock husbandry and afforestation. On prehistoric settlement and economy Price's detailed analysis of Dartmoor (280) finds no expected association between sites and environment, nor can pastoral activities fully explain the pattern and it is concluded that tin extraction was the major underlying link. Bogucki (36) argues that the ownership of cattle for draught in neolithic society provided a source of household differentiation and access to status, power and wealth. The view that cattle had an important symbolic as well as economic value is stressed in Davis and Payne's study of an unusual bone assemblage (92) while Fairweather and Ralston's investigation of plant remains from Grampian (115) support the belief that bread wheat may have been grown in its own right in prehistoric Britain.

Major articles on medieval source material mostly focus on Domesday Book. Jackson (191) uses the contemporary meaning of Domesday terminology combined with traditional historical method and statistical analysis to argue that the Normans used ploughlands for determining manorial value. In a fresh approach to the question of the purpose of the Domesday inquest Higham (172) considers the political context of its birth and proposes that it functioned as a device to reconcile the Norman establishment to the royal cause by ensuring that military costs were evenly shared. Palliser (269) considers the reliability of the Yorkshire text as an indicator of land laid waste and concludes that it is too disorganized and incomplete to be used as a

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Footnote: Publications are dated 1993 unless otherwise noted. References to articles or off-prints should be sent to the Bibliographical Unit, Rural History Centre, University of Reading. The Master Index containing over 40,000 classified references on British agrarian history can be consulted by appointment.

Ag Hist Rev, 43, 1, pp 73–89
straightforward indicator of society and economy in the north. Harvey (163) provides a detailed account of unique medieval documents which provide the only systematic record of the rights and obligations of workers and tenants on an English estate. On the late Anglo-Saxon economy Jones (198) draws our attention to important developments when price-making markets replaced gift and exchange, and Fleming (119) repudiates the traditional segregation of towns and rural elites, demonstrating that the relationship between them was in fact a close and significant one. The belief that transportation in medieval times was costly compared to later periods and an obstacle to growth is challenged by Masschaele (237) in the light of new evidence from sheriffs' accounts, and Langdon (217) uses purveyance records to illustrate the inadequacies of inland water transport which, it is argued, accentuated the differences between economically advantaged and disadvantaged areas. Bailey (9) broadens the research agenda for the urban economy to include an assessment of local marketing networks of towns and villages, and Carter's local study (63) reconstructs the hierarchy of overlapping networks of towns and villages, and Carter's local study (63) reconstructs the hierarchy of overlapping social and economic relationships which formed an urban centre's hinterland. On family structure Razi (288) uses court rolls to observe the interactions of kinship between the thirteenth and sixteenth centuries in order to demonstrate that the familial system underwent a major transformation over the period due to demographic, institutional and economic change. Studies of women dominate the literature on medieval society. Biller (31) examines pastoral manuals for insights into social and demographic patterns, and in a wide ranging comparative work on European household formation Smith (323) links the state of the labour market and kinship patterns to the propensity of women to marry. Goldberg (135) seeks to establish how far there were real differences in the degree to which women were able to influence decisions regarding marriage over time, and between town and countryside. The issue of female employment in the English village as reflected in the court rolls of a Staffordshire manor is addressed by Graham (142). Her conclusion is that a marked sexual division existed with women dominating the intermittent, less stable, less specialized trades. The unchanging nature of female employment is also considered by Bennett (26) who asks why such dismal characteristics have been retained over so many centuries. In assessing the expertise of noble women as estate managers Archer (6) finds that no area was closed when circumstances demanded and that power and achievement could be immense. The pattern of personal pledging in manorial courts is discussed by Postles (278) in relation to kinship and office holding, while Biddick (30) examines the powerful yet unacknowledged ways in which the division between anthropology and history has influenced the study of the medieval peasantry.

On the medieval agrarian economy Persson (273) proposes a method for ranking regions or nations according to their labour productivity, and Mate (238) reopens the Brenner debate on agrarian class structure in a detailed regional study of the Sussex land market. Here land tenure was more multi-layered and society more complex than Brenner allowed for and it is argued that the different experiences of England and France were rooted in their respective legal systems rather than class structures. The results of intensive research into Norfolk farming between medieval and modern times are reported by Campbell and Overton (61). Their evidence on crop proportions, crop yields and livestock demonstrate a remarkable advance in land productivity during the medieval period, but it was after 1740 that the most rapid and profound transformation is identified.

Writings on estate management are even more ubiquitous than usual in the early modern literature due to Hoyle's important edited work on crown property. He and Thomas (183, 342) emphasize the failure of the crown to maximize returns during Elizabeth's reign when lands were used as a source for patronage to reward loyalty and for capital. The benign neglect and then open hostility by the Queen to the duchy of Cornwall is documented by Haslam (164) who cites the diversity of tenures as a further problem underlying the steep decline in the duchy's fortunes during the sixteenth century. The attempts to raise revenue by reforming management of crown property through afforestation, 'improvement' of wastes and drainage are discussed by Think (339) who shows how the results generated little revenue for the monarch but much hostility from those who lost lands or common land in the process. The difficult and often compromising method of improving crown revenues is also highlighted in Large's in-depth local account of disafforestation (218). Hoyle's essay (182) explores the motives attached to new management policies and demonstrates how the increase of employment and food supply were anticipated at the beginning of the seventeenth century, but by the 1620s cynical manipulation of the law by the crown in order to squeeze pecuniary advantage from unprofitable assets replaced the earlier idealism. The importance of office holding and administration on crown estates is underscored by Gray (148) who shows how in Wales it was one way out of the straightjacket of small estates, partible inheritance and colonial status which prevented landowners from exercising power in government. In
a further article (147) Gray describes the tangle of interlocking partnerships which operated in the market for crown land. The management of enemy estates during the Civil War is analysed by O'Riordan (267) and Ketch (205) interprets data on landowners in the Civil Survey for County Waterford. The political events which underpinned a further article (147) Gray describes the tangle of feudal lords to disciplined functionaries and more or less prudent estate owners are described by Goodare (137), and Baskerville et al (18) demonstrate that deference and the ideology of paternalism were important factors in the voting behaviour of English freeholders in county elections during the eighteenth century.

The need not to take maps at their face value is stressed by Bendall (25) who describes rare sixteenth-century examples illustrating vividly how their design for use in litigation distorted the representation of contemporary landscapes. Hey's examination of the ballad (171) demonstrates its range of meanings and shows how folkloric elements can be related to other forms of historical evidence. Poyster (123) also uses popular ballads to explore popular attitudes to marriage and to demonstrate how they helped reinforce traditional order. Grievance and popular revolt are recurring themes. Howkins and Merricks (180) explore the meaning of ritual and symbolism in manifestations of protest in early modern times and detect elements of continuity even into the twentieth century. Bush's analysis of the 1536 rebellion (54) suggests that grievances were largely directed against taxation and landowners who were overriding the custom of tenant right. A re-examination of the Scottish plantations in Ulster by Hill (174) concludes that close cultural affinities with the Irish explain the absence of serious conflict. Proudfoot (282) undertakes an investigation of social protest in Ireland during the eighteenth and nineteenth centuries to show that it did not depend solely on a colonial dialectic but instead reflected fundamental social and economic inequalities, reinforced by colonial transformations. The allegiances of nobility, gentry and peasant farmers in the English Civil War are discussed by Blackwood (35), and Wood (180) links conflict over land rights in early mining communities to technological and organizational developments in the lead mining industry. Popular attitudes to turnpikes are discussed by Freeman (124) who relates the extent of opposition to pre-existing systems of road maintenance, and Dyck (106) focuses on William Cobbett, maintaining that his main aim was to create a rural radical platform that addressed the experiences and political consciousness of agricultural labourers. A number of articles discuss the concept of proto-industrialization, including Kriedte, Ogilvie and Mager (213, 264, 233), and Gray (146) presents a regional study of Irish linen production in order to demonstrate the importance of gender in uneven patterns of development.

A leading issue in research into the eighteenth and nineteenth centuries relates to the controversial problem of living standards. Komlos (211) offers a critical assessment of the major study of data on height by Floud et al derived from military records, and presents new data on colonial runaways (210). His main finding is that for those of English origin heights declined from the 1720s, whereas Irish runaways were heavier and suffered no equivalent deterioration until after mid-century. Nicholas and Oxley (239) use height data of female convicts to chart trends in living standards between the 1790s and 1820. Findings suggest that while Irish nutritional levels slowly improved, English women's standards fell, and those in the countryside fell most of all in the face of a shrinking demand for their labour. Although northern labourers are usually represented as favoured in the case of real wages, Richardson (291) demonstrates how sharp price movements over the short term could have a devastating impact on living standards and were a potent cause of distress and protest in Lincolnshire for example. Cullen's article on Irish diet since before the advent of the potato (86) explains its advance in terms of the desire to sell grain for cash and consume potatoes as an alternative. The investigation of Irish workhouse food provision and nutrition by Crawford (82) reveals how diets deteriorated significantly when potatoes were replaced by cereal substitutes. Gibson and Smout's discussion of Scottish dietary changes (129) explores possible causes of the reduction in animal based food and increase in cereal consumption, and Collins (76) questions why wheat replaced other food grains in nineteenth- and twentieth-century Europe. The pattern of dental caries since Roman times is charted by Moore (252) who finds the level of decay closely correlated with the consumption of refined sugar, and Nelson (258) provides a systematic review of differences in diet between different social classes since the 1860s.

On primary source material Baker (11) asks to what degree the values of the tithe rent charge bear a direct relationship to the agricultural output of a parish and can be used reliably as a surrogate, and Hill (173) argues that censuses can serve only as a very general guide to women's employment, with little value in comparative studies. The research potential of documents which arose out of the Finance 1909-10 Act for population studies is considered by Short (315), and Rawding and Short (286) provide a case study to demonstrate how they
can throw light on landholding and landownership patterns in Edwardian England. Elites continue to attract attention. On their positive roles Moore-Colyer (248) describes how the Welsh landowners were instrumental in shaping much of the landscape and contributed to the preservation of wildlife within it, while Fletcher (120) stresses their involvement in urban growth and the railways. Scottish landowners are shown in a less favourable light by Devine (98). He argues that Highland emigration was not simply the result of population pressure and distress but was related to the changing priorities of landlord policy and widespread coercion, and Cowan's study of emigrants from the borders (80) gives the restrictive and neo-feudal practices of the landowning classes as the cause of a deep sense of alienation prompting the nineteenth-century exodus abroad. In another illuminating study of English landed society Thompson (346) explores the fluctuations in wealth and influence during the last century and the changing public perceptions of this enduring elite. On lesser mortals, Snell (327) looks behind the deference of the rural poor to ascertain from contemporary witnesses the deep-rooted sense of grievance flowing from a multitude of issues including the poor law and enclosure, and Howkins' investigation of hiring practices (179) throws light upon the often overlooked family, female and child agricultural workers. Grieves' analysis of recruitment in the First World War (152) stresses the breakdown of paternalism and traditional deference which led to more egalitarian content in the enlistment process, and Woodeson (381) uses oral testimony to show that recruits to the Women's Land Army were responding to personal motivation rather than the patriotic sentiment to which they were subjected.

On farming Dodgshon (101) provides a detailed account of systems in the Highlands and islands, from eighteenth-century estate records and literary sources, teasing out some of the strategies that lay behind them. In a shift away from the usual preoccupation with southern England open fields and small farmers Rogers (294) focuses upon the social impact of waste land enclosure in a Lancashire village which prompted acrimonious dispute and wiped out the cottager class, and Searle (308) examines the motives of a small group of customary tenants who played a leading role in the enclosure of Cumbrian commons. Neave's study of settlement contraction to the East Riding (257) during the seventeenth and eighteenth centuries considers enclosure and emparkment, although the link with the nature of landholding is also emphasized. A useful synthesis and overview of changes in Ireland's agricultural economy between 1850 and the First World War are provided by Turner (350) including statistical indexes, and Breathnach (44) identifies the key developments in the Irish dairy industry. The adoption of the milking machine in England is investigated by Collins (75) who explains why compared to other mechanical innovations it was so slow to take hold. In his account of marling Mathew (239) argues that it was not merely a marginal device employed to raise the body of light soils but contributed in a significant way towards reducing soil acidity within the advanced mixed-farming system. The unacknowledged and crucial contribution of horses in the First World War is described by Singleton (320) who documents the vast sums spent transporting animals from remote corners of the globe to the battlefields.

The role of government is prominent in research on agrarian topics. Aalen (1) explores the wide ranging state aided programmes for rural reconstruction in late nineteenth- and early twentieth-century Ireland, and Bull (50) assesses the significance of the nationalist response to the Irish Land Act of 1903. Johnson (194) examines the Irish Gaeltacht Commission Report of 1926 and explains why it failed to support the survival of the Irish language. The interplay of politics and ideology in the Highland land issue is explored by Cameron (59), and Anthony's detailed examination of the agricultural labour market in Scotland (5) shows how the nature of institutional intervention can be an instructive guide to the balance of power between employers and workers. The failure of a weak and divided agrarian lobby to counter a government committed to cheap food is discussed by Moore (251) in his study of the removal in 1922 of the ban on cattle imports, and Tsokhas (348) demonstrates how during the Second World War the British government's desire to purchase the Australian wool clip was constrained by Australia's own commercial and strategic objectives. Environmental issues are featuring more prominently in the literature. Sheail (308) focuses upon problems posed for the environment during the inter-war period by newly established beet sugar factories and the milk processing industry, and highlights the values of the partnership forged between the scientific community and the industry itself to limit pollution. In another study (310) Sheail underscores the dramatic loss of rural land to urban development which created pressures on the sanitary infrastructure and water supply, leading to a more co-ordinated and comprehensive approach to drainage. The interplay between farming, the environment and politics during the last fifty years is reviewed by Bishop and Phillips (34), and Brown (49) focuses upon advertising in the countryside during the inter-war period. He points out that oil companies were responsible for the
worst aesthetic offences but as popular opposition mounted they shrewdly adopted a green image and resorted to alternative methods of advertising.

1. Aalen, F. H. A., Constructive unionism and the shaping of rural Ireland, c 1880–1921, Rural Hist, IV, 2, pp 137–64.


6. Archer, Rowena E., ‘How ladies... who live on their manors ought to manage their households and estate’: women as landholders and administrators in the later Middle Ages, in Woman is a Worthy Wight, P J P Goldberg, ed, 1992, pp 149–81.


12. Barber, K. E. et al., Climatic change and human impact during the late Holocene in northern Britain [Roman deforestation], in Climate Change and Human Impact on the Landscape, F M Chambers, ed, pp 225–36.


15. Barnard, T. C., Historiographical review.
et-20th century Irish stem family; a case study from County Kerry, in Approaching the Past, M Silverman and P H Gulliver, eds, 1992, pp 205–35.

33 Birdwell-Pheasant, Donna, Irish households in the early twentieth century: culture, class and historical contingency, Jnl Family Hist, XVIII, 1, pp 19–38.

34 Bishop, K D and Phillips, A A C, Seven steps to market – the development of the market-led approach to countryside conservation and recreation, Jnl Regional Studies, IX, 4, pp 315–38.

35 Blackwood, B G, Parties and issues in the Civil War in Lancashire and East Anglia, Northern Hist, XXXIX, pp 99–25.


37 Bolam, P M, National Sheep Association – 100 not out, Jnl Royal Ag Soc Eng, CLIV, pp 171–83.


42 Boyer, G R [Review article], England’s two agricultural revolutions, Jnl Econ Hist, LIII, 4, pp 915–23.

43 Bradley, R, ‘For I would ask a question of them all’: reflections on the prehistory of the south west of Ireland in Past Perceptions, E Twogood and M Ronayne, eds, pp 131–4.


56 Charlesworth, A, From the moral economy of Devon to the political economy of Manchester, 1790–1812, Social Hist, XVIII, 2, pp 205–17.


58 Cheape, H, The Red Book of Appin: medicine as magic and magic as medicine, Folklore, CV, 1–2, pp 11–23.

59 Cherry, G E, Changing social attitudes towards leisure and the countryside in Britain, 1890–1900, in Leisure and the Environment, S Glyptis, ed, pp 22–32.

60 Childs, Wendy R, Devon's overseas trade in the late Middle Ages, in The New Maritime History of Devon, M Duffy et al, eds, 1992, pp 79–89.

61 Clark, R J et al, Indigo, woad, and Tyrian purple: important vat dyes from antiquity to the present, Endeavour, XVII, 4, pp 191–9.


64 Collins, E J T, Food adulteration and food safety in Britain in the 19th and 20th centuries, Food Policy, XVIII, 2, pp 95–109.


68 Cooney, Gabriel, A sense of place in Irish prehistory, Antiquity, LXVII, 256, pp 632–41.


82 Davis, S and Payne, S, A barrow full of cattle skulls [Symbolic as well as economic value of cattle in prehistoric Britain], Antiquity, LXVII, 254, pp 12–22.


ANNUAL LIST AND BRIEF OF ARTICLES ON AGRARIAN HISTORY, 1993


140 Graham, B J, The high Middle Ages: c 1100–c 1350 [Settlement], in An Historical Geography of Ireland, B J Graham and L J Proudfoot, eds, pp 58–98.


145 Gray, Jane, Gender and plebian culture in Ulster [c 1770–1820], Jnl Interdisc Hist, XXIV, 2, pp 251–70.

146 Gray, Jane, Rural industry and uneven developments: the significance of gender in the Irish linen industry, Jnl Peasant Studies, XX, 4, pp 590–611.


152 Grieve, K, 'Lowther's Lambs': rural paternalism and voluntary recruitment in the First World War, Rural Hist, IV, 1, pp 55–75.

153 Guinnane, T, The Poor Law and pensions in Ireland, Jnl Interdisc Hist, XXIV, 2, pp 271–91.


155 Hadfield, A, English colonisation and national identity in early modern Ireland, Eire-Ireland, XXVIII, 1, pp 69–86.


159 Harley, D, Pious physic for the poor: the lost Durham County medical scheme of 1655, Medical Hist, XXXVII, 2, pp 148–66.

160 Harris, P M, One hundred years of agricultural education at Reading University, Jnl Royal Ag Soc Eng, CLIV, pp 145–63.

82

THE AGRICULTURAL HISTORY REVIEW


170 Hazelkorn, Ellen, 'We can't all live on a small island': the political economy of Irish migration, in The Irish in the New Communities, P O'Sullivan, ed, 1992, pp 180-200.

171 Helgerston, R, Nation or estate?: ideological conflict in the early modern mapping of England [Saxton and Nordon as county and estate surveyors], Cartographica, XXX, 1, pp 68-74.


181 Hopkins, A, Deserters from the plough [Historians' perspectives on 19th-century rural Britain], Hist Today, XLIII, Feb, pp 32-8.


183 Howkins, A and Merrick's, T, 'Wee be black as hell': ritual, disguise and rebellion, Rural Hist, IV, 1, pp 41-53.


188 Hoyle, R W, Resistance and manipulation in early Tudor taxation: some evidence from the north, Archives, XX, 90, pp 158-76.


194 Jackson, C B JR, How the Normans determined Domesday Book manorial values for Essex county, Albion, XXV, 1, pp 1-22.


196 Jarvis, Claire, The reconstitution of nineteenth-century rural communities, [Central Essex], Local Pop Studies, LI, pp 46-53.


198 Johnson, M, investigations of a multi-period landscape, Potter Brompton [Vale of Pickering],

Johnson, M H, Rethinking the Great Rebuilding, Oxford Jnl Arch XII, 1, pp 117-25.


Kennedy, L and Clarkson, A, Birth, death and exile: Irish population history, 1700-1921, in An Historical Geography of Ireland, B J Graham and L J Proudfoot, eds, pp 158-84.


King, Margaret H, Marriage and tradition in fishing communities [Eastern Scotland, c 1800 to the present], Rev of Soc Culture, VIII pp 58-67.


ANNUAL LIST AND BRIEF OF ARTICLES ON AGRARIAN HISTORY, 1993


Nicholas, s and oxley, Deborah, The living standards of women during the industrial revolution, 1795–1820, Econ Hist Rev, 2nd ser, XLVI, 4, pp 723–49.


Ogivie, Shelagh c, Proto-industrialization in Europe, Continuity and Change, VIII, 2, pp 159–79.


Palladino, P, Between craft and science: plant breeding, Mendelian genetics, and British universities, 1900–1920, Tech & Cult, XXXIV, 2, pp 300–23.


Phythian-Adams, C, Local history and societal history, Local Pop Studies, LI, pp 30–45.


Postles, D, The changing pattern of male forenames in medieval Leicestershire and Rutland to c 1350, Local Pop Studies, LI, pp 54–61.

Postles, D, Personal pleading in manorial courts in the late Middle Ages [Three manors in Leicestershire], Bull John Rylands Univ Libr, LXXV, 1, pp 65–78.


Proudfoot, l j, Regionalism and localism: religious change and social protest, c 1700–1900 in An Historical Geography of Ireland, B J Graham and L J Proudfoot, eds, pp 185–218.

Proudfoot, l j, Spatial transformation and social agency: property, society and improvement, c 1700–c 1900, in An Historical Geography of Ireland, B J Graham and L J Proudfoot, eds, pp 219–57.


Raftery, b, Recent developments in Irish wetland research [Wooden trackways provide insights into early woodworking and woodland management], in The Wetland Revolution in Prehistory, B Coles, ed, 1992, pp 29–36.


Richards, b, Howard did poor people emigrate from the British Isles in the nineteenth century? Jnl Br Studies, XXXII, 3, pp 250–79.


RIDGEWAY, C, Gardens, earthworks and Justice, Jnl Garden Hist, X, 2, pp 137–54.

RYDER, M T, Christopher Columbus, livestock and human disease, Ark, XX, 2, pp 50, 63.


SHEAIL, J, Taken for granted – the inter-war perspective, Jul Hist Geog, XIX, 2, pp 433–47.

SHOEMAKER, R B, Using Quarter Sessions records as evidence for the study of crime and criminal justice, Archives, XX, 90, pp 145–57.


SHRADER-FRECHETTE, K, Locke and limits on land ownership, Jul Hist Ideas, LIV, 2, pp 201–19.


STEVenson, J, Social aspects of the industrial revolution, in The Industrial Revolution and British Society, P K O’Brien and R Quinault, eds, pp 520–53.


SWANSON, R N, Clergy in manorial society in late medieval Staffordshire, Staffs Studies, V, pp 13–34.

TANNER, M F, Recreation, conservation and the changing management of water resources in England and Wales [From the 19th century to privatization], in Leisure and the Environment, S Glyptsis, ed, pp 96–115.


THOMPSON, B, Free aims tenure in the twelfth century, Anglo-Norman Stud, XVI, pp 221–43.


TURNER, M, Rural economies in post-famine Ireland c 1850–1914, in An Historical Geography of Ireland, B J Graham and L J Proudfoot, eds, pp 293–337.


URDANK, A M, Quantification and social history: a reply to Jeffrey Cox, Jnl British Stud, XXXII, 3, pp 280–2.


VAN HORIZ, RENE, Recent progress in the automatic reading of printed historical documents, Hist & Computing, V, 2, pp 68–73.


VON FRIEBURG, R, Der Letzte ‘Landwar’ in
BOOKS CITED


BAKENSEIT, S et al, eds, Kultur und Staat in der Provinz: Perspektiven und Erträge Der Regional-
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By JOHN R. WALTON

The 1994 winter conference, held jointly with the Historical Geography Research Group of the Institute of British Geographers, took place on Saturday, 3 December at the Institute of Historical Research, London. A varied diet of papers was on offer, the theme ‘Social Relationships in the Countryside’ imposing no serious constraints on content or treatment.

Dr Richard Smith (University of Cambridge), in a paper entitled ‘Social and economic responses to dearth on three manors of the Abbots of St Alban and Bury St Edmunds, 1280–1322’, presented the interim results of a continuing study of the consequences of subsistence deficiency during the late thirteenth and early fourteenth centuries. While historians in general have found it difficult to demonstrate that dearth was any more than an indirect cause of increased mortality, Dr Smith considered it unlikely that Livi-Bacci’s interpretation of the historical demography of recent centuries, which sees subsistence and mortality as two largely unrelated variables, would hold good for the century before the Black Death. Mead Cain’s explorations of land market activity in the village of Char Gopalpur, Bangladesh during the 1970s provided instructive parallels with events in similarly high-risk environments in medieval East Anglia. Distress land sales soared in dearth years, the numerous transactions between kin apparently testifying to the shortcomings of the extended family as a support mechanism. The paper ended with a plea for ‘enthusiastic comparativists’ to consider why the early fourteenth century was starvation-prone when the period of subsistence difficulty in the late sixteenth and early seventeenth centuries was not.

The paper by Dr Barry Harrison (University of Leeds), ‘Housing and customary tenure in a Pennine valley: the parish of Grinton in Swaledale (North Yorkshire), 1620–1700’, began by outlining the landholding and settlement history of the dale, laying particular emphasis on the pronounced population increase of the fifteenth and early sixteenth centuries. The earliest surviving vernacular building dates to 1634. This marked the beginning of a century or so of remarkable building activity, prompted in part by the tenants’ attainment of tenurial status almost equivalent to freehold. Most of the resulting houses are small, simple and uniform three-cell structures. Much discussion focused on the appropriate interpretation of several properties which apparently never had an agricultural function.

The lunch break was the occasion of a presentation to Dr Joan Thirk in recognition of her recent award of the CBE for services to agrarian and local history. The formal conference programme then recommenced with Dr Roger Wells (University of Brighton) speaking on ‘Mr William Cobbett, Captain Swing and King William IV’. Finding much to criticize and less to praise in the work of other students of the period, Dr Wells presented a detailed diagnosis of events in east Sussex and Kent, and especially in the town of Battle, during the years 1829 to 1831. Agricultural distress, pro-French meetings, Cobbett’s lecture tour and his subsequent trial, incendiaryism, Swing, and pro-Reform agitation were interconnected in this area to a degree hitherto unappreciated. As well as the principal players of the title, the dramatis personae included Treasury solicitor and government agent Moore, arsonists or alleged arsonists Goodman, Bushby and Inskipp, and the Sussex bench as recipients of the King’s Christmas hospitality.

In the last paper of the day, Dr Richard Smith (Royal Holloway) presented ‘Two routes to crofting: Nordic and Gaelic Highlands compared’. Although similar in outward appearances, crofting in the west Highlands and western isles had quite a different history from its less well-known counterpart in Shetland. With no clan tradition, but a system of laird and tenant, Shetland crofting originated in the tenurial tradition which obliged all tenants to participate in the islands’ export-oriented fishing economy. Intensification of the system during the eighteenth and nineteenth centuries led to conditions reminiscent of the densely-populated mainland, and the critical attentions of the 1871 Truck Commission.

Dr Peter Dewey (Royal Holloway) was thanked for organizing another successful conference, his sixth and last before the responsibility passes to Dr John Broad (University of North London).

Ag Hist Rev, 43, 1, pp 90
Book Reviews


This volume is the proceedings of an international conference held at Bellagio in 1989. As with all such synopses the essays presented were quite diverse in their subject matter and in the way their authors interpreted such concepts as ‘productivity’. The word is slippery to use and we are not much enlightened at the end of the volume as to its usefulness in historical terms. At this conference, however, the organizing principle was quite faithfully set out and followed, at least in outline. All the authors attempted to pitch their contributions on the historical experience of agricultural productivity, though some adhered to a dynamic interpretation and others were overborne by the statistics of traditional peasant regimes. The semantics of ‘productivity’ are discussed by the editors and the precept laid down in the Introduction was to investigate the causes of (and obstacles to) gains in physical output through time, nationally, regionally or sectorally. The result is not wholly satisfactory but the concentration of academic fire power on the interpretation of an enigma is impressive.

The papers, as published, are various in another respect. Some are specific explorations of the problems laid out in the Introduction: others are pièces d’occasion in its other signification. Recycling ideas or data is no bad thing in the interests of cultural diffusion, when the opportunity is apposite or when the author provides evidence of renewed thought or speculative innovation. Several in this volume, however, have tended to fire the boiler lightly and locomotion is discontinuous towards a clearer understanding of the theme animating the conference. One suspects that more was learned in the hotel bar or the trattorie of Bellagio than has appeared in print.

Part of the difficulty is of the editors’ making. The Campbell-Overton conspectus of the historical tracing of productivity trends is too well known – for it has been much advertised – to refresh the international debate. The nature of their interest in the positive, but not necessarily effective or extensive, contribution of innovations to agricultural development has prompted two distinct responses: first, how to relate the concept to real experience in a periodic scale that differed markedly in divergent essays; and secondly, how to show that the orientation imparted to the discussion by the editors’ work will not fit particular circumstances, without openly repudiating their guidance. Several papers, especially those on medieval England and the Low Countries, take the concept seriously and produce interesting data to underpin the argument about productivity, but at the expense, particularly in the two Winchester papers, of a clear perspective. Campbell also seems to force his material into a procrustean bed of model-building when he could have stressed the theme of diversity which his data command. But the chief problem arises with the second sort of paper, for instead of a specific analysis there resulted, on Italy or Ireland, for instance, papers which are constructed around a basic theme that defies specificity. It is interesting to learn what O’Brien and Tonido or Turner and O Grada have given and their essays in fact are among the most interesting in the collection, but they are not papers determined by the overriding principle of the conference.

Having said that I find the structure of the volume deficient in rigorous cooperative interpretation and ratiocination by the editors and contributors, I should like to commend several individual essays for the outstanding quality of their argument and the clarity of their exposition. I intend to pass over in silence articles I found stale, unconvincing or defective. Among the very good, I count Tony Wrigley’s excellent ‘Energy availability and agricultural productivity’, which addresses a real problem and runs through the pros and cons with panache, George Grantham’s equally illuminating essay on French labour productivity in the wheat districts and Robert Allen’s thoughtful comparison of ‘two agricultural revolutions’ in England between 1450 and 1880.

To sum up, this is a very useful book with much in every paper to stimulate thought or provide valuable information. The papers are well written and creditable to their authors. Too much of the volume is déjà vu perhaps and nobody has effectively addressed the problem of colligation. A farmer who had read the book observed to me that he could not ‘feel the soil’ in the essays. They were too cerebral in the general sense that almost all academic writing on economic history is divorced from the practical experience of men. Altogether, I think the volume will ‘do’ for the investigating classes who will use it most often.

B A Holderness

Shorthorns, which accounted for about two-thirds of all the cattle in Great Britain in 1908, were (in their northern dairy form at least) a rare breed in 1975. There were over 100,000 Lincoln Curly Coat pigs in this country when the breed was first shown at the Royal Show in 1907; they were extinct by the late 1960s. Does it matter if a breed disappears? It could be argued that recognized and tightly defined breeds of livestock, with all their accoutrements of breed societies, herd books, shows, and judging points, are a relatively recent phenomenon, beginning in the eighteenth century, flourishing in the nineteenth, and coming under increasing pressure from the livestock breeding companies and their population geneticists in the late twentieth century. On the other hand, in addition to their intrinsic historical interest, it might be suggested that there is always the possibility of rare breeds having characteristics which, although presently obsolescent, may be demanded again by farmers if circumstances change. This is the argument which has been so successfully advanced by the Rare Breeds Survival Trust over the last twenty years.

It is perhaps surprising and regrettable that, to judge from the formal contacts between them, the members of the BAHS know little of the Rare Breeds Survival Trust (the RBST), for their interests clearly overlap at some points. Those agricultural historians who wish to inform themselves of the activities of the RBST since its formation in 1973 now have a handy work of reference to which they can turn. The trust's prehistory is traced back to the Zoological Society's puzzlement about the best way to deal with a few domesticated animals kept at its Whipsnade zoo, and succeeding chapters describe the legal, organizational, and fundraising problems of establishing the trust, the technical problems involved in conserving genetic resources (stock imports, semen banks, surveys, breeding programmes, registration programmes, and even the question of what is a breed), the people involved, and the way the trust communicates with its members and others through its journal, The Ark, and its workshops, conferences, shows and sales. One of the authors (Alderson) has been closely involved with the trust almost from its inception, and his detailed knowledge of all the old and continuing arguments and decisions is apparent, although there are a few awkward moments when he is himself one of the protagonists in the story.

Whether or not the book can justifiably be described as a history must depend on one's definition of history, and there is insufficient space here to do justice to this question. Perhaps 'chronicle' would be a fairer description for what clearly sets out to be more a report of the trust's activities than any analysis of why things have happened. Here is much detail but rather less setting of the detail in context. The authors assume a reasonable knowledge of rare breeds and their history in their readers, which may be justifiable if they believe that their readers will be drawn from among the members of the trust, but restricts its usefulness to others. We are told (p 59) that membership has risen from less than 100 in 1973 to more than 10,000 now, and it might have been interesting to have had some discussion of the reasons for this growth. Other similar organizations (for example, the Woodland Trust) underwent similar expansions at the same time: did the RBST expand for the same reasons? How important has the expansion of farm parks been in raising the membership? What proportion of the membership actively keep rare breeds? What proportion of rare breeds are kept as a visitor attraction? The book is littered with the names of the socially and agriculturally well-connected; how important were these connections? And how much of the success of the trust has been due to the immense amount of money and effort put in by one or two people?

Clearly this is a book which will be immensely useful to future historians of rare breeds and the rare breed conservation movement. It might have been still more useful with references, and the authors have not been well served by what was presumably their publisher's decision to maximise the print and minimise the margins and spaces on each page.

PAUL BRASSLEY


P HARRIS, The Silent Fields: One Hundred Years of Agricultural Education at Reading, Department of Agriculture, Reading University, 1993. xi+175 pp. Illus. nps.


When future agricultural historians attempt to account for the growth in agricultural output in Britain in the second half of the twentieth century, one of the variables they will have to look into is the impact of agricultural education. Has education merely provided the icing on a cake baked by other hands, or has it provided the vital raising agent without which the whole thing would have fallen unpalatably flat? Have the agricultural colleges provided essential training for successive generations of farmers and farmworkers, or have they just provided a finishing school for the sons and a few daughters of the better-off farmers and landowners? Have
their products been snapped up by farming or mainly used by the ancillary industries? Has their main contribution been in research or training? Is it, indeed, possible to make an academic subject out of a practical calling like agriculture?

Given some interest in these questions, the appearance of these three books is therefore welcome. And given institutional propensities to mark their own anniversaries, it is no accident that they should all appear at much the same time, for they are centenary histories, and the 189os were a great decade for the foundation of agricultural colleges. This was partly because the county councils, established in 1888, were given some responsibility for technical education, partly because the Board of Agriculture, established in 1889, was allowed to spend a few thousand pounds each year on education, and mainly because of the passage of the Local Taxation (Customs and Excise) Act of 1890. This provided for a duty to be raised on beer and spirits to compensate the publicans of superfluous public houses whose establishments were to be closed down. The temperance movement was outraged by this endowment of the publicans, the government needed some uncontroversial purpose towards which the money could be diverted, and so it was decided to pass it to the county councils to be used for technical or agricultural education. Hence the rash of agricultural colleges and university departments established in the 1890s and financed by what became known as the 'whisky money', among which were the subjects of the three books under review here.

To some extent they all tell the same story. There are the pioneering days before the First World War, with very few staff, who spent a good part of their time with extra-mural classes (the principal of the Essex County Laboratories had a £15 annual motorcycle allowance in 1911) and few students, the majority of whom took the national diplomas rather than degrees, with heavily scientific syllabuses. The combination of the teaching, research and advisory functions continued into the First World War, when there were also the women of the Land Army to train, and beyond. The inter-war years formed a period of slow but more or less steady expansion ('stability and consolidation' is the phrase used by Richards for Wye), and the Second World War again involved research, advice, maximizing the production of the farms, and teaching the Women's Land Army. With the establishment of the National Agricultural Advisory Service after the war the universities and colleges lost their advisory function, but teaching and research expanded, until the final phase arrived in the 198os, with the relative decline in the number of agricultural students and diversification into related areas from the rural environment to horses and floristry. And if there are similarities in the stories, so are there similarities in all three books, as they cover administrative issues and describe the working and playing of the students and the research of the staff, all illustrated by reproductions of old advertisements, syllabuses, examination papers, and photographs of staff and students wearing more jackets, ties and hats than would now be customary.

But there are also differences. Richards' history of Wye College is the most substantial of them. It is the only one to be properly referenced and have an index, and the one which best sets the story of the academic institution in the context of agricultural, social and educational change, although it might be argued that some of the conflicts between the apprentice patricians and the young radicals among the students that took place in the early 197os are given less attention than they might have had. His chapters 3 and 6 contain the best short summaries of the politics of agricultural education in the pre-1914 and post-1940 periods that have yet appeared, at least in this reviewer's judgement. It is interesting to compare the extensive evidence and careful thought which went into the formation of agricultural education policy in the years before 1980 with the recent diversification of courses without benefit of central planning and in response to market forces. Beale and Owen's work provides the most extensive examples of this trend, as the finale to an account which covers the metamorphosis of the Essex County Technical Laboratories into Writtle College, decade by decade. Old students will find much material to refresh their memories, but historians will find rather less analysis of why changes occurred. The same criticism might be made of Harris's account among the students that took place in the early 197os are given less attention than they might have had. His chapters 3 and 6 contain the best short summaries of the politics of agricultural education in the pre-1914 and post-1940 periods that have yet appeared, at least in this reviewer's judgement. It is interesting to compare the extensive evidence and careful thought which went into the formation of agricultural education policy in the years before 1980 with the recent diversification of courses without benefit of central planning and in response to market forces. Beale and Owen's work provides the most extensive examples of this trend, as the finale to an account which covers the metamorphosis of the Essex County Technical Laboratories into Writtle College, decade by decade. Old students will find much material to refresh their memories, but historians will find rather less analysis of why changes occurred. The same criticism might be made of Harris's account of the department at Reading. On the other hand, he prints many verbatim transcripts of the memories of staff and students which will prove useful to future workers in this field. The last fifty pages of the book are devoted to the present state of the department.

It appears, therefore, that none of these books answers the questions posed in the first paragraph of this review, and, to be fair, none of them quite set out to do so. The accounts of Writtle and Reading will provide some useful evidence for anyone in future who wishes to examine the contribution of education to agricultural change, and Richards' thoughtful account of Wye will be worthwhile reading for historians of twentieth-century agriculture as a whole, in addition to those who concentrate upon the history of agricultural education.

PAUL BRASSELEY
This impressive work is the latest in the series of Bibliographies on the History of Science and Technology to be published under the general editorship of Robert Multhauf at the Smithsonian Institution. Designed for advanced students and scholars, it ranges over a wide range of topics including agronomy, meteorology, plant and animal science, veterinary medicine, entomology, nutrition, technology and agricultural policy. There are also sections on the less traditional biotechnology, the green revolution, women, and institutions. Particularly valuable are those which list the indexing and abstracting services, the bibliographies and catalogues, and the reference works, including electronic sources. As well as the books and articles written by historians the compilers have included the scientific and social science literature that is not published in historical journals but which will become increasingly important to historical research.

The compilers have not attempted to be comprehensive; indeed their aim has been to avoid an endless listing where the important is lumped with the trivial. Instead we are provided with a highly selective ‘critical’ bibliography intended to lead the scholar to the most significant literature in his or her field of interest. Of enormous value are the annotations which are brief, to the point and highly informative. Because of space limitations the literature on horticulture, viticulture, apiculture and other subject areas such as vegetables has been excluded and the compilers have also tried to avoid purely economic literature. There is a useful index which requires to be consulted since many of the 1400 citations logically could fit into more than one section. Overall this is an important work of reference. Unfortunately, readers of this journal probably would find it prohibitive to buy.

**Raine Morgan**


Steensberg’s association with the techniques and mechanics of fire clearance is now almost legendary. He laboured (literally) with Iversen and Troels-Smith in the now famous ‘neolithic’ experiments in chopping down trees with stone axes and swiddening in Draved in Denmark in the early 1950s, and now this work, published in what must be about his 90th birthday, is a culmination of an abiding interest in fire, clearing and rotations.

The book has a wealth of references. What is most valuable is the inclusion in the text and the bibliography and the extensive German and Scandinavian languages literature that may well be new to the predominantly linguistically insular Anglo-American readership of this journal. It is also lavishly illustrated with many photographs, but the maps are often meaningless.

The book is arranged in three main sections: I, Fire clearance in modern and early modern times; II, Paring and burning, ecobug, framiguare, Rasenbrennen, etc; and III, Fire clearance in early medieval and prehistoric times, which ends with the Draved experiment. The reader is left a little puzzled about the rationale for this retrospective arrangement. Any sense of chronological progression and continuity is lost.

Another problem is that one regional or historical example follows another, in the various sections, sometimes as lengthy quotations, with little linkage or generalization, except in the last few pages. It is difficult to place the individual case studies and examples into a specific socio-economic, yet alone a politico-historical context. For example, Ester Boserup’s seminal schema of agricultural intensification with increasing population receives no mention. Although somewhat qualified by recent work it would have been important as a means of analysing and generalizing about the agricultural systems discussed. In the same way the ethnographic context of the ‘contemporary’ examples in Section I, in say Papua New Guinea for example, passes one by. The picture presented is a static one. One has no idea how modern intrusions and influences into these societies have, or are likely to have, altered the situations outlined. As an example, the work of Townsend on ‘Stone and steel tool use in New Guinea society’ would be relevant. This is not, one hopes, ‘nit-picking’ as there is now barely any society that remains truly ‘traditional’ and untouched by modern tools and markets, which alter productivity and techniques.

Historically the very existence of Iversen’s postulated *landnam* phase of clearing in neolithic Denmark, which is perhaps central to much of the argument in Part III, has come under intense scrutiny in the work of Bogucki and Rowley-Convoy, and more recently Denevan has ques-
tioned if slash-and-burn could ever have existed in Latin America, especially in the Maya lands.

What we have then, is a valuable compilation of literature and example that builds-up a convincing case for the ubiquitous use of fire in periodic vegetation clearing and turf-paring in many part of the world, at many different times. An awareness on the part of the reader of the recent debates will add new levels of understanding to the text.

MICHAEL WILLIAMS


This volume about Norfolk is one of the series titled The Origins of the Shire produced by Manchester University Press under the general editorship of Nick Higham. It deals with the topography and environment of the county, the archaeological background, the Saxon (Anglian) settlement, and its development to the Norman Conquest, which laid the foundation of medieval Norfolk.

The period is of great interest to both archaeologists and historians. Although the collection of archaeological data continues to increase, scholars of both disciplines have less evidence than they would like in order to write about the subject.

The book is divided into seven sections, the first dealing with the environment and topography, which sets the scene of a gently undulating landscape with 150 km of coastline, stretching to fenland in the west. The second section describes the prehistoric and Roman background. Axial field patterns in the Waveney valley (Fig 2.1) are assigned to the Iron Age, partly because a Roman road is aligned obliquely across them. The antiquity of such field patterns is not entirely convincing because they look like medieval fields and evidence is not given to prove otherwise, although the author does recommend caution in interpretation. Roman roads cutting across field systems are not sufficient evidence alone; medieval fields were laid out according to the local topography and would approach and continue beyond a Roman road obliquely if it suited the lie of the land. Nevertheless, Williamson’s interpretation in no way detracts from the main themes and analyses of his book.

Evidence for the arrival of the Angles during the fifth century onwards is provided by early graves that are similar to those in northern Europe. Roman sites were abandoned on claylands, as the population declined, but many larger sites in the valleys continued in use. As elsewhere in the country, new settlements of the period predominate in river valleys and on light soils. Pollen analysis of peat from meres suggests an increase of pasture with little woodland regeneration, but place-names refer to belts of regenerated wood. Early tribal names are preserved as hundred names. The large Spong Hill cemetery is interpreted as serving a tribal region rather than as belonging to one or a few nearby settlements.

The kingdom of the East Angles emerged from the tribal groups during the Middle Saxon period, 650–900; Bede’s history records relationships with other kingdoms. Wheel-made Ipswich-ware pottery was used from c 650 and coinage appeared by 775. In the seventh century many settlement sites were relocated, to form a pattern similar to that of later villages. The large estates that were created can be reconstructed from the evidence provided by place-names, hundred boundaries and the Domesday survey of 1086.

In 865 the Danes came to Norfolk. Place-name names, except Thorpe and those containing a personal-name element, are concentrated in the east of the county, and lie in isolated locations. They probably represent peasant immigration, whereas places with personal-name components plus tun are likely to be centres of an ‘elite’. The absence of pagan burials has been interpreted to mean that numbers of settlers were low. However, minor place-names such as bekker and gata may indicate more extensive settlement.

The Domesday survey of 1086 shows a dense population and a complex manorial system, Norfolk being the most populous county of England with 27,000 recorded individuals and 726 vills. Population was concentrated in the south-east and in river valleys, associated with arable lands. The great estates became fragmented; in the resulting complex tenurial system it was rare to find manors in single ownership. Distribution maps show that sokemen were uniformly distributed but freemen occupied grazing areas on poorer ground with little arable or woodland. Estate qualifiers (‘great and little’, etc.) were not much used, suggesting that fission was then recent. Viking settlement provided social conditions that encouraged fragmentation. Hundreds were once related to royal manors, which were imposed after reconquest from the Danes, but some archaic aspects of the 1086 geld collection may relate to an earlier Danish administration.

The sixth section deals with Christianity and churches. A few Christian Roman finds are known but pagan cremation rites dominate in early Saxon cemeteries. Conversion during the seventh century followed national trends; two sees were created c 680. By the tenth century minsters held sway over the smaller churches that later became parish churches. The Domesday survey recorded 250 churches (only Suffolk having more), but as a pre-Conquest charter refers to 9 churches, of which
only 4 are recorded in 1086, even more existed. The large numbers of ecclesiastical buildings are related to the fragmented manors. Many churchyards have two churches placed in them and Reepham once had three.

The last section of the book deals with the Norman Conquest and after. Norwich was established as the Norman centre of medieval Norfolk with a new cathedral and castle. There were no regular planned vills, and settlement became more dispersed, spreading around greens and to the edges of commons. Farms were restricted to limited areas and were not uniformly scattered. Fields were more complex than simple two- or three-field arrangements and were associated with dispersed settlement. North and west Norfolk had an organized fold-course system, with animals grazing on heath and brought to folds on fallow land for manuring.

Sixteen excellent photographs are used in the book, many being the work of Derek Edwards, well known for his aerial photography. They are placed together in the centre and unfortunately are reproduced on the same quality paper as the text, which make them appear rather dull. Surely the publishers could have used good quality art paper, having decided not to disperse the plates throughout the text?

The book is well written and very readable. Tom Williamson is to be congratulated on his treatment of a subject that has many interpretations and differing opinions, and will continue to be debated and revised as more evidence becomes available.

DAVID HALL


The Norfolk estate of Holkham Hall is best known for the agricultural improvements of the Coke family, its owners from the seventeenth century, and its fine Palladian hall. But the survival of one of the richest family archives still remaining in private hands offers an opportunity to study the medieval foundations of Holkham. This volume documents the early history of Holkham and covers the period 1250–1350. A second volume covering the period 1350–1600 is intended. In addition to setting the estate’s history in a longer perspective, the volume is a rich source of material on the agricultural practices, economy and social structure of medieval Norfolk.

The documents printed here are the earliest in the Holkham archive. Original charters form the bulk of both the collection and this printed edition. Additional material includes, among others, manorial documents and miscellaneous and royal documents. The main item of interest, however, is the so-called Neel Cartulary, compiled between 1414–60. It is an important testimony to seigniorial land management and is accordingly transcribed in its entirety and given a comprehensive introduction.

The introductory chapters trace the formation, order and survival of the archive. The organization of the archive, the editors’ suggest, is indicative of the efficient land management of the East Anglian lay landlord. The introduction considers the background to the social structure and physical nature of medieval Holkham. The editors detail the complex structure of the several manors of Holkham, particularly the manor of Neel. Attention is drawn to the Neel Cartulary which charts the genesis and development of seigniorial inheritance in the early fourteenth century; the documents also provide evidence of an active land market in Holkham. The discussion encompasses the system of peasant holdings, services and rent, the nature of free and free tenants, and the distribution and significance of the sheep folds. A survey of agricultural practices reveals the existence of sheep/corn husbandry as far back as the thirteenth century. The editors clearly intend to show that the agricultural practices of the eighteenth and nineteenth centuries were not entirely novel, but the peak of a long series of improvements. Surviving court rolls for the period allow a brief section on the social structure of the community of Holkham. They also permit an extensive prosopography of Holkham 1330–1350.

Moreover, this book makes a valuable contribution to landscape history. The text reveals a bustling landscape of gardens, hamlets and closes. A detailed overview of Holkham’s medieval fields is provided. The topography of Holkham is vividly presented by the mapping of fourteenth-century fields and Holkham town. These are supplemented by detailed topographical information including an extensive gazetteer. As well as providing a comprehensive picture of Holkham, the work is an excellent methodological example of landscape reconstruction.

The editors have attempted to retain the feel and context of the source material. The documents are carefully edited with descriptions of handwriting, seals and endorsements. Marginalia are not ignored but included alongside the relevant charters. Microfiches depicting a selection of documents, maps and photographs of Holkham are a welcome inclusion. Unfortunately, some of the deeds and photographs are less than clear and, therefore, add little to the book. However, this does not significantly detract from the work. Overall, the result is
an accessible book with clear editorial methods, substantial cross referencing and an extensive index; it should prove a valuable source book.

D MARSH


The origins and rationale of subdivided commonfields, with their fragmented and dispersed land-holdings, have long exercised an abiding fascination upon scholars from a variety of intellectual backgrounds. Over the past thirty years some of the most innovative work has been done by a succession of North American economic historians and econometricians – Carl Dahlman, Donald McCloskey, Stefano Fenoaltea, and now Robert Townsend – who have enlisted economic theory in an endeavour to establish what real economic advantages such an ostensibly inefficient system of land-holding may have offered and what gave it such a remarkable power of survival so long after the circumstances of its creation had disappeared into the mists of time. Here, McCloskey’s proposal that scattered land-holdings may have represented a primitive form of risk aversion in a hazard-prone world which offered few alternative forms of ‘insurance’ has been especially provocative. As debate has progressed, however, so the growing abstraction of the argument and sophistication of the theory have increasingly restricted participation to those as much if not more at home in economics than history. This applies particularly to Robert Townsend’s The Medieval Village Economy, a book written in the language of economics by a master of modern economics for fellow economists. Advance praise on the rear dustjacket from a quartet of distinguished North American economic historians hails it as a pioneering work of micro-economic theory, the sub-title proclaims it as A Study of the Pareto Mapping in General Equilibrium Models, and closer inspection confirms that this is more an exercise in economic model building than historical analysis or reconstruction. Most agricultural historians will be more than happy with Townsend’s portrayal of the agricultural regime which his model is intended to elucidate, and they will be downright dissatisfied by his failure to couch his conclusions in terms which they are capable of comprehending. Townsend’s appeal at various critical points in the model-building process for ‘further data acquisition and analysis’ is therefore likely to pass unheeded because unappreciated.

Townsend’s medieval villagers inhabited a high-risk agrarian world, partly because of the frequent and essentially random shocks inflicted by adverse weather, fungoid diseases, and the depredations of birds and insects, and partly because of the prevailing ‘hostile, militaristic environment’. It was a world of low living standards, self-sufficiency and recurrent famine. Land-holdings were characterized by their extreme spatial fragmentation and yields by their high variability, both from year to year and place to place. There was little storage of grain from one year to the next and no apparent borrowing/lending between lords and villagers. As evidence he cites several seventeenth-century field maps, the Winchester Pipe Rolls for the thirteenth and fourteenth centuries, and a few other near contemporary series of manorial accounts relating to manors in southern England. Thus represented and documented (medieval historians have long since appreciated the error of taking the evidence of the Winchester estates as representative of agrarian conditions in thirteenth-century England as a whole) it is a world almost certainly more artificial than real which, in its emphasis upon economic autarky, violence and uncertainty, and the persistence of commonfield farming over much of the country from the fifth to the fifteenth centuries, is at odds with much recent historical writing on the subject. The latter now dates the origins of regular commonfields to the ninth and tenth centuries, stresses the solid institutional and economic achievements of the twelfth and thirteenth centuries, and lays particular emphasis upon the growing commercialization of economic life. Few medieval village economies can ever have fitted Townsend’s precise description and never for more than part of this long period. True, Townsend is led by his own model to question whether reality was ever quite as he characterizes it, but this is unlikely to surprise or impress those sceptical of the initial scenario which the model was designed to explain. Nor are historians likely to be won round by the author’s professed method of proceeding pedagogically ‘from the relatively simple to the relatively complex’. Those able to cope with early chapters on ‘Uncertainty and Landholding Patterns’ and ‘Storage as Risk Reduction’ are likely to have been left far behind by the time they reach the economically demanding chapters on ‘Rentals with Unobserved Outputs’, ‘Sharecropping with Unobserved Inputs’, and ‘An Incentive Theory of Landholdings’, which offer virtually no concessions to those interested in the conclusions if unable to follow the method and reasoning by which they were derived. This is a pity, for there is scope for a highly constructive dialogue between economists and historians if they can only find a common language in which to converse. Of course, this presupposes that there is a desire for such dialogue.
in the first place, which in this particular instance
must be doubted. For Townsend the medieval
village economy is more a vehicle for demonstrating
the potential of general equilibrium modelling than
an object of interest in itself. He will not be
disappointed therefore if his book makes little
impact upon those endeavouring to research the
medieval village economy from the records of the
period, for its intended readership plainly lies
elsewhere.

BRUCE M S CAMPBELL

R W HOYLE, ed, The Military Survey of Gloucestershire,
1522, Bristol and Gloucestershire Archaeological
Society, Gloucestershire Record Series, vol 6,

Together with the lay subsidy returns of 1533–27,
the military surveys of 1522 are one of the most
important sources for English history at the end of
the Middle Ages. As Cornwall’s work has shown,
they provide unrivalled information about popula-
tion totals and the social and geographical distri-
bution of wealth. Unfortunately, few of the 1522
returns now survive, probably because the
Exchequer returned them to local commissioners
as part of the preparation for the ‘Amicable Grant’
of 1525 (p xvii). Certainly, the Gloucestershire
return survives among the Berkeley muniments
rather than at the PRO. Yet, if anything, the
information provided by the 1522 survey is even
more useful than that contained in the taxation
returns of subsequent years. Whereas the subsidy
returns simply list taxpayers, their wealth and tax-
renders, the ‘Muster’ returns of 1522 were intended
to name the lords of manors, their stewards and
local rectors, along with the names, wealth and
military equipment of tenants and servants, and a
list of those fit for military service. The survey has
often been seen as simply the pretext to gather the
information needed for a forced loan but Hoyle
convincingly argues that the government was also
serious in its military intent, even though the
Gloucestershire commissioners’ failure to link lords
and tenants consistently did reduce the utility of
the survey as a source for raising military retinues.

In an introduction which offers little food for
thought, Hoyle stresses the need to read the Muster
returns in the light of the specific practices adopted
by particular groups of commissioners, practices
which could vary even within particular counties.
For instance, the Gloucestershire commissioners
treated the poor in three different ways in different
parts of the county, the tendency to omit the poor
in the Cotswolds hundreds meaning that, surpris-
ingly, the later subsidy returns actually contain more
names than those listed in what should have been
the fuller muster return of 1522 (pp xxii–xiv).

Conversely, many wealthy individuals listed in 1522
are omitted from the subsequent taxation returns
which, even allowing for migration and mortality,
suggests that ‘the subsidy assessment was made less
rigorously than is often assumed’ (p xxix). Finally,
whilst historians have used the surveys of the 1520s
as indicators of previous economic change, they
have tended to forget that the tax-burden of the
1520s had an economic impact in its own right.
Here Hoyle emphasizes the role of taxation in
slowing down economic activity in the first half of
the sixteenth century and thus the impact of the
state on economic development. This is an excellent
edition of a fascinating source, an edition which
will be indispensable for local historians but which
has a relevance for all historians of English society
and economy in the later medieval and early
modern periods.

S H RIGBY

TEOFILO F RUIZ, Crisis and Continuity: Land and
Town in Late Medieval Castile, University
xvi + 351 pp. £43.95.

The geographical area covered in this beautifully
written and well documented monograph comprises
present-day Old Castile along with the coastal
region to the north of the Cantabrian Mountains –
Cantabria and the Basque Country. Within its
bounds lay the ports of Santander and Bilbao and
the important urban centres of Valladolid and
Burgos. The pilgrimage road to Santiago de
Compostela crossed the northern part of the Old
Castile, replete with its itinerant salesmen. As
Teofilo Ruiz informs us, enterprising pilgrims, with
one eye on salvation and the other on profits, did
not enter or leave Spain empty-handed. More
significantly in the long run, over the difficult and
twisting yet well-traversed passes of the Cantabrian
range, mule trains brought in increasing loads of
luxury woollens and silks from Flanders and the
Moorish lands for the wealthy oligarchy. As for
generations of Castilian farmers, at best they scraped
a meagre existence from the production of more
mundane staples such as cereals (barley, wheat, rye),
flax, wine, livestock, honey and wax. Later, with
the consolidation of the internationally famous
transhumant flocks of the Meseta, Castilian wool
would be transported in a northward direction for
export to England and the Low Countries. At an
earlier stage, iron, hides, fat and horses were the
main items dispatched to northern Europe through
the Castilian ports on the Bay of Biscay.

The Cuban American historian, Teofilo Ruiz, is
already well known for a number of seminal articles
in this field, although this volume betrays ample
evidence of a substantial modification of his ideas.
In essence, he portrays Old Castile during the Middle Ages and beyond as an area of surprising climatic and geographical diversity. While he is far from being a geographical determinist, in general the high altitude, poor soils and unpredictable climate of this part of northern Spain, excluding the coastal belt, are considered to be extremely hostile to the farming community. Medieval Castile was fabled for its 'ten months of winter followed by two months of hell'. As travellers recounted, the agricultural population of the high plateau, or Meseta, were the perennial victims of a never-ending sequence of floods, frost, hailstorms, drought and snow which destroyed crops and frequently resulted in great scarcity. In addition, as the historical debate has established, late medieval Castile suffered from endemic political chaos consequent upon the peculiar nature of the Reconquest of the Iberian peninsula from the Moorish invaders. An important theme of this book – hinted at in the subtitle of the work 'continuity and change' – is the manifestly unfavourable impact of the Reconquista on Castilian society. A further valuable contribution is that Ruiz also furnishes a detailed account of the daily struggles of peasants, artisans and merchants in all corners of medieval Old Castile both in the countryside and the towns. He skillfully charts and illustrates a succession of conflicts between both lords and peasants as well as between the patrician elites and the urban poor, many of which were marked by wanton violence and destruction, especially in the late fourteenth and fifteenth centuries.

In search of a general interpretation of the economic crisis which beset late thirteenth- and early fourteenth-century Castile, Ruiz firmly rejects traditional Malthusian approaches of the type used to explain developments north of the Pyrenees. Although he considers such theories as applicable to certain areas of northern Europe, most notably parts of England and France, he demonstrates convincingly that there was no demographic pressure on the Castilian countryside with its small and scattered population. The crisis of late medieval Castile, he contends, was not the result of the Black Death. In fact, the crisis preceded the plague's onslaught. Instead, in common with writers like Angel Garcia Sanz, he maintains that the region suffered from important shortages of agricultural labour from the mid-fifteenth century onwards due in large part to the opening up of al-Andalus to Christian settlement.

Within this historical framework, the middle sections of the book focus on the nature of rural life. A series of chapters offer a typology of peasant obligations and conditions, a description of how peasants lived and worked the land, the choice of crops and farming methods. In general, Ruiz shows that while forests were burned or felled in parts of the plain to make way for cultivation, the mountain regions of Cantabria and the Basque Country retained an adequate supply of wood. Throughoat northern Castile a biannual crop rotation was practiced. Often, more than half of the arable land was left fallow while the other half was cultivated, with the fields being rotated (in theory) the next year – a system known as año y vez. In common with many other areas of Europe before the eighteenth century, there was never enough manure to go around, a factor which helps to explain the extended fallowing in order to replenish the soil. After presenting an overview of Castilian agriculture, Ruiz goes on to provide a detailed case study of the domain of the monastery of Santa María la Real de Aguilar de Campoo, for which a rich documentation exists. These lands were under the jurisdiction of the bishop of Burgos on the banks of the Pisuerga and constituted a prosperous agricultural area at the crossroads of several trade routes. He also offers a fascinating study of the market for land in northern Castile, arguing that after 1250 those peasants who sold their lands did so largely because of the opportunity to migrate south provided by the redistribution of Moorish property following the Reconquest. Other transactions took place for a variety of reasons, such as to settle an inheritance or to pay off Jewish money lenders.

Overall, Ruiz's splendid monograph is a work of considerable reflection and maturity. It demonstrates a fine understanding of the diversified landscape of Old Castile and reflects the author's excellent detailed knowledge and grasp of his source material. Although thoroughly conversant with the many and contentious ideological debates and controversies among Spanish and other medieval historians of different tendencies and schools, Ruiz's approach is essentially empirical. For my part, I found it convincing and highly readable.

JOSEPH HARRISON


The work of Lucie Bolens is not well known to English agricultural historians, but she is the supreme authority on the early agricultural history of southern Spain. So the two volumes of her work reviewed here give an opportunity to survey and appreciate its breadth, scale, and importance for European agricultural history. Lucie Bolens was born in Algeria, is a professor of history in the University of Geneva, and always writes in French,
but her subject matter is Andalusia, and in writing on Moorish Spain, she is constantly opening up fresh views on the interchange of farming methods, crops and food habits between the Arab world and southern Europe. Since much of English farming history, in fact, demonstrates the drift of agricultural and horticultural influences from the Mediterranean to northern Europe, her work is highly important in tracing the beginnings of a slowly advancing tide. It is full of discerning insights.

Professor Bolens’s first publication was her doctoral thesis in the form of a typescript (1974), later issued in book form by Droz in 1981, on medieval farming treatises which emanated from Andalusia. Now nineteen of her essays that have appeared between 1978 and 1990 are brought together in one volume by Variorum, while, in the second work reviewed here, she writes on Andalusian cuisine between the eleventh and thirteenth centuries, interspersing her historical observations with recipes taken from documents of the same period.

On Andalusian cooking and entertaining Professor Bolens shows the breadth of her experience and learning, when spanning two very different cultures. She knows, she says, that she could unleash a storm by equating nougat with turron and halva, but long reflection and experience instil hope in a tolerant dialogue between nations. Certainly, this book from a historian appears at the right moment to stimulate fruitful ideas on some of the connections between the Christian and Islamic worlds, now that we eat the food of all nations, and are prepared to test their recipes in a strong spirit of curiosity and acceptance.

The volume of Professor Bolens’s essays by Variorum deals with the remarkably innovative period, agriculturally, between the eleventh and thirteenth centuries, when scientists, philosophers, theologians and translators in the kingdom of Seville were mounting a cultural renaissance, and travellers from the east called Andalusia a terrestrial paradise. Politically, she sees it as a period when centralization collapsed, and regional differentiation flourished. Culturally, it was a period when Arabs, Jews, and Christians lived peacefully with each other.

Arab princes maintained experimental gardens, and encouraged the study of ancient, including classical, texts on agriculture. Thus the practices of Arab and Roman farmers were examined by the scholars alongside indigenous Spanish farming. Population was rising, and agricultural was stimulated. But the circumstances of the ensuing agricultural revolution were wholly different from those which we in Britain associate with such a transformation. It did not need large farms and a large scale of operation to function at its best. Cultivation in Andalusia was generally in the hands of smallholders, and was more like market gardening. The experimentation which interested the intellectuals called for careful observation, intensive toil, and attention to detail. Landholders were ideally equipped, having a religious belief that Nature was sacred and was the giver of all benefits, and being willing and able to offer unstinting labour. Theirs was exactly the style needed for undertaking new ventures.

The second essay entitled ‘The agricultural revolution in Andalusia in the eleventh century’ sets the intellectual background of the renaissance by analysing three treatises from Seville which illustrate the way farming lore was being gathered from many quarters. Columella featured as the dominant authority among Roman authors, and it is worth noting that he was born in Spain, where his uncle farmed. The newly-compiled Arab treatises had an essentially practical purpose to arrive at the best systems for dry and for irrigated cultivation. Among other concerns, ploughing and hoeing routines had to be carefully chosen to suit the climate, different soils and situations, and to retain moisture. Essays follow which analyse a number of varied themes in agricultural practice and the accumulation of knowledge. Methods of improving the fertility of the soil come under scrutiny, irrigation techniques are illuminated by legal documents which guarded individual rights to water. (One of the new crops of this period, sugar cane made heavy demands on water, every four days from March to July, every eight days from July to October.) The fourth essay examines the first attempt at plant classification by the botanists between the eleventh and twelfth centuries, and shows the close attention then being paid to techniques of grafting. The fifth essay sheds light on vine cultivation in the eleventh and twelfth centuries, despite Islamic opposition to alcohol. An important essay follows on the haricot bean, which has been mistakenly described as a first-time introduction in the tenth century from America. Professor Bolens has found eleven varieties of this bean, in an Arab manuscript, giving it a much earlier history in Asia and Africa, and underlining one of her main themes, that the Mediterranean was a remarkable centre of distribution for new plants and new varieties, not least from India. A fascinating essay follows on the foods used for bread in times of famine between the eleventh and thirteenth centuries. Contemporary texts named more than seventy possible ingredients, among which feature bitter fruits like acorns which were cooked first to eliminate their acidity. This helps us to understand equivalent references in English documents to the use of acorns in times of scarcity.

Further essays deal with liquids used in cooking,
condiments, and the appearance of couscous in Andalusia in the thirteenth century, hard wheat having arrived, along with rice, as an innovation in the tenth century. Professor Bolens associates the introduction of couscous with the ascendency of berber dynasties in the twelfth and thirteenth centuries, which had the effect of mingling African traditions in handling grains with the established bread tradition of Europe. Some short essays, using a thirteenth-century cookery book and recipes from other scattered sources, sensitively analyse the Arabs’ appreciation of flavours (as in sorbets) and colours, and the significance attached to colours, taken from plants, for clothing and the adornment of skin and hair (including henna).

An essay on the gardens of Andalusia demonstrates convincingly the rich miscellany of plants and the elegantly formal layouts already found in princely households in southern Spain long before the new wave of plants arrived from the New World, and inspired another horticultural renaissance. Indeed, the whole volume illustrates more effectively than anything yet in print the first reasonably well documented agricultural/horticultural revolution in European experience. In due course that phase of change lost momentum, but it was galvanized again, carried to new heights, and influenced a larger territory in the fifteenth to seventeenth centuries. The focus of the liveliest and perhaps most purposeful activity at that stage, however, moved northwards.

In the eleventh to thirteenth centuries Andalusia stood at a vitally important crossroads in the Mediterranean where several different civilizations met. Professor Andrew Watson explored some of its agricultural innovations in his book in 1983, Agricultural Innovation in the Early Islamic World, but Professor Bolens is the best guide yet in surveying the scene, both agriculturally and culturally. Every essay is furnished with a bibliography for further reading, and many have appendices of documents translated from the Arabic. Her work must take first place on what may prove to be a new shelf of exciting books on agricultural history, exploring the world-wide exchange of farming experience, and giving due credit to the contributions both of scholars and practical farmers. This last theme is prominent in Mauro Ambrosoli’s book on botany and agriculture in western Europe, 1350–1850, reviewed in Ag Hist Rev, 42:1, 1994, pp 91–2 (in its Italian version though soon to be published in English). It is also the theme of Gang Deng, a Chinese scholar, who won a prize at Milan in September 1994 at the International Congress of Economic History, for his book on the role of the literati and of technical books in long-term agrarian development in China. As we would expect, the perspectives of historians are being lengthened just at the time when producers also are being forced to review agriculture in world terms.


This vast and ingeniously researched book presents a vision of rural France in the past that is profoundly different from the widely-accepted stereotype of largely self-sufficient peasant households operating on the margins of the commercial economy. Jean-Marc Moriceau focuses on an elite group of tenant farmers who cultivated the rich soils of the inner Paris Basin and took full advantage of their location and environmental and social circumstances to supply the growing capital with grain and fodder. With 400,000 inhabitants living within a 30 km radius of Notre-Dame, Paris was the largest focus of food consumption in western Europe in the early 1300s; by 1780 that total was to increase to 860,000. Moriceau’s dual concern is with the distinctive social evolution of these tenant farmers and their role in the improvement of agricultural techniques. Eighteenth-century taxation records for the élection of Paris provide a starting point, enabling him to identify the names of large tenant farmers on the plains of ‘France’ and Multien, extending north of the capital toward Senlis and Crépy, and of Hurepoix to the south of the city. Of course, parts of these immensely fertile areas are now covered with suburban housing estates, airports and motorways, but many of their substantial farm buildings and large fields remain in the present landscape.

These pays, with their navigable rivers, highways and networks of local markets, had responded to the growing demands of Paris for foodstuffs in medieval times, but then suffered widespread damage during the Hundred Years War. In the second half of the fifteenth century local landlords enlisted successful family farmers as tenants to promote the recovery of their estates, often making advances of capital, livestock and seeds to assist the process, and establishing favourable leases of nine, twelve or even thirty years. An elite group of tenant farmers duly emerged, who arranged strategic marriages for their children in order to enhance their control of farmland. They devoted particular attention to educating those sons who would not be destined to work the land in order to prepare them for alternative careers, typically as priests or grain merchants, or more rarely as public officials in Paris. These powerful tenant dynasties once again played a decisive role in restoring the pays of the Ile-de-France following the Wars of Religion. They
employed triennial rotations more flexibly, with new fodder crops being introduced and vital supplies of manure being obtained from cattle as well as sheep.

During the seventeenth century, heavier taxation, worsening climatic conditions, fluctuating commodity prices, and increasing demands for food from the capital accelerated agricultural change and created new challenges and opportunities for these tenant dynasties, which typically produced seven or eight children per marriage. Some families managed to innovate successfully between 1650 and 1750, increasing their hold on land resources and generating quantities of fodder for urban horses, as well as abundant supplies of grain. Traditional crops such as rye and maslin were abandoned in favour of wheat to satisfy the Parisian taste for white bread. These dynasties duly enhanced their wealth and strengthened their social position in the countryside.

They purchased land as well as renting it, and played a major role in the commercial life of their home villages and market towns. Their solidly-built farmhouses contained the material expressions of wealth, including silver ornaments, silken clothes, and books. Other families were less successful and abandoned farming to their more innovative and efficient neighbours, directing their energies to trade, the law, administration or colonial service.

Paying meticulous attention to demographic conditions as well as to the evolution of social and economic circumstances, Moriceau chronicles the activities of these gentlemen farmers who fostered links between Paris and its hinterland, and often managed to amass property and savings, as well as acquiring the tastes and fashions of Parisian elites. He employs a dazzling array of archival sources to trace the changing fortunes of his selection of tenant dynasties across three and a half centuries, making use of documentary evidence from the archives nationales, seven archives départementales, and a host of commune depositories, as well as papers held by lawyers and local families. Seven annexes, covering 150 pages, provide essential statistical evidence on demography, crop yields, prices, taxation and rents, as well as an illuminating essay on the diversity of local measures of land, grain and other agricultural commodities in the Île-de-France prior to the Revolution. More than 600 items are included in the bibliography which direct the reader to international debates in rural history as well as to the intricacies of agricultural change and the fortunes of tenant households within a 30 km radius of Paris. The text is complemented by numerous quantitative maps and over a hundred statistical tables.

Without doubt, Les Fermiers de l'Île-de-France is a superb example of a regional monograph in the very best French tradition. At 250 francs it is remarkably good value for money.


This is a lively, incisive study of women (mostly those living in the country rather than in towns), viewed from a fresh vantage point. It investigates women’s command over their property, both land and movables, in the three separate phases of their lives, as single women, wives, and widows. It uses as its main source of information the probate accounts presented by an executrix, or by an administrators in cases of intestacy, in the ecclesiastical courts. Nearly three-quarters of all probate accounts were filed by women, usually a year after the inventory of goods had been drawn up, when debts had been paid, expenses were known, and the residue was ready to be distributed. The clerks of the court scrutinized the accounts closely, disallowed some expenses, and presided over a fair distribution of what was left, following as best they might the terms of the will. Probate accounts were first used by Clare Gittings in 1984 in a study of funeral rites, but they are only now being more systematically and fully exploited. They give a unique view of ordinary women’s experience in handling property, and Dr Erickson provides a wide-ranging and satisfying account of them, set against the background of current legal theory, and drawing comparisons with the experience of women of the gentry and noble classes.

The largest samples of accounts used here are taken from Lincolnshire, Cambridgeshire, southern Northamptonshire, and West Sussex, with additional small numbers from Somerset, Dorset, and Hampshire. Where available, these documents are examined alongside the relevant wills and inventories, and although at every turn Dr Erickson is obliged to call for more research, she is plainly carving out a new path in the history of property relations between men and women, which others will surely follow. They can look forward to a veritable feast of information, for thirty thousand probate accounts survive in the various archive offices.

Women’s property was subject to several different jurisdictions, and these did not speak with one voice: the common law was harsh in dealing with married women’s movables, ecclesiastical law was more reasonable and realistic, manorial and borough customs imposed their own varying rules about widows’ rights to land and buildings (and these could change during this period), while the courts of equity were ready to listen to plaintiffs if they
had the money to pay for a remedy against gross injustices. Inadequate indexes prevent Dr Erickson from making more than a modest foray into proceedings in the equity court of Chancery.

The author's main tasks are to show the general experiences and expectations of women when handling the property of their kin, and to explore the policies and decisions of the church courts. The results are clearly summarized as the argument proceeds, the statistical evidence is generously supplied, and a picture of property relations emerges which is new at many points, puzzling and thought-provoking at others. Some conventional assumptions have to be entirely discarded, others have to be modified, while the geographical analysis of the records reveals differing conventions, locally entrenched, which have yet to be explained. Wills made in Yorkshire, for example, were more likely to endow women with land than in Lincolnshire or West Sussex; hence single women were more likely to be found living off the land or their rents in Yorkshire than further south. In Cambridgeshire, for unknown reasons, the court was more generous in its provision for widows and children than in Lincolnshire and West Sussex.

Our general belief that men were bequeathed land while women received movables is not upheld everywhere, and certainly not in the Yorkshire evidence. Even when women did receive movables, Dr Erickson makes the important point that their value was often the equal of land in the sixteenth and seventeenth centuries. Only in the eighteenth century did consumer goods multiply rapidly and fall in value, making for unaccustomed problems in equating them with land. Ecclesiastical courts favoured a rough equality among heirs through most of the period, despite the theoretical tyranny of primogeniture. But most surprising of all is the way women, before marriage, protected their property, and that of their children at second and third marriages, by simple or informal marriage settlements. Often their existence emerges only casually or by implication, but Dr Erickson has a watchful eye. She convincingly shows how the documents glide carelessly over these sensible and practical arrangements between men and women, which softened the impact of rigid theories.

Much other miscellaneous information is garnered here to shed light on other aspects of women's lives. Food allowances and the costs of bringing up girls and boys were evidently judged the same by the probate courts, in contrast with the food allowances for men and women that were ordained by JPs when assessing wages at Quarter Sessions. Women were regular users of the money market to build up both their own savings and the bequests of money which they guarded for young children till their majority. Facilities for taking such monies were offered by towns, and even villages sometimes, which were then made available as loans at interest to local people. The practice is already known in towns, but the detail brought to light here calls for further substantiation, if possible, in village documents.

This study is written in a spirited feminist vein, which does not allow conventional masculine viewpoints, for example on widows, to pass without comment. So its original insights are mingled with some acerbic judgments that hit hard and true. But it is firmly anchored to a sound, scholarly base, and makes invigorating reading. It is not entirely free of small errors. The legal year before 1752 did not start on April 1 but on March 25; Thomas Tusser's services to the farmer is misunderstood when he is denounced as an execrable versifier; and Thomas Tryon would have been surprised to hear himself deemed the successor of Gervase Markham. But the author succeeds in maintaining a sympathetic relationship with all her readers, and says much to stimulate reflection.

JOAN THIRSK


It is now more than twenty years since the term proto-industrialization first came into popular use, thanks largely to the work of F F Mendels, and later of Peter Kriedte, Hans Medick and Jurgen Schlumbohm (KMS). Its genesis (particularly the KMS version) owed much to earlier writers of the German Historical School and the concept has always had a more sympathetic reception and more influence upon research on the continent than in Britain. In this country it met with some hostility. This was partly because of the influence in the 1970s and early 1980s of macro-economic and econometric approaches to industrialization, but also because of a deep suspicion of stage theories of growth, particularly those derived from a Marxist perspective as was prominent in the KMS analysis. In addition, with no counterpart in English historiography to the Annales School or to the Swiss-German folklorist tradition and with a marked separation of economic from social and cultural history, the interdisciplinary nature of the hypotheses and ideas surrounding proto-industrialization fell largely upon stony ground. With one or two significant exceptions, it is only very recently that various aspects of the proto-industrial model have been applied to empirical work on a range of British regions. The appearance of this special issue is thus timely for British scholars. The sophisticated and questioning framework of ideas surrounding
the notion of proto-industry as it has now developed is likely to be both useful and influential for the new generation of researchers in this field.

The editor's valuable review article surveys the development of the proto-industry literature in the last decade or so, stressing that the varied impact of proto-industrialization in different European regions owed much to social institutions: land tenure systems, the state, guilds and communal structures. The survey is thorough, wide ranging and provides an excellent set of footnotes. Surprisingly, most of the issues still actively debated are those which were at the top of the agenda more than a decade ago when various surveys of the early literature started to appear. For example, only limited progress appears to have been made concerning the parallels between European proto-industry and contemporary development issues since Mendels first linked his research to initiatives being discussed by the World Bank. Yet both Ogilvie and the essay by KMS refer to the importance of research on proto-industry for our understanding of contemporary forms and locations of domestic industry.

The core of this volume is the essay by KMS, written partly in response to a piece by Wolfgang Mager which also appears here. Mager argues that the usefulness of the concept of proto-industry should be separated from the more questionable idea of proto-industrialization. He provides a helpful survey of the very different raw material and technical requirements of various proto-industrial sectors suggesting that these are the key to understanding the nature of links between agriculture and industry and the connection or lack of connection between decentralized and later, more capital intensive, forms of manufacturing. KMS rightly criticise this rather narrow view of proto-industry, pointing to the wider set of connections between peasant ecosystems, demography, family life, and capital accumulation which the broader concept of proto-industrialization elicits and which promoted the idea of an organic transition from a phase of proto-industrialization to industrialization proper. KMS admit that it is now necessary to differentiate and modify the model to further exploit its heuristic value. In particular they see a need to look more closely at the varying nature of family economies: income earning opportunities and the work process can no longer be seen to determine household structure and demographic behaviour directly or necessarily particularly where proto-industry provided independent incomes for individuals rather than families.

What remains very much an unresolved issue in this debate is the usefulness of proto-industrialization as a concept identifying the key features and dynamic elements of the early modern European economy. Clearly, compared with the 'transition debate' of the 1950s and earlier, the ideas surrounding proto-industrialization have helped to improve our understanding of the mechanics of change a great deal. But the dynamism of urban growth, of agricultural change (per se) and of sectors of the economy which, for technical reasons, were never organized along proto-industrial lines, must always feature in any theorization of the rise of industrial capitalism: a point which it is not clear that KMS accept.

The volume also includes three interesting empirical studies by Marco Belfanti (on central and northern Italy), Marcus Cerman (on nineteenth-century Vienna), and Francois Hendrickx (on two communities in Twente in the Netherlands). Belfanti demonstrates the nature of restrictions placed by Italian cities and guilds on the expansion of industries in the countryside and shows that the forms of rural industry which did succeed, principally branches of silk manufacture, did not result in the sort of population growth or social change which the Mendels' model anticipates. Cerman's piece suggests that the ideas surrounding proto-industrialization as a research agenda should be applied as much to urban and to centralized as to rural household production. He uses census data from three periods to consider the impact of domestic manufacturing and the rise of the factory upon the age and rate of marriage and household composition. His findings are broadly in line with expectations of the model until factory manufacture dominates, at which point the differences between households of male factory workers, artisans and domestic workers become indistinguishable. The problem with this study is that the absence of employment information for women make it impossible to know if households are characterized by a family economy dependent on one or another form of industry and the separate impact of migration and urbanization could well be more important than the nature of employment in influencing household composition. The Netherlands research, an excellent study, looks at one community which industrialized in the nineteenth century and one which passed from proto-industry to re-ruralization. Both witnessed a series of marked changes during the expansion of proto-industry but neither experienced significant change in demographic behaviour, perhaps because of the low level of proletarianization: the degree of dependence on manufacturing could always be adjusted in recession by a shift back to the land. In addition, the difference in demographic behaviour between the two places appears to have resulted from differences
in moral restraint imposed by Catholics on the one hand and orthodox Protestants on the other. The quality of the empirical studies, together with the wide ranging nature of the theoretical debates addressed, makes the volume essential reading for all historians interested in socio-economic change, early industrialization and debates about the impact of domestic manufacturing in specific regional and institutional contexts.

PATRICK O'BRIEN and ROLAND QUINAULT, eds, The Industrial Revolution and British Society, CUP, 1993. xii + 295 pp. £27.95 (hb); £9.95 (pb).

When is a Festschrift not a Festschrift? Two possible answers: when the publishers do everything possible to conceal from the bookshop browser that the book is a tribute to Max Hartwell written by former pupils; and when the introduction defines it as a ‘Textschrift’. The book comprises ‘wide-ranging surveys which are intended primarily for a student readership’. A reviewer must therefore judge it at ‘Textschrift’. The book comprises ‘wide-ranging surveys which are intended primarily for a student readership’. A reviewer must therefore judge it at three levels: as a collection of essays, as an exploration of the continued relevance of the ideas of one of our most distinguished economic historians, and as a potential addition to undergraduate reading lists.

Taking these criteria in reverse order, the authors all avoid narrow presentations of personal research: this is no collection of would-be journal articles. Several essays will certainly be used in teaching, notably O'Brien's impressive introductory survey of modern conceptions of the industrial revolution, Gilbert's re-appraisal of Halévy's thesis concerning religion and political stability, and Quinault on political reform. However, the publishers' obvious desire for student sales is unlikely to be satisfied, as it is hard to imagine any one course using both Von Tunzelman's strongly economic review of technological and organizational change in industry and Lacqueur's essay on sex and desire; the latter briefly discusses the population history of the period but its heart (or loins) is set on exploring more salacious matters. Hawke's chapter on 're-interpretations of the industrial revolution' covers very similar ground to O'Brien less well. Stevenson's 'social aspects of the industrial revolution' is too general, a re-assessment of the standard of living debate being just one of his many themes. Conversely, Philips on the law, courts and punishment takes too narrow a theme. While the authors have stuck to their briefs, the choice of themes was clearly constrained by the book's function as Festschrift and has not resulted in a balanced set of review essays.

The distinction of many of these authors is itself a tribute to Hartwell's teaching, but the book has relatively little to say concerning his special interests. O'Brien argues for the continued relevance of the industrial revolution as a concept, although we should perhaps understand it more as a qualitative transformation of parts of the economy than as a particularly remarkable quantitative expansion in national output. However, other contributors find it of only tangential relevance to their particular themes; Bythell, discussed below, specifically rejects Hartwell's outlook and argues for continuity. As far as the standard of living debate is concerned, Jones' brief concluding memoir of Hartwell simply observes of it, 'the less said the better'. In sum, Hartwell may believe that economic changes in eighteenth-century Britain 'constituted the greatest single divide in human history', but this is not the apparent consensus among these particular pupils.

This review mentions every author in the collection but will identify three of greatest interest to rural historians. Firstly, anyone interested in this period should read O'Brien's introductory review which effectively criticises the work of revisionists such as Crafts, noting the dearth of statistical evidence on which their arguments are built. He devotes a significant section to the relationship between industry and agriculture. Overall agricultural productivity rose more rapidly than that of manufacturing, hence 'agriculture should be ranked among the modernising and in the long-run perspective as a leading sector for the economy' (p 25). O'Brien's other chapter, on the role of the state in creating the preconditions for industrialization, is another useful survey with a middle-of-the-road conclusion: the Hanoverians made a positive contribution, but more by what they did not do than what they did, and by being less incompetent than continental regimes.

Bythell emphasizes the agricultural sector in his account of 'women in the workforce'. The replacement of farm service by labouring greatly reduced female participation rates, and women were increasingly drawn into domestic service in towns, promoting migration. Richards provides a valuable survey of regions which were geographically peripheral to industrialization and shows they were in different senses casualties. East Shropshire exemplifies rural proto-industrialization; Ironbridge was for a time the epitome of the new industries, but by the early nineteenth century the area was marginal. North Shropshire had a quite different role, supplying food to the north-west. The impact of industrialization on the Scottish Highlands was generally negative: imported factory goods squeezed out local craftsmen; booms in kelp or herrings were short-lived and little of the wealth created remained in the region; successful sheep-farming had weak linkages to the rest of the Highlands economy.
South Australia developed as a high-wage monoculture, tightly integrated into the home economy.

In sum, a valiant attempt to get a Festschrift published in these austere times, some interesting and useful essays, but ultimately one for the library.

Humphrey Southall


For the past twenty or so years historians of India have been busy challenging the enduring dichotomies that for so long structured an 'imperial history' of the sub-continent. Long gone now is the belief that the British ruled easily and evenly across India. British rule was, rather, fragile, contested and dependent upon the collusive activities of zamindars and other local notables. Long gone, too, is the view that the eighteenth century in India was a Black Century — a century when the despotic rule of the late-Mughal Empire fell apart under the weight of its internal contradictions and when India was delivered into a despairing cycle of economic decline, political dislocation, and social and legal anarchy. Chris Bayly and others have taken a lead in challenging this apocalyptic reading of eighteenth-century Indian history, and now John McLane has provided chapter and verse on its inadequacies. McLane is not averse to reading Indian history by reference to his own preferred dichotomies — moral versus contractual economies, bodily coercion versus impersonal legal systems — but is quite good a historian to allow these dichotomies to obscure some important continuities in the life of eighteenth-century rural Bengal as its inhabitants moved from Mughal to British imperial rule.

McLane's book falls into two parts. Part I is concerned to examine the changing relationships between landholding arrangements and revenue collection systems in eighteenth-century Bengal and local systems of (Hindu) kingship. The second part of the book fleshes out this general account, which is based largely on secondary sources, with a painstaking account of the Burdwan raj. The Burdwan raj was one of the six great estates (zamindaris) that contributed a majority of the rental and other incomes upon which the Mughal Court (and later the East India Company) so clearly depended. As McLane points out: 'By the mid-eighteenth century it [Burdwan raj] covered some 5,000 square miles and was a virtual Hindu kingdom within the weakening provincial Mughal hegemony' (p 125).

Part I of Land and Local Kingship will probably be of most interest to the general reader. McLane has written an accessible and often gripping account of the precise ways in which surplus was extracted from Bengal's cultivators throughout the eighteenth century by a variable pyramid of zamindars, mansabdars, jodtars, Company officials and other, lesser, tax and rent-collectors. McLane tells us when and where and how the revenue was collected. He also tells us how the extraction of revenue was justified in Bengal, where Hindu zamindars far outnumbered the higher non-Hindu mansabdars, by reference to prevailing Hindu conceptions of kingship. The good Hindu king was expected both to provide political gifts and patronage to his subjects (the subject matter of chapter 5) and to exercise a coercive physical presence over the raiyats (cultivators) in order to secure the surplus upon which his superiors (justifiably) relied. (Coercion is the subject matter of chapter 4, which draws tellingly on the work of Foucault.) McLane's particular achievement is to show how these twin aims or duties came into conflict with one another as the more commercially-oriented rule of the East India Company became secure from about 1765. The company was more effective than the late-Mughal Empire in maximizing — or seeking to maximize — the flows of tribute due to it, and it duly put pressures on local kings/zamindars to 'serve the extractive goals of the colonial state', rather than to 'indulge their dependents, exercise reciprocity, or focus on the ritual elements of kingship' (p 307). The rajas survived (very often) in a shifting political environment, but they did not survive amid the struggles between Europeans, Mughals and Marathas entirely on their own terms. What was left was a hollow form of kingship which was increasingly strong on coercion and commercialization, and much weaker in respect of gift-giving and the established requirements of a moral economy.

If Land and Local Kingship has a weakness it is that it repeats this important finding — on the (changing) mutual dependence of colonial rulers and local Hindu notables — on too many occasions. The second part of the book mainly serves to confirm, albeit very eloquently and precisely, the arguments set out in Part I. Readers of this journal might have been better served if McLane had moved sideways to look at what was happening on the land and in the fields, in terms of cropping patterns, agricultural productivity and the marketing of an agricultural surplus. Most of these points are mentioned but they are not taken up at any length. But this, of course, is to criticise a book for not being another book, which is never very fair. In terms of what McLane has set out to do this book can surely be commended. It is well researched and well written and its broad arguments are both important and persuasive. Land and Local Kingship...
will undoubtedly come to be seen as a landmark study in its field.

STUART CORBRIDGE

T M DEVINE, Clanship to Crofters' War: The Social Transformation of the Scottish Highlands, Manchester UP, 1994. xiv+238 pp. 36 illus. £40 (hb); £14.99 (pb).

The disentanglement of historical fact from the plethora of fiction and myth about the Highlands and Highland society is a major theme of Scottish history. Over the past generation around thirty scholars have diligently researched into related topics bearing on this subject. Drawing on their work, and including his own substantial contributions in this area, the author presents an authoritative survey of the state of current knowledge. Attention is given not only to distinguishing fact from romantic fiction but also to explaining how and when the myths evolved.

Sixteen chapters clearly outline the main areas of clanship and Highland culture, the economic structure, political and social conflict, religion, and the role of the landlord and the nation state. In many ways this is a story of centre and periphery. Even within Scotland itself the gulf between Highland and Lowland society was almost as great as that between it and England. Separated by religious, language, and the level of economic resources, the Scottish Highlands experienced a different pattern of development from the rest of the country. But their cultural isolation did not necessarily lead to a strong sense of community. In chapter 3, which details the transformation of Gaeldom, the author stresses the point that Gaelic society and clanship were in decay long before the eighteenth century. But from the 1760s onwards the pressures intensified as everywhere the bailie, the traditional township settlement of multiple tenancies and the stronghold of communal farming, was broken up in the interests of commercial agriculture. It was replaced by the large farm controlled by a single tenant, where sheep were the main crop and high cash rentals were the chief incentive. The crofts that became the refuge of the traditional cultivators were often situated on marginal land and deliberately set at too small a size to provide a living. Landlords conveniently found work for any surplus labour on profitable non-agricultural activities such as fishing, linen manufacture or kelp-burning. Other traditional features of life fared no better, and even Gaelic, dealt with in chapter 8, started its retreat from the late eighteenth century. In subsequent centuries the pressure on the native language, both from the state and the religious establishment, became stronger. Its plain inconvenience was demonstrated as more of the population were forced from the region in search of permanent or seasonal employment.

The discontent on the part of the crofters that ended in the disorders of the 1880s underlined the fact that this was not a land of ancient landlords, nor had it a tradition of unity. Over the previous two centuries both landlord and tenant had been vulnerable to economic adversity. But whereas the landlords could extract themselves by selling up or changing the use of their land, crofters, who now made up the bulk of the population, had a far more restricted range of choice. By 1850 a substantial number of the older landlord families had been supplanted by newcomers with money made elsewhere. This group found themselves with estates which they valued firstly for their scenery and sporting rights, and secondly for any revenue raising enterprises like sheep farming. As the indigenous peasant inhabitants had been marginalized from these activities they contributed little in rents and, with the decline of some of their by-employments, it was inevitable they were valued least of all. In those districts adjacent to the developing industrial regions Highlanders quietly took the route out, often of their own accord and with a real sense of alienation. Yet despite their economic problems and earlier disorders, the Highlands nevertheless gained an important place in the popular perception of nineteenth-century Scotland. These sentiments were strong among the military establishment which had always provided an important source of outside employment for the Highland male. It is ironic that by 1881 the wearing of tartan trews was ordered even for Scottish Lowland regiments which earlier had won battle honours fighting against Highlanders.

The style of the book is direct and it should have a wide appeal. One of its strengths is that the linkages between the Scottish Highlands and the rest of Britain, including Ireland, are brought out. Also, important general themes, like the 'pull' and 'push' explanations of emigration, are examined. Those areas where there are gaps, as for example the neglected parallel subject of Lowland clearances in the late eighteenth century, are also indicated; so too are the variations in practices and conditions between different parts of the Highland region. As is appropriate for a survey work of this kind, the footnote references have been kept fairly sparse, and each chapter ends with a helpful list of titles for further reading. Some readers might wish the book had ended with a more general chapter drawing together the various themes covered, but this is a small criticism. Its format makes it very...
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useful both for teaching purposes and as an introduction for those wanting to pursue a general interest in the subject.

RICHARD PERRIN


Other volumes in the Longman regional history series edited by Barry Cunliffe and David Hey appear in two volumes divided at 1000 AD, but the massive industrial development of Lancashire and Cheshire in recent centuries led to the decision to begin the present volume in 1540. Thereafter the discussion is conducted in five major chronological sections ending in 1660, 1780, 1860, 1920, and 1974; inevitably this leads to an element of overlap and the need to refer back to earlier sections to trace the continuity of specific themes. Like most of the volumes in the series this is largely a work of synthesis, dependent on the interests of earlier historians. Not surprisingly, the discussion of industry is rich and purposeful, providing a clear picture of developments: no less than ninety pages are devoted to industry before 1920 and there are further sections on towns and transport. Landed society fares well with forty-six pages on the wealth and life styles of those above stairs and on the lower ranks who serviced the nobs. Much detail is provided but structures and trends are difficult to discern until we come to the well-thumbed evidence of the third quarter of the nineteenth century. Agriculture receives relatively short shrift - a mere seventeen pages for the period 1540-1920. The specialist will learn little new. But does this matter? The series is not aimed at a hyper-critical academic audience. If this highly competent, well-illustrated volume helps to provide an increasing awareness of past developments among the general reading public it will have served its purpose.

DONALD WOODWARD


A decade ago a reviewer of Rollo Arnold's The Furthest Promised Land described that book as a remarkable tour de force. New Zealand's Burning: The Settlers' World in the mid 1880s repeats and expands upon that success. Like its predecessor it is a well-made book of the highest intellectual quality. It is also, and alas this is not often the case with agricultural history, a gripping read, a book which it is very hard to put down. The cover picture 'A coach driving for life' sets the tone repeated not only in illustration but also in text. Thus on p 56 we read of how Mrs Richardson protected her children from fire by putting them into a tunnel 'hollowed in the creek bank for meat and butter'. Nearby the Lehmanns saved themselves by scrambling into their potato patch and covering themselves with the green potato tops.

The book is an adventure not simply in its subject matter: the settler's life was certainly an adventure of which the fire hazard was but a small and occasional part. It is also methodologically innovatory and experimental in using fire, the tool as well as the adversary of the colonist, as a unifying theme for discussion of the New Zealand of the 1880s 'moving past the virgin phase' (p 10). However, the book is assertively anti-reductionist: 'practising historians know that history is not one thing but many things' (p 113). And its philosophy is idealist in its quest to 'get some understanding of the minds of those who first shaped and used them (a variety of colonial institutions)' (p 109). We have deliberately endeavoured to see the settlers on their own terms and not to look at them from the false perspective of some other society's agenda' (p 10). This latter is a particularly bold position, and in my view a welcome one, in contemporary New Zealand where so much scholarship is driven by concern for the Treaty of Waitangi and its present implementation. A good dose of intellectual pluralism is very necessary in such contexts.

The book is then in two closely related parts: 'Fire Storm Summer' and 'Anatomy of a Settler Society'. There is inevitably repetition but not to excess. The first chapter launches directly into the drama of the fires of the summer of 1885-86 at the individual scale. The main focus of the remainder of this part is events in Hawkes Bay and Taranaki and subsequent relief and reconstruction, followed by three short chapters on events elsewhere. The second part employs these dramatic events and Arnold's wider reading of the sources, provincial newspapers in particular, for purposes not only of dissection but of synthesis. Some of the emphases are predictable, thus 'town' and 'country' each get a chapter. Others are less so, the rich discussion of 'patterns' ranging from the significance of the phases of the moon (even for election dates) to the relative insignificance of class. Fire brigades receive a whole chapter which exposes not only the constant and widespread nature of the fire risk but also a context of competing priorities, contradictory attitudes, and thus confusion.

What emerges from this wealth of detail is an evaluation of New Zealand 'settling down'. The urban element is not neglected but Arnold is
anxious to assert the primacy of the rural in this particular context. His conclusion emphasizes two dimensions, the centrality of family life both in work and in recreation — and each was to be had in abundance — and the 'element of altruism ... implicit in the widespread self-help of those communities' (p. 283). The objective he sums up as 'the way of life to which so many of the tenant farmers of Victorian England had successfully aspired but with the added bonus ... of the freehold' (p. 282). If this necessitates an internal focus the external contacts are certainly not ignored. There is frequent discussion of 'home', but equally frequently continental European names have a conspicuous place. Taranaki's dairy industry, the commercially adventurous character of which in its early years Arnold emphasizes, drew on European and American as well as British models, and Swiss expertise was needed to establish the first cheese factory. The experience of the province's first dairy farmer who walked Taranaki's first Jersey cow 130 miles (from Marton to Bell Block) exemplifies another of Arnold's themes, the tenacious courage and not least stamina of the settlers, women as much as men, an attribute now too readily forgotten or wilfully ignored in dubious speculative accounts of the morality of European settlement. Arnold does not ignore, though he certainly does not emphasize, the shortcomings of this yeoman (one of Arnold's favourite words) world, shortcomings which he sums up as 'a hunger for land (which) caused it to ride roughshod over Maori rights and over ecological considerations' (p. 283). These are issues which necessarily and rightly concern contemporary New Zealanders. In widening our focus and understanding of the settlement process Arnold has provided not only a splendid and satisfying book about our past but an essential tool, if at times I suspect an unpopular and misunderstood one, for our making of its future.

PETER J PERRY


This is the fourth volume in the Gorsebrook series on the political economy of Canada's Atlantic region (which includes the provinces of New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland). In addition to the editor's substantial and enlightening introduction, his afterword, and his essay on rural industry in Inverness, Nova Scotia, 1899-1910, five other writers make contributions, using (with the exception of the last) local historical material to illustrate and clarify broader changes affecting the economy of the region. They deal with: farm households and wage labour in the early nineteenth century; the process of capitalist transformation and its effects on rural households in Hopewell, Nova Scotia, in the later nineteenth century; the nature of the fishing industry of Newfoundland's north-east coast in the first half of the nineteenth century; settlement in New Brunswick under the province's Labor Act, 1919-1929; and the reflection of historical changes in the fiction of two Nova Scotia authors writing in 1954 and 1963, Charles Bruce and Ernest Buckler.

This wide range of subjects, locations, and periods requires the reader to have some knowledge of current lines of historical discussion in Canada, and in particular, that concerning the place of agriculture and rural industries in Canada's wider economic development. This background is provided by the editor's introduction which, furthermore, discusses the peculiar historical characteristics of the Atlantic provinces and their position in the story of Canada's industrial revolution. The following essays are intended to highlight the rural background to industrialization — and the arcane problem of defining 'rural' in this region's case is not overlooked. Major themes which unify the various subjects are given as issues of transition, and the differences between town and country.

Among the conclusions which emerge are the prevalence of farm-based wage labour in the northeastern Maritimes, the increasingly commercial nature of production and trade as a result of demographic pressures, and the flow of rural labour into industrial occupations, as illustrated by the coal-mines of Inverness, Nova Scotia. In New Brunswick during the 1920s rural workers proved themselves capable, against hostile interests, of securing and retaining forested farm lots, primarily for the purpose of cutting timber for pulp and paper manufacture; while in Newfoundland, fishing based on the household created a class of independent free labourers and small capitalists. Finally, the two novelists mentioned above showed how rural communities, though quite distinct from urban ones, were finding their traditional values increasingly under pressure from modern influences.

The book offers more than a small number of detailed local studies serving to illustrate the variety and complexity of rural societies in the Atlantic provinces. It provides the reader also with an opening into important debates (with ample references to further reading) which surround the historical view of these societies; and, in general, it succeeds admirably in its main objective of placing the countryside at the centre of the region's history.

G E MINGAY

Numerous contemporaries and historians, running from Arthur Young through Karl Marx and Emile Zola to Eugen Weber, have castigated the backwardness of the French peasantry in the eighteenth and nineteenth centuries. Whether or not there was an agricultural revolution in France in that period has been a question long-debated by historians, economists and geographers from France, Britain and North America. The character, timing and location of changes in agricultural productivity and organization, and the contribution of those changes to overall economic development in France, have proved difficult to pin down. For a long time it has been a common assumption that the agricultural sector developed only slowly and that it acted as a brake on French economic progress. Recently, a group of revisionist historians have begun seriously to challenge that assumption and to construct a much more favourable case for the growth of productivity and for significant structural and organizational changes in French agriculture during the eighteenth and nineteenth centuries. Underlying this debate is, of course, the fundamental difficulty of formulating robust generalizations which capture the complexity of agriculture as an economic activity and which embrace both a long historical period and a deep geographical diversity. As the historiography of the 'Agricultural Revolution' in England has shown, such debate also thrives on the ambiguities of qualitative evidence and on the uncertainties of casual analyses of quantitative sources. In relation to France, it has also (somewhat paradoxically) been the case that the sheer mass of agricultural statistics from its 30,000 or so communes checked their rigorous compilation are presented in a final chapter of fourteen pages in volume 1. Some of the findings are unsurprising. For example, Toutain identifies in the course of the nineteenth and twentieth centuries a growing regional specialization, and a national and international commercialization of agriculture in France, and he confirms that in terms of productivity growth the differences among départements diminished between 1840 and 1929 but were accentuated again thereafter. Other conclusions are more remarkable. For example, Toutain claims to have demonstrated that by the mid-nineteenth century the regions of northern and northwestern France (including Brittany) were the richest agriculturally and that the distribution of the production of fruits and vegetables has been constant during the last 150 years, determined by the facts of physical geography and population density. His final, overall conclusion is that one cannot justifiably speak of an agricultural revolution in France before 1960. Such a conclusion, in the light of the plethora of changes identified by Toutain, is only sustainable because he has not defined the term 'agricultural revolution'.

While Toutain's monitoring of agricultural change in this major project in historical economics has usefully made accessible to interested scholars a mass of statistical data, his interpretations of that data will remain open to question by them.
However admirable the scale of this enterprise in data collection and standardization, it remains fundamentally descriptive rather than analytical and contextual. For example, no serious study of the pace and character of agricultural change in France during the last 200 years can afford to ignore, as this one does, the role of the state both in promoting change and in preventing it through protectionist policies. There are other remarkable features of this study. It astonishingly ignores significant, substantial, related work — not only that by Hugh Clout on the transformation of agricultural land-use in France between 1815 and 1914 but also that by J Pautard on regional differences in the growth of French agriculture during the nineteenth and twentieth centuries. Most disturbing of all, however, is that these three volumes concerned with the regional character of French agriculture include only one map, indicating the boundaries and constituent départements of the planning regions of France created in 1960 which Toutain employs as the framework for his study. Whatever his case, Toutain could have made it much more powerfully had he mapped and not just tabulated his data. There should undoubtedly have been a fourth volume: an atlas.

ALAN R H BAKER

POUL VERNER CHRISTIANSEN, En Østjysk Landsby Radder, Tiilst, Kasted, Geding Lokalhistoriske Forening, Århus, 1992. 127 pp. nps.

Local history studies are popular in the Nordic countries and they tend to have a focus on agrarian topics. This monograph, the product of a local history study group illustrated with field sketches by two of the participants, digs into the roots of Geding a hamlet near Århus in Jutland. It opens with a chapter on the late Middle Ages, but is concerned principally with the period of Danish absolutism (1661—1849), during which Geding had a population of between one and two hundred, with six to nine farms (all save one owned by freeholders). Initially the seigneurial rights belonged to the crown, but during the seventeenth century they were acquired by the owners of the manor of Ristrup (a colourful succession of noblemen including a minor poet). The history of the settlement is written first in terms of the conflicts between the freeholders and the manorial owners: subsequently, of the disagreements between the freeholders and the smallholders and farm labourers.

Sources for the study are located principally in the Landarkiv at Viborg and in the archival collections in Copenhagen — recalling the comprehensive Udskiftnings documentation from the Danish enclosure movement and the first formal census materials. Geding was subject to Udskiftnings in 1782 and its first census was held in 1787. In anticipation of their need to consult original documents, enthusiastic members of the study group even learned to read the Gothic script. Church records, manorial ledgers, deeds, wills and a scattering of letters complement the generous records of court proceedings. Legal issues range from significant challenges concerning the misuse of the turneries to minor sentences imposed upon local miscreants. The appendices include lists of the field names compiled from the Matrikel of 1683 and the taxation records of 1781. The names of peat bogs recall their importance in the local economy. Meadow names were collected by a teacher in 1826.

The merit of this modest book lies in the example that it sets for other groups to follow. Historians who wish to illustrate the broader generalizations of their own work will find in it a variety of economic and social detail. By a strange coincidence, Adam Thorpe’s Ulverton (Martin Secker and Warburg, 1992) was being read when Poul Verner Christiansen’s monograph arrived for review. The realities of life through the centuries in the hamlet of Geding provided an entertaining complement to Thorpe’s inventive work of fiction.

W R MEAD

ERIC J EVANS, Tithes: Maps, Apportionments and the 1836 Act, Chichester, British Association for Local History, 1993. 32 pp. £4.50.

Reader beware! Although advertised as a revised edition, this is in fact a straight reprint of Eric Evans’s useful little pamphlet of 1978, with a new introduction summarizing the more important work on tithes published over the past fifteen years. So if you already have the first edition this is probably not for you. On the other hand, if you missed the first edition before it went out of print, then this really is a handy little booklet if you want to come to terms with the complex problems relating to tithe collection prior to 1836, the background to the tithe commutation legislation and the Act itself, and the act in practice beyond 1836.

Unfortunately the final chapter on the processes of commutation beyond 1836, which is the one likely to be most useful to agricultural historians, is also the one which has dated most since 1978, predominantly as a result of the researchers of Roger Kain and Hugh Prince. The chapter does not spell out the processes of commutation clearly enough, while recent local work suggests that Evans’s conclusion that ‘tithe commutation was accomplished with remarkable smoothness and lack of rancour’ (p 25) is too simplistic. But for anyone wanting an informed, brief guide to tithe commutation this remains the most accessible publication available.

J V BECKETT
176 pp. £4.99.

What is it about horse-drawn vehicles that causes normally sane people to sit under a searing July sun in the crowded main ring of a country show to await the arrival of a brewer's dray or to gawp at a top-hatted type perched on a gig pulled by a sweating cob? This reviewer would like to think that people were drawn to such spectacles by an appreciation of the role of these vehicles in the pageant of social history or, perhaps, by a fascination with the technical achievement of their designers. But these are probably fond imaginings. A few may thrill at the sight of a whipptree or pole-bar or at the prospect of the application of a roller scotch, but most are motivated by the same sort of nostalgia that characterises the vintage car show or that ultimate non-event, the traction engine rally.

Mr D J Smith, whose expertise and encyclopaedic knowledge of the genre has been revealed in a variety of works, provides us in the present volume with an extremely useful reference work, impressive by the sheer scope of its coverage. If the breathtaking gallop through transport history from the discovery of the wheel into the mid-nineteenth century may prove unsatisfactory for economic historians, and the technical minutiae and coverage of driving methods slightly tedious to the non-specialist, the descriptions and illustrations of an extraordinary range of vehicles will be appreciated by students across a variety of disciplines. Berlines, landaus, clarences and barouches rub shoulders with brewers' drays, farm carts and fire engines. How many readers of nineteenth-century novels have an accurate or even vague visual image of the various horse-drawn vehicles mentioned in their pages? For that matter, how many students of military history could succinctly describe a World War I mobile pigeon loft, or a travelling cooker and Mark II horse ambulance of the same period? Very few indeed, I suspect. But they should not despair, for if they have Mr Smith at their side, all will soon be revealed. Dray vehicles, milk floats, furniture pan-technicians, undertakers' carriages; little escapes Mr Smith's attention, and his somewhat terse descriptions of each are occasionally enlivened with anecdote. It is comforting to read, for example, that during the course of the development of the omnibus in the 1890s, 'decency boards' were incorporated to screen the lower limbs of female passengers and thereby to limit any testosterone surge among their male counterparts. Writing of the rather alarming 'crane-necked phaeton', a decidedly dangerous sporting vehicle, Mr Smith tells us of the notorious Lady Archer who often drove one of these death-traps and was described, somewhat equivocally, '... as renowned for her skill with the whip as for the cosmetic powers she exercised on her complexion'. Again, drivers of the cabriolet insisted that it be drawn by a tall thoroughbred horse accompanied by a dwarfish groom known as a 'tiger' on account of his striped livery. Such absurdities of fashion speak volumes for Victorian attitudes and it is probably not without significance that the cabriolet was a favourite conveyance of Charles Dickens.

This is a most excellent reference work but does not pretend to be an economic history of horse-drawn transport. A mere two and a half pages are devoted to builders and materials, horse types receive only a passing mention, while trade economics are ignored. It would be extremely interesting to know more of the builders of these vehicles, the cost structure of their trade and temporal changes in its organization. How did changing fashion dictate demand for different vehicles and thereby influence profitability? Who were the designers of the conveyances mentioned and how were their plans modified on a local basis? I am sure that Mr Smith would join me in welcoming a companion volume addressing these and kindred questions, and so adding substantially to our understanding of transport economics before the motor car.

RICHARD MOORE-COLYER


This report, the fifth in a series, is a study of thirty-eight standing buildings of the parish of Chiselborough in south Somerset close to Montacute and Yeovil. Most are of rubble stone with Ham stone dressings from nearby Hamdon hill, new builds of the late sixteenth and early seventeenth century or squatters' cottages of the mid-eighteenth century. All but two farms are within the modern village area. Parish and manor were coincident and in the absence of probate material in Somerset the buildings are instead correlated with estate records, maps, surveys, rentals and manorial court records. The attempt to relate surviving buildings to historic tenures is the chief interest of the volume. The editor estimates that 58 per cent of early seventeenth-century houses and 74 per cent of squatters' cottages survive. Losses are noted and located. In the nineteenth century properties were divided to accommodate a growing population. Each building is described, sketched in plan form with occasional sections, elevations and some details of beam mouldings, and accompanied by notes on
the development of tenures on that site. The whole record is categorized according to the typology of plan forms found elsewhere in the county and prefaced by a useful summary of current research on the area’s local history. The standard of recording is variable and not all the buildings have been fully surveyed. Of one cottage the study cheerfully reports that the internal features of the plan are ‘based on the recollection of a previous occupier before both houses were substantially renovated’. Yet, one might wait forever for the excellent whilst this good piece of collaborative local research is used.

PHILIP MORGAN

Notes on Contributors

BARRY HARRISON is a lecturer in history and local history in the Department of Adult Continuing Education at the University of Leeds, where he has taught since 1966. He is joint author of Vernacular Houses in North Yorkshire and Cleveland (Edinburgh, 1984) with B Hutton, and of The North York Moors: Landscape Heritage (Newton Abbot, 1989) with D A Spratt, and he has written a number of articles on local history, landscape history and vernacular architecture for local and national periodicals. He is researching field systems on the Wessex chalklands and vernacular buildings and farming in Swaledale (North Yorkshire). He is currently President of the Vernacular Architecture Group.

VIVIEN POLLOCK is curator in the Local History Department of the Ulster Museum. After her doctoral research on the history of Ulster seafisheries undertaken at the University of Ulster at Coleraine under Peter Roebuck, she was appointed as assistant keeper of agriculture and crafts in the Ulster-American Folk Park, a museum of emigration in Co Tyrone. She is presently researching the general social and economic history of Ulster since 1600 with particular reference to the physical, technical and historical contexts of the collections in her care and to the specific areas of rural and maritime history.

JOHN CHAPMAN, of the Department of Geography, Portsmouth University, has worked for many years on various aspects of enclosure and is director of the National Enclosure Project. He is the author of numerous papers on enclosure, and of A Guide to Parliamentary Enclosures in Wales. He has also published on other aspects of nineteenth- and early twentieth-century agriculture and on the development of Portsmouth.

SYLVIA SEELIGER is a research associate in the Department of Geography at Portsmouth University, currently working on the National Enclosure Project. She has also participated in a soil erosion project, as well as working on ancient woodland. Women as landholders is the subject of her doctoral research. Her latest publication is A Guide to Enclosure in Hampshire 1700–1900 with John Chapman.

RICHARD MOORE-COLYER is reader in agrarian history at the University of Wales, Aberystwyth. His various books and articles reflect broad interests in the cultural and agricultural history of the nineteenth century. He is also interested in prehistory, and is currently preparing for publication a series of studies of plant and animal husbandry in the second millennium BC.

RICHARD ANTHONY was brought up on a farm in Cambridgeshire, and is a graduate of the University of Edinburgh where he was awarded his PhD in 1993. He has had articles published in the Economic History Review and Scottish Affairs. His thesis is due to be published during 1995 under the title Herds and Hinds: Farm Labour in Lowland Scotland, 1900–1939. He is presently training as an accountant in London, although he retains a strong interest in modern rural history.

ALUN HOWKINS is a senior lecturer in history at the School of Cultural and Community Studies, University of Sussex, where he has taught since 1976. He is the author of Poor Labouring Men (1985), and Reshaping Rural England, 1850–1925 (1991).

JOHN LANGDON is a professor of history at the University of Alberta, Edmonton, Canada. He is the author of Horses, Oxen and Technological Innovation (Cambridge, 1986) and numerous articles and chapters on medieval technology and agriculture. He is currently working on a book about the milling industry in the later Middle Ages, as well as beginning research on medieval transport.
Notes and Comments

FORTHCOMING CONFERENCES
The BAHS holds three conferences a year. The first is its annual residential Spring Conference held at a different location each year in early April. The second is a one-day conference on a local history theme on a Saturday in September, again at a different location each year. There is some doubt over the future of this conference as the one scheduled to be held in Birmingham for September 1994 had to be cancelled because of insufficient support. This was a great pity as the conference organizer had arranged an exciting programme of papers on the Midlands in the eighteenth century. Members of the society who feel they would like to attend a conference at this time of the year, and can suggest either local themes and venues, or strategies, which they believe would tap an existing market and draw in a significant audience are invited to contact the Autumn Conference organizer, Dr Richard Hoyle of the University of Central Lancashire at his home address, 37 Lower Bank Road, Fulwood, Preston PR2 4NS. The final conference is also a one-day conference which is held at the Institute of Historical Research, Senate House, University of London on the first Saturday in December. For the last six years this conference has been organized by Dr Peter Dewey from Royal Holloway College, University of London, Egham. Peter will now be taking a well earned rest after six successful conferences, and from 1995 he will be handing over to Dr John Broad of Whitelands College, University of North London.

The society's next conference will be the 1995 Spring Conference which will be at the University of Sheffield from Monday 10 to Wednesday 12 April. The local organizer is Professor David Hey, Division of Adult Continuing Education, 156-198 West Street, University of Sheffield, Sheffield S1 4ET. The 1995 Autumn Conference will be provisionally arranged for the south of England and will be organized by Dr Richard Hoyle. Looking ahead to 1996 the Spring Conference then will be held at Roehampton, Surrey. The local organizer is Dr Peter Edwards, Department of History, Roehampton Institute of Higher Education, Digby Stuart College, Roehampton Hill, London SW15 5PH. Dr Edwards has already arranged a number of papers which will include, the geography of food production, women as landowners, and market gardening. As an added attraction the conference will also involve a field trip to Young's Brewery at Wandsworth! The dates that you should keep free in your 1996 diary are Monday 1 April to Wednesday 3 April, and further details can be obtained either from Dr Edwards or the BAHS Secretary. The 1997 Spring Conference will be held at the University of Portsmouth and Dr John Chapman will be the local organizer.

CALL FOR CONFERENCE PAPERS
The society is always glad to hear from those willing to offer papers at conferences. If you have one to offer you can either contact one of the conference organizers, or the BAHS Secretary who acts as an overall conference co-ordinator. You should supply a title for your paper and some details, preferably in the form of a short synopsis, together with an indication of which conference(s) you will be available to deliver it to. The addresses of the organizers of the forthcoming conference are given above. The BAHS Secretary is Dr Richard Perren who can be contacted at the Department of History and Economic History, Taylor Building, University of Aberdeen, Old Aberdeen AB9 2UB, Fax 0224 272300.

REQUESTS FOR HELP
As part of our service to readers Notes and Comments now includes a section under this heading. This is designed for all members of the BAHS, but particularly those who are not attached to an academic institution. We hope this will provide assistance for two types of problem: firstly, those thinking of carrying out research and who have chosen a topic, but are not too sure where to begin, or want to know who else has worked on that particular subject; and secondly, those who are well into a project but need further information to fill in gaps, or require advice on methodology. From time to time we have published lists of research in progress, but as there are intervals of some time between their appearance it is hoped this spot will fill the gap where someone wants information in the short term. This service is open to all members and if you feel it might be of some help to yourself, you are urged to send your name and address, along with your request, to the Secretary of the BAHS, Dr Richard Perren, Department of History and Economic History, Taylor Building, University of Aberdeen, Old Aberdeen, AB9 2UB.

INTERNATIONAL SYMPOSIUM IN CHINA
The China Agricultural History Society and the Agricultural History Society of the United States are planning to hold an international symposium in Beijing, China in mid June 1996 on the theme of the origins and the diffusion of agricultural systems in the world. All historical periods are to be covered. Further details will be published in the
FORTHCOMING CONFERENCES
next issue of the *Review*. Otherwise anyone inter-

ested may contact Professor Wang Siming, Institute
of Agricultural History, Nanjing Agricultural
University, Weigang, Nanjing 210095, China (Fax
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Several former members of the society have com-
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Market Integration and Agricultural Output in Seventeenth-, Eighteenth-, and early Nineteenth-Century England

By J A Chartres

Good roads, canals, and navigable rivers, by diminishing the expense of carriage, put the remote parts of the country more nearly upon a level with those in the neighbourhood of the town. They are upon that account the greatest of all improvements. They encourage the cultivation of the remote, which must always be the most extensive circle of the country. They are advantageous to the town, by breaking down the monopoly of the country in its neighbourhood. They are advantageous even to that part of the country. Though they introduce some rival commodities into the old market, they open many new markets to its produce. Monopoly, besides, is a great enemy to good management ...

(Adam Smith, Wealth of Nations, I, IX)

Abstract

Discussions of English agricultural change in the long eighteenth century imply significant changes in levels of market integration, and the capacity of farmers to respond clearly to the price signals available in the market. The present speculative paper reviews the empirical evidence for growing market integration over this long period, and raises questions over the ways in which the mercantile and transport changes that underpinned it may have facilitated farmers' reallocation of resources to more productive ends. It attempts to link English price evidence, relatively poor by comparison with that of its European neighbours for much of the period, to changing market opportunities, to which it attributes much of the significant growth of farm output before the period of major technical innovation after 1820.

In several earlier studies, I have attempted to explore the interrelationship of transport improvement, developments in market structure and organization, and changing patterns of agricultural output and productivity in the 'long eighteenth century', broadly covering the period from the 1650s to the 1820s. The present paper revisits this work, and attempts to identify long-term trends in market integration, to examine the empirical data available for its fuller analysis, and to indicate specific mechanisms by which the process of integration affected production decisions at farm level.¹

If we take as a premise for the present analysis the implications of much modern work on UK, predominantly English farming, it can be assumed that at least until the 1820s, rural improvement took place largely through endogenous means. While some external, 'artificial', inputs to farming were available during the period - conditioners such as lime, and fertilizers such as 'night soil' for example - and were widely used, it was only at the very end of the period that 'industrialized', wholly exogenous inputs, became available, and led fairly quickly to a new and stepwise jump in grain yields.² The logical corollary of this is that the long-term incremental improvement of English farming, widely seen by Crafts and others as perhaps the most significant single component of economic

¹ This is a revised version of a paper first presented at the European Historical Economics Workshop, Lerici, April 1994, and I am grateful to its organizer, Karl Gunnar Persson and all the participants for their constructive criticisms and suggestions. Particular thanks are due to the discussant of the paper, Kevin O'Rourke, to whom specific debts are acknowledged below, and Cormac Ó Gráda. I am also grateful for the comments by two anonymous referees, by Patrick O'Brien, and by Kevin Keasey.

growth in the period, must be attributed to what can crudely be termed integrative and organizational factors. The more efficient employment of given factors of production, and best-practice techniques, were its source, rather than new technology.

This argument effectively highlights many of the issues which will be touched upon in the following paper. It points to the need to integrate the historical analysis of transport changes with that of farming. The nature of information networks needs also to be assessed, since it may well have been in many trades, that speed of information transfer, rather than that of the bulky commodities themselves, was critical to the advancing articulation of market systems, which facilitated changes in land use at the local and regional level. Many of these issues have as yet been little studied in the UK, though several are already familiar themes of research on mainland Europe, notably in studies by scholars such as George Grantham and Jack Thomas. Consequently, in the pages that follow, there are numerous points at which such gaps in our knowledge have to be highlighted.

I

Economic historians of agricultural markets in England, from Thorold Rogers to Arthur John, have tended to economic 'whiggism', and built in long-term assumptions of progress into their descriptive analysis. This has been critical in the assessment of change in the period 1670–1830, and the first and bulky section of this paper suggests that such an assumption is unfounded, when confronted by a more rigorous assessment of the empirical evidence. A single quotation from a classic study by John serves to establish the point:

A second complicating factor in this period is the existence of a variety of separate markets, particularly for grain. Thorold Rogers, on the basis of Houghton’s figures, distinguished six price regions at the end of the seventeenth century. One was based ‘on the Thames and its greater affluents, with certain places such as Hitchin or Wycombe near it ... The next district is the Eastern Counties, chiefly Cambridgeshire, Bedfordshire, Essex, parts of Hertfordshire, Suffork,Norfolk and Huntingdonshire. The Midlands are less definite, but will comprise the counties west of those last named, generally between the Trent and the Thames. The South is the range from Kent to Devonshire, and includes some Surrey markets. The South-west includes Falmouth, Plymouth, Bristol and Pembroke, with the valleys of the Severn and Wye. The North contains the markets north of the Trent and will include Liverpool’ ... After 1730, the growth of provincial newspapers, which quoted London prices, helped to break down this sectional autonomy; but it was not until the development of canals and turnpike trusts that a major improvement was effected in this respect.

The firm if implicit ‘progressive’ model visible in both Rogers and John is clear, and it is proposed in this first section of the paper to demonstrate that it is misplaced, even as a description of the evidence Rogers himself employed as the basis for the definition of ‘price regions’. Subsequent data sets indicate that regional price integration both advanced and retarded during the course of the long eighteenth century.

Rogers employed simple averaging as his methodology throughout his study, and the Houghton data, so critical in the longer historiography of the subject as the fixed point of regional price autonomy against which change was subsequently measured, certainly indicates regional differentials in price, when treated in this way. Reworking the data, my own annual averages for wheat for six towns falling within Rogers’ ‘regions’ are presented to illustrate the
TABLE 1
Annual average price of wheat, selected towns, 1693–1700 (‘best wheat’ in shillings per bushel [c 35.2 litres])

<table>
<thead>
<tr>
<th>Harvest year</th>
<th>London</th>
<th>Cambridge</th>
<th>Stamford</th>
<th>Retford</th>
<th>Hereford</th>
<th>Pembroke</th>
</tr>
</thead>
<tbody>
<tr>
<td>1693</td>
<td>7.6</td>
<td>7.0</td>
<td>6.0</td>
<td>8.5</td>
<td>5.5</td>
<td>3.9</td>
</tr>
<tr>
<td>1694</td>
<td>4.5</td>
<td>3.8</td>
<td>3.5</td>
<td>4.8</td>
<td>3.9</td>
<td>2.6</td>
</tr>
<tr>
<td>1695</td>
<td>6.1</td>
<td>6.0</td>
<td>5.5</td>
<td>7.1</td>
<td>4.7</td>
<td>3.5</td>
</tr>
<tr>
<td>1696</td>
<td>5.9</td>
<td>5.4</td>
<td>4.9</td>
<td>6.6</td>
<td>5.1</td>
<td>4.3</td>
</tr>
<tr>
<td>1697</td>
<td>7.4</td>
<td>6.8</td>
<td>6.6</td>
<td>8.0</td>
<td>6.6</td>
<td>5.5</td>
</tr>
<tr>
<td>1698</td>
<td>7.1</td>
<td>6.7</td>
<td>6.7</td>
<td>7.9</td>
<td>6.3</td>
<td>5.2</td>
</tr>
<tr>
<td>1699</td>
<td>5.1</td>
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<td>4.5</td>
<td>5.6</td>
<td>4.6</td>
<td>3.9</td>
</tr>
<tr>
<td>1700</td>
<td>3.9</td>
<td>3.6</td>
<td>3.3</td>
<td>4.2</td>
<td>4.1</td>
<td>3.5</td>
</tr>
</tbody>
</table>


TABLE 2
Annual average price of horse beans, selected towns, 1693–1700 (in shillings per quarter [c 2.82 hl])

<table>
<thead>
<tr>
<th>Harvest year</th>
<th>London</th>
<th>Cambridge</th>
<th>Stamford</th>
<th>Retford</th>
<th>St Albans</th>
<th>Dunstable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1693</td>
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<td>22.1</td>
</tr>
<tr>
<td>1694</td>
<td>21.1</td>
<td>22.4</td>
<td>25.2</td>
<td>26.0</td>
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</tr>
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<td>28.2</td>
<td>28.9</td>
<td>22.7</td>
<td>26.5</td>
<td>28.3</td>
<td>30.8</td>
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<tr>
<td>1696</td>
<td>25.2</td>
<td>27.9</td>
<td>21.1</td>
<td>31.8</td>
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<td>28.2</td>
</tr>
<tr>
<td>1697</td>
<td>24.7</td>
<td>27.1</td>
<td>24.0</td>
<td>30.0</td>
<td>25.0</td>
<td>18.2</td>
</tr>
<tr>
<td>1698</td>
<td>31.0</td>
<td>26.2</td>
<td>27.3</td>
<td>27.7</td>
<td>27.3</td>
<td>26.3</td>
</tr>
<tr>
<td>1699</td>
<td>28.1</td>
<td>29.1</td>
<td>32.4</td>
<td>30.0</td>
<td>27.8</td>
<td>32.0</td>
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<tr>
<td>1700</td>
<td>19.6</td>
<td>19.3</td>
<td>20.0</td>
<td>29.2</td>
<td>23.5</td>
<td>26.2</td>
</tr>
</tbody>
</table>

Source: as for Table 1.

point in Table 1. Unfortunately, on the basis of my selection of series, continuity of weekly quotations throughout the period, no representative of Rogers' 'south' is included. As indicated by Table 2, for horse beans, broadly similar patterns may be generated for other commodities. Rogers employed a similar approach, but averaged observations promiscuously, and, so far as I am able to tell, fitted his regional boundaries 'by eye'.

Later series, albeit drawn from a much narrower range of primarily institutional sources, and available on a longer and more variable periodicity than the weekly observations described in the tables, appear to demonstrate a lesser degree of interregional variation. Unfortunately, the most recently published studies, by Richard Perren and Arthur John, employ 'annual averages' of data derived from provincial newspapers, and none of the points of observation fits that of the Houghton data for the 1690s. Other studies have tended to employ only the very familiar Eton College, or Winchester series, and present even less convincing spatial coverage. Thus the comparison of proportionate price differentials for markets over time is exceptionally difficult, although as a first stage in the argument presented here, it is an essential element of the context.

Accepting that the crude descriptive data are not what one would wish, some figures indicative of regional price differentials are

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reproduced in Table 3. For each decade from the 1770s, prices for identical years falling into the mid-points of the range of prices are presented, together with an indication of the approximate attribution of each town to one of Thorold Rogers’ ‘regions’. Unfortunately, the poor quality of even this data is demonstrated by the gaps in the record, and at present we must simply note that the quality of UK data, even after the research that has been incorporated into successive volumes of the Agrarian History of England and Wales, remains inadequate by comparison with the mercuriales of most of our European neighbours. The incomplete series represented in Table 3 suggest a reduction of the dispersion of the range of prices by comparison with the earlier data, but are too limited to do much more.

From the 1790s, and particularly from the reformed administration after 1821, there exist the weekly ‘corn averages’, collected from a large number of fixed locations, and used as the basis for national measurement of cereal prices. Modern investigators of these data, Lucy Adrian and Wray Vamplew in particular, have validated their quality, and indicated that while they are clearly imperfect, they represent a reasonable basis for analysis of general price and production trends, and from the late 1820s, provide a weekly national average which can be treated as a fair reflection of the actual market situation.7 They support the general point made on the basis of the figures in Table 3, that the range of dispersion of prices was, by the second quarter of the nineteenth century, significantly reduced, and that it is therefore generally supportive of the implicit model of a long-term trend towards market integration expressing itself by the harmonization of prices. By the second quarter of the nineteenth century, on these figures, prices appeared to con-

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MARKET INTEGRATION AND AGRICULTURAL OUTPUT IN ENGLAND

form to the expectations of basic cobweb theories, and validated general historical expectations of progressive change during the period of the 'industrial revolution'.

II
These views of the nature and structure of the market are clearly not an acceptable analytical basis for the assessment of the extent of integration, and its impact upon decision-making at farm level. Although UK researchers are hampered by the relatively poor availability of data, quite different approaches are needed to meet these issues. This second section of the paper attempts to review the findings and implications of such work, and to create the basis for further exploration of the value of these signals to producers and merchants.

The most interesting and challenging of such studies was that by Granger and Elliott in 1967, which appears to have attracted few followers. They rejected the attempt to measure the extent of market integration by mere descriptive assessment of annual averages, and employed spectral analysis to the available data, at the same time reviewing the somewhat naïve theoretical context in which the topic had previously been discussed. My observation has been that their work remains insufficiently incorporated into the historiography of the topic, and that it requires re-evaluation here. While subsequent work by scholars such as O'Brien and Hueckel have explored the impact of relative prices upon intersectoral resource switching, or its absence, less concern has been demonstrated for the finer analytical issues raised within agriculture.

It will come as no surprise that the data base available for Granger and Elliott was very limited in both geographical range and periodicity. Their work employed 'monthly' data from the Beveridge series on 'Navy Victualling Series A', from which they generated their own simple annual averages; annual average prices taken from Beveridge's Winchester series, and from Lord Ernle's Eton College series; and Michaelmas spot prices for Lincoln, derived from Hill. From the outset, then, it is clear that their work embraced no short-term series equivalent in any way to the mercuriales of France.

The analysis concentrated upon the assessment of leads and lags in the observed price series, and provided results that led to questioning of the conventional picture presented by Rogers, and uncritically recycled by John. Although the advanced analytical techniques are arguably excessive for the quality of the data — the unrepentant historian surfaces! — the conclusions are important, and at the risk of over simplification, can be summarized as follows. Assessing the data for two overlapping time periods, 1723–62, and 1754–93, Granger and Elliott produced correlation coefficients for their paired series for both 'long' [over four years] and 'short' [two to four year] fluctuations, and estimated 'leads' and 'lags' from the data. The r² outcomes are reproduced in summary form in Table 4.

The authors concluded that the evidence for the earlier period, generating surprisingly short leads and lags, and higher correlations than the then secondary literature would lead one to expect, pointed towards the rejection of the 'regional autonomy' theses of Rogers and John. In many ways more interesting was the second critical finding of this research, that the second time period appeared to display lower correlations, and thus to suggest that


Granger and Elliott, 'Wheat prices', pp 261–2. Data reproduced in Table 4 are taken from p 263, Tables 1 and 2.
INTERREGIONAL INTEGRATION WAS LESS ADVANCED. THE REASONS WHICH MIGHT UNDERLIE THIS ARE EXPLORED LATER IN THIS PAPER, THOUGH IT IS WORTH NOTING AT THIS STAGE THAT GRANGER AND ELLIOTT CONFINED THEIR OBSERVATIONS TO EXPRESSIONS OF SURPRISE. FOR THE MOMENT, ACKNOWLEDGING THE DEFICIENCIES OF THE DATA, IT IS PROPOSED THAT WE ACCEPT THIS AS EVIDENCE OF RETARDATION OF MARKET INTEGRATION.

THOUGH IT HAS BEEN ARGUED IN THE PRESENT PAPER THAT ENGLISH PRICE DATA OF SHORTER PERIODICITY ARE GENERALLY FRAGMENTARY, THERE ARE EXCEPTIONS, PRINCIPALLY THOSE PUBLISHED IN JOHN HOUGHTON'S COLLECTION FOR IMPROVEMENT OF HUSBANDRY AND TRADE. THE ANALYSIS OF THIS MATERIAL FORMS THE CENTRAL ELEMENT OF THE PRESENT SECTION, BUT, BEFORE TURNING TO MY RELATIVELY CRUDE STATISTICAL METHODS AND THEIR OUTCOMES, THE SOURCE NEEDS EVALUATION FOR QUALITY. FROM 30 MARCH 1692 TO 24 SEPTEMBER 1703, HOUGHTON PUBLISHED WEEKLY PRICE SERIES FOR AROUND FIFTY TOWNS, MANY OF WHICH APPEARED INTERMITTENTLY, AND THUS HIS SPATIAL COVERAGE AT SOME POINT OF THE PERIOD WAS SIGNIFICANTLY GREATER. HOUGHTON'S CREDENTIALS AS A FELLOW OF THE ROYAL SOCIETY WERE VALIDATED AT THE OUTSET OF THE ENTERPRISE BY TWENTY-EIGHT OTHER FELLOWS, INCLUDING PLOT, SOUTHWELL, EVELIN [SIC], PEPYS, HANS SLOANE, AND EDMUND HALLY [SIC].

HOUGHTON, COLLECTION, I, P 1, 30 March 1692. THE ENDORSEMENT IS DATED 11 NOVEMBER 1691. NEARLY ALL CAN BE IDENTIFIED AS FELLOWS OF THE ROYAL SOCIETY FROM STANDARD SOURCES, SUCH AS THE DICTIONARY OF NATIONAL BIOGRAPHY, THOUGH ONE, PETER PETT, WAS EXPELLED: MANY OF THE REMAINDER WERE FELLOWS OF THE COLLEGE OF PHYSICIANS, WHICH IS NOT SURPRISING IN THE LIGHT OF HOUGHTON'S OWN PROFESSION OF APOTHECARY. WE CAN ASSUME THAT HOUGHTON'S TRADE INVOLVED EXTENDED NETWORKS OF CORRESPONDENCE, AND THAT THIS MAY HAVE PROVIDED THE BASIS FOR HIS AMBITIOUS PROJECT.

Unfortunately, at no stage does Houghton describe the ways by which he collected his 'weekly' price data, and to date I have been able to locate little external evidence to fill that gap. What there is suggests that he possessed an elaborate system of provincial correspondents, whose diligence or its absence accounted for the gaps in the record, and whose general lassitude is revealed by the striking deterioration of most of the series from around 1700/1. One explicit record survives from 28 March 1694, a letter from his Oxford correspondent, providing the market prices 'last Saturday', probably 24 March, but only one of the published prices accords with those in the letter. However, the correspondent, 'An Ch', did report that two others had recently removed from the town, but could still be reached through him, and encouraged Houghton with the words 'I hope your advice to Foreigners goes on'. While the data cannot be fully validated in provenance, their origins can thus be suggested with reasonable probability. This also suggests that they lie rather closer to retail prices than most of the other series conventionally analysed.

The better validation may simply lie in examination of the series for presumptive quality, and a single, typical example of the full set of available data for Dunstable, and

<table>
<thead>
<tr>
<th>Paired series</th>
<th>1723–62</th>
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<th>1754–93</th>
<th></th>
</tr>
</thead>
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<td></td>
<td>Long</td>
<td>Short</td>
<td>Long</td>
<td>Short</td>
</tr>
<tr>
<td>London–Lincoln</td>
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<td>0.30</td>
<td>0.65</td>
<td>0.35</td>
</tr>
<tr>
<td>London–Winchester</td>
<td>0.90</td>
<td>0.65</td>
<td>0.55</td>
<td>0.15</td>
</tr>
<tr>
<td>London–Eton</td>
<td>0.85</td>
<td>0.60</td>
<td>0.70</td>
<td>0.50</td>
</tr>
<tr>
<td>Lincoln–Winchester</td>
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<td>0.40</td>
<td>0.05</td>
</tr>
<tr>
<td>Lincoln–Eton</td>
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<td>0.70</td>
<td>0.20</td>
</tr>
<tr>
<td>Winchester–Eton</td>
<td>0.90</td>
<td>0.50</td>
<td>0.65</td>
<td>0.10</td>
</tr>
</tbody>
</table>
the comparative plots of wheat for London, Brecon, Hereford and Pembroke is presented in Figures 1 and 2. Although some of the principal cereals quoted, oats for example, display long horizontal patterns throughout the period covered by the graph, and must be regarded as of no real value as price currents, most suggest the
variability consistent with data which reflects the state of the market in the short and medium term. The quality for wheat data is generally better than that for other cereals, for reasons to which we will be returning in due course, and the chart for that crop for London, Pembroke, Hereford, and Brecon, also looks pretty convincing as 'real data', at least until the final two years, when the series merely repeat themselves. The conclusions are, therefore, that the Houghton data appear to possess presumptive reliability as reflections of local prices and inter-commodity variation, and that, over the difficult years 1693–1700, they show fairly consistent evidence of one complete peak-to-peak or trough-to-trough cycle. They appear to display a spatial range, periodicity, and quality unmatched in Britain before the nineteenth century.\footnote{Scottish data are somewhat more promising than those for England, and have been the subject of several studies by Rosalind Mitchison, beginning with the useful assessment of the annual prices, in T. M. Mitchison, 'The movements of Scottish corn prices in the seventeenth and eighteenth centuries', Econ Hist Rev, second ser., XVIII, 1965, pp. 278–91.}

Having established the credentials of the materials, we can turn to their analysis. For a number of reasons, the Houghton data were not subjected to a replication of the spectral analysis techniques employed by Granger and Elliott. Although the data were relatively rich in observations – up to seven commodities for eighteen geographical locations in the initial frame for data collection – the fact that a single price cycle appeared to be involved precluded the estimation of the spectra, although, for other purposes, the fact that the prices appeared to display no underlying trend was helpful.\footnote{It is also worth admitting that the author rapidly found himself lost in the arcane mathematics of discussions of the value of spectral techniques, vide Marc Nerlove, 'Spectral analysis of seasonal adjustment procedures', Econometrica, 32, 3, 1964, pp. 241–86, and lacking in software programs available for direct application. Even now, the technique is very limited in use, and stands a little outside the standard portfolio of time series techniques.} After piloting the data collection exercise, it became evident that collection of observations on a weekly basis was not necessary, and that for any analytical purposes monthly observations would suffice. Given the likely leads and lags involved in the transmission of information by correspondence alluded to above, we can assume a range of perhaps two weeks on average between the actual observation and the publication of the price, and precision at the level of the week is probably superfluous.

As is evident from the data plotted in Figures 1 and 2, and the others provided in the Appendices, several years and some commodities had to be screened out before statistical analysis. Of the seven commodities for which data were collected, neither oats nor grey peas produced a quality or a range to warrant further statistical analysis, itself suggesting that neither was traded extensively or that the range of locations that emerged from the screening of the data omitted the north, in which oats in particular may have remained the predominant bread grain for most of the eighteenth century.\footnote{E. J. T. Collins, 'Dietary change and cereal consumption in Britain in the nineteenth century', Ag Hist Rev, XXIII, 1975, pp. 97–115.} Figure 3 presents the towns for which data were collected, and, as indicated in our earlier discussions of Tables 1 and 2, the limitations of spatial coverage are clear: both the north and the north-west are effectively excluded from the analysis by the deficiencies of data. Corn markets of known significance, such as Liverpool or Wakefield, produced some observations, but too intermittently for our present purposes. The result was therefore to bias the data towards the south and east of England, and, for the reasons explained earlier, to confine the statistical analysis to harvest years 1693–1700.

The data were subjected to the simple but relatively severe test of first-differencing, and then a correlation matrix generated for all the pairs of observations. For the data of the best quality, wheat, this produced fourteen sets of observations, but
dropped successively to nine for each of barley, malt and rye; and eight for horse beans. For each commodity both absolute and relative first differences were tested, observations examined both on an immediate and a one-month lagged basis, and the results are presented in summary form in Tables 5–8. The final commodity examined, horse beans, produced only one pairing at these levels of significance, from twenty-seven possibles, for London and High Wycombe, at 0.25.

These results are extremely interesting in themselves, and all the more so when considered in the light of the predominant tone of the earlier secondary literature. It should be noted that there are reasons for considering the 1690s as an unusual period for observation, in that it provides evidence of a sharp rise and fall in prices, and, like the 1590s and 1790s, was a period in which there is clear evidence of dearth, despite the level overall trend that would characterize our period treated as a unity. It also saw the beginning of regular exports of English grain under the stimulus of government bounty. Therefore, conditions may not have been wholly typical of the succeeding decades, but for England at least to the 1770s, and arguably throughout the period we are considering, no decade was 'normal' or 'representative', given the distorting impact of state intervention on price levels and the direction of trade flows. It is therefore argued here

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14 Chartres, 'Marketing', pp 448–54. Exports under bounty had taken place during the 1670s, but beginning a continuous series from 1689. In the 1690s, they were heavily concentrated on barley and malt, and geographically into the East Anglian region.
15 A H John, 'English agricultural improvement and grain exports, 1660–1765', in D C Coleman and A H John, eds, Trade, Government, and Economy in Pre-Industrial England, 1976, presents a case for a very significant impact of these exports on production, particularly regionally.
### TABLE 5
**Correlations of wheat prices, by first differences, 1693–1700**

<table>
<thead>
<tr>
<th>Town</th>
<th>Bre</th>
<th>Cbg</th>
<th>Dun</th>
<th>Hfd</th>
<th>Lon</th>
<th>MM</th>
<th>Nw</th>
<th>Ng</th>
<th>Pbk</th>
<th>Stf</th>
<th>HW</th>
</tr>
</thead>
<tbody>
<tr>
<td>St A</td>
<td>0.45</td>
<td>0.38</td>
<td>0.26</td>
<td>0.46</td>
<td>0.36</td>
<td>0.33</td>
<td>0.30</td>
<td>0.33</td>
<td>0.27</td>
<td>0.54</td>
<td>0.43</td>
</tr>
<tr>
<td>Bre</td>
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<td>0.27</td>
<td>0.33</td>
<td>0.24</td>
<td>0.24</td>
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</tr>
<tr>
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<td>0.27</td>
<td>0.55</td>
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<td>0.53</td>
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<td>0.29</td>
<td>0.49</td>
<td>0.29</td>
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</tr>
<tr>
<td>Lon</td>
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<td>0.33</td>
<td>0.23</td>
<td>0.26</td>
<td>0.60</td>
<td>0.33</td>
<td>0.33</td>
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<td>0.33</td>
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</tr>
<tr>
<td>MM</td>
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<td>0.45</td>
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<td>0.44</td>
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<td>0.28</td>
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<tr>
<td>Ng</td>
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<td>0.33</td>
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<td>0.30</td>
<td>0.33</td>
<td>0.37</td>
<td>0.37</td>
</tr>
</tbody>
</table>

In this and following tables, towns are abbreviated as follows: St Albans, St A; Brecon, Bre; Cambridge, Cbg; Dunstable, Dun; Hereford, Hfd; Hitchin, Hch; London, Lon; Melton Mowbray, MM; Norwich, Nw; Nottingham, Ng; Pembroke, Pbk; Retford, Rtf; Stamford, Stf; High Wycombe, HW.

Sources: Houghton, Collection; these data were first analysed and published in J A Chartres, ‘The marketing of agricultural produce’, in Joan Thirsk, ed, The Agrarian History of England and Wales, V, part II, 1985, pp 406–502, esp pp 459–65. The present paper provides a more detailed exploration of the results of this analysis in a considerably wider historical context. Coefficients in excess of 0.21 are significant at above the 97 per cent level, and those in excess of 0.27 at above of the 99 per cent level. For simplicity in the presentation of these data, indicators of those pairings which emerged as ‘significant’ on a lagged basis, have been omitted. These accounted for 16 per cent of the pairs for wheat; 15 per cent for barley; 20 per cent for malt; and 8 per cent for rye.

### TABLE 6
**Correlations of barley prices, by first differences, 1693–1700**

<table>
<thead>
<tr>
<th>Town</th>
<th>Bre</th>
<th>Cbg</th>
<th>Hfd</th>
<th>Lon</th>
<th>MM</th>
<th>Nw</th>
<th>Pbk</th>
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</thead>
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</tr>
<tr>
<td>Hfd</td>
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<td>0.33</td>
<td>0.33</td>
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</tr>
<tr>
<td>Lon</td>
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<td>0.39</td>
<td>0.30</td>
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<td>0.33</td>
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</tr>
<tr>
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<td>0.25</td>
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</tr>
<tr>
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<td>0.33</td>
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### TABLE 7
**Correlations of malt prices, by first differences, 1693–1700**

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<th>Town</th>
<th>Cbg</th>
<th>Dun</th>
<th>Lon</th>
<th>MM</th>
<th>Nw</th>
<th>Pbk</th>
<th>Rtf</th>
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<tr>
<td>Nw</td>
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<td>0.27</td>
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<tr>
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that there is reason to doubt the evidence derived from the 1690s, but that it is insufficient to invalidate the tentative conclusions that can be drawn from the exercise.

If this analytical approach, as is suggested, tests the extent to which price movements were generally synchronized, and that this is a powerful indicator of the extent of practical integration of cereal markets, then important conclusions emerge. The first is that for the bulk of the group of towns tested, wheat prices were remarkably consistent in the extent and direction of change. To that extent, it suggests that the market for wheat, grown largely as a cash crop and thus most likely to suggest capitalistic market structures, was remarkably integrated in the 1690s, and that these results accord well with those derived by Granger and Elliott for the period 1723–62.

Of the markets examined, only those in the far west, above all Brecon, generated evidence of serious detachment from the general movement of wheat prices, both in generating few ‘significant’ pairings, and in producing some inverse relationships. This is not to say that there are not some puzzles in these results: Norwich, for England's second city located at the centre of a major granary, does not produce the strong and consistent correlations that might have been expected with London, but that may indicate how unwise previous studies have been to consider these issues wholly in terms of wheat. Though still weaker than one would have hypothesized, Norwich does produce a significant coefficient for barley. These results therefore suggest a relatively high level of price integration for wheat in both the 1690s and the period 1723–62, which deteriorated in the second half of the eighteenth century, and which is not fully restored until perhaps some years after 1810.

As interesting, perhaps, are the results for the other cereals, which have been generally neglected in previous British studies of prices. The series for barley and for malt would, of course, be expected to exhibit very similar patterns and, on the comparative evidence of Tables 6 and 7, they do, allowing for the fact that two slightly different sets of towns are involved. The great barley-producing and malting counties to the north of London reveal themselves in the strong presence among the pairings of St Albans and Dunstable, but here above all the relatively inconspicuous position of Norwich is surprising. Already by the 1690s, East Anglia was beginning to concentrate upon barley production, most of it for malting rather than as an inferior bread grain or animal feedstuff, and what is known of the physical flows of trade points to two principal destinations for East Anglian regional exports: London, from the 1690s beginning to develop as the key entrepôt for English grain; and the Netherlands, mainly Rotterdam and Amsterdam, where the lesser English barleys and malts could secure
a valuable markets with the distillers. This dualism may help to explain some of the odd performance of Norwich, and, for present analytical purposes, it is a pity that data of the requisite quality do not survive for the known centres of the barley and malt trades, King's Lynn and Yarmouth. A glance at the locations of these data also suggests a degree of concentration into the east and east midlands, again what would be expected from the existing secondary literature on commercial barley farming. Both barley and its semi-processed form, malt, were clearly also significant cash crops, and although their price behaviour suggests less extensive integration than for the wheat market, it was nonetheless clear, and for some of our pairings of markets, the price harmonization very strong.

The fourth grain, rye, has attracted precious little attention from British historians, and it appears to have been a crop which was well behind barley, oats, and wheat in sown acreage, and probably accounted for less than 15 per cent of total English cereal output in the 1690s. Even then, it was often grown for consumption on the farm, and frequently in mixtures with the other winter grain, wheat, and known as mancorn or maslin. The evidence of the trade statistics suggests that it was also imported in significant quantities to the east coast ports, as were oats, probably both for animal feedstuffs. Accordingly, it is not surprising to find in the rye data an apparently less integrated market than for the grains higher up the consumption ladder, and one that yields evidence of trade concentrated into the east midlands and eastern counties, with the exception of Brecon. Though these data cannot provide any real certainty, they suggest a greater degree of local and regional autonomy in the markets for rye than for the other grains. Strikingly, the final crop for which data were subjected to similar tests, horse beans, produced little evidence of integration, and suggested largely localized price determination.

Thus the preliminary conclusions from this exercise are that the market for wheat was advanced in its extent of price integration, but that this diminished significantly as one descended the bread scale. However, one further point needs first to be addressed before the implications of these results are explored. The analytical approach here employed ignored the absolute levels seen as significant by Rogers and his followers, and considered instead relative movements, and this may need some justification. The range of prices of the two crops covered by Tables 1 and 2 is quite striking: can one justify ignoring this in pursuit of analysis based upon harmonization of movements? For several reasons, the answer can be affirmative. The crops we are considering may not be homogenous: 'best' wheat may not be the same in Brecon as in London or Norwich, but may still react to similar disequilibrating factors in the market place. Regional measures differed widely in volume, and in their customary use: some bushels were normally 'struck', and others heaped. Although some of the differences in the figures of Tables 1 and 2 are sufficiently large as to explain why Rogers discerned different regions, they may still lie within the range of explanation by such factors. While recognizing grounds for proper scepticism, then, the Houghton data have historical integrity, and corresponding analytical significance.

III

The final two sections of this paper consider the implications of such evidence as we have been able to present on prices and market integration, first by examining the extent to which the picture derived from

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19 Chartres, 'Marketing', p 444.
MARKET INTEGRATION AND AGRICULTURAL OUTPUT IN ENGLAND

Figure 4
Rank-size distribution of English towns, 1500–1979

...the work discussed in section II is credible and related to external historical circumstances, and second by examining the extent to which it represented a critical permissive factor in specialization of farm output.

The first issue is one addressed in an earlier paper, but one that can be further explored here. The argument is that up to the middle of the eighteenth century, England had been dominated by the massive growth of London, both in absolute and proportionate terms. As is evident from the curves of Figure 4, redrawn from Jan de Vries, this produced an unbalanced urban hierarchy in England, one which displayed striking 'concavity'. From the middle of the eighteenth century, this was gradually reduced, through the relatively faster growth of other urban centres, until, by the earlier nineteenth century, it had achieved a marked log-linearity, which can be interpreted as evidence of a coherent, efficient, and mature urban hierarchy. The kinked and gradually straightening curves of Figure 4 should therefore be treated as a long-term description of England's rapid urbanization, led initially by London to the point at which England came to rival the Netherlands in its proportionate 'urban' population, and successively by the industrial and commercial cities, which assumed relatively greater significance in the century after 1750.

It is argued here that this long-term profile of the nature of change in England's urban hierarchy provides some explanation for the outcome of the statistical investigations which gave Granger and Elliott cause for 'surprise'. Although the geographical coverage of their data was very limited, other factors may help to support the case being made here, that the half century or so from the 1750s or 1760s represented a phase of instability and adjustment between two distinct equilibrium positions of integrated cereal markets. It assumes that Granger and Elliott in their analysis of the period 1754–93 (Table 4) did not produce a statistical quirk, but a result that suggested historical actuality.

For several reasons, market conditions may have been more stable for the periods 1690s–1750s, and after, say, 1820, than in the interim. The first is the evident primacy...
of London as market for cereals, which would point to its demanding perhaps 8 per cent of gross output in 1750 for food and drink. Superimposed upon this key market feature was a second factor, the substantial export trade in grains stimulated and sustained by government bounty payments, and a third, London's disproportionately important position in domestic and foreign shipping. Coupled with its equally dominant position on England's principal river navigation system, and as the hub of a relatively developed road goods carrying network, London came to play a disproportionately large influence in England's grain markets. Integration in our first period may thus be treated as the outcome of London's primacy, which by the 1750s may have led to perhaps a quarter or more of England's wheat being traded physically through the capital. Some of Granger and Elliott's 'lead and lag' analysis may be argued to support this case. Though London's provisioning requirements in this period may not have differentiated it significantly from that, say, of Paris on the Île de France, these multiplicative trading factors clearly did so. Integration in our first time period can thus be argued to have been the outcome of dominant metropolitan price-setting.

Kevin O'Rourke has posed an important alternative interpretation of these results. Implicitly, in the earlier parts of this paper, four indicators of integration have been posited, and it is perhaps at this point that they need to be made explicit. These are: absolute convergence of price levels; reductions in regional variations of prices, measured by comparative coefficients of variation; increased regional specialization in output; and, finally, an increase in the correlation of prices in different areas.

Dr O'Rourke has suggested that re-investigation of the Granger and Elliott's data produce fewer quirks than at first appear, in other words less conflict with the expected 'whiggish' model of historical integration. Retesting the data using standard rather than spectral statistical approaches, O'Rourke identified the source of Granger and Elliott's declining correlations in the Eton-Winchester relationship: first-differenced correlations for the other series produced no serious conflict with the earlier period. The 'problem' thus could be in part illusory.

Another possible explanation, which may fit better with other implications of the present paper, is that the grain market in the second half of the eighteenth century was subjected to greater shocks than in the preceding or succeeding periods. Employing a formal Roehner model, O'Rourke has confirmed the implicit arguments presented earlier, that regional price differentials theoretically can be assumed to be primarily a function of transport costs. However, if in the context of increased shocks to the networks of supply, given the fact that no region or market was wholly autarchic, then increased price variance could result, and the correlation coefficient could fall without implying any change in market efficiency or the extent of integration. Neither inference drawn here from Granger and Elliott's work can therefore lead to the certain rejection of the 'whiggish', long-term view of growing integration and market efficiency.

It is also significant that the Houghton data enable seasonal patterns of prices to be examined, and compared with similar data on the transport of cereals. On this basis one can tentatively assess whether the

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45 That is the implication of ibid, and Chartres, 'Marketing'.
46 I am indebted for this comment to discussions with H van der Wee.
47 These paragraphs provide a very brief statement of an important range of empirical and theoretical issues raised primarily by O'Rourke, and by other members of the workshop, none of which can yet be resolved with finality. The need for more intensive work on English short-term price series is clearly reinforced by these arguments, but cannot be comprehended within the present speculative paper.

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market possessed the information and storage systems which would be needed to support this hypothesis. Again, the answer to this important question can only be provided for a very limited range of years, and few English data appear to offer the possibility of examining these issues on a comparative basis for later periods. The evidence that can be produced combines seasonal patterns of coastwise grain shipments into London, derived from one of the principal wharves in the city, Wiggins Key, in the early 1680s, with the monthly London price movements, 1698–1703, derived from Houghton. In combination, on what has to be seen as a very rough-and-ready statistical base, these data, presented in Figures 5 and 6, suggest that physical flows and seasonal price movements were not consistently similar, and clearly point to stockholding in city granaries, and effective information flows as further elements in the price regime of a mature market structure. Neither data set is sufficiently robust to be certain of this conclusion, particularly in the absence of any effective comparative research.

Many new circumstances applied to the succeeding sixty years or so, nearly all of which will be so familiar as to need relatively little recapitulation here. Under pressures of population growth, net exports of grains effectively ceased from the early 1760s, and do not recommence until the mid-1790s, thus removing one of the critical elements of London’s primacy. From the 1760s, though not completed until around 1815, there was the first technological change in transport capable of turning the traditional internal trades of Britain ‘outside in’, and refocusing grain trades and those of other bulky, low-value commodities, the advent of the canal. The cumulative impact of population growth led to clear regional and local cases
of dearth, with potentially severe public order consequences, all indicative of radically altered supply conditions, and these were very pronounced during the hungry '90s. All of these were perhaps secondary to the overwhelming impact of new urban growth, with its very striking consequent provisioning demands. As early as 1801, only one of the top six provincial towns following behind London in England's hierarchy in 1700, Bristol, was still in this group, and in the subsequent years the relative positions of Manchester, Liverpool, Birmingham, Leeds, and Sheffield were further elevated.\textsuperscript{31} Infecting northern and midland England with new poles of attraction for food suppliers, new targets for successive von Thünen rings of specialization, and growing nodes within an evolving transport system, these cities shattered the old equilibrium of market relationships, and the new probably only stabilized in the 1820s.

IV

The final section attempts very briefly to explore the implications of these findings for the analysis of production decisions at farm level, and thus to relate the assessment of trends in market structure and integration to wider considerations of agricultural productivity. This would represent an agenda for a paper in itself, and here the issues are confined to price evidence, and the extent to which it can be related to the key issue of shifting patterns of output.

Patrick O'Brien's estimation of a new series of relative prices for England, 1660–1820, forms the essential point of departure for the argument of the present section. In looking primarily at the John thesis of the centrality of agriculture in the dynamics of a home market based profile to economic growth, O'Brien incidentally raised important questions as to the strength of price signals to the switching of output between agriculture and industry:

Nevertheless, the new price indices suggest that the reallocation of resources from arable to animal husbandry had little to do with the inducements offered by shifts in relative prices. Between 1660 and 1820 the movement in the relative prices of grains compared to animal produce is almost imperceptible ... On balance, English farmers were not receiving the strong price signals (posited by several agrarian historians) to shift land and other resources from arable to pasture. The argument that agrarian progress became more conditioned by urbanization and patterns of expenditure favourable to animal farming – which in the long run promoted higher levels of overall efficiency – is not supported by price data. Perhaps demand for meat and dairy produce did rise more rapidly than demand for grain over the eighteenth century, but equally that may have been accommodated by cost-reducing innovations in animal husbandry and by imports from Ireland.\textsuperscript{32}

A number of agrarian historians have indicated that these important challenges to the new orthodoxy of English agrarian history are hard to reconcile with the hard evidence of quite extensive general shifts in the profile of output, and the very pronounced emergence of regional specialization. Paul Glennie, for example, contended that O'Brien's argument applied with force to consumer prices, but provided less certainty about relative levels of farm profits. These may have been sustained by the very economies in the marketing and transport processes indicated by the present paper, and there may also have been very pronounced gains in productivity in both the cereal and livestock sectors, both of which would offer significant gains in farm revenue. In addition, as will be evident below, there were quite distinct and asynchronous regional changes taking place within this market system, and these are not fully captured by the national aggregate price series approach.\textsuperscript{33}

\textsuperscript{31} Wrigley, 'Urban growth', p 160.


\textsuperscript{33} Paul Glennie, 'Continuity and change in Hertfordshire agriculture, 1550–1700: II – trends in crop yields and their determinants', \textit{Ag Hist Rev}, 36, 1988, p 158.
It is argued here that a number of the implications of the present study of prices, when combined with the evidence of change in transport and distributional systems, suggest that there are ways of reconciling the apparent conflict. The crude summary of the conclusions about market integration being advanced here, is that it was more pronounced on either side of the half century or so from c 1760, than it was during that period. That intervening period has been suggested as being one of complex adjustments, taking place under conditions of relative scarcity of food supply, inflation, the highest rates of population increase, and, at least on Crafts's estimates, relatively retarded growth rates of home agricultural output. Another dimension of the adjustment may have been the refocusing of regional and national trading links to the rapidly growing 'new' urban centres. Specific case studies of these symptoms of adjustment or the advance of regional specialization and intensification exist in plenty, and suggest that the general clarification of the price signals may have been perhaps more important than O'Brien's aggregate measures in determining shifts in farm investment decisions. If the middle period was, as argued here, characterized by 'noisier' signals, or confusion resultant upon the fact that many new transmitters were beginning to broadcast, then that too may find support in these cases.

The two ruling characteristics of the grain market in our first period was that it was generally one in which the home food supply was not in danger, and that this point was reinforced by the buoyancy of exports. The evidence from regional and local studies combines strongly with that of price analysis to suggest that the outcome was one of significantly enhanced regional specialization. East Anglia, above all, rapidly came to specialize in the large-scale production of barley, and in order to do so devised ways of abolishing much of its fallow, and hence introducing fodder crops to maintain its livestock herds. As, after the late 1720s, the export market shifted in favour of wheat, then the cereal output of largely southern and eastern England responded. The inland counties of the south and east also demonstrated such responses, as the intensification of arable in the counties north of London, such as Hertfordshire, and in the chalk downlands of the counties to the west of the capital, demonstrated. Clarity of information about markets, coupled with significant improvement in the mercantile structure that articulated them, enabled these cereal farmers to intensify labour and other inputs, which appear increasingly to have been the critical sources of gains in the physical product of their lands. Greater output at higher yield and higher cropped acres were the probable sources of their enhanced net farm income in this context, and the superficial evidence of historians' 'national' price indices largely irrelevant to the issue.

The second of our illustrative case studies focuses upon the south midlands and the middle quarters of the eighteenth century. The benefits of clear and consistently-transmitted market signals to specialist wheat and barley farmers have been specified, but how did such factors affect the farmers of the southern midlands of

16 Mark Overton, I am sure, will regard this as a gross oversimplification, but I hope true to the spirit of his critical research findings on the region, and their wider implications. I take as a basis for much of this comment his 'The diffusion of agricultural innovations in early modern England: turnips and clover in Norfolk and Suffolk, 1580–1740', Trans IGB, new series, X, 1985, pp 205-21.
37 Chartres, 'Marketing'; much of the present argument was fore-shadowed by E L Jones's seminal study, 'Agricultural origins of industry', Past & Present, XL, 1968, pp 58-71.
39 Glennie, 'Continuity and change'. On the operations of merchants and middlemen in the period, see Chartres, 'Marketing'.

24 O'Brien, 'Agriculture', p 778.
33 I have argued this case earlier in 'City and towns', but this provides a welcome opportunity to clarify and expand the argument.
England, where corn and horn had long been alternative, rather than complementary, cash crops. Part of the answer is to be found in the widespread development within the region of ley farming, somewhat eccentrically termed 'up-and-down husbandry' by Kerridge, and part by the presence of this region as the geographical locus of the first great wave of parliamentary enclosures in the 1740s. The two issues are best seen as a continuum, permitted and facilitated by the integration of corn markets, which clarified the availability of bread grain supplies from outside the region, and thus permitted the region to respond rationally to market conditions, and to move towards specialization in grazing. Ley farming, as John Broad has demonstrated, was a low-risk intermediate stage in this process, and parliamentary enclosure of open field arable for conversion to grass its logical conclusion. Robert Allen's challenging researches on the same region suggest a further mechanism, through the enclosure process, which enabled land use to be reallocated in response to this signal.

Third, an earlier paper attempted to examine the interactive effects of these integrative and informational changes through the analysis of power relationships in the market place. This was put simply in terms of grains, and the arguments can only be summarized here. Empirical evidence was drawn from the oligopolistic London corn market, from the still more concentrated corn markets visible in the Essex and Kentish ports, and, through David Ormrod's work, the great grain ports of Yarmouth and Lynn, and linked to suggest an asymmetrical power relation-

ship between buyer and seller at each stage of exchange. This, it can be argued, demonstrates the real power of the holder of information and the ready cash or essential credit facilities, features which are commonplace in the analysis of the market structures of mainland Europe. In the actions of the holders of market, perhaps oligopsonistic, power we can find a further mechanism sharpening the power of price signals as integrative forces, and 'taxing' the increment of output in less competitive zones of supply into greater efficiency or diversification. The apparent signs of disintegrative tendencies in the later eighteenth century may be indications of increasing competition between the merchants serving the growing alternative markets outside London, and perhaps of a relative shift of power back towards the producers, as supply conditions became more constrained. I have also suggested that the corn riot in the period, and Edward Thompson's 'moral economy' and custom-based assessment of crowd behaviour, may be interpreted as perfectly rational responses to the adverse impact of these market power structures, and to the manifestations of complex and integrated markets. The behaviour of the urban crowd effectively provided for the economic historian an alternative indicator of these shocks, integrative tendencies, and increasing price variances.

This paper has largely eschewed comments on livestock, and perhaps it would be sensible to add a final case-study or exemplar from this sector to the general case being made. It will be obvious that the problems of comparison of price quotations become still more forbidding when dealing with sheep and cattle, even in the nineteenth century, and fewer statistical


42 Chartres, 'City and towns'.

43 In many senses the Liguria conference widened my frame of reference, and raised issues to which I shall return, but an example may be seen in Jean Meuvret's Le probleme des subsistances a l'époque Louis XIV, III, Le commerce des grains et la conjoncture, Paris, 1988, ch 2, pp 47–96.
series of real promise exist for the kinds of analysis I would advocate. However, a very clear case can be made for the existence of an integrative mercantile structure akin to that for corn by about the same period, the early eighteenth century.\(^\text{44}\) There was equally compelling evidence of oligopsonistic power, and exploitative rings. Again the case suggests that extensive market integration was the process which generated productive regional specialization in the livestock trades, which ran from the store-producers of the far west and north, through the graziers of the midlands, to the fatteners of the fringes of London. Very significantly, the key transport innovation of the 1820s, the steam coaster, effectively transformed Aberdeen-shire from the first to the last zone.

That the farmer could and did respond to what O’Brien might have seen as weak price signals, and that this response may be a further indication of real market integration, has been shown in the important and interesting work of Andrew Copus. In his examination of the breeds, qualities, and other features of English southern downland sheep after 1780, Copus has shown clearly how the ‘democratic’ process of breed alteration, or very conscious crossing, was conducted by tenant farmers in response to shifts in the relative prices for wool, tallow, and meat. Responses appear to have been sensitive and relatively rapid, and largely independent of the ‘gents’ who, as usual, confined their attentions to the production of uncommercial freaks.\(^\text{45}\) There was clearly extensive, subtle, and early integration of livestock markets, which provided a powerful parallel contribution to cereals in agricultural improvement.

V

The conclusions to this study will be relatively brief. The analysis of such data as are available, which are relatively few, and arguably poorer in quality than those available to many of our neighbours, has traditionally been conducted in ways that have not greatly helped the assessment of market integration. Indeed, the lasting impact of the pioneering work of Thorold Rogers may have been to mislead, by presenting evidence of extensive regional price autonomy at the end of the seventeenth century, which has subsequently been uncritically adopted by other scholars,\(^\text{46}\) as the baseline against which to evaluate the ‘progress’ of the periods in which they expected it, the traditional area of ‘agricultural revolution’, largely after 1750.

Recent scholarship outside this field has tended to emphasize two critical revisions to the historiography. The ‘industrial revolution’ is now more widely accepted as a process rather than a concentrated period of time, and a more extended chronology accorded to growth. This has had the effect of adding emphasis to the later seventeenth and earlier eighteenth centuries as key period for analysis, rather than zones merely contributing ‘preconditions’ to the revolution. This has been paralleled by the work of the agrarian historians, who had reached many similar conclusions rather earlier, thanks to the work of Eric Jones, Joan Thirsk, and others, and it has become clear that concepts of ‘agricultural revolution’ are the better explained as constructs

\(^{44}\) Discussed at length in Chartres, ‘Marketing’, esp pp 480–91.


\(^{46}\) What in many ways was the study with the best-researched data base was the chapter by P J Bowden, in the Agrarian History, V, II, which followed up his 1967 study of the sixteenth and early seventeenth centuries of volume IV. When one looks with care at his methodology, it becomes clear that he effectively ‘fixes’ his regions and their relativities by choosing base series, and correspondingly the price appendices to both volumes, while an immense improvement upon the previous confusion, fail to address what are argued here to be fundamental questions.
felt to be necessary adjuncts to the concept of the industrial revolution, rather than as descriptions of real processes. The commercial, transport, and first sexual revolutions perhaps belong in the same boat. Deeper analysis of the complex processes of long-term change have correspondingly become highlighted, as much in agriculture as in industry or trade.

The radical conclusions beginning to emerge from the work of early modern agrarian historians and historical geographers, principally Mark Overton and Paul Glennie, have combined with those of Michael Turner and Robert Alien, to alter our perceptions of agrarian change in the long eighteenth century. Most strikingly, in the joint work of Overton and Bruce Campbell, it has become clear that technical standards in East Anglian cereal farming, up to at least 1700, were no better than 'best practice' of the great monastic estates of the earlier fourteenth century. Logically, the diffusion of such best practice, largely through the intensification of labour inputs, could explain much of the advance in yields and arable productivity in the first half of the century. Enclosure and the familiar emblems of 'improvement' after 1740 may well have been less productive *per se* than once we thought, and the years 1760–1820 may perhaps be better described as a period of extensification on a given technical base, rather than critical years of technical progress.

These conclusions lead us to focus upon the unanswered questions about the mechanisms which produced change and the diffusion of best practice. The arguments presented in brief here have been that price signals and their mercantile progenitors were critical elements in these processes, and that these help to explain how the intensive regional division of labour in eighteenth-century agriculture, stressed long ago by Jones as the key issue, came about. The close analysis of such data as are available indicates a highly-integrated market up to about the middle of the century, generated perhaps by the 'primacy' of London in England's urban system, which subsequently deteriorated, and only reasserted itself in the less inflated circumstances of the 1820s. Many factors may help to explain this, but the fundamental issue of England's rapid urban growth is suggested as the critical key, in generating a plurality of major centres of demand. Another critical vector for change may have been labour.

The simple conclusions here advanced are thus to put some flesh, and some new chronological perspectives, upon the views of Adam Smith that formed our epigraph. Market integration may have allowed the pack of factors in English agriculture to be reshuffled to produce quite remarkable growth in output. It remains an area in which further research is needed before any formal modelling of these complex interactions could hope to be empirically successful, but it is hoped that the explorations of the present paper have suggested that it might well repay the effort.
MARKET INTEGRATION AND AGRICULTURAL OUTPUT IN ENGLAND

APPENDIX 1

Monthly wheat prices, 1693-1700, London, Melton Mowbray, Nottingham, Retford, and Stamford

APPENDIX 2

Monthly barley prices, 1693-1700, London, Melton Mowbray, Norwich, and Stamford
APPENDIX 3

APPENDIX 4
Monthly horse bean prices, 1693-1700, London, Dunstable, and High Wycombe
Who was subjected to the Laws of Settlement?
Procedure under the Settlement Laws in Eighteenth-Century England

By NORMA LANDAU

Abstract
This article examines the procedures under the settlement laws which produced the eighteenth-century settlement documents now in parish archives. The article uses the evidence of procedure in the application of the settlement laws to argue that parish officers applied these laws in order to regulate and monitor immigration to their parish. So, this article argues against the hypothesis that the settlement laws were applied just to the unemployed and those in need of poor relief. Indeed, it presents evidence that, before 1795, parish officers applied the settlement laws to many men just because they were living in a parish which was not their parish of settlement.

According to the settlement laws of eighteenth-century England, parish officers had the power to regulate the interparochial migration of most English men and women. In applying the settlement laws, they generated the production of settlement documents, documents which historians are now using to investigate the social and economic life of agrarian England. This article examines the process which produced these documents, and so it addresses a question which affects the assumptions historians can make about these documents: whose lives, the lives of which strata of English society, are reflected in settlement documents? For, while parish officers had the power to regulate the interparochial migration of most of the English, parish officers did not have to do so if they did not want to do so. If parish officers had so wished, they could have applied the settlement laws just to those who were unemployed or otherwise in imminent or immediate need of relief. This article uses evidence not available to earlier historians to demonstrate that eighteenth-century parish officers applied the settlement laws so as to regulate and monitor interparochial migration. As a result, the people whom they subjected to the settlement laws — that is, the people whose settlement documents are now being used to analyse agrarian society — were by no means just those who were unemployed or in need of relief. So, this evidence indicates that eighteenth-century parish officers applied the settlement laws to a large proportion of England’s population and that, in rural parishes, they


Ag Hist Rev, 43, II, pp 139-159
continued to do so throughout the eighteenth century.

According to the settlement act of 1662, the act which provided the framework for the laws of settlement, parish officers could remove from their parish to his parish of settlement any person who rented for under £10 a year and who was 'likely to be chargeable to the parish' he had come to inhabit.3 Who, under the settlement laws, was a person 'likely to be chargeable'? England's judges provided a neat answer: a person 'likely to be chargeable' was a person who rented for less than £10 a year. As Mr Justice Powis stated in 1714, in a case that elaborated upon earlier precedent: 'The words likely to become chargeable, imply that a person is not in a tenement above ten pounds per annum; for if he be in such a tenement, no one can aver that he is likely to become chargeable'.4 Three years later, Mr Justice Eyre summarized previous opinion in what became the definitive statement of the law: 'living on a tenement under £10 a year, and likely to become chargeable, are convertible terms'.5 As most Englishmen rented for much less than £10 a year, the 1662 act allowed parish officers to prevent interparochial migration by most Englishmen. For, under the 1662 act, if and when most Englishmen moved to a new parish, the officers of that parish could immediately remove them from that parish.

Indeed, the settlement act of 1662 was considered such a stringent restriction upon the right to reside that in 1687 Chief Justice Herbert declared that a parish could remove even a freeholder from his freehold to his parish of settlement, if the freehold yielded an income of less than £10 a year.6 However, by 1697 the judges, speaking through Lord Chief Justice Holt, had decided that 'the Act of Parliament never meant to banish men from the enjoyment of their own lands'. Hence neither freeholders nor copyholders could be removed from the parish of their freehold or copyhold.7 And so possession of a freehold or copyhold became a means of acquiring a settlement in the parish of the freehold or copyhold.8

Judges' rulings and subsequent legislation further defined those whose movement parish officers could regulate. By the early eighteenth century, parish officers

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3 Rex and the Inhabitants of Stannour, Hil. 2 and 3 James II, Skinner 268, English Reports, vol 90, p 122.
4 For the quotation and freehold see: Inter the Parishes of Ryslip and Harrow, Hil. 8 Will III, 2 Salkeld 524, English Reports, vol 91, p 440. For copyhold see: Harrow and Edgware, E. 11 Ann, reported in B. Bert, A Collection of Decisions upon the Poor's Laws, reprint of 1771 ed, 1978.
5 The judges also decided that someone who came into possession of any landed estate 'by act of law' - that is, by inheriting the estate or by being appointed its executor or administrator - gained a settlement in the parish where the estate was located if he lived there for forty days while in possession of the estate (Trin, 7&8 George II, 1734, Rex vs Inhabitants of Sundrith, reported in James Burrow, A Series of the Decisions in the Court of King's Bench upon Settlement Cases from ..., 2 vols, 1768, vol 1, pp 7-11; Manley and Grandborough, Trin. 4 George I, 1718, 1 Strange 97, English Reports, vol 91, p 409; Rex vs Inhabitants of Uttoteer, Trin. 5 George III, Burrow, Settlement Cases, vol 2, pp 538-546. I want to thank Professor Thomas Barnes for his advice on the relation of any such immigrants, but instead to those who are the inheritors, administrators, or executors of landed estates (K D M Snell, 'Settlement, Poor Law and the Rural Historian: New Approaches and Opportunities', Rural History, 3, 1992, p 131).
6 Snell supports his presentation with the following quotation (p 167, n 11) which he attributes to R. Burn, The Justice of the Peace and Parish Officer, 2nd ed, 1814, vol 4: 'Persons to be removed under the statute of C.2 are those that wander from place to place ... [those making] a vagrant intrusion into a parish, in which the party has nothing of his own within the purview and scope of the poor laws'. However, as that part of the quotation which precedes the ellipses appears in Burn on p 520 and that which follows the ellipses appears on p 524, Burn's presentation differs considerably from the 'quotation' that appears in Snell's footnote.
7 William and Mary c 11. This statute also endowed those who completed an apprenticeship or service for a year as an unmarried servant with a settlement in the parish in which they apprenticed or served. Likewise, it declared that those immigrants who paid taxes in their new parish, or assumed parish office there, acquired a settlement in their new parish.
could apply the settlement laws to any independent person. That is, they could apply these laws to any person who was not: a woman living with her husband; a child age seven or under who was living with his mother; a legitimate child who had not acquired a settlement of his own and was living with his father (or, with his mother, if his father was dead); an unmarried servant hired under a year-long contract; or an apprentice. Therefore, the settlement laws allowed parish officers to remove from their parish most independent adults (and their households) who might want to exercise their liberty, as Englishmen, by moving to that parish.

Someone who moved into a new parish could indeed acquire a settlement in that parish, but it was rather difficult for an independent adult to acquire a settlement in a parish to which he had moved. There were only four ways in which an independent adult could acquire a new settlement. He could live for forty days in a parish in which he possessed a freehold or copyhold estate. (However, from 1723, the settlement acquired by a person who purchased property for less than £30 endured only so long as he possessed that property.) The new resident aspiring to settlement in his new parish could also rent for £10 a year; or he could serve in a parish office; or he could pay taxes levied in his parish of residence. Since a parish's ratepayers did not want to bestow a settlement on its immigrants — and so assume responsibility for their welfare — they did not appoint non-settled immigrants residing in their parish to parish office. And so, in practice, the only way in which most independent adult Englishmen could acquire a settlement in a new parish was to pay its taxes.

Parliament then obstructed that route to settlement, and at the same time made it possible for more English adults to move from one parish to another. In 1697, Parliament decreed that, if an immigrant provided his parish of residence with a certificate from his parish of settlement, the immigrant could not be removed until he needed poor relief. The certificate was the issuing parish's acknowledgment that the issuing parish had guaranteed the immigrant's parish of residence that the issuing parish would assume responsibility for the immigrant should he need poor relief. Therefore, while the certificate protected the immigrant not in need of relief from removal, it also protected the parish to which he had moved by declaring that another parish was responsible for his relief. From 1698, the settlement laws bestowed another benison upon the parish to which the certificate was addressed. For in 1698, Parliament decreed that, even if a certificated immigrant paid rates or taxes levied in his parish of residence, he did not gain a settlement in that parish. Therefore, from 1698, enforcement of the settlement laws could deny most independent adults, even those who paid taxes, a settlement in the parish to which they had moved. Since, if the settlement laws were enforced, most independent adults could not acquire a settlement in the parish to which they had moved, the interparochial migration of adults was greatly curtailed.

9 George I c 27 s 3. A person who inherited realty obtained by such a purchase did acquire a settlement in the parish if he lived in the parish for forty days in possession of the property. Similarly, a person who acquired such realty through marriage, or was in possession of such property as administrator or executor, and then lived in the parish for forty days also acquired a settlement there: M Nolan, A Treatise of the Laws, 2nd ed, 1806, vol 1, pp 492–94, chap 23 'Of Settlement, upon a Tenement of ten Pounds a Year Value', sect 1 'Division of the Subject'; and pp 539–42, chap 24, 'Of Settlement by Estate', sect 1 'Of the Estate necessary to confer a Settlement'.

10 From 1723 payment of highway or scavenger rates, and from 1748 payment of land and window taxes, did not endow the payer with a settlement in the parish for which he paid his rates or taxes: 9 George I c 27 s 6; 21 George II c 10.

11 8 and 9 William III c 30.

12 9 and 10 William III c 11.
most independent adults and their households was subject to regulation under the laws of settlement.

So much has always been clear. What was not clear was whether parish officers actually applied the settlement laws to most of the population whom they could subject to these laws. Legally, parish officers could demand certificates from those 'likely to be chargeable' — that is, those immigrants renting for less than £10 a year — and remove all those 'likely to be chargeable' who did not obtain a certificate. But, did parish officers actually apply the settlement laws to all who could be restricted by them, or did they merely apply the settlement laws to those who needed poor relief? Historians could not arrive at a definitive answer to this question, for the documents produced in the application of the settlement laws do not permit more than an impressionistic analysis of the application of the settlement laws.

There are two reasons why settlement documents do not reveal the way in which parish officers applied the settlement laws. First, there is the problem posed by the likelihood that surviving documents are not a representative sample of the documents issued in the application of the settlement laws. Second, those settlement documents that survive are so dispersed that it is not possible to reconstruct the pattern of their issue. Both problems result from the ways in which parish officers applied the settlement laws.

Some varieties of settlement document are more likely to survive than others because parish officers found some varieties of settlement document more useful than others. The document most useful to the parish to which it was delivered was the certificate. The certificate safeguarded the recipient parish against any claim upon its funds by the certificated immigrant or his family; it allowed the recipient parish to tax the certificated immigrant and his family without thereby bestowing a settlement upon them; and it identified the parish which would have immediately to assume responsibility for the certificated immigrant and his family should they need poor relief. One would therefore suspect that certificates would be the document which parish officers were most likely to preserve in their parish's archives. And that is, indeed, the case. As Dorothy Marshall observed: 'where the parish papers have survived at all, there copies of certificates are usually to be found'.

The order to remove an immigrant to his parish of settlement is less likely to survive. However, since that removal order constituted a judicial determination that the parish in which an immigrant was living was not responsible for his welfare, many parishes chose to keep a copy of it. Since the original removal order was delivered, with the immigrant, to his parish of settlement upon his removal, that order too sometimes survives in parish archives.

The settlement document least likely to survive is the settlement examination.

Before an immigrant could be removed, before parish officers could demand that he or she had been in the parish for 12 months, or that he or she had a home, or that he or she did not have a home, the immigrant had to demonstrate that he or she held a right to come to the parish and that he or she had the means to provide for himself and his family. To demonstrate this, the immigrant had to present to the parish officers of the parish to which he or she was going the 'removal order', a document in the form of a certificate and a court order, confirming the parish of settlement of the immigrant. Does the amount of surviving removal orders, and certificates, show the impact of a parish on the number of migrants who, once they arrived in a parish, were removed by parish officers?

Just as it is impossible to determine how many immigrants applied for settlement certificates, it is impossible to determine how many removal orders and certificates, survived. Some varieties of settlement document are more likely to survive than others because parish officers found some varieties of settlement document more useful than others. The document most useful to the parish to which it was delivered was the certificate. The certificate safeguarded the recipient parish against any claim upon its funds by the certificated immigrant or his

14 From 24 June 1739, the certificating parish was also responsible for the costs of removing the certificated immigrant and his family back to his parish of settlement should they need poor relief: George II c 29.
he obtain a certificate, parish officers had first to ascertain that the immigrant did not have a settlement in their parish. To do so, they had the suspected immigrant examined before one or more justices of the peace. Surviving examinations, like the more numerous surviving removal orders and even more numerous surviving certificates, repose in parish archives, where their relative numbers pose a problem. Does the preponderance of certificates among settlement documents indicate that the issue of a certificate — that is, the issue of a document permitting interparochial migration and guaranteeing support for the migrant — was the most usual result of parish officers’ application of the settlement laws?

Just as the relative numbers of surviving settlement documents pose a problem of interpretation, so the dispersion of these documents further obscures the procedure which produced them. These documents are dispersed because most applications of the settlement laws entailed dispersion. Look, for example, at the reason why a removal order quite probably does not repose in the same archive as the settlement examination on which it was founded. It seems likely that the first document issued in most applications of the settlement laws was an examination into someone’s claim to a settlement. If the parish in which this person resided decided to remove him, it would then obtain a removal order. That order would be sent with the immigrant when he was removed to his parish of settlement. However, before 1835 it was not necessary to send the examination on which that order was founded to his parish of settlement. As a result, only a small proportion of surviving eighteenth-century removal orders repose in the same parish archive as the examinations on which the removal orders were founded. And, as the examination on which a removal order was founded remained with the parish which obtained the removal order, most surviving examinations are also not accompanied by a surviving removal order. Of 1453 examinations of adults in the archives of 67 parishes in six counties, only 28 are filed with an associated removal order. What proportion of these examinations did indeed result in removal? The settlement documents in parish archives will not yield an answer to that question.

Nor will the settlement documents in parish archives reveal the proportion of examinations which resulted in certificated immigrants, for the process of obtaining a certificate likewise entailed an exchange of documents. If a prospective emigrant obtained a certificate to his new parish of residence before he departed from his parish of settlement, then his examination would remain in his parish of settlement, while his certificate would reside in the archives of his parish of residence. A similar dissociation of examination and certificate might well occur if the immigrant obtained a certificate after he had immigrated. The immigrant’s parish of residence might send his examination to his parish of settlement along with a request for a certificate. Or, the immigrant might return to his parish of settlement in order to obtain a certificate, and while there he might be examined was executed. As a result, ‘after 1834 the examination and removal order frequently became an amalgamated document’ (Snell, ‘Settlement, poor law’, p 167, n 10).

This count excludes the examinations of women who were examined as to the settlement of their illegitimate children. These 67 parishes are located in the counties of Bedfordshire, Berkshire, Buckinghamshire, Essex, Hertfordshire, and Suffolk, and are listed in the Appendix to N Landau, ‘The eighteenth-century context of the laws of settlement’, Continuity and Change, 6, 1991, p 431.

as to his settlement.  

Indeed, even if the immigrant's parish of residence made a copy of his examination, it is likely that the parish officers would discard that examination upon receipt of his certificate.

So, because of the process inherent to applications of the settlement law, removal orders and certificates are likely to repose in the archive of a parish other than that of their associated examination. Therefore, it is not possible to use parish archives to determine: what proportion of examinations resulted in removal;  

what proportion of examinations resulted in a certificate; and what proportion of examinations did not result in either removal or certification. The settlement laws empowered parishes to do any or all of: impede emigration (by refusing to issue certificates); regulate immigration (by demanding that immigrants obtain certificates and removing uncertificated immigrants); monitor immigration (by insuring that residents who had not acquired a settlement in the parish were examined as to their settlement); and insure that parish rates were not spent on non-parishioners (by removing immigrants who needed poor relief to their parish of residence).

However, since the documents issued in any one application of the laws of settlement are apt to be dispersed among the archives of two or more parishes, it is not possible to determine from the documents in a parish archive either the policy which a parish adopted in applying the settlement laws, or the frequency with which parish officers applied those laws. As a result, historians had to rely upon exceptionally fragmentary evidence for their analysis of parish practice in the application of the settlement laws.

Nonetheless, most historians concluded that, in rural areas, parish officers probably applied the settlement laws so as to monitor and regulate immigration. According to Dorothy Marshall, though parish officers of urban areas subjected only those in need of relief to the restrictions of the settlement laws, the parish officers of rural areas regulated the immigration of those whom they considered merely a potential burden on the rates. In rural areas, Marshall opined, parish officers' application of the settlement laws impeded the immigration of married labourers and their households.  

Sidney and Beatrice Webb likewise decided that rural parish officers obstructed migration to their parishes. Ethel M Hampson was even more emphatic: parish officers regulated immigration, demanding certificates even of immigrants who were employed.

Documents which were not available to these historians confirm their analyses. Unlike the settlement documents in parish archives, these newly available documents are not merely those documents which parish officers exchanged and chose to preserve. Instead, they are documents which record parish officers' activity under the settlement laws, or the frequency with which parish officers applied those laws. As a result, historians had to rely upon exceptionally fragmentary evidence for their analysis of parish practice in the application of the settlement laws.
the laws of settlement. Parish officers' activity under the laws of settlement had to be authorized by the justices of the peace. And the documents which will be analysed here are records of the settlement business which parish officers brought before the justices.

According to law, two justices — both of whom had heard the evidence on which the document was founded — had to sign each settlement examination, certificate, and removal order if the document was to be legally admissible. However, if a justice resided in or near a parish, its officers might first bring their parish's settlement business to him so as to discover what in that business required further action and the attentions of two justices. Paul D'Aranda was such a justice. D'Aranda, a justice resident in the rural parish of Shoreham in Kent, compiled a diary of his work as a justice acting alone for the year 1708. D'Aranda's diary is unusual, and unusual for three reasons. First, few such diaries survive. Secondly, those few that do survive rarely note the result of the actions initiated before the justice; but D'Aranda's does. Thirdly, only two justice's diaries record business for a parish whose business was also noted in a surviving contemporaneous petty sessions's minute book. D'Aranda's is one of those two diaries.

D'Aranda's diary therefore provides a unique opportunity to follow parish officers as they conduct their settlement business.

All the settlement business which Shoreham's officers brought to D'Aranda in 1708 was part of their efforts — perhaps efforts spurred by Shoreham's vestry to ascertain whether the parish's residents had a settlement in their parish, and to insure that those who did not were either certified or removed. Such an application of the settlement laws was by no means unique to Shoreham. Even though the minutes of very few eighteenth-century vestries have been published and the eighteenth-century administration of only a handful of parishes analysed, it is nonetheless evident that parishes did, periodically, ascertain whether their residents had a settlement in the parish, and then attempt to extract certificates from their non-settled residents by threatening to remove and sometimes actually removing them. For example, in 1736 the vestry of Wimbledon in Surrey ordered that 'the inmates and others who have intruded into the parish are to be summoned before the bench to give certificates to indemnify the parish'. The vestry of Walthamstow in Essex conducted a similar investigation; so did Chalfont St Peter (Buckinghamshire) in 1722, Ash (Kent) in 1772, Hungerford (Berkshire) in 1783, Uffington (Berkshire) in 1785, Woodford (Essex) and Canterbury in 1789, and Midhurst (Sussex) in 1794. Some places made more regular inspections. In Maidstone, each overseer 'as soon

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48 Kent AO, U442/O45. This notebook is divided into two parts. Aside from its first three entries, the first part of the notebook records D'Aranda's work as a justice acting singly in 1708. The second part of the notebook notes the business of Sevenoaks petty sessions, the petty sessions D'Aranda attended, from June 1707, through 1708.

49 For the other diary and its associated petty sessions minute book, see R Paley, Justice in Eighteenth-Century Hackney: The Justicing Notebook of Henry Norris and the Hackney Petty Sessions Minute Book, London Record Society, 28, 1991. (Unlike the Kentish parishes examined here, the parish of Hackney, Middlesex, had a petty sessions which was held just for that one parish.) Two other eighteenth-century Kentish justices, Sir Wyndham Knatchbull and William Brockman, kept notebooks of their activities as single justices, and also made notes which amount to a very incomplete record of the petty sessions which they attended (Kent AO, U951/O3, U951/O4; BL, Add MSS 42598, 42599).
as possible after his appointment, made a

circuit of his ward accompanied by a con-

stable. They searched all likely dwellings

looking for non-residents and examining

their certificates ...'.

Even rural parishes such as Leyton and Walthamstow in Essex employed a beadle to insure that all resi-

dents 'likely to be chargeable shall produce
certificates ... and where such certificates

cannot be had be ... brought before a
Justice ...'.

Because parish officers were investigat-
ing the settlement of all likely to be
chargeable – that is, those who rented for

less than £10 a year – their periodic inves-
tigations could result in the examination of

a large number of inhabitants at the same
time. Shoreham’s officers proceeded to

obtain a warrant from D’Aranda for the

examination, before D’Aranda or another

justice, of nine people as to their settle-
ment. D’Aranda examined all these nine

residents of Shoreham plus eight more –
fifteen men and two women in all – on

26 March, 28 March, and 2 April, 1708.

Again, examination of many people on a

single day was not unique to Shoreham.

Published accounts of multiple examin-
ations include that for Painswick,

Gloucestershire (where 40 per cent of 70

examinations taken between 1695 and 1747

were taken on just four days), Hagley,

Worcestershire (where 49 examinations

were taken on just three days), Bromsgrove,

Worcestershire, (where 24 per cent of 377

examinations were taken on just six days).

Most of the examinations taken by

D’Aranda did not result either in further
action by Shoreham’s officers under the

settlement laws, or in further record made

at the petty sessions to which Shoreham

took its settlement business. D’Aranda

decided that five of the fifteen men brought

before him for examination had a settlement

in Shoreham. Another of the men averred

that he would soon leave Shoreham, and,

indeed, he did. D’Aranda ordered the

remaining nine men to secure certificates.

Four did, but not without further adue. Tho-

mas Carter’s parish of settlement agreed
to send a certificate if it first received an

‘affidavit of what he had sworne’ before

D’Aranda. Another of the four certifi-
catemen – Henry Carter – received his
certificate at Sevenoaks petty sessions on

10 April, where he was not examined as to
his settlement. In this again, Shoreham’s
experience was not unusual. Over three-
quarters of the certificates signed at Kent’s
petty sessions were not associated with

an examination taken at petty sessions.

In all, 10 of the 17 examinations that

and Settlement Documents of the Parish Church of St John Baptist
Bewnagrow, Worcestershire, Birmingham and Midland Society for
Genealogy and Heraldry, 1983, p 3; P Hernbry, Calendar of Bradford-
on-Avon Settlement Examinations and Removal Orders 1725-98,
Wiltshire Record Society, 46, 1939, p xxii.

36 William Peman, examined 28 March.

37 D’Aranda’s notes on Carter’s examination, taken 28 March, tran-
scribed in Melling, The Poor, p 64.

38 This count is based on samples from those two Kentish petty
sessions (Sevenoaks and Sittingbourne) whose minute books
recorded both certificates and examinations. The periods compris-
ing the sample are presented in Table 1. In these periods, 433 of
the 556 certificates signed at these petty sessions were not associated
with an examination taken at petty sessions.

It might also be helpful to note that the law never required that
the certificate be based on an examination (though, in practice,
the issue of a certificate was usually preceded by an inquiry into
the settlement of the prospective certificatee, an inquiry again
usually based on an examination before one or more justices). The
law on certificates had always required that the certificate be
signed by two justices (8 and 9 William III c 30), and from 1730
the law also required that a witness to the parish officers’ signature
of the certificate swear to those signatures before two justices (3
George II c 29). I have not found any evidence of alteration,
before 1795, in either the relation of examination to the issue of
a certificate, or the nature of the examination on which the
certificate was, in practice, based. In 1795, a new act, 3 George
III c 101, altered the laws of settlement by depriving officers
of the power to remove immigrants if they did not need poor relief.
Therefore, there were fewer occasions for the demand for certifi-
cates after 1795, and their issue was drastically reduced.

39 M Barker-Read, ‘The treatment of the aged poor in west Kent,

40 Pond, ‘Internal population migration’, p 91; E N Williams, comp,
The Eighteenth Century Constitution, 1960, p 370.

41 The entries in D’Aranda’s diary – the warrant, the examinations,
and D’Aranda’s notes of subsequent proceedings on these examin-
ations – are transcribed in Melling, The Poor, pp 60–66.

42 P Styles, ‘The evolution of the law of settlement’, University of
Birmingham Historical Journal, 9, 1962, p 59; P D Bloore, Extracts
from the Poor Law Documents in the Parish Church of Elygate Church
Formerly in Worcestershire, Birmingham and Midland Society for
Genealogy and Heraldry, 1983, p 1; P D Bloore, The Poor Law
D’Aranda took as a single justice did not produce a further examination before two justices which could find its way to Shoreham’s archives. And this despite the fact that an examination taken by just one justice could be neither the foundation for a removal order nor admissible as evidence, should the examinee be unavailable for testimony. Again, Shoreham was not unusual in not obtaining a more definitive examination for its archives. Of 1453 examinations of adults in the archives of 67 parishes in six counties, 40 per cent were signed by just one justice of the peace.

Shoreham’s officers took further action under the settlement laws against seven of the seventeen examinees. All such action was taken, first, at petty sessions. One of the examinees, Robert Bromfield Jr, had been examined at Sevenoaks petty sessions on 6 March, 1708, when the justices issued a warrant for his removal. Once it became clear that his parish of settlement would not grant him a certificate, Shoreham acted on that warrant, removing him by mid-April.

The cases of the remaining six examinees – four men and two women – were considered at Sevenoaks petty sessions after D’Aranda had examined them. The justices at Sevenoaks heard about both women on 24 April. One of the women, Frances Lock, was brought to petty sessions because of the legal questions about her settlement raised by her contention that her divorce was not valid. Sevenoaks petty sessions issued a warrant for the examination of her
ex-husband. However, that examination proved unnecessary. For, as D’Aranda noted, her ex-husband came with a letter from an attorney and ‘shew’d me authentick Copy of the Act of Divorce’. D’Aranda thereupon concluded that the divorce was valid. ‘Yet to satisfy Shoreham Officers I consulted Counsellor Blundel who gave me as his opinion written that her legal settlement is in Shoreham’. Frances Lock was therefore accepted as Shoreham’s parishioner.44 Susan Tilman’s settlement business was also quickly dispatched. When she was examined on 26 March, she was still sick from smallpox, and living at Frances Lock’s. On 24 April, Sevenoaks petty sessions issued a warrant for her removal and ordered that her parish of settlement reimburse Shoreham £2 11s 0d for its expenditures on her board, lodging, nursing, and medicines during her illness.

One appearance at petty sessions was insufficient to conclude the settlement business of the remaining four male examinees. The tales of these four recommence on 10 April. Then it was that Thomas Poucy reported that his parish of settlement ‘would consider’ his request for a certificate. On 18 May he was examined at Sevenoaks petty sessions. On 28 July his parish of settlement requested that he swear again to his settlement in the presence of one Mr Green, after which that parish finally sent Shoreham a certificate.

It was, likewise, on 10 April that the other three examinees were examined yet again, this time at petty sessions. One examinee, John Homewood, had on 31 March reported to Shoreham that his parish of settlement had refused to grant him a certificate. At petty sessions Homewood’s examination again revealed that his claim to settlement was based on his service as an apprentice over twenty-six years ago. Petty sessions ordered that he bring his indenture to their next meeting. And there his story stops, for neither D’Aranda’s notes nor the petty sessions’s minute book indicate what, if any, further action was taken on his case.

Thomas Richardson was also re-examined at this petty sessions, where he was allowed until Michaelmas to secure a certificate. He did not do so, but he nonetheless managed to secure the right to remain in Shoreham. By 6 November 1708, when he was brought to petty sessions and examined again, he had hired a tenement and two pieces of pasture in Shoreham for £10 a year. By November, Richardson was therefore a settled inhabitant of the parish of Shoreham.

James Clarke’s adventures under the settlement laws were even more protracted. Along with his two fellow residents of Shoreham, he was examined at petty sessions on 10 April, when he was given a month to obtain a certificate. That certificate had still not arrived on 24 July, when Clarke was again examined at petty sessions and a removal order issued against him. Shoreham’s overseer thereupon requested that Clarke depart, but instead Clarke hid in the house of Mr Ballard, a gentleman of the neighbourhood and a future justice of the peace. On 31 July, Ballard came to petty sessions and desired that the warrant of removal be respited while he tried to get Clarke a certificate. On 14 August, Ballard told petty sessions that Sutton-at-Hone, Clarke’s parish of settlement, had made it their policy not to issue certificates at all. However, Ballard had a solution to the problem. According to Ballard, Clarke had £100 in money and Clarke’s brother was able and willing to lend Clarke an additional £200. Therefore, Ballard concluded, Clarke was ‘capable of hiring and stocking at least a small Farm’, and so Ballard had leased Clarke lands for £10 a year, thereby giving Clarke a settlement in Shoreham. Shoreham’s officers were sus-

44The petty sessions minute book does not note an examination of Francis Lock taken at petty sessions. Lock was examined before D’Aranda on 2 April (Melling, The Poor, pp 65–66).
picious: they requested that Ballard show them the lease, but Ballard refused. Shoreham’s officers were right to be suspicious. On 19 April 1709 — over a year after D’Aranda had examined him — Clarke was again examined at petty sessions, where the justices decided that, as he was not occupying the lands he claimed to have leased, the warrant of removal issued on 24 July 1708 should be executed.45

As is evident, those Shoreham residents who appeared at petty sessions were but a selection from among those whom its parish officers subjected to the laws of settlement. The majority of those whom D’Aranda examined were not examined again at petty sessions. Those whom Shoreham brought to petty sessions were immigrants — that is, people who did not have a settlement in the parish in which they lived.46 But Shoreham did not bring all its non-settled residents to petty sessions. Only when Shoreham wanted to secure a document which required the signature of two justices — only if it wished to remove an immigrant, or to make the threat of removal sufficiently credible to extract a certificate from the immigrant’s parish, or to secure an examination signed by two justices and so legally admissible as evidence of an immigrant’s parish of settlement — only then did Shoreham bring immigrants to petty sessions.

On occasion, Shoreham wanted to secure such documents because an immigrant was in immediate or imminent need of poor relief. However, on other occasions, Shoreham’s parish officers wanted to secure such documents because they were monitoring or regulating immigration. Shoreham was not idiosyncratic in its use of petty sessions for the examination of a selection of its immigrants, or as a venue suited to endeavours to monitor and regulate immigration. Since 40 per cent of the settlement examinations preserved in parish archives were signed by just one justice, it is likely that, like five of Shoreham’s twelve immigrants, many immigrants were subjected to the settlement laws by a process that never involved examination before two justices sitting jointly, and may never even have entailed an appearance before justices sitting as a group. Like Shoreham, other parishes also were more likely to bring immigrants to petty sessions than settled inhabitants: a fifth or more of the settlement examinations preserved in parish archives are examinations of people who had a settlement in the parish in which they resided, while such settled inhabitants comprised only a tenth of those examined at Kent’s petty sessions.47 Finally, like Shoreham, other parishes were likely to bring their examinees to petty sessions in a group: just over half the adults examined at the seven Kentish petty sessions whose minute books record examinations were examined in the company of at least one other immigrant living in their parish who was also examined as to his settlement.48 Both parish archives and petty sessions records reveal that, like Shoreham, other parishes periodically investigated the settlement of immigrants and then brought a selection of these immigrants to petty sessions, there to gain

45 Kent AO, PS/SE1. Shoreham does not seem to have been successful in ridding itself of Clarke. In May 1709, Shoreham appealed to West Kent’s quarter sessions against an order removing Clarke from Sutton-at-Hone to Shoreham. However, quarter sessions confirmed that order (Kent AO, Q/SO W6).
46 D’Aranda was by no means the only justice who first examined those whom parish officers wanted questioned as to their settlement, and then sent the cases of those who did not have a settlement in their parish of residence to petty sessions. See, for example, James Brockman’s examination of William Jedurie on 15 Sept 1730, followed by his issue of a summons to Jedurie’s parish of settlement to appear at the next petty sessions (BL, Add MSS 42599, f 43).
48 Landau, ‘Laws’, p 408. The seven petty sessional divisions whose clerks kept records of examinations in their minute books are: Bromley, Rochester, Sevenoaks, Sittingbourne, Malling, Bearsted, and Ashford. There were 184 parishes in these seven divisions. Therefore, the pattern of examining groups of people from a single parish at petty sessions cannot be attributed to the atypical behaviour of a couple of parishes. Nonetheless, that is what Snell suggests (Snell, ‘Pauper’, p 389).
TABLE I
Petty sessions minute books which form the data base for the present analysis

<table>
<thead>
<tr>
<th>Petty sessions</th>
<th>Early eighteenth century</th>
<th>Mid-eighteenth century</th>
<th>Late eighteenth century</th>
</tr>
</thead>
<tbody>
<tr>
<td>East Kent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sittingbourne</td>
<td>1723–26</td>
<td>Jul 1760–Jun 1764</td>
<td>1789–92</td>
</tr>
<tr>
<td>Ashford</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Kent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sevenoaks</td>
<td>1708–10, 1717–25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bromley</td>
<td></td>
<td>1748–56, 1768–73</td>
<td>1783–86</td>
</tr>
<tr>
<td>Malling</td>
<td></td>
<td>1748–58, 1767–75$^b$</td>
<td>1783–86</td>
</tr>
<tr>
<td>Bearsted</td>
<td></td>
<td>1749–57</td>
<td></td>
</tr>
<tr>
<td>Rochester</td>
<td></td>
<td>1754–58</td>
<td></td>
</tr>
<tr>
<td>Tonbridge</td>
<td></td>
<td>Nov 1767–Oct 1771</td>
<td></td>
</tr>
</tbody>
</table>

$^a$The certificates analysed for Wingham at mid-century are those for 1737 through 1740, and 1759 through 1762.
$^b$The period indicated for Malling as 1767–75 covers the seven years from September 1767 through to August 1771 and November 1772 through October 1773.

Sources: Kent A/O, PS/US, PS/W, PS/Se, U442/O45, PS/Be, PS/NA, PS/A, PS/T; Bromley Central Library, Bromley petty sessions minute books; Sevenoaks Library, Sevenoaks petty sessions minute book; Dog Inn, Wingham, Kent. Wingham petty sessions minute book.

that imprimatur of two justices on their settlement documents which allowed the parish to regulate and monitor immigration.

Therefore, the records of petty sessions provide evidence of parish officers’ activity when they advanced a further stage in their application of the laws of settlement. For the records of petty sessions enable us to follow parish officers as they conducted that settlement business which required the signature of two justices. After all, it was at petty sessions that parishes obtained a large proportion – though by no means all – of the documents they exchanged as they enforced the settlement laws. In eighteenth-century Kent, there were fourteen petty sessional divisions; there are extant minute books for nine of these petty sessions. The minute books note the issue of documents signed at petty sessions. Therefore these minute books reveal that process which produced a large proportion of the settlement documents now reposing in parish archives. Table 1 presents these minute books and shows the period selected for investigation into the procedures of each petty sessions. Like the record of settlement business conducted before a single justice, the minute books of petty sessions indicate that the process which produced settlement documents entailed the surveillance and regulation of immigration.

Perhaps the most impressive evidence of such surveillance and regulation is the large number of certificates signed at petty sessions. The number of certificates signed at petty sessions was already large in the early eighteenth century, before Parliament ordered that, from 24 June 1730, every certificate had to demonstrate that a witness had taken an oath before two justices that he had seen the parish officers sign and seal the certificate. From 1730, such witnesses found – as had parish officers before them – that petty sessions was an institution convenient for the conduct of business that demanded the joint action of two justices of the peace. The clerks of only three
Kentish petty sessions noted the justices’ signature of certificates in their minute books, though it is clear from certificates now in parish archives that the justices also signed certificates at the other petty sessions. Table 2 shows that parish officers’ enforcement of the settlement laws at petty sessions more often resulted in the issue of a certificate than in the issue of an order to remove an immigrant. Since people who held certificates could not be removed until they were chargeable, and since very few of the certificated were removed soon after they received their certificate, it is likely that the prevalence of certification indicates that parish officers were subjecting people who were neither unemployed nor in immediate or imminent need of poor relief to the laws of settlement.

Therefore, the issue of certificates at petty sessions tells against K D M Snell’s argument that the overwhelming majority of the people whom parish officers subjected to the settlement laws were unemployed or in imminent or immediate need of poor relief. To sustain his argument, Snell has asserted that a substantial proportion of certificates were issued to people who needed poor relief. However, it is usually not possible to determine, from documents issued under the settlement laws, whether the people subjected to those laws needed poor relief. Settlement examinations rarely state whether the examinee is in need or unemployed. Certificates never mention the subject. And, while removal orders distinguish between those ‘chargeable’ and those ‘likely to be chargeable’, it is quite probable that some of those removed as ‘likely to be chargeable’ were unemployed or in immediate or imminent need of poor relief. Therefore, to determine whether someone subjected to the settlement laws was in need, it is almost always necessary to collate his settlement documents with other sources.

The most straightforward way to discover if a person was in need is to determine whether his parish of settlement – the parish responsible for paying him poor relief – was in fact paying him poor relief. Of sixteen immigrants awarded certificates at petty sessions by five parishes in periods covered by the accounts of these parishes’

---

**Table 2**

<table>
<thead>
<tr>
<th>Petty sessions</th>
<th>Period</th>
<th>Certificate only</th>
<th>Removal order only</th>
<th>Removal then certificate</th>
<th>Certificate then removal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wingham</td>
<td>1706–15</td>
<td>8.9</td>
<td>11.4</td>
<td>0.2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1737–40</td>
<td>50.0</td>
<td>4.8</td>
<td>1.5</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1759–62</td>
<td>32.8</td>
<td>5.5</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Sevenoaks</td>
<td>1708–10</td>
<td>11.6</td>
<td>5.2</td>
<td>0.4</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1717–26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sittingbourne</td>
<td>1723–26</td>
<td>17.5</td>
<td>17.5</td>
<td>1.8</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1760–64</td>
<td>50.3</td>
<td>21.3</td>
<td>1.5</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>1789–92</td>
<td>29.5</td>
<td>29.3</td>
<td>2.0</td>
<td>0</td>
</tr>
</tbody>
</table>

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53 In ‘Pauper’, pp 378, 381, 385, 388, 389, 390, Snell indicates that eighteenth-century settlement examinations usually reveal whether the examinees are in need and/or are unemployed. However, in ‘Settlement, poor law’, p 155, he states: ‘Examinations before 1795 rarely provide explicit evidence on the issue ...’. Snell does not indicate the evidence which altered his assessment of the content of settlement documents. (For the change in the law which makes 1795 a significant date in the history of settlement, see n 75.)
54 Burn’s instructions about the removal order assume that, unless a person is irremovable until chargeable, the order to remove him will declare he is ‘likely to be chargeable’ (Burn, *Justice of the Peace*, 3rd ed, 1756, pp 544, 547 sub ‘Poor (Removal)’). Landau, ‘Context’, pp 435–46, n 30, and Snell, ‘Settlement, poor law’, p 151 and p 167, n 9.
overseers, only one — Richard Mercer — was receiving relief.\(^{55}\)

As part of his argument that the usual recipient of a certificate was either unemployed, in search of work, or in either immediate or imminent need of poor relief,\(^{56}\) Snell asserts that certificates were usually delivered either before or very shortly after immigrants moved into a parish.\(^{57}\) That is, he asserts that the examination for the certificate and perhaps even the issue of the certificate occurred before immigrants had found work in the parish.\(^{58}\) Snell does not provide evidence of parish procedures to support his assertion. Indeed, evidence of the relation between the date at which someone moved into a parish and the date of his examination or certification is difficult to obtain, for examinations rarely and certificates never reveal when an immigrant moved to his parish of residence.

There are, however, two types of evidence which indicate that most examinations were not taken within a few weeks of arrival in a parish, and that certificates were routinely issued some time — even years — after immigrants had moved to their parish of residence. First, there is a series of settlement examinations recorded at one Kentish petty sessions by a clerk who was unusual in usually noting the date of the examinee’s marriage. The date of marriage provides, for those immigrants who had been married not long before their examination, a proxy for the date at which an immigrant established himself in the parish as a head of a household. For, if the new husband had been living in another parish before his marriage, then it is likely that his marriage was the occasion of his move to the new parish. Most probably, his marriage required that he find new housing, and quite possibly — and especially if he had been working as an unmarried servant living in his employer’s house — a new job. On the other hand, if the new husband had been living in the parish before he married, then the date of his marriage indicates the date at which his presence in the parish made him an obvious candidate for the attentions of the parish officers: single men were rarely removed,\(^{59}\) examined, or even certificated\(^{60}\). If it is possible to determine exactly the proportion of single men among those removed, for a removal order states whether the person being removed is to be removed along with a wife and/or child. However, it is difficult to determine the marital status of examinees, for the absence of a notation that a man is married on his examination does not necessarily mean that he is not married.

It is also probable that many of the certificates which designate just a man as the certificated person are also not evidence that that man was not a married head of a household. The statute governing certificates, 8 and 9 William III c 30, declared that the certificate rendered ‘the person mentioned in the certificate, together with his family’ irremovable until they needed poor relief. It seems likely that, during the eighteenth century, parish officers came to demand that the certificate specify more precisely those under its protection. Pond noted that more than half of the certificates granted to a man only were granted between 1700 and 1720 (‘Internal population migration’, p 47). And Styles observed that, while before 1730, certificates just indicated those (other than the person being certificated) who were covered by the certificate by a phrase such as ‘and family’, after 1730 certificates gave the name of each person covered by the certificate (‘Evolution of the law of settlement’, p 56).

Quite possibly, new precision was introduced into certificates as parishes strove to protect themselves from the liabilities intrinsic to issuing certificates and receiving certificated immigrants. According to law, the certificate covered both the certificated immigrant and his family. Who was included within the legal
Do examinations of recently married immigrants reveal that they were examined within a few weeks of their presentation of themselves to their parish of residence as the head of a household? Table 3 presents the evidence. Of forty-six immigrant men who were examined within eighteen months after their marriage, only sixteen (35 per cent) were examined within two months of that marriage. If examination in order to extract a certificate were reserved for those who were unemployed when they arrived in a parish, then a much larger proportion of these new arrivals should have been examined within two months of their marriage. The interval between marriage and examination indicates, instead, that parish officers had immigrants examined not because these immigrants were unemployed, but because they were immigrants. Therefore, parish officers could delay examination until it was convenient, and examination might not be convenient for a year or more. However, parish officers did indeed eventually secure the examination of immigrants; that is, they monitored immigration.

Table 3 presents the percentage of examinations within various time periods following marriage. The data are based on records from Bearsted petty sessions, 1749-57.

<table>
<thead>
<tr>
<th>Time since marriage</th>
<th>Percentage of examinations</th>
</tr>
</thead>
<tbody>
<tr>
<td>less than 1 month</td>
<td>2</td>
</tr>
<tr>
<td>1 month</td>
<td>11</td>
</tr>
<tr>
<td>2 months</td>
<td>4</td>
</tr>
<tr>
<td>3 months</td>
<td>7</td>
</tr>
<tr>
<td>4-6 months</td>
<td>8</td>
</tr>
<tr>
<td>7-9 months</td>
<td>5</td>
</tr>
<tr>
<td>10-12 months</td>
<td>7</td>
</tr>
<tr>
<td>13-18 months</td>
<td>7</td>
</tr>
<tr>
<td>19-24 months</td>
<td>2</td>
</tr>
<tr>
<td>25 months-3 years</td>
<td>5</td>
</tr>
<tr>
<td>37 months-4 years</td>
<td>8</td>
</tr>
<tr>
<td>49 months-5 years</td>
<td>2</td>
</tr>
<tr>
<td>61 months-6 years</td>
<td>2</td>
</tr>
<tr>
<td>7-9 years</td>
<td>11</td>
</tr>
<tr>
<td>10-12 years</td>
<td>7</td>
</tr>
<tr>
<td>13-16 years</td>
<td>5</td>
</tr>
<tr>
<td>17-25 years</td>
<td>7</td>
</tr>
<tr>
<td>N = 91</td>
<td>100</td>
</tr>
</tbody>
</table>

As Table 3 shows, 51 per cent of the ninety-one men whose date of marriage is known were examined within eighteen months of their marriage.

The second series of records which allows estimation of the interval between arrival in a parish and the issue of a certificate are the returns to the marriage tax of 1705 made by several parishes in Kent's

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62 Snell asserts that 'many' of the examinations which constitute the data for Table 3 'would involve cases of migration or death, which predispose her [Landau's] results' (Pauper', p 395). Snell's argument here — that one must exclude immigrants from an analysis of the application of the settlement laws to immigrants — is not entirely persuasive. Snell's other argument — that Table 3 is invalid because it includes 'cases of death' — does seem alive to a greater range of possibilities. The article which introduced the data from which Table 3 is derived stated that that data came from examinations of immigrant married men taken at petty sessions (Landau, 'Laws', pp 427-8, 418, n 35). So, Snell's argument here — that many of the examinees were dead — seems to present the eighteenth-century petty sessions as seance.
Wingham division. Many of these returns list the inhabitants of a parish by name. So, it is possible to determine whether the people certificated to these parishes after 1705 were living in these parishes in 1705. Similarly, it is possible to determine whether people removed from these parishes after 1705 were living there in 1705.

Of fourteen people certificated to these parishes in 1706 and 1707, only six (43 per cent) had not been living there in 1705. In contrast, seventeen (71 per cent) of the twenty-four people removed from these parishes in 1706 and 1707 had not been living there in 1705. Evidently, parish officers moved relatively quickly to remove immigrants when those immigrants posed an immediate threat to the parish rates. As is also evident, such prompt action does not characterize parish officers’ response to immigrants who eventually obtained certificates. An immigrant who obtained a certificate might receive it several months— even a few years— after he took up residence in his new parish. That parish officers tolerated the presence of these immigrants, and did not remove them, suggests that a large proportion of such immigrants were not in imminent or immediate need of relief when they were examined or certificated.

The issue of certificates at petty sessions therefore confirms the evidence of parish archives. The certificate is indeed the document most likely to be preserved in parish archives, but that does not mean that the very large numbers of extant certificates misrepresents the prevalence of certification under the settlement laws. Enormous numbers of certificates were indeed issued, and the issue of certificates indicates that parish officers used the settlement laws to regulate and monitor immigration.

Similarly, the examination at petty sessions of very large numbers of people who were neither certificated nor removed at petty sessions likewise indicates that parish officers used the settlement laws to regulate and monitor immigration. Table 4 presents the settlement fate of all adults examined at those petty sessions whose clerks noted both examinations and either or both of removal orders and certificates in their minute books. People whose examination did not result in a record of either certificate or removal in the petty sessions’s minute book are listed in the column entitled ‘examination only’.

Clearly, the justices at petty sessions did not issue either a certificate or a removal

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62 Kent AO, QC/T2. I want to thank the Cambridge Group for the History of Population and Social Structure for permitting me to examine their copies of and their work on these tax returns. I also want to thank Peter Lindert for making his copies of some of these tax returns available to me.

63 By chance, it happens that all of the certificates granted in 1706 and included in this numeration were issued at least seven months after the compilation of the 1705 tax return for the parish to which the certificate was issued. This count is based on: (a) all removed from or certificated to a parish for which a tax return listing the names of householders survives; and (b) those removed from or certificated to a parish who are listed as residents in the 1705 tax return of their parish of settlement.

64 Styles, ‘The evolution of the law of settlement’, pp 61–62, shows that in Painswick, Gloucestershire, the interval between examination and certification might be months or even years. Similarly, Pond found that the parish officers of Walsingham, Essex, demanded certificates from immigrants about eighteen months to two years after their arrival (‘Internal population migration’, pp 28–29).

65 Even the large number of certificates now in parish archives, indeed, even eighteenth-century lists of such certificates, do not adequately indicate the prevalence of certification. For even these documents fail to reveal a parish’s receipt of quite a substantial proportion of the certificates delivered to it. Collation of entries in those petty sessions minute books which note the issue of certificates with collections of certificates in parish archives, and with contemporaneous parish lists and entry books for certificates, revealed that some certificates issued at petty sessions were no longer in those collections, nor were they noted in the lists and entry books. Of 61 certificates granted at Sittingbourne petty sessions to four parishes in the Sittingbourne division from June 1760 through June 1764, and from 1799 through 1792, only 48 are now noted in those parish’s archives. Of 15 certificates issued at Sevenoaks petty sessions for immigrants to Sevenoaks from 1708 through 1710 and from 1717 through 1725, only 9 remain in Sevenoaks’ archives. (Sevenoaks Library, D292B.) It is quite likely that, when a certificated person was removed to his parish of settlement, his certificate was also returned to that parish. Similarly, it appears that, when some certificated people moved out of the parish to which they were certificated, they took their certificate with them. (Paley, Justice in Eighteenth-Century Hackney, p 77, no 395.)

66 Table 4 excludes those removal orders and certificates issued at petty sessions for which examinations are not recorded in the petty sessions’s minute book. The periods covered for each petty sessional division are presented in Table 1.
order for a large proportion of the men examined at petty sessions. It is also likely that about half the men and women whose examination at petty sessions did not result in a removal order or certificate also issued at petty sessions were neither certificated nor removed by justices acting out of petty sessions. Only about one in six of the examinations taken at petty sessions which did not result in a removal order or certificate issued at petty sessions eventually produced a removal order issued out of petty sessions.67 Similarly, about one in three of the examinations taken at petty sessions which did not result in a removal order or certificate issued at petty sessions produced a certificate issued out of petty sessions.68

Examinations of people who did not have a settlement in the parish in which they lived, and which did not result in either a removal order or a certificate still served a purpose. If, after he was examined, the examinee became unable to give evidence of his settlement, then the earlier settlement examination was legally accepted as evidence of that settlement. So, if after he was examined, the examinee became insane, or deserted his family, or went abroad, or died, his settlement examination was legally admissible as evidence both of his own settlement and of that of his wife and children.69

SETTLEMENT LAWS IN EIGHTEENTH-CENTURY ENGLAND

<table>
<thead>
<tr>
<th>Settlement disposition at petty sessions of those examined at petty sessions</th>
<th>Examination only</th>
<th>Examination then removal order</th>
<th>Examination then certificate</th>
<th>Examination then removal order then certificate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sittingbourne</td>
<td>351</td>
<td>30</td>
<td>115</td>
<td>101</td>
</tr>
<tr>
<td>Sevenoaks</td>
<td>86</td>
<td>14</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>Ashford</td>
<td>5</td>
<td>0</td>
<td>68</td>
<td>37</td>
</tr>
<tr>
<td>Bearsted</td>
<td>40</td>
<td>0</td>
<td>98</td>
<td>17</td>
</tr>
<tr>
<td>Malling</td>
<td>171</td>
<td>16</td>
<td>283</td>
<td>102</td>
</tr>
<tr>
<td>Rochester</td>
<td>105</td>
<td>5</td>
<td>51</td>
<td>29</td>
</tr>
</tbody>
</table>

68 Even parishes in the Sittingbourne division, where by mid-century most certificates were recorded in the minute books of its petty sessions, received certificates whose issue was not recorded at petty sessions but which were based on examinations taken at petty sessions. The records of the four parishes (Kent AO: Bobbing, P33/13/1-2; Borden, P35/8/2; Bredgar, P43/8/1; Milton-next-Sittingbourne, P253/8/3) in the Sittingbourne division whose certificates have been collated with the settlement business noted in the minute books of Sittingbourne petty sessions reveal that, from June 1760 through June 1764, and from 1789 through 1792, these parishes received 13 certificates, whose issue was not recorded in the petty sessions’ minute book, which were based on examinations taken at petty sessions. In the same period, 34 other residents of these four parishes were examined at petty sessions for whom the petty sessions’ minute book does not record the issue of either a removal order or certificate, and for whom there is no record in the archives of these four parishes of receipt of a certificate. Similarly, of 37 immigrants to the town of Sevenoaks examined at Sevenoaks petty sessions from 1708 through 1710 and 1717 through 1725, and neither certificated nor removed at petty sessions, 9 left certificates in the town’s archives.

Likewise, the records of three parishes in the Malling division (Kent AO: Aylesford, P12/8/1, P12/8/22; West Malling, P243/13/147; West Peckham, P285/13/1) show that, in

69 As part of his argument that a settlement examination was usually taken only when the examinee was in imminent or immediate need of poor relief, or unemployed, Snell argues that parish officers did not secure examinations simply to monitor immigration — simply to secure an examination which could, if necessary, be used in the future as evidence of the immigrant’s settlement. So, Snell denies that, in the eighteenth century, examinations of people who had since become unavailable for further questioning were legally admissible (Pauper’, p 397, and pp 411–12, n 110). However, Rex vs Eriswell, (3 TR 767, English Reports, vol 102, pp 815–25) a case brought before King’s Bench on appeal in 1790, establishes that before 1790, and as of 1790, the examinations of people who could no longer testify as to their settlement were admissible as evidence of that settlement. The case revolved about a removal order founded on an examination taken some years earlier of a man who had since become insane. The judges declared the examination admissible. Indeed they declared that barring such examinations would alter the usual and established practice. As Judge Buller stated: ‘I have inquired what is the usage at different sessions, and I find that throughout the west of England, in the

1768–1778, 1767–1775, and 1783–1786, these parishes received certificates founded on 16 examinations taken at petty sessions — examinations which were not noted as associated with a removal order in petty sessions minute books. In the same periods, 42 immigrants to these three parishes were examined at petty sessions; their record of removal does not appear in the petty sessions minute books; and record of their certification does not appear in the parishes’ archives. (See also Landau, ‘Laws’, p 402.)
officers therefore secured examinations of immigrants even if they did not intend to remove them. And, as a result, parish officers secured an examination taken before two justices at petty sessions of people who were not in need of poor relief. For example, of thirty-four people examined at petty sessions, all of whom had their settlement in one of nine parishes, only four were listed in that parish's overseers' accounts as a recipient of relief.\footnote{See above, p 148.}

By bringing to petty sessions an immigrant who did not need poor relief, parish officers were securing a well-founded settlement examination, a settlement examination of the person who could provide the best testimony about those of his activities relevant to determination of his settlement. Such an examination could spare a parish considerable cost and effort should the examinee or his family need relief when the examinee was unable to testify. Just such a motive may well have impelled Shoreham's officers to bring John Homewood to Sevenoaks petty sessions, first to be examined as to his settlement, and then again to show petty sessions his indenture of apprenticeship — that is, his evidence of his claim to settlement.\footnote{Landau, 'Laws', p 397.}

Parish officers' use of petty sessions to obtain examinations which would be legally admissible should the immigrant be unable to testify in the future indicates that parish officers applied the settlement laws so as to monitor immigration. Parish officers' use of petty sessions to obtain examinations which persuaded parishes to grant certificates to emigrants indicates that parish officers applied the settlement laws so as to regulate immigration. And petty sessions was not the only venue at which parish officers conducted such activity. Parish officers brought immigrants to justices acting outside of petty sessions to be examined, certificated, and removed. After all, justices acting outside of petty sessions issued about a third of Kent's removal orders.\footnote{As part of his argument that the settlement laws were not used to monitor and regulate immigration, and that, instead, 'a large majority of examinations ... document people in the intervals between employment', Snell states: 'Figures of examinations and removals suggest very small yearly averages in each rural parish (about 0.05 to 2.0 per annum)' ('Settlement, poor law', pp 150, 157). Snell does not present the calculations which resulted in this estimate, but the footnote to his statement indicates that it is based on the number of examinations and removal orders that were issued, the large number of settlement documents issued at petty sessions reveals that parish officers were applying the settlement laws with considerable assiduity.}

The nine parishes selected are parishes whose overseers kept clear and detailed accounts. The overseers' accounts (all deposited at the Kent ARO) and the periods for which they were inspected are listed here. This list also places each parish in its petty sessional division: Bromley division — Orpington P277/8/1 and P277/11/1 for Jan 1783-Jan 1786, and North Crop P102/12/3 for 1783-1786; Malling division — Aylesford P12/12/4 for 1748-1753 and 1768-April 1771; Sevenoaks division — Codyd P102/12/2 for 1717-1725; Sittingbourne division — Harlup P175/11/4 for 1723-1726, Bredgar P143/12/4 for 1760-June 1764, P143/12/6 for 1789-Jan 1792, Borden P55/12/2 for 1723-1726, P55/12/3 for June 1760-June 1764, Rodmersham P307/12/4 for 1789-92, and Newington-next-Sittingbourne P56/12/5 for 1760-April 1763.

The examinees include 14 people living in their parish of settlement (1 of whom were given relief) and 20 people living elsewhere, that is, 20 immigrants (1 of whom was given relief). During the periods in which these 34 people were examined at petty sessions, 61 immigrants to these nine parishes were examined at petty sessions, none of whom were given relief by their parish of residence. During these same periods, these nine parishes gave continuing or occasional relief to over 100 adults who had not been receiving relief at the beginning of each period.
Indeed, petty sessions’ minute books indicate that the officers of rural parishes used the settlement laws to monitor and regulate immigration until 1795, when Parliament decreed that no immigrant who was not destitute nor dissolute could be removed to his parish of settlement. Only one Kentish petty sessions produced a minute book which allows analysis of late eighteenth-century practice in monitoring and regulating immigration. Of the surviving late-eighteenth-century minute books, only that for the Sittingbourne division notes the issue of all settlement examinations, removal orders, and certificates signed by the justices. Sittingbourne’s minute books show that, while the number of examinations unassociated with removal orders, and of certificates issued for urban parishes, had declined markedly by the early 1790s, rural parish officers’ surveillance and regulation of immigration remained vigorous. On average, each year from 1789 through 1793, the justices at Sittingbourne sessions signed settlement documents for 3 per cent of all families – both those settled in their parish of residence and those not so settled – living in the division’s rural parishes.

If each year 3 per cent of all families were, at petty sessions, subjected to the settlement laws, then settlement business conducted at petty sessions affected a large proportion of those families who were not living in their parish of settlement. After all, the residence of a considerable proportion of families could not be regulated under the laws of settlement. Families able to rent for £10 a year (possibly a third of the rural population), and those renting for less than £10 a year who were living in their parish of settlement were not the subject of settlement documents issued for immigrants at petty sessions. So, it may be that in any given year one-half to three-quarters of rural families were not candidates for regulation as immigrants under the laws of settlement. If that is the case, then each year rural parish officers in Kent’s Sittingbourne division took to petty sessions settlement business relevant to 6–9 per cent of all families who were not living in their parish of settlement. Since the settlement business conducted at petty

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75 This act, 35 George III c 101, decreed that, from 22 June, 1795, the only immigrants who could be removed under the settlement laws were those in need of relief and unmarried pregnant women. (The act also stipulated that it did not alter the justices’ powers under the vagrancy laws to pass rogues, vagrants, and idle and disorderly persons to their parish of settlement.) Therefore this act limited the legal definition of those who could be removed under the settlement laws. However, even as the 1795 act was being passed, unprecedented increases in the price of food were forcing more and more people to request poor relief. And so, in and after 1795, people were being removed who, before the mid-1790s, would probably neither have needed relief nor been removed. As a result, it is not possible to use a comparison of the number of people removed before and after 1795 as a gauge of the proportion of those removed before 1795 who did not need poor relief.


77 This calculation demands a count of the families whose settlement business parish officers brought to petty sessions. Unfortunately, Sittingbourne’s petty sessions minute book does not always reveal whether a person who was being examined or certificated was single or the head of a family. On occasion, the clerk of Sittingbourne’s petty sessions did not note whether an examinee was married or had resident children. Rarely did he note whether a person who was receiving a certificate was married or had resident children. I assumed that all of the following were heads of a family: those women whose resident children were noted by petty sessions’ clerk; those men whom the clerk noted as married; and all men whose certificates were endorsed by the justices at petty sessions.

The calculation also demands an estimate of the number of families in the rural parishes of the Sittingbourne division. I obtained that estimate by multiplying the number of families reported in the 1801 census by the ratio of the number of people aged 25 or over in 1791 to the number of people aged 25 or over in 1801. For the age distribution of, and number of, the English population, see E A Wrigley and R S Schofield, The Population History of England, 1541–1871, 1981, p 529.


79 At the moment, there is little information on either: the proportion of residents of any eighteenth-century parish who were settled in that parish; or the proportion of the poor resident in any eighteenth-century parish who were settled in that parish. Snell, ‘Pauper’, p 415, n 128, reports that in 1835, an average of 71 per cent of the poor in 46 rural East Suffolk parishes were living in their parish of settlement.
sessions constituted only a portion, though a large portion, of parish officers' application of the settlement laws, then the large number of settlement cases considered at petty sessions suggests that parish officers each year applied the settlement laws to a very large number of immigrants, a number larger than the number of such people added each year to the relief rolls.

Indeed, since parishes could suffer if their overseers did not apply the settlement laws to the wealthiest of their non-settled inhabitants, it seems quite possible that an appreciable proportion of the men examined under the settlement laws were men of some substance. According to the laws of settlement, anyone who paid poor or church rates in the parish in which he lived acquired a settlement in that parish unless he was certificated to that parish. Therefore, parish officers had a choice in dealing with a resident who did not have a settlement in their parish. They could tax such an immigrant, thereby giving him a settlement in their parish; or they could choose not to tax him, and so diminish parish funds; or they could have him examined as to his settlement and threaten to remove him unless he presented them with a certificate. Some parishes chose to extract certificates rather than forfeit taxes. Mitcham, Surrey, maintained the practice of demanding certificates from potential ratepayers into the 1780s. Similarly, St Mary's in Dover rated certificated immigrants but abstained from rating the uncertificated. As a result, ratemakers could comprise a large proportion of those certificated to a parish. The twelve certificatemen who are noted and rated as such in the parish of Orpington, Kent, from March 1781 through July 1787 comprise 75 per cent of the people whose certificates are listed in Orpington's records as received between 1772 and 1787. Similarly, at least some of the certificated in Hackney in the 1730s were substantial householders.

In insuring that their substantial, though non-settled, inhabitants were certificated, parishes also protected themselves against acquiring these immigrants' servants and apprentices as settled members of the community. Though the settlement laws declared that apprentices and unmarried servants hired for a year acquired a settlement in the parish in which they served or apprenticed, the settlement laws also decreed that servants and apprentices of certificated people could not found a claim to settlement on such an apprenticeship or service. And parishes took action under that provision of the settlement laws. Of 294 former male apprentices examined at Kent's petty sessions in the periods selected for analysis, twenty-nine had served a certificated master and could not claim a settlement in the parish in which they had served that master. Similarly, in the town of Buckingham, when parish officers were given a list of people from whom to demand certificates, they were also advised: 'if the persons should ask why they should give certificates etc, Is because their servants should not have a settlement'.

So, it should not surprise us that glimpses of parish officers in action reveal that they

83 Some parishes did indeed choose not to rate an uncertificated immigrant when the immigrant's parish of settlement refused him a certificate (Gentleman's Magazine, 60, 1790, pp 868–87).
85 Newman, 'The old poor law in East Kent', p 197. Newman notes (pp 223, 235, 237, 241) that, in the last quarter of the eighteenth century, several parishes ceased to rate their poorer inhabitants. This could well have resulted in decline of surveillance of the immigration of people who were not in need of relief.
86 Bromley Central Library, P277/11/1, P277/11/1.
87 Paley, Justice in Eighteenth-Century Hackney, p xxi; and see pp 160–61, no 990, and pp 163–64, no 1003.
88 & Anne c 18 s 2.
89 Four of these 29 apprentices founded their claim to settlement on an apprenticeship to a second master.
90 Buckinghamshire RO, P/29/13/100, dated 19 May 1718.
were attempting to apply the settlement laws to quite substantial inhabitants of their parish. In 1758, in a rare comment upon settlement business, the clerk of the Malling division noted of the examination of a shopkeeper: 'Adjudged not removeable He having made Oath that he was worth £60 after all his Debts were paid'. Similarly, in 1709, the clerk of Wingham petty sessions noted, in an equally rare gloss upon his sessions's settlement business, that as John Cowper was renting and occupying lands in Ash valued at £12 per annum, and that 'including his stock etc on the said Lands he is now worth thirty pounds and upwards', he need not bring a certificate to Ash, for he had now acquired a settlement there.

As parish officers applied the settlement laws even to relatively substantial residents of their parish, the settlement laws affected a very large portion of English society. This extensive application of the settlement laws does not necessarily mean that migration was stifled or even greatly restricted. Much application of the law entailed the issue of certificates – documents which guaranteed an emigrant that his parish of settlement would assume responsibility for his poor relief, and after 1730, even pay the costs of conveying him back to that parish should he need poor relief. Quite possibly, the certificate inspired its possessor, encouraging him to venture further into an unknown and indifferent land. Yet, whether the net effect of the settlement laws was encouragement or restriction of interparochial migration, it is evident that the settlement laws enabled parish governments to wield enormous power over a very large proportion of Englishmen, if parish governments so wished. The governments of rural parishes did so wish. And so the governors of rural parishes – parish officers and parish vestries – used their powers to decide whether immigrants would be allowed to continue sleeping in the beds they wished to consider their own.

--IK A Pelham, 'The immigrant population of Birmingham, 1686–1726' Transactions of the Birmingham Archaeological Society, 61, 1946, pp 50–53, suggests that the development of a system based on certificates encouraged movement over greater distances. Gowing tests this hypothesis by comparing the certificates delivered to Birmingham from 1697, when statute established the certificate as part of settlement law, with those delivered to Birmingham before 1697, when certificates were just records of private agreements between parishes allowing a person settled in one parish to live in another. Gowing finds that the data supports Pelham's hypothesis (Migration in Gloucestershire, p 218).
Essex Agriculture in the ‘Golden Age’, 1850–73
By E H HUNT and S J PAM

Abstract
By investigation of agriculture in one county, Essex, this paper reviews broader debate on farm incomes, investment, methods, and output during the so-called ‘golden age’. In several respects, particularly the extent of investment and ‘high farming’, the Essex experience offers scant support for traditional interpretations. Landlords’ and farmers’ response to price changes receives particular attention. It is argued that Essex farming was characterized by continuity in methods and output: milk and meat production in 1873 were scarcely less subservient to corn than they had been in 1850. But there were good reasons why this was so.

Until the 1950s accounts of agriculture in the third quarter of the nineteenth century, in Essex as in England, were reassuringly unequivocal.* This was, in Lord Ernle’s familiar description, a ‘golden age’, the triumphal successor to a transitional recovery following the ‘blackest day’ depression of 1815–37. This halcyon-age of prosperity, ‘high farming’, enterprise and investment was then swept aside by an avalanche of American grain inaugurating the ‘great agricultural depression’ of 1874–96. More recently, of course, each of these certainties has been questioned: did the so-called ‘golden age’ acquire its lustre when agriculturalists looked back nostalgically from the succeeding depression? Were not some of the celebrated achievements of ‘scientific farming’ rather like Concorde, technically splendid but economically suspect? Such questioning has not deprived the period of its historical cohesion. Few doubt that the ‘golden age’ was a better time for landlords and farmers than preceding or succeeding decades or that incomes and confidence were sufficient to encourage investment and innovation. But the extent and consequences of these and other variables are now debated.

‘High farming’ is a case in point. Did this period, as many claim, witness exceptional expenditure on farm buildings, drainage, machinery, fertilizer and animal feed, and which of these investments was most increased? ‘High farming’ has been variously interpreted as entailing a continued commitment to corn at a time when price signals were urging the opposite, and as having been directed no less towards increasing the livestock element within mixed farming. Whereas most interpretations assume that the wheat acreage fell significantly, and E L Jones has further claimed that the chief source of prosperity in the ‘golden age’ was not cereal production but livestock husbandry, others claim that the wheat acreage was constant.

* The authors are indebted to Dr E J T Collins, Dr P A Johnson, and Professor G E Mingay who kindly commented upon an earlier version of this article.

1 R E Prothero (Lord Ernle) English Farming Past and Present, 6th ed, 1951. Prothero, in fact, reserved this accolade for the years 1852–63. More commonly, as here, the ‘golden age’ is considered to coincide with the more general ‘mid-Victorian boom’. F M L Thompson’s ‘golden age’ (1853–73, in English Landed Society in the Nineteenth Century, 1963), like Prothero’s, recognizes low grain prices in the early 1850s.

2 ‘Taken as a whole, there was probably much more landlord’s capital sunk in farm improvements in the middle years of the nineteenth century than in any comparable period’: J D Chambers and G E Mingay, The Agricultural Revolution, 1750–1880, 1966, p 163; ‘Money was poured into land’, Prothero, English Farming, p 375.

or increasing. Moreover, because some have claimed that structural change in English agriculture was less than the market called-for, or that much of the change that occurred was misdirected, the landlords' reputation for dynamism and enterprise at this time has also been challenged.

One obvious approach to the investigation of these issues is through regional analysis. This article attempts to contribute towards an overall evaluation of English agriculture in the third quarter of the nineteenth century by examining the characteristics of farming in Essex, a county where we might expect to find evidence of an agrarian 'golden age'. Essex at mid-century contained extensive arable acreage, its farms were larger than the average, and it appeared well-placed to benefit from any stimulus emanating from London and the metropolitan markets.

I

In two respects, landownership and farm size, Essex agriculture witnessed little change of consequence in the third quarter of the century. Land was bought and sold of course; there was a steady trickle of monied-men from nearby London and some landlords were active in buying-up land adjoining their estates while disposing of more distant farms. But there was little evidence of large estates either being assembled or dissolved and figures calculated from the tithe awards for the early 1840s and those from the 'New Domesday Survey' of 1872–3 show no marked change in patterns of landownership. Nor was Essex a county dominated by great landowners. In the early 1870s estates of over 3000 acres accounted for some 28 per cent and 41 per cent of farmed land in Essex and in England and Wales respectively. Reliable and comprehensive statistics of farm-size were not collected until 1875 but it was widely assumed that Essex farms were larger than average and this was certainly so by 1875 when, according to the agricultural returns, the proportion of acreage in holdings in excess of 300 acres was 36 per cent in Essex and 28 per cent in England and Wales.

Evidence of changes in farm size on individual Essex estates is probably a reasonable indicator of trends in the county as a whole before 1875, and on six out of ten estates examined there was virtually no change in this respect. On the remaining four estates there was a modest increase in average farm size: Lord Petre's 18,000 acre Throndon estate, for example, had 49 tenants in 1860 and 47 in 1870. While such estate evidence may not reveal all changes of significance, including more numerous smallholdings, it is unlikely to underestimate increases in farm size significantly. Thus at a time when increasing farm size was regarded as one of the characteristics

5 Thompson, Landed Society, chap IX; Chambers and Mingay, Agricultural Revolution, p 168.
6 The exchange of farms by Lord Petre and Arthur Pryor in 1869 to consolidate estate boundaries northwest of Chelmsford is an example of this kind: Essex Record Office (hereafter ERO), Petre MSS, Accounts D/DP A365, p 30.
7 Thompson, Landed Society, pp 122–7. The number of Essex landowners with over 1000 acres was remarkably stable. About 97.5 per cent of Essex is covered by the tithe awards.
8 BPP, 1875, LXXIX, Agricultural Returns (1875), pp 25–31. Statistics in the 1851 census are not reliable. In particular, small farms and market gardening are significantly under-enumerated and problems arise concerning the enumeration of multiple holdings.
9 Namely, Benyon, Bonnell, Neave, St John's College, Cambridge, St Thomas's Hospital, and Wingfield Baker. The other estates examined were: the Ecclesiastical Commissioners, Lord Petre, St Bartholomew's Hospital, Tower. The authors are grateful to the Master, Fellows and Scholars of St John's College, Cambridge, for permission to examine the St John's records.
10 ERO, Petre MSS, Tenant ledgers, D/DP A364–8. Census returns of Essex farmers and graziers (4421 in 1851 and 3925 in 1871) are beset by problems of definition but are broadly compatible with a clear, but modest, long-term increase in farm size.
of 'high farming', change of this kind in Essex was hardly more than perceptible.

What was produced on Essex farms at mid-century and how did output change by the 1870s? Evidence to answer these questions comes mainly from the tithe files (c. 1840s), from the 1861 county rate returns, from the parish summaries of the official agricultural returns (available from 1866), from estate and farm accounts, and from R. Baker's 1845 prize essay 'On the farming of Essex'. Each of the sources has its shortcomings but together they are sufficient to reveal the main features of Essex farming and any significant changes that occurred. At mid-century over three-quarters of Essex farmland was arable and in only 7 out of almost 300 parishes for which tithe file evidence survives was arable acreage exceeded by pasture. Wheat was the main cash crop, accounting for between 20 and 30 per cent of the arable acreage, about the same as the area under barley and oats combined. No other English county was more dependent upon cereals. A surviving crop book covering several farms, amounting to 3000 acres, on Lord Petre's Thorndon estate in 1857–9 reproduces the main patterns in Essex agriculture: 78 per cent was arable and almost a third of the arable was wheat. Here, as on most of the county's heavy soils, turnips were of little importance and fallowing was extensive.

Tithe file evidence suggests that on the eve of the 'golden age' about a quarter of Essex farmland was pasture. Livestock may have been of more consequence than this proportion suggests: Baker, writing in the mid-1840s and anxious to portray Essex agriculture in a favourable light, claimed that cattle were commonly bought in the autumn, yard-fed in winter, folded on fallow land in the summer and fattened for sale the following year. Some of the 1840s tithe files noted increasing numbers of sheep on the clays. By this time too, the new railways were tapping fresh sources for London's milk beyond the immediate fringes of the metropolis: St Thomas's Hospital, for example, was supplied from a Romford farm by 1846. However, the overwhelming impression remains that on most Essex farms at mid-century livestock husbandry was hardly more than peripheral. As late as 1853 only 5 per cent of London's milk supply came from country districts. Caird, concluding his observations on Essex in 1851–2 and urging more attention to livestock, particularly to milk production, wrote 'hitherto the chief dependence of the farmer has been on his corn crops, cattle being kept for manure, but not generally as a source of profit'.

How much had Caird's advice been heeded twenty years later? Essex in 1870 displayed very few signs of that extensive conversion to pasture said to have been in progress by the 1860s: the balance between arable and pasture appears to have altered remarkably little. A minority of Essex farmers had converted to pasture: John Youngerson, for example, near Chelmsford, converted 155 acres in the mid-1860s 'on account of the high price
of stock and the increased cost of agricultural labour. Such cases, however, must have been exceptional because the proportion of Essex farmland that was pasture appears to have fallen from c. 27 per cent in 1840 to c. 20 per cent in 1870. These figures, admittedly, are based on incomplete tithe evidence (covering about 97 per cent of the county) and the acreage under grain in 1870 may have been influenced by high grain prices in 1867 and 1868. But the evidence is sufficiently robust to preclude the possibility that pasture increased by much. Moreover, farm accounts of conversion to pasture are more than matched by similar accounts of ploughing-up, including for example that at Althorne Hall on the Dengie peninsula (25 acres of arable in 1858, 117 acres by 1869) and the conversion of marsh pasture at Chadwell in 1852. A later commentator (T S Dymond, 1901) described 'most of the good old grassland on the heavy clay soil of south east Essex' being broken-up in the 1850s.

Of course, reduced grass acreage does not necessarily indicate increased cereal production nor fewer livestock. Some arable land, probably an increasing proportion, was devoted to fodder, and market gardening almost certainly was expanding. Evidence on the livestock population, in fact, does suggest increasing numbers although by no means on the scale that Caird would have advised. Comparison of the somewhat meagre tithe file evidence on stock-keeping in the 1840s and the parish agricultural returns of 1870 gives the impression of a small overall increase in stocking with considerable variety between locations. Individual farm accounts and estate records likewise show only modest increases in stock-keeping: on farms at Audley End (near Saffron Walden) and Great Henny (close to the Suffolk border), for example, and there was no increase at all on the Tabor farms in north-central Essex. And while dairying had expanded it was still far too restricted to have much impact on the general character of Essex farming except along the London–Chelmsford railway and in a few other localities: in 1870–2 dairying accounted for less than 5 per cent of Essex farm output. Low levels of investment in farm buildings (below) is likewise consistent with no more than very limited increases in livestock keeping during the 'golden age'.

In most parts of Essex, therefore, arable farming lost little of its importance despite a tentatively increased emphasis on meat and dairy output. The importance of wheat, the main cash crop, appears to have been more than maintained: wheat accounted for an estimated 20 per cent of Essex farmland in 1840 and about 24 per cent in 1870–2 by which time it occupied only around 14 per cent of the total English acreage. A surviving crop book for Great Henny farm (321 acres) gives a similar impression: there wheat acreage was 65 in 1847–8, 81 in 1861–2, and 88 in 1871–2. The contribution of Essex evidence to debate on whether or not wheat acreage declined significantly in the 'golden age',

For comment on the accuracy of the agricultural returns with regard to livestock numbers see S J Pam, 'Essex agriculture, 1850–1914', forthcoming London University PhD thesis, chap 3. ERO, Braybrooke MSS, Audley End home farm accounts, D/DBy A 267–70; Mist farm accounts, Great Henny, D/DU 441/54–68; Tabor MSS, D/DTDa A77. This is an estimate. A surviving crop book for Great Henny farm (321 acres) gives a similar impression: there wheat acreage was 65 in 1847–8, 81 in 1861–2, and 88 in 1871–2. The Thurrock district, where cereal acreage after 1840 'ceased to expand ... but nowhere significantly diminished', provides another example: E J T Collins, A History of the Orsett Estate, 1743–1914, Thurrock, 1978, p 54.

Tithe files; BPP, 1870, LXVIII; 1871, LXIX; 1872, LXIII Agricultural Returns (1870–2).

ER O, Misc farm accounts, Great Henny D/DU 441/54, 55, 59, 64, 66.

25 Tithe files; BPP, 1870, LXVIII, Agricultural Returns (GB) 1870, pp 28–9.
26 St Bartholomew's Hospital MSS, Almoner's reports, 1838–69, Eo8/6; Church Commission, Ecclesiastical Commissioners MSS, London cathedral surveys S1, Biggs Manor estate report, pp 204–115.
and whether livestock expanded at the expense of cereals, is therefore unequivocal. Essex wheat and cereal output, like Essex landownership and farm size, was characterized by continuity. As late as 1867 one of the allegedly more enlightened Essex farmers, J J Mechi, described livestock farming in terms that echoed Caird's mid-century comment (above) on its traditionally peripheral role in corn country: animals, wrote Mechi, failed to 'pay market price for their food' but were necessary as 'providers of the best and cheapest manure'. Despite price trends in favour of livestock and much publicity for 'high farming', the primacy of corn was not yet seriously challenged.

II

Was continuity in landownership and output composition accompanied by sufficient improvement in Essex agrarian fortunes to justify the 'golden' epithet conventionally attached to these years? While a minority of Essex landlords enjoyed considerable non-agricultural incomes, the great majority derived most of their income from farm rents. Thus their fortunes were closely related to those of local farming. Evidence on Essex rents comes from two main sources: the Income Tax Schedule A (Lands Only) Assessments and from surviving rent-rolls for individual farms on thirteen Essex estates. The taxation records are comprehensive and represent a useful, if only approximate, guide to long-term changes in landlords' rental income. Estate rent rolls provide complementary evidence of rent movements on specific Essex farms. Unfortunately, rent-roll evidence from the very beginning of the period is available for only three estates, although other estates have continuous records from the time when rents began to rise in the mid-1850s.

In Essex, as elsewhere in England, rents fell in the first four years of the 'golden age' and continued to rise for four or five years after 1873. Between 1850–2 and 1870–2 Essex rents, according to the income tax assessments, rose by about a quarter. Estate rent evidence is broadly compatible with that taken from the taxation returns, but the estate records also illustrate great variety in rent, and in rent increases, within the county: rents of land suitable for livestock or market-gardening and well-placed to take advantage of growing markets or transport improvement were above average in 1850 and at an increasing premium throughout the 'golden age'. On Lord Petre's Thomdon estate, for example, rent on Bacons and Dagness farms, on good mixed soils in the Mountnessing district close to the Chelmsford to London railway, rose by 24 per cent between 1859 and 1874. At the latter date rent per acre on these farms was over 70 per cent higher than that on the London Clay Tillingham Hall farm (near East Horndon and some distance from a

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Belhus estate, of mainly fertile, well-drained, soils suitable for market gardening, rents increased by more than three-quarters between 1857 and 1874. Given relative price movements before and during the ‘golden age’, higher and more rapidly rising rents on land suitable for livestock or market gardening is hardly surprising, but the tardiness of structural change in Essex farming noted above appears the more remarkable. Farmers perhaps were encouraged to maintain grain output because adverse price movements were partially compensated by lower rents. Landlords appear to have had more reason to reduce dependence on cereals, although whether the incentive was sufficient to repay investment in conversion is another question.

How average rent increases translated into changes in landlords’ real income varied at different times. In the first half of the 1850s, when rents fell, landlords could hardly have been aware that a ‘golden age’ had begun. The 1860s, when rents generally pushed ahead of prices, were more conducive to landlords’ well-being, but over the whole of the ‘golden age’ era (1850–2 to 1870–2) prices (according to Rousseaux’s figures) increased by 26 per cent, about as much as the increase of Essex rents. The comparison is approximate of course: comparing different years produces different answers and doubtless the average Essex landlord disposed of his income in ways not faithfully reflected in Rousseaux’s index. But the most optimistic generalization about Essex landlords’ rental incomes in the ‘golden age’ is that, in real terms, they increased modestly. Naturally in some places, like the Belhus estate or Bacons farm and Dagness farm (above), rent increases were more compatible with the description ‘golden age’. But there were also, of course, examples like Tillingham Hall farm (above), or the Essex lands of the St Thomas’s Hospital estates where real rent/acre appears to have fallen.

There is scant evidence of outstanding prosperity for Essex farmers either, although they seem to have fared rather better than landlords. Their fortunes seem likely to have depended considerably on what they produced. All farm prices fluctuated from year to year but there is no doubt that over the period wheat prices rose less than beef prices and not much more than non-farm prices. Comparing three-year averages at the beginning and end of the period (1850–2 and 1870–72) wheat prices rose by 34 per cent when prices generally rose 26 per cent according to the Rousseaux index and by 32 per cent according to the Sauerbeck–Statist index. Barley prices rose by 41 per cent over this period, and those of prime beef and mutton, according to reports in the Essex County Standard, by 55 and 35 per cent.

Over a period when average rents increased by about a quarter and when the cost of labour per acre was rising, corn farmers would have needed to increase productivity substantially to secure more than modest prosperity. Productivity was

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28 ERO, Petre MSS, Thorndon account ledger, D/DP A350 and tenants’ ledgers, D/DP A366. Caird, of course, had noted such differences in 1850 when he compared average rentals of 20s to 30s per acre in fertile north-east Essex with rents as low as 10s to 15s on the stiff clays: Caird, English Agriculture, p 136.
29 ERO, Barrett-Lennard MSS, Correspondence, DDL C67, 68.
30 B R Mitchell and F Deane, *Abstract of British Historical Statistics*, 1962, pp 472–4; the Sauerbeck–Statist index shows a somewhat greater price rise over this period (35 per cent).
31 The St Thomas’s estate archives (GLRO) indicate rent increase per acre of only 14 per cent between 1850 and 1874.
33 The St Thomas’s estate archives (GLRO) indicate rent increase per acre of only 14 per cent between 1850 and 1874.
34 ‘Agriculture in Essex during the past fifty years as exemplified by the records of one farm,’ *J ournal Royal Stat Soc*, LX, 1897, p 265.
rising and returns on tenants' capital investments were satisfactory. Differentiated rent increases helped also, in effect transferring part of the consequences of relatively low grain prices to landlords. Thus there were few signs of farmers in distress. Some tenants quit as a consequence of financial difficulties and some became bankrupt but far fewer than those affected after 1872 when signs of hardship multiplied. On five Essex estates where this change can be measured the percentage of quittings ascribed to serious financial losses or bankruptcy was 16 per cent between 1850 and 1873 and 36 per cent between 1873 and 1900.\textsuperscript{45} The Essex County Standard recorded just seven farmer–bankrupts in 1870–2 but fifty-three in 1880–2. There is Essex evidence (below) also that lends at least some credence to the Punch stereotype 'golden-age' farmer who spent extravagantly on home, family and entertainment. Without then there was reason why farmers should later look back fondly upon the 1850s and 1860s. But the final impression is of modest comfort rather than of unprecedented prosperity. This must have been especially the case for the majority of Essex farmers whose livelihoods depended much upon sales of grain.

III

Absence of anything beyond modest prosperity for many Essex farmers and most Essex landlords, and the prominance of those least dependent upon wheat among the more prosperous, focuses attention again on the remarkably slow pace of structural change in Essex at a time when landlords are said to have been eager to invest and innovate. How important was 'high farming' in Essex and what changes did it introduce? What evidence can Essex offer to debate on the existence (or absence) of a golden-age 'agricultural revolution on the English clays'.\textsuperscript{46}

As indicated earlier, 'high farming' is somewhat of a portmanteau description: most commonly it describes systems of mixed farming in which greater output was achieved by increased investment, especially upon draining. Typically, increased grain production is understood to have occurred alongside reduced fallowing and an expanded output of turnips and other fodder crops that provided 'high feeding' for sheep and cattle. 'High farming', associated also with large farms and large estates, usually entailed additional buildings, especially to house cattle; farm-grown fodder might be supplemented by increased purchases of enriched animal food; and arable productivity was stimulated by greater use of fertilizers and machinery, including the much-publicized steam-ploughing. As a system it was both capital-intensive and labour-intensive and, while dairying and pasture were not precluded, the emphasis in livestock husbandry was high-feeding to maximize production of meat and manure from folded or stall-fed animals. Many accounts, like those of F M L Thompson and R W Sturgess, regard 'high farming' after 1850 as, in essence, the application to newly-drained heavy soils of techniques already successfully employed on the lighter soils.\textsuperscript{47}

Others, however, have questioned both claims of massive investment at this time and the applicability of 'high-farming'

\textsuperscript{44} Surviving farm accounts for this period suggest that Essex tenants could expect returns of 10 per cent or more on working capital. ERO, Basbybrooke MSS, Home farm accounts D/DBy, A267–9; Misc farm accounts, Great Henny farm D/DU 441/55–75.

\textsuperscript{45} Estate archives for St Bartholomew's Hospital, Benyon, Ecclesiastical Commissioners, St John's College, Cambridge and St Thomas's Hospital.

\textsuperscript{46} R W Sturgess, 'The agricultural revolution on the English clays', Ag Hist Rev, XIV, 1966, pp 104–21. Responding to Sturgess, E J T Collins and E L Jones, 'Sectoral advance in English agriculture, 1850–80', Ag Hist Rev, XV, 1967, pp 65–81, suggested that on much English clayland investment was neither extensive nor noticeably successful. Replying, Sturgess argued that with regard to south-eastern claylands his views and those of Collins and Jones were not far apart.

\textsuperscript{47} Sturgess, 'Agricultural revolution'; Thompson, Landed Society, p 246.
The London Clays that comprised perhaps a third of Essex farmland were particularly unrewarding. Essex Boulder Clays, which covered another quarter of the county, also required careful management, especially in wet weather.49

The earlier evidence on the unchanging balance between arable and pasture is not necessarily incompatible with widespread high-farming in Essex because reduced following, and greater numbers of folded and stall-fed animals, together with more manuring, could result in increased output of both livestock and grain with pasture acreage unchanged. However, the tithe files, the later parish agricultural returns, and estate records also indicate that except on the fringes of London, along the railways, and on less-heavy soils in a few other places, livestock numbers increased very little. If ‘high farming’ made much impression across Essex as a whole, therefore, it must have been ‘high farming’ of the kind subsequently criticized for giving first priority to maximizing corn output when market indicators signalled greater concentration upon livestock.50 Disparaging comment on the place of livestock in mixed farming by the best-known Essex advocate of ‘high farming’, J J Mechi (above), is certainly consistent with such an interpretation.

Mechi was a businessman-turned-farmer and owner-occupier of Tiptree Hall, a 170 acre heavy-soil farm in east-central Essex. He invested lavishly and, according to Caird, kept the whole farm ‘in constant tillage’.51 But how representative was he of Essex agriculturalists and what evidence is there of other landowners taking part in a great mid-century investment extravaganza? There is some evidence of this kind: Richard Benyon (1565 acres, Ockendon), for example, was a textbook improving landlord. He invested heavily in the 1840s, spent a further £8000 on drainage in the 1850s and 1860s, and never hesitated to erect new farm buildings or cottages as the need arose. Lord Petre re-invested 15 per cent of the Thorndon estate (18,000 acres) rents; the governors of St Bartholomew’s re-invested a similar proportion of their Essex rents in the 1860s; St Thomas’s lands in Essex were considerably improved also; and C J Tower (2481 acres, South Weald), W Bower-Smyth (2819 acres, Theydon), and the earl of Essex (3090 acres, Rayne) were other Essex landlords dedicated to improvement via substantial investment.52 These examples, however, are not representative of landlord activity in Essex as a whole. Other estate evidence and material from surviving land company ledgers suggests strongly that capital investment in ‘golden age’ Essex was far less than most general accounts imply. Few Essex landowners (or tenants) are listed as borrowers in the surviving land company ledgers, or in the records of loans made under the Public Money Drainage and Improvement

48 Contrast the views of, for example, F M L Thompson (‘great schemes of agricultural investment . . . great landowners pouring money into their estates’) Landed Society, pp 246–7, 253 or that of Chambers and Mingay cited above (n2) with those of Collins and Jones, ‘Sectoral advance’, pp 68–9. The suitability of ‘high farming’ techniques on the clays is discussed below.

49 There was, of course, a variety of soils in Essex, as elsewhere, but the county’s distinguishing pedological feature was the preponderance (over 60 per cent) of heavy soils. One Dengie farmer described his sub-soil as ‘stiff, tough, dumb and impervious’: BPP, 1894, XVI, pt 1, Royal Commission on Agricultural Depression: Report of R H Pringle, pp 36–7. Pringle commented, ‘To plough it three horses are required. In the best of seasons it is expensive to work. It cannot be touched in wet weather.’ For details of Essex soil types see Pan, ‘Essex agriculture’, chap I.

50 Thompson (Landed Society, pp 253, 255) refers to landlords ‘held in thrall by corn’ and ‘improvements all too often . . . directed towards encouraging good corn farming when the trend of the times favoured animal husbandry’.


52 ERO, Benyon MSS, D/DBe. E42. 46. 15. 44. 55. 57. 66; Petre MSS, Thordon estate accounts, D/DP, A309–126, 341–50; St Bartholomew’s Hospital MSS, Almoner’s reports, 1869–75, ED 8/6; Minutes of the Board of Governors, Ha/20–3; Rental ED 16; General account 1850–70; FD; GLRO, St Thomas’s Hospital MSS, County estates log book, HI/ST/Et18; Clerk’s rental HI/ST/E50/7–20, 27; ‘Notes on estate improvement, 1800–40’, HI/ST/E60/17; ERO, Tower MSS, Letter D/D Tn A6; PRO, Drainage loan ledgers, MAF 66/1, 2, 3, 17; IR 3/3.
of Land Acts, and the amounts they borrowed were small: one of the largest of the land companies, the General Land Drainage Company, lent only £23,922 to Essex owners between 1851 and 1870.53 From these sources it appears that the total borrowed for drainage alone between 1847 and 1874 was unlikely to have much exceeded £30,000.54 If we accept A D M Phillips’ recent estimate that loan-capital commonly constituted about one-fifth of total drainage outlay, then investment under this heading was only about £17 per 100 acres over twenty-seven years.55 These, of course, are rough estimates but their implication is confirmed in the accounts of several Essex estates: on the Belhus estate (3700 acres) a mere 3 per cent of rents was reinvested between 1867 and 1876; the proportion reinvested was even lower on the Bonnell estate (1945 acres), and at Bower Hall (1158 acres) was barely 1 per cent between 1850 and 1862. Very little improvement, other than necessary repairs, appears to have been carried out on Guy’s Hospital land in the 1850s and only 2 per cent of rent went on improvement in the following decade. The fellows of St John’s College, Cambridge, were similarly parsimonious with less than two per cent ploughed back on improvements in the 1850s and not much more (3¾ per cent) in the 1860s.57 There is also a great deal of piecemeal evidence that reinforces these accounts of sparse investment: surveys undertaken by the Ecclesiastical Commissioners (1852–73), for example, refer repeatedly to inadequate and poorly maintained farm buildings on properties held by beneficed lease holders, and much the same was said of the Essex farms bought by St Bartholomew’s Hospital. Likewise, a report of 1869 on the earl of Verulam’s Messing estate (1120 acres) noted a ‘considerable acreage requires drainage’ and complained of farm buildings ‘old and considerably out of repair’.58 A later (1886) account of the Orsett estate includes a plea that new farm buildings ‘should not be neglected any longer’ and Pringle emphasized lack of investment in Essex during the ‘golden age’ among the causes of the succeeding depression.59 This evidence of decidedly modest investment on most Essex farms is obviously compatible with what was said earlier

53 Two other companies lent £15,547 in the 1860s: PRO, Drainage loan ledgers, MAF 66 series; PRO, General Land Drainage Company, Ledger 1, 1851–1868, Ledger 2, 1868–96, MAF 66/1–2; Land Improvement Company, Ledger 1861–69, MAF 66/3; Land Loan and Enfranchisement Company, Ledger 1, 1861–78, MAF 66/4.
54 Calculated from evidence in A D M Phillips, The Underdraining of Farmland in England during the Nineteenth Century, 1899.
55 Ibid., p 117. Contemporary estimates put the cost of drainage at around £6 per acre. See, for example, Caird in Select Committee on the Improvement of Land (BPP, 1873, XVI), qq 412–14; Phillips, Underdraining of Farmland, p 86; Thompson, Land Society, p 248.
56 A new cattle shed at this time cost, typically, around £150: see, for example, St John’s College, Cambridge, MSS, Accounts S64, Rentals (new cattle sheds, Rawrith 1862, 1863); GLRO, St Thomas’s Hospital MSS, Accounts HI/ST/66113 (new cowshed, Aveley 1856); ERO, Bonnell MSS, D/DHn E4, ‘Particulars of old leases and present leases and money spent on repairs on Essex farms’, Skinnerswick, 1869.
57 ERO, Barrett Lennard MSS, Correspondence D/Dl: Bonnell MSS, D/DHn E4, ‘Particulars of old leases’; BPP, 1894, XVI, pt. 1, p 255; St John’s College, Cambridge, MSS, Rentals 1850–70, S.B 4; Senior bursar’s statement on the audit, 1893, D/Dke Ag; ERO, D/DSw A1, Cashbook of Rettendon properties.
58 Church Commissioners, Ecclesiastical Commissioners MSS, London cathedral, London bishopric and London chapter surveys, S1, pp 294–315; S3, pp 357–415; S4, pp 231–75; St Bartholomew’s Hospital MSS, Surveyors’ reports, Eo8/1; General account 1850–70, FDI; Hertfordshire Record Office, Earl of Verulam MSS, Mooting court minutes (1839), xl. 122, Box 44.
59 ERO, Whitmore MSS, Drivers report p 4. See also the 1879 survey of the Eastern Lodge estate (c. 8600 acres) with details of buildings in need of urgent repair: ERO, Eastern Lodge Estate MSS, Surveys and suggestions on repairs (1879), DDIMg, E27–36; DPP, 1894, XVI, pt. 1, pp 35, 58–9 and qq 8765–6; Collins, Orsett Estate, pp 56, 51, 55.
on the absence of significant changes in farm size, estate size, and livestock holdings. Other evidence on high farming is more fragmentary but none was found that significantly modifies the emerging impression that Essex took little part in mid-century agrarian innovation. Farm sale catalogues indicate increased use of farm machinery, including iron ploughs, oilcake breakers, mangold pulpers, horse hoes, scarifiers, mowers and rollers. Such change, however, was no more than incremental: one report noted barley still being hand-threshed in the 1870s and despite considerable local advertising Essex boasted only two operational sets of steam ploughing tackle in 1866. 60 In 1870 turnips and swedes still occupied a mere 2 per cent of clayland parishes, significantly less than the acreage under fallow. 61 Similarly with intensive manuring and fertilizing: surviving farm accounts and railway company carriage records testify to some increased use of purchased fertilizer, such practices were commonplace in a few parishes and evident also on the farms of enlightened or eccentric individuals throughout the county. 62 But here also the extent of change was too modest to substantiate claims that 'high farming' had become widespread.

It is clear that while a minority of Essex landlords invested with textbook open-handedness, the majority were less extravagant and some were parsimonious. The tithe files suggest that at the beginning of the 'golden age' high farming was extensively practised in fewer than a tenth of the county's parishes, most of them near to London: 'high farming' at that time was 'the exception rather than the rule'. 63 All the subsequent evidence indicates no more than a gradual and limited expansion of such practices in the following twenty-five years and very little that substantiates textbook accounts of massive investment, new crops, new machinery and methods. Essex was a corn county in 1850 and hardly less so in 1873. By and large, corn was still produced by methods not radically different from those Caird witnessed in his mid-century tour: without much more reliance on complementary stock and fodder, and without greatly increased use of fertilizer and machinery. Farming in Essex thus appears not entirely compatible with either of the interpretations of third-quarter agricultural trends offered by E L Jones and F M L Thompson. Jones' suggestion (above) that the main source of farm prosperity in the 'golden age' was not cereals but livestock hardly applies to Essex because dependence on livestock there was so slight. 64 And whatever their importance elsewhere, F M L Thompson's 'great schemes of agricultural investment ... to render the clay farms as like the turnip farms as possible', were not much evident in Essex. 65

IV

If the Essex experience offers little support for the once conventional view of agriculture having prospered in the third quarter of the century, with prosperity spurring attempts to maximize output, does it perhaps lend greater support to quite different, and more recently fashionable, interpretations that emphasize how little was changed in English agriculture at this time despite prevailing price signals and the

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62 About 12 per cent of Boulder Clayland, and 7 per cent of London Clayland was under fallow: PRO, MAF 68/240, Parish summary of the agricultural returns for 1870, Essex.
63 Farmer Prout's preference for chemicals over rotation and dung was mentioned above. Farmer Hudley treated his Witham fields with starfish as well as guano and chalk: BPP, 1866, VI, Select Committee on Agricultural Customs, 99 2133, 2140.
65 Jones might retort that Essex prosperity was slight also. He could add that what has been said of Essex farming here is entirely compatible with the arguments he and Collins advanced in their 'Sectoral advance'.
66 Thompson, Landed Society, p 246.
forthright advocacy of those, like James Caird, who urged adaptation to a world of freer trade and falling freight rates. From this latter perspective landlords and farmers, complacent and apathetic, are accused of dissipating the long breathing-space between corn-law repeal and the main onslaught of new-world cereals in the 1870s. Caird himself, on the eve of the 'golden age', accused Essex landlords of 'complete indifference to agricultural enterprise' and urged the county's farmers to respond to the almost boundless metropolitan demand for milk.

What has been said of modest investment and dilatory change in Essex farming practices is obviously broadly consistent with this more critical appraisal. And there is further evidence of similar implication, especially with regard to the landlords' performance. One aspect of the general disincentive of many landlords to invest in the 'golden age' appears to have been that investment initiatives now came more often from their tenants who drew attention to neglected opportunities or even raised loans to undertake investment themselves. None of this was new: tenants traditionally provided working-capital and undertook considerable maintenance and running repairs. But there now occurred a subtle shifting of the boundary between landlords' and farmers' responsibilities, partly in response to easier market conditions that increased the attractiveness of tenancies, eased landlord fears of farmers quitting, and discouraged initiative that landlords fulfil their share of repairs. Essex estate accounts for this period list many grants of tiles to tenants, indicating that landlords preferred to drain individual fields or farms on a 'materials only' basis rather than finance a major drainage pro-

gramme. On the Guy's Hospital estates between 1853 and the 1870s most heavy-soil drainage was financed by tenants who also paid for improvement such as altering hedges, straightening fences, enclosing waste and making repairs of a kind undertaken by landlords.

A minority of Essex landlords, Col Bramson of Skreens for example and G Capel Cure (Ongar), engaged in day-to-day estate management and some provided more dynamic leadership, pioneering new methods and urging improvements upon their tenants. But the majority appear to have been content to delegate extensively to agents of varying competence. Certainly there is a contrast between their indifferent leadership and the robust entrepreneurship of eighteenth-century East Anglian landlords. In their defence it can be said that landlords remained active in initiating and running those county and local agricultural improvement societies that arranged lectures, shows, ploughing matches and visits to model farms. A group of leading Essex landowners lobbied successfully to host the Royal Agricultural Society's annual show at Chelmsford in 1836 and landowners were active members of both the Essex Agricultural Association (begun in the wake of the Chelmsford show) and the

**Notes**

66 In 1867, for example, G Capel Cure was supplying pipes and tiles at Bovington Hall and Ongar Park farms while tenants dug the drains: ERO, Capel Cure MSS, D/Dc E5.

67 ERO, Guy's Hospital MSS, Receiver's reports for the Essex estate, D/DCs E7. Cresting farm (Porter estate), 'much improved by the tenant', and the Birch estate near Colchester provide further examples: ERO, Porter MSS, D/DPo E11; Round MSS, D/DR E16. One Essex farmer, in evidence to the Select Committee on Agricultural Customs (BPP, 1847–8, VII, p 125) claimed there was hardly a tenant in the county who dare ask his landlord to build him anything.

68 W Fisher Hobbs, for example, who bred shire horses and pigs and was a founder-member of the Royal Agricultural Society: B G E Wood, SEAX 7: Agriculture in Essex, 1840–1890, ERO Publications, Chelmsford, 1975, no. 12.


70 Caird, English Agriculture, pp 134, 142.
Essex Chamber of Agriculture (1867). None of this, however, was done with conspicuous panache; it amounts to hardly more than would be expected even of apathetic landlords. Tenant farmers became openly critical of such leadership in the 1840s, especially in responding to the Anti-Corn Law League, and mounted a minor opposition to the League might, of course, be interpreted as prudent foresight and this evidence is perhaps no more damaging to the landlords' reputation than the perennial neglect of estates being neglected to over-indulge in public service or personal dissipation. But there was certainly no diminution in complaints of this kind either, and failure to persuade tenants of the appropriate response to the Anti-Corn Law League is perhaps further evidence of a partial retreat from the landowners' traditional leadership role.

If the reputation of Essex farmers emerges better from such examination than that of landlords it is more because they manifested fewer shortcomings than because they displayed particular managerial skills. Landlords transferred some of their responsibilities to tenants, but the burden was taken up without noticeable enthusiasm or innovation because tenants too preferred incremental change. Few Essex farmers could be described as scientific agriculturalists and few showed much interest in agricultural education. Like the landlords they were frequently accused of social extravagance, of neglecting their farms, and there was perhaps substance to such complaints. Some left much of the day-to-day management to a farm foreman. One local commentator judged the comfortable lifestyle of certain Orsett farmers beyond the reach of the local doctor, and a surviving farmer's diary (1871) records a hectic social life of concerts, dances, card parties, hunting and steeple-chasing. The eventual consequences of such indulgence, and reluctance to adjust to harder times after 1873, have been frequently mentioned in accounts of the succeeding depression in East Anglia, not least in comparisons between the fortunes of local farmers and those of the more abstemious, hard-grafting, incomers from Scotland and Lancashire. One particular manifestation of tenant (and landlord) conservatism was continued indifference to what happened to their produce beyond the farm gate. Only a handful of Essex men participated in the transformation of London food markets that occurred at this time. Local newspapers and the records of the Essex Chamber of Agriculture contain very few complaints or comments on marketing arrangements and there appears to have been little organization for farmers beyond the reach of the local doctor, and a surviving farmer's diary (1871) records a hectic social life of concerts, dances, card parties, hunting and steeple-chasing. The eventual consequences of such indulgence, and reluctance to adjust to harder times after 1873, have been frequently mentioned in accounts of the succeeding depression in East Anglia, not least in comparisons between the fortunes of local farmers and those of the more abstemious, hard-grafting, incomers from Scotland and Lancashire. One particular manifestation of tenant (and landlord) conservatism was continued indifference to what happened to their produce beyond the farm gate. Only a handful of Essex men participated in the transformation of London food markets that occurred at this time. Local newspapers and the records of the Essex Chamber of Agriculture contain very few complaints or comments on marketing arrangements and there appears to have been little organization for farmers.
to have been no attempt to initiate co-operative marketing, or any other kind of farm co-operation.

V
Thus it is possible to construct a seemingly damning indictment against landlords and farmers alike. Further evidence, however, exonerates, or partly exonerates, Essex men from several of these charges. The case for their defence must begin with the vigorous critique of 'high farming' that depicts much of it as massive over-investment in 'state-of-the-art' agriculture, impressive in scale and ingenuity but decidedly unimpressive when judged by economic criteria. Consequently, we are told, many activities barely paid even on soils for which they were best-suited, which is why so much 'high farming' was abandoned when the 'golden' years yielded to depression. Where lavish investment was targeted upon cereal yields, it is said to have been doubly foolish because cereal production was already threatened by imports. From this perspective it was perhaps as well that Essex boasted relatively few high-farming apostles like Prout and Mechi (above), whose farm accounts were frequently challenged by more conservative Essex tenants. If there was, as Thompson argues, a 'last, expensive, homage to king corn', Essex men, although loyal to corn, avoided most of the expense. This by no means is to claim that they were exceptionally competent, or well-informed, that each potential investment had been carefully appraised before rejection. Merely that they should not be castigated for failing to exploit investment opportunities that were likely to have proved spurious.

Not all opportunities were spurious of course. To what extent were worthwhile investment opportunities foregone out of apathy or shortsightedness? Drainage is customarily given prominence among investment of this kind; yet investment under this heading in Essex was very modest. One reason for this was the belief that extensive drainage on the clays, while undoubtedly beneficial, was not sufficiently worthwhile to repay the considerable expense. Certain mid-century enthusiasts had proclaimed drainage the sovereign remedy for heavy soils. The new mass-produced clay drainpipes, they claimed, could transform once-soggy fields, break the long stranglehold of naked fallows, allow the introduction of green (fodder) crops and thus increased cattle and sheep, and generally facilitate successful 'stock and corn' farming on traditional wheat and bean lands. In fact, within the technical constraints of the time, much clayland was not nearly so adaptable. Not only were turnips, other fodder crops and barley unlikely to flourish on the heavier soils, no matter how expensively drained, much other Essex land required considerable supplementary investment in marling and manuring, and the sustained co-operation of tenants, to create anything resembling the classic 'stock and corn' regime. Bare fallows remained essential to clean and rest the heavier land. Moreover, much of Essex was already tolerably drained. R. Baker, in 1843, described hollow-drain underdraining, much of it in place since the mid-eighteenth century, extending over some two-thirds of the county. Baker maintained that hollow drains were durable and on Essex soils might prove more successful than the newer (and more expensive) tile or pipe drains which, unless covered with gravel and cockle shells, 'do not answer

77 Chambers and Mingay, Agricultural Revolution, p 175, cite Mechi's claims uncritically but many Essex farmers maintained that his methods were uneconomic on the clays: Essex County Standard, 19, 26 December, 1851; 30 March 1860; ERO, T/3 20/33, 114/1-2.
78 Thompson, Landed Society, p 248.
79 For example, J J Mechi, Letters on Agricultural Improvement, 1845, and J R Dent (1860), cited in Sturgess, 'Agricultural revolution', p 119.
80 Thompson, Landed Society, p 248.
81 Collins and Jones, 'Sectoral advance', pp 70-1.
well'. The tithe file reports indicated that much drainage had been undertaken on the Boulder Clays in the 1830s and noted a need for additional drainage in only 39 parishes. Of course, traditional methods, of limited effectiveness with surface water, were never more than a partial solution to draining the heavy clays but the new pipe and tile technology offered only limited further advantage. The fundamental difficulty was cost: effective drainage of heavy land was inordinately expensive. One recent commentator estimated that converting Essex clays to pasture cost over three times as much as conversion in Cheshire or Staffordshire and also required several more years to produce good grazing turf. It was calculations of this kind more than unthinking conservatism, the logic of high costs and poor returns, that led Essex farmers to declare that land still undrained in 1870 was not worth draining.

Expenditure on machinery, particularly steam cultivation, was everywhere less successful than investment in drainage and Essex farmers had reason to appraise this aspect of 'high farming' with particular caution. Machinery economized on labour but savings were likely to be marginal where wages were as low, and labour as plentiful, as they were in much of Essex. So plentiful was labour that a man displaced by machinery might leave his employer with higher poor rates besides a bad conscience. Clearly this was less likely to occur on the metropolitan fringes of Essex (where 'high farming', as well as high wages, were more commonplace) but to the east and north of London the wage contours were closely-spaced: the mid-century Morning Chronicle survey recorded north Essex wages 'extremely low', the labourers too poor to afford meat. Another local characteristic that discouraged investment, especially for conversion to pasture, was climate. Low rainfall, like the warm Essex summers, was far more a handicap to pasture farming than to arable: 'in the dry east and south of the country permanent pasture was a precarious crop'. In reasonable years, in fact, neither too wet nor dry, much of Essex produced excellent cereal crops and even the heavier clays, unsuitable for fodder crops, produced a satisfactory wheat harvest.

In these circumstances, a cautious and sceptical response to advocates of 'high farming' and dairying, is certainly defensible. It would have required unequivocal and sustained price signals to induce rational men to abandon farming that was suited to local soil and climate and, in most years, producing adequate returns. On the heavy Essex soils significantly reduced dependence on cereals entailed prodigious expenditure, several years of reduced income, and commitment to unfamiliar farming that might prove no less precarious, and no more profitable, than the time-honoured wheat and bean cultivation. Were market indicators, despite these manifold impediments to change, sufficiently emphatic to indicate what F M L Thompson called the 'proper' adjustment of farming to the marketing possibilities of the 'golden age'? If incentives to restructure were insufficiently compelling, continuity

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81 Sturgess, 'Agricultural revolution', p. 112. 'On a great deal of the land ... permanent pasture does not flourish on account of the dryness of the climate': W E Bear, 'Advantages in agricultural production', JRASE, 3rd ser, V, 1894, p 263. Root crops too were less likely to flourish in the drier areas.
possibly owed more to prudence than to apathy. According to Thompson, wheat prices, after their recovery in 1853–5, 'settled down to a slowly declining trend' while 'the prices of animal products continued to rise steadily'. In fact, neither trend was so clear. In the five years leading up to Corn Law repeal wheat prices had hovered between 50s and 58s a quarter. They were very high in the following year (69s 9d) and then fell to a miserable 38s 6d in 1851. Caird's booklet advocating 'high farming' as the best substitute for protection had recently appeared and the calamitous price sequence appeared to vindicate both the gloomy prophecies voiced at the time of corn law repeal and Caird's recommended remedy. If Essex farmers and landlords were not at that time contemplating how their heavy corn-land might be coaxed into producing grass and fodder, they richly deserve all the opprobrium subsequently heaped upon them. But 1851 was the nadir: wheat was not to be so cheap again until the mid-1880s. By 1853 its price was back above 50s a quarter and then, for two years, moved higher than at any time since 1819. The subsequent fall was shortlived and, after further fluctuations, wheat prices in the early seventies were on a par with levels in the 1840s and quite high enough for viable production on the Essex clays. This sequence is consistent with a relative decline in wheat prices having occurred, but claims that prices fell absolutely in the 'golden age' are unwarranted.

As noted earlier, meat prices were indeed more buoyant than wheat prices and their relative increase, although gradual and intermittent, should perhaps have prompted Essex landlords and farmers at least to investigate the feasibility and cost of improving their farms. Curiously, however, even in the face of the dramatic fall in wheat prices for the whole of 1853, the London market remained high as livestock dealers took advantage of the situation (Fig. 1). Reassuringly, the proprietors of the St Bartholomew's Hospital MSS, London, Governors' minutes, HA/1/21–9), recorded that the hospital had purchased 130 oxen, cows, and calves from Essex in December 1853 for £2,809 10s 9d. As one commentator observed, 'the highest prices of 1853 have been followed by the lowest of 1854'.

![FIGURE 1](image-url) Wheat and milk prices, 1848–74 (Sources: Mitchell and Deane, British Historical Statistics, pp. 488–9; St Bartholomew's Hospital MSS, London, Governors' minutes, HA/1/21–9)

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\(^7\) Thompson, Landed Society, pp 245, 255.
\(^8\) Mitchell and Deane, British Historical Statistics, pp 488–9.
of increased stocking. Milk prices, however, appear to lend less support to common suppositions about price trends for animal products and the nature of 'proper adjustment'. Initial investigation of milk prices in the London area, using the records of St Bartholomew's Hospital (Fig 1), shows the price steady between 1849 and 1855 around 10d a gallon. Subsequently the price fluctuated, reaching as much as 1s 1d at the time of the cattle plague (1865–7), but remaining below 10d for most of the period 1864–73. Better evidence, particularly on prices received in Essex in the 1850s, is required, but on the basis of the evidence presently available there was very little incentive for Essex men to turn to dairying as the much-lauded migrant Scots farmers were to do later in the century.

The course of milk prices during the 'golden age' is both interesting and unanticipated: most commentators have assumed that rising population and incomes, income-elastic demand, and the absence of overseas competition, were conducive to rising milk prices: Caird, in 1868, claimed dairy produce prices had increased by half since 1850. Possibly Essex and London milk prices fell relative to those received by dairy farmers more distant from the capital. At mid-century Essex supplied most of London's rail-milk. As railway expansion opened up this market, and as rail tariffs were adjusted to the advantage of distant suppliers, the advantage of proximity was diminished, perhaps reducing the differential between London and provincial milk prices at the same time. While this intriguing possibility remains to be explored, the evidence already cited helps to explain, and justify, the very slow expansion of dairy farming in Essex. Farmers in traditional dairying areas, producing cheese and butter, could switch to supplying liquid milk with relative ease, little expense, and considerable financial advantage.

Improving transport likewise exposed Essex meat producers to greater competition from distant counties that were more suited to stock raising. Some of the cattle and sheep at one time seen in Essex were there only because they needed to replenish weight lost on the long trek from upland Britain. In carrying animals (or country-

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90 Note, however, that the relative increase in beef prices occurred mainly after the mid-1860s: D Taylor, 'The development of English dairy farming, c.1850–1930', unpublished Oxford University DPhil thesis, 1971, p. 39. If the sale of ex-milkers and surplus calves exceeded the cost of buying-in new milkers, buoyant meat prices should have encouraged a similar appraisal of dairying, as should relative decline in the cost of purchased animal feed. But milk prices were the prime consideration in such appraisals.

91 St Bartholomew's Hospital MSS, Governors' minutes 1849/50–1913/14, Ha/1/21–29. Until 1860 the hospital obtained most of its milk locally. Subsequently it was supplied from South Weald (near Brentwood) in Essex. The figures that follow therefore combined London prices and Brentwood prices: the course of milk prices in Brentwood over the whole period may have been a little more buoyant than the following account suggests. St Thomas's Hospital obtained milk from the Romford district as early as 1846 but no evidence of its price has been found prior to 1855. Figures for St Thomas's published in BPP, [1903, LXVIII, Report on Wholesale and Retail Prices, p. 137, are broadly consistent with those for St Bartholomew's.

92 There is a dearth of good quality information on milk prices, probably because the market for so perishable a product was highly fragmented. The formidable statistical appendix to Vol VI of the Agrarian History of England and Wales contains information on the prices of produce as esoteric as cider and grass-seed but no milk prices. Elsewhere in the literature references to dairy produce prices are usually based on butter and cheese prices. Atkins provides a useful series of London retail prices which, like the St Bartholomew's series, shows long periods when prices were unchanged and no evidence of any persistent rise: P J Atkins, 'The retail milk trade in London, c.1790–1914', Econ Hist Rev, 2nd ser, XXXIII, 1980, p. 532. Collins and Jones ('Sectoral Advance', p. 79), citing evidence from the Report on Wholesale and Retail Prices pp. 136–7, claim there was a clear long-term rise in milk prices between 1831–5 and 1871–5. However, their claim appears to rest mainly on evidence from only one of the two price series in the 1903 report, that of the Royal Bethlem Hospital, London. The St Thomas's figures (beginning in 1855) show milk prices after the mid-1860s distinctly below the Royal Bethlem prices, while the Royal Bethlem figures for the beginning of the 'golden age' are equally clearly below those paid by St Bartholomew's Hospital (Fig 1). The level and movement of the St Thomas's and St Bartholomew's series are broadly similar and together raise serious doubts about the reliability of the Royal Bethlem series. Between 1855–9 and 1870–4 the Royal Bethlem figures indicate that milk prices rose by 31 per cent whereas the St Bartholomew's and St Thomas's series indicate price falls of 13 per cent and 3 per cent.

93 Cited in Jones, Agriculture, p. 198.
94 T W Fletcher (in P J Perry, ed, British Agriculture, 1875–1914, 1973, p. 87) suggests milk prices in Lancashire may have risen in the mid-1860s cattle plague removed half of London's cows and the consequent milk scarcity further encouraged provision from distant counties: Taylor, 'English dairying farming', pp. 104, 111.
95 Taylor, 'English dairying farming', p. 130a, shows the relative profitability of cheese and milk production.
killed meat) direct to London markets rapidly and with little weight-loss, railways reduced the importance of home-county fattening and thus help to explain why rising meat prices during the 'golden age' were accompanied by only modestly increased stock-keeping. With regard to both milk and meat, therefore, the consequences for Essex farming of greater inter-regional competition were contrary to those more-widely recognized influences of growing international competition that shaped Caird's analysis: improved transport on the prairies and north Atlantic encouraged English farmers to abandon corn, but improved internal transport encouraged many Essex farmers to do exactly the opposite.

VI

The most remarkable feature of Essex farming during the 'golden age' was how little it changed. Here, as we have seen, the textbook high-farming, high-spending, landlords were a rare minority and the so-called 'golden age' was not particularly prosperous. Some change occurred of course, but in 1870 farming practice in Essex was recognizably what it had been at mid-century, milk and meat production scarcely less subservient to corn.

Essex evidence therefore offers scant support for the traditional interpretation of the 'golden age'. But neither does it endorse more recent interpretations that emphasize the tardiness of response to market pressures, allegedly through apathy or because landlords and farmers devoted too much of their high-farming energy to increasing cereal yields. Essex agriculturalists cannot be exonerated from all charges of ignorance, indolence, and inertia: double-

less some opportunities were missed. However, the criticism has been overdone because whilst modest investment and hesitant structural change may appear to be consistent with conservatism, it was, no less, the strategy indicated by rational appraisal. In Essex, that is, conservatism and enlightenment were fortuitously in harmony. The correct course may sometimes have been followed for the wrong reasons, but it would be churlish to suggest that informed, or intuitive, assessment of the costs and benefits of innovation was not equally important in explaining why landlords and farmers acted as they did.

It has been argued that the Essex preference for continuity over radical change was rational for three main reasons. Firstly, because drainage and many other high-farming innovations were particularly unrewarding on the Essex clays. Poor returns were especially likely when investment was directed at converting arable land to pasture, and the Essex climate and plentiful labour were further disincentives to innovation. Secondly, market indicators, usually assumed to have been urging greater emphasis on mixed farming or pasture, were by no means so unequivocal. Long-term trends in the price of milk hardly amounted to a proclamation that arable should be laid to grass, and wheat prices fluctuated around levels that produced tolerable (even if not 'golden') returns in most years and offered no sustained indication that it was unwise to

98 Whether the landlords or the farmers have been the less-unfairly castigated is debated. Chambers and Mingay, Agricultural Revolution, p 163 and Thompson, Landed Society, p 255 incline towards portraying landlords in the more sympathetic light with emphasis on short-sighted tenants declining to adopt improvements that landlords would willingly finance. For Essex, however, it was suggested above that such evidence can at least be matched by accounts of similar shortcomings among landlords. The landlords, after all, should have been more aware of costs, opportunities and long-term market trends; they should have read more, kept better accounts, and alerted farmers to the potential benefits of co-operation. Even the more impecunious among them could normally raise loans for improvements, and worthwhile improvements were reflected in rent returns. For tenant farmers, by contrast, differential rents provided another disincentive to innovation by neutralizing price trends that favoured livestock.

99 The traditional distinction between rearing and fattening counties derived from several considerations and was by no means enunciated by railways.
persist in patterns of farming well-adapted to the Essex environment. Thirdly, throughout the ‘golden age’ improving transport eroded the advantages of proximity that Essex once enjoyed in supplying milk and meat to London. Mounting competition from regions where soil and climate gave comparative advantage to pasture and mixed farming caused market indicators favouring milk and meat to be more muted in Essex than elsewhere. In cereals Essex still retained a comparative advantage over most of England, even if its advantage over the American prairies was under challenge. And so Essex farmers and landlords invested modestly, moved only very tentatively towards milk and meat, and continued to produce traditional crops by traditional methods.

To what extent these Essex findings should influence understanding of English agriculture as a whole in the ‘golden age’ cannot be ascertained from this investigation alone. Certainly Essex was not unique: other studies have unearthed tantalizing hints that much of what has been said here might apply no less to certain other places, particularly to other heavy-soil areas in the south and east. Evidence of maintained or expanded arable acreage, for example, has been found for Sussex, Buckinghamshire, Bedfordshire, Northants, Wiltshire and Derbyshire.¹⁹ Likewise, levels of expenditure on drainage in Norfolk, Suffolk, Sussex, Berkshire and Hampshire seem likely, as in Essex, to have been incompatible with textbook accounts of landlord extravagance.¹⁰⁰ Holderness found little evidence of exceptional expenditure on farm buildings anywhere in Norfolk and Suffolk, and when the senior bursar of St John’s College, Cambridge later complained of insufficient investment in the ‘golden age’ the college’s Essex farms were not distinguished from those in other counties.¹⁰¹ At the very least, there appears to be widespread, if still fragmentary, support for Collins and Jones’ suggestion that innovation and investment on the claylands during the ‘golden age’ was far less than that which transformed farming on the lighter soils in the first half of the century. One obvious response to the Essex evidence might be to observe that any detailed investigation is bound to discover deviations from the textbook stereotypes. The contention here, however, is that because the Essex experience differed so significantly from that depicted in generalized accounts, because Essex represents a sizeable exception to any such generalization, and because Essex farming had some aspects in common with farming elsewhere, the familiar interpretations of English agriculture in the ‘golden age’ may require yet more qualification.


¹⁰⁰ Phillips, Underdraining of Farmland, Table 3.4, p 81.

Elements of Sustainable Agriculture: The UK Experience, 1840–1940

By JOHN SHEAIL

Abstract

As an illustration of the value of an historical context in appraising contemporary issues in rural management, the paper cites evidence of a concern for sustainable farming during the period 1840–1940, as revealed in the 'expert' guidance offered on the general topics of high farming, the grassing down of land, specialization, and land utilization. For the most part, the challenge was not so much to find general panaceas, but rather to pursue those forms of husbandry most suited to the mosaic of local conditions encountered in each part of the countryside.

POLICIES for the use of the UK countryside are again the subject of intensive debate, both at a governmental level and among the various user-interests and commentators, including those working in the media, who believe they have some claim to make prescriptions. Among the many initiatives taken, there have been extensive discussions among, and between, agricultural, environmental and socio-economic scientists, under the aegis of their respective research councils. The agricultural historian has been a notable absentee.*

The value of such an historical perspective was illustrated in a paper in the Journal of the Royal Agricultural Society of England, in 1985, when Dr E J T Collins took conservationists and ecologists to task for regarding the inauguration of the ploughing-up campaign of the Second World War as the benchmark from which to measure change in the agricultural environment. A longer time perspective was needed. Whilst the rural landscape may have been less intensively exploited between 1870 and 1940, Collins argued that many of the changes since 1940 were in effect a resumption of trends that had begun to develop in the seventeenth and eighteenth centuries. Through the destruction of the commons, reclamation, and the adoption of tighter systems of crop and animal husbandry, the British landscape became second only to the Dutch in western Europe, in being so tamed and intensively worked. If the years of agricultural depression after 1870 are regarded as the 'middle past', when progress was interrupted and perhaps reversed, the decades since 1940 may be seen as a time when lost ground was regained and surpassed.¹

As the intensity of post-war management practices has come under close scrutiny, and all sectors acknowledge the need for more sustainable forms of development, an historical perspective may similarly be relevant. A voluminous literature already exists on British agriculture, following what is perceived to be the massive change-over in farming systems since 1940. Through its almost complete dependence on industrial (off-farm) inputs, post-war farming is perceived to have become qualitatively different from what had gone before. Not only was ground regained, but the area already under cultivation was used much more intensively. In scenic and wildlife terms, there was a transformation both

* I am grateful to the Society for inviting me to speak at its Winter Meeting of 1993, and thereby causing me to explore further the subject of 'sustainability', and for the very constructive comments of referees on the present paper.

It is not the purpose of this paper to retrace the last fifty years of upheaval, but rather to explore the extent to which elements of concern for 'agricultural sustainability' can be found in the publications of agriculturalists over the previous century. As reviews published for the Economic and Social Research Council have emphasized, there is little consensus as to what constitutes a sustainable farming system. An agricultural scientist might define it as the position where the farmer can pass onto his grandchildren the farm in good working condition, together with a respected position in the community. More generally, it may be perceived as maintaining food production in the long run without degrading the resource base. It must not only be economically viable and environmentally benign, but it should also protect the social and economic well-being of those involved in the production process. Prescriptions for achieving that end might vary from seeking improvements, say in soil conservation and nutrient recycling, to the making of wholesale changes in the farming system. Whereas the agricultural and environmental policy-maker and scientist are typically responsible for the former, the 'green' movement has attracted considerable notoriety in putting forward more radical solutions.

As Marsh and Gould have demonstrated, historical precedents may be found for 'green radicalism' in the late nineteenth century. Then too, there were strident calls of 'back to nature' and 'back to the land'. Through their writings and other ventures, John Ruskin, William Morris and Edward Carpenter gave expression and leadership to a wider dissatisfaction with urban-industrial life, of which 'modern' farming was seen to be a product. This paper will not focus on their activities, but rather on the search for greater sustainability within what today would be regarded as the agricultural sciences. The focus will accordingly be on the textbooks and guidance given more generally to landowners and occupiers, through the professional and academic literature. In 1891, for example, the Royal Agricultural Society of England commissioned the agricultural botanist and agricultural correspondent of The Times, Dr William Fream, to write such a textbook, according to a schema drawn up by leading figures of the society. The book, Elements of Agriculture, fell into three parts, the soil, the plant and the animal. As a simple diagram demonstrated, the soil grew the crop that fed the stock which produced the manure required to keep the soil 'in good heart'. Year by year, the soil doles out from its vast stores of insoluble matter small quantities dissolved in water, and therefore available as the food of crops, and to these the farmer adds contributions of his own in the form of natural and artificial fertilisers.

The challenge was not so much to find a general panacea, but rather to pursue the form of husbandry most suited to the mosaic of local conditions encountered in each part of the countryside.

Disruption of any kind is likely to lead to reappraisal, if only as a means of building up defences against those who might seize such times of weakness to launch an attack. In that sense, the impact of the books, The Theft of the Countryside, in 1980, and This Land is our Land, in 1987, reflected both

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the skills of their author, Marion Shoard, as a polemicist, and the perceived vulnerability of vested interests, as they became increasingly unsure of their future.6

A sense of the alarm and bewilderment felt by those who practised farming, some hundred years earlier, was conveyed by Albert Pell, in two papers published in the Journal of the Royal Agricultural Society. Pell lived in Northamptonshire, where he rented some 280 acres, which he managed together with over a thousand acres that the family owned in the Isle of Ely. He acquired further wide-ranging insights into the problems of agriculture as a member of parliament, and through his governorship of Guy's Hospital estates and membership of the Council of the Royal Agricultural Society. Attracted into farming by the 'new and interesting discoveries and developments in agriculture' associated with such figures as J B Lawes at Rothamsted, Pell perceived landowning to be a business that ought to be studied scientifically.7 At a time of increasing competition for markets from America and India, and fierce attacks on the supposed advantages of landowners, the priority for him was an enquiry of the most practicable kind into what made land so valuable. Although 'the extraneous influence of the surrounding capital and labour of an industrious and populous society' might make an appreciable contribution, far deeper, historical roots had to be examined. Far from representing some kind of 'unearned' increment accruing to owners, the capital sums invested by owners frequently exceeded the market value of the estates on which they had been expended. Whilst a title to land might be coveted like no other form of property, it became only a boon or gift, in Pell's judgement, when conveyed after 'somebody else had made it fit to use.'8

In an article, 'The making of the land in England: a retrospect', published in the Journal of the Royal Agricultural Society in 1887, Pell described both the striking improvements made to the condition of the land and the circumstances in which they had come about. In his words,

We in England are at the present day but the heirs or successors to others, who, whether they derived their original title in the wilderness and waste by patent, grant, conquest, diplomacy, or communal inheritance, generally got nothing, apart from wild animals and minerals, for the expenditure of toil and capital in the development of their acquisition, but the chance of remuneration.

Landowners had been required to erect farmsteads, provide shelter in the form of hedges and walls, and improve the soil through drainage, warping, claying and marling. There was 'but a small portion of rural England' that had not benefited from these costly operations, conducted entirely at the expense of successive owners of land.

Whilst the first execution of such work had all the charm of conquest about it, and attracted the praise of admiring citizens, much less notice was taken of the continued investment required to maintain the value of the original capital. In the same way as the cost of beacons, buoys and lights must be included as a charge on coastal sea voyages, so the landowner must take close account of the costs of maintaining fences, renewing tile drains, and repairing the fen banks and drainage machinery. As Pell remarked

While the field laughs with grain, it is more than possible that the owner groans at the cost of its artificial fertility.

Too often he finds it

would have been better to have left the down unbroken, the copse ungrubbed, the gorse and heather to bloom in peace, the sullen clay

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7 T Mackay, ed, The Reminiscences of Albert Pell, 1908.  
undrained, the boulders where they lay on the moor, and the grand homestead in the architect's office.

Of the thousands of cases where 'an artificial depletion of income' had taken place, Pell cited the examples of the estates of J M Heathcote on the edge of the Huntingdonshire fens, Lord Leicester at Holkham in Norfolk, the earl of Bathurst in the south-west, and an unnamed estate on Shap Fell. Over an 87-year period, the sum of £218,446 had been expended by the Heathcote family on an estate that extended from the higher lands of Oxford Clay to the fenlands, where the bed of the former meres now supported grain crops, and substantial farmsteads replaced the duck decoys. If the same sum had been invested at 4 per cent interest, the income for 1886 would have exceeded that of the whole estate in that year by £1,400. As Pell pointed out, even if none of the improvements had been attempted, tenants would still have been found to keep the land in a reasonably productive, and therefore profitable, condition.

II

Present-day analysts have been no less ambitious in making full use of historical knowledge to press a particular perspective. Whilst none too impressed with the eighteenth and nineteenth centuries (the drainage of the unique Whittlesea Mere in the Huntingdonshire fenlands and clearance of Hainault Forest in Essex occurred in the same year, 1851), the main purpose of Oliver Rackham’s book, The History of the Countryside, published in 1986 was to highlight the implications of the fact that more environmental change had occurred in the UK since 1945 than for any comparable period over some twenty centuries. Almost every rural change had extended what was already commonplace, at the expense of what was wonderful, rare, or had meaning.9

The Canadian historian, Colin Duncan, has been no less diligent in taking a large sweep of history to demonstrate the scale of recent and almost unremitting human folly. His purpose was not so much to repair oversights in the existing literature, but to provide 'a new overall context' focused on the environmental content of 'the remarkable socio-legal arrangements' for English soil husbandry, whereby the land itself was perceived to be all important. Far from its being an optional 'extra', a grasp of its perceived importance was fundamental to interpreting the course of events up to 1815, and the relatively spurious nature of what was achieved thereafter.10

From such a premise, Duncan constructed a chronology, whereby the seventeenth and eighteenth centuries were characterized as a time when most landowners granted leases for several lives. Through their substantial security, tenant families had an abiding interest in the productivity of the soils they worked. Only with the trend towards letting farms for terms of years in the late eighteenth century did the introduction of restrictive covenants become more necessary. Often referred to as 'the custom of the country', they sought to impose the husbandry practices that generations of trial and error had found most relevant and suited to local conditions. The marked fluctuations in market conditions during the early nineteenth century, and later rise of incomes during the period of high farming, manifested themselves, according to Duncan, in the nearly standard adoption of annual leases. The decline in the profitability of arable, relative to livestock, production after 1873, which led to the great 'grassing


down' gave rise to destructive bouts of tenant-right agitation, as farmers strove to escape from every form of restriction. Instead of meeting head-on the dilemma of revitalizing soils under a system of shorter leases, or exploring how the new off-farm fertilizers and feeding-stuffs might be grafted on to old rotations, a highly-sustainable system of local recycling seemed no longer relevant. Almost thoughtlessly, what Duncan calls 'the worldly-wise fine-tuning' of soil-husbandry to local conditions was abandoned.

Such interpretations of the chronology of farming change are likely to stimulate even closer scrutiny of data sources. Detailed covenants may be found in leases for even the sixteenth century. In some localities and periods, the existence of covenants may deceive, in as much as they may have been a legal device that had little direct bearing on what actually happened on the land. For the nineteenth century, Thompson has warned of how the absence of written prescriptions should not be taken as proof of disarray in the relations of landlord and tenant. In practice, customs of the tenant-right variety could have provided protection for the reasonably efficient and prompt rent-payers, long before given statutory effect from 1883 onwards.12

Duncan characterizes the historians' response to the trends towards annual leases (effectively tenancies at will) as like that of cheer-leaders. They have assumed the unpredictability of market conditions made such leases inevitable, and therefore beyond criticism. More insidiously, they have tended to assume new farming methods were necessarily better, and that flexibility was therefore good a priori. For his part, Duncan and many other writers may have assumed too easily that a family farm can be trusted, through its greater sense of security, to act as a natural steward, hus-

III

Any probing of the motives and resources of those directly responsible for the land raises questions as to the relevance and quality of any 'expert' advice sought or given. Guidance might come from many directions, and perhaps most prestigiously through parliamentary enquiries. At the invitation of the Royal Commission on the depressed condition of the agricultural interest, Pell and the agricultural writer, C S Read, made a 93-day tour of the USA and Canada in 1879. Although acutely aware of how little they had seen of the continent, their report highlighted the extraordinary difficulties that even resident 'experts' might have in forecasting the permanence and nature of American competition for British markets.13

On the plains and farms of the states and territories in the upper catchment of the Missouri and Mississippi, the report found 'a display of activity and energy beyond comprehension', as emigrants pushed further west. As yet, they were 'only breakers of the soil'. Whilst through human diligence the earth might continue to be productive, much of that produce was likely to be consumed locally as the vast deposits of coal were developed beneath the Missouri basin, centred on Kansas City. Nor was nature invariably kind. Although the fresh unexhausted soils, level surfaces, and absence of stones made it easier to use

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modern machinery, and grain might be 'manufactured' by 'a scourging course of cropping', cultivators also had to contend with severe winters, dangerous droughts, insect pests and, in the prairies, a shortage of good water. With plenty of land available for nothing, it seemed the American stockman might pose the greater threat to British farmers. Much of the western country was, however, poorly watered for the better class of stock. Production costs would rise as the plains became more settled, land was allotted, and free range terminated.

Turning to the 'expert' advice given as to how British farmers might respond, Duncan found it ironical that the beneficial effects of leys were rediscovered as increasing tracts of arable were grassed down. He cited the guidance given by Elliot and Stapledon, but his overriding object was to emphasize the folly of not seizing this as the further pretext for returning to longer leases. In his view, there was no need to fuss endlessly in a scientific way about soil fertility. If given time, land under ley farming could perfectly well solve its own problems. A sound farming system in which locally adapted practices are institutionally protected would have no need of persons other than those 'well versed in local farming'.

Such observations raise the question as to how the term, 'scientism' (as defined as an overweening belief in the relevance and utility of scientific method), might be applied to those in the nineteenth century, who invested, say, so much effort in chemical analysis. Even to contemporary observers, considerable advances were being made. Over a 20-year period, the manufacture and sale of artificial manures had, in the words of Augustus Voelcker, the consulting chemist to the Royal Agricultural Society, developed from 'a venturesous speculation' to 'a legitimate well-regulated business' of gigantic dimensions. By the 1860s, it was timely to warn of the dangers of uncritical reliance on the tables of the analytical chemist. A purely theoretical base could not suffice. As Voelcker emphasized, a practical knowledge was also required. In papers published in the society's journal, he demonstrated the variability of soils in retaining the substances that encouraged plant growth. The need to avoid any kind of prescriptive approach was also emphasized by J B Lawes in his evidence on tenant right, given to the Royal Commission on the depressed condition of the agricultural interest in 1881. Whilst tenants should be given greater freedom of cropping, the landlord should retain powers to prevent everything being taken off the farm without anything being put back. In his judgement, the most pressing need was to ensure tenants were fully compensated for anything introduced as capital to the land that remained of value after the lease expired. When challenged by the commissioners to lay down some ground rules as to what freedoms and compensation might generally be accorded to tenants, Lawes adamantly refused. The agricultural scientists' role was rather to help the individual farmer to know how best to respond to local circumstances.

In a lecture to the London Farmers' Club in 1870, on the subject of soil exhaustion in relation to landlords' covenants, Lawes found it anomalous that, in a century that had witnessed so much change, so little thought had been given to the actual course of cropping in any district. There were little or no data on the wisdom of enforcing strict adherence to a fixed rotation by crops. It was as if the system established by our forefathers was proof against all improvement, in spite of the vastly improved means of mechan-

16 BPP, 1881, XVII, Royal Commission ... Agricultural Interest, Minutes of Evidence, qq 57, 648–56 and 57, 661–3.
ically working the soil and enormous increase in our resources of elements of fertility.

As Lawes emphasized, any consideration of the appropriateness of a particular form of husbandry to a locality, farm or field had to begin with the 'condition' of the soil, namely the elements of fertility that caused the land to produce crops within a specific period of time, and whose absence might result in the soil becoming rapidly exhausted. 'Condition' implied more than natural or standard fertility - a naturally fertile soil might be out of condition, and a naturally poor soil in high condition. That additional fertility was achieved through the skilled exertions of the farmer, whether at his own free-will or through the device of covenants.

Whether the immediate pretext was the compilation of an analytical table, or debate as to tenant rights, the outcome over the course of the century was an appraisal of unprecedented rigour of the whole farming system. Every experiment at Lawes' Rothamsted Experimental Station, in Hertfordshire, whether on arable or grass, demonstrated the impossibility of removing anything from the soil without reducing its natural fertility. In Lawes' words, 'The first step of agriculture is exhaustion'. Losses could only be arrested by robbing somebody else's land in order to replenish the soil in question. In evidence to the Royal Commission, in 1881, Lawes dismissed as academic any argument as to whether the replenished fertility was natural or artificial. They were the same ingredients, but in different form. Nitrate of soda might be an artificial manure, but it was the nitric acid in the natural soil that had been wasted and was now applied as a food to that soil. The crucial point was not its 'naturalness', but the quantity and character of what was applied. Two and two did not make four in manuring. Whilst most farmers realized the proportional benefit of manuring declined as more manure was applied, a great deal of further research was required before 'a standard of perfection' was achieved in prescribing the amounts required to meet specific objectives.

From an analysis of the results obtained from trials carried out over a 30-year period, on wheat and barley rotations, and permanent meadow at Rothamsted, Lawes found that both farmyard manure and artificial manures could be used to maintain the condition of the land. When active nitrogenous manures, such as Peruvian guano, ammonia salts or nitrate of soda, were applied in the moderate quantities usually employed, the unexhausted residues left in the soil after the removal of a crop had little effect on succeeding crops. Rapecake, bones and other purchased organic manures, that yielded up their fertilizing elements comparatively slowly, might continue to have an appreciable effect throughout a rotation. The effects of farmyard manure might be even more marked. Any effects of mineral manures, such as phosphates and salts of potash, would be too slow and gradual to be detected.

In evidence to the Royal Commission in 1881, Lawes was at pains to emphasize there were limits to the amount of protection high farming could afford the farmer. The fact that such advocates as J J Mecchi had invested more than they recovered from the land did not mean, however, that the farmer, who showed greater understanding and judgement, was precluded from making as much profit from his capital as he had in the past. Lawes himself had adapted to circumstances by putting down a quarter of his farm of 500 acres to

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In 1875, the Journal of the Royal Agricultural Society published fifty-five reports from different parts of England and Wales on "The laying down of permanent pasture and the increase in the length of time arable land was left under artificial grasses", compiled in response to a questionnaire distributed by the society. As many found, it was "not one of those processes which turns in the ready penny and gives quick returns". The most widely-read prescription for laying down pasture, written by an estate owner in Kent, Faunce de Laune, emphasized the need to select and sow the right seed-mixture.

The paper was the immediate stimulus for trials carried out by Robert Elliot, on his estate of Clifton Park in Roxburghshire. The results further emphasized the importance of good soil husbandry. Elliot reasoned that, as agricultural competition from other countries and developments in manufacturing and mining in Asia made it harder for Britain to earn the revenue needed to import cheap food, the only recourse was to adopt those forms of husbandry that required little or no input of fertilizers, and yet sustained the fertility of the soil. In seeking to meet that challenge, in his book, The Agricultural Changes required by these Times and how to carry them out, Elliot again emphasized how there was no general rule. The wisdom of the conclusions reached by Lawes had, however, been borne out by trials at Clifton, in so much as the most important aid to productivity was not, strictly speaking, the chemical composition, but the physical condition of the soil, its permeability to roots, power of absorbing and radiating heat, and above all its ability to absorb and retain moisture. The key to profitability was not so much costly manures or subsoil ploughing, but "a scientific rotation of crops" that included large crops of red clover and other nitrogen-collecting plants capable of sustaining as many stock as possible. The close-turf enriched by some four years of manure, when ploughed in, would provide ample physical conditions for growing a succession of four years of crops, without recourse to artificial manures, except for a small supply to stimulate turnip growth.

Whilst Sir George Stapledon, the agronomist most closely associated with ley farming in the twentieth century, paid handsome tribute to the stimulus he had derived from Elliot's work, the strength of any lineage should not be exaggerated. As Stapledon conceded, there were key elements of Elliot's work that were overlooked. He and others had, for their part, made fresh and quite unexpected discoveries. Most strikingly, they had discovered the resilience and competitive abilities of wild white clover and other indigenous species. Common to all this work was, however, the emphasis placed on the intense variety of conditions brought about by the interaction of climate, soils, and plant and animal growth. Here, the agronomists' observations were increasingly informed by the surveys, trials and experiments of early ecologists. Stapledon was an associate member of the British Vegetation Committee, and founder member of the British Ecological Society, the world's oldest ecological society (founded in 1913). Following his appointment as director of the Welsh Plant Breeding Station at Aberystwyth, in 1919, Stapledon in turn demonstrated to agronomists and

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20 BPP. 1881, XVII, qq 57, 198 and 57, 701.
22 R. H Elliot, The Agricultural Changes required by these Times and how to carry them out (reprinted as The Clifton Park System of Fanning and Laying Down to Grass, 1943).
what could be achieved with the scientific study of the soil, the introduction of the 'Soil Bureau' and the development of soil survey and agricultural research. The soil was studied and classified, and experiments were conducted to determine the most profitable farming practices. This led to a better understanding of soil management and led to the development of more efficient farming practices.

In the event, the impact of ecological agriculture was not as revolutionary as expected. The soil was found to be a complex and dynamic system, influenced by a wide range of factors, and the limitations of traditional farming practices became apparent. The shift from intensive to more sustainable farming methods was slow, and the transition was not as seamless as initially hoped.

In conclusion, the study of the soil is an ongoing process, and as our understanding of soil ecology increases, so too will our ability to manage and conserve this important natural resource.
students to take a course at Wye Agricultural College, and had for many years been a land agent. At his instigation, Hall successfully persuaded Oxford University to sponsor a research institute in agricultural economics. Appointed its first director in 1913, Orwin was able to renew, in more explicitly economic terms, Lawes' challenge to the centuries-old assumption that the only way of sustaining fertility was by a crop rotation designed to produce cereal crops through the integral pursuit of arable and animal husbandry.  

Even in the depths of the depression, farmers had failed, for whatever reason, to capitalize on the new-found knowledge of the chemist and biologist. They had remained locked 'over head-and-ears' in tradition. In his book, The Future of Farming, published in 1930, Orwin highlighted the achievement of the few pioneers. Near Sawbridgeworth in Hertfordshire, John Prout and his son had demonstrated at the farm scale, between 1864 and 1913, what Lawes and J H Gilbert had found on their trial plots at Rothamsted, namely that, with a judicious application of artificial manures, corn crops could be grown continuously and the land kept 'in good heart'. A further and continuing example was provided by George Baylis in Berkshire who, since 1875, had succeeded in short-circuiting the most costly element of corn production, namely the growing of crops to feed the livestock that had to be managed in order to provide the dung needed to grow the crops for sale. By substituting applications of ammonia and phosphates in artificial manures for that previously derived from livestock, Baylis was able to reduce production costs to such a level that it was worthwhile to use as much of the land as possible for growing crops for direct sale. The income enabled him to hire or purchase over twenty farms, amounting to some 22,000 acres in all.  

Orwin had not only the communicative skills to publicize such ventures, but an unrivalled opportunity to highlight their implications. By the time he retired in 1945, nearly every university had established a department of agricultural economics. The Ministry of Agriculture had an economics branch. Almost all were led by men who had received their initial training at Oxford. Each had been encouraged to re-appraise even the most basic assumptions of farming. As Orwin emphasized, in his book of 1930, the experience of the decades of agricultural depression had illustrated how the most successful farmers were those who specialized in one or two products, say milk and cheese production or market-gardening and fruit-growing. As Orwin reasoned, the depression itself had been instigated by overseas' producers who were able to concentrate all their energies on one commodity. Unencumbered by a diversified production system of the kind most English farmers clung to, they had found it easier to eliminate both direct costs and forms of waste to the very lowest point. It followed that if English farming, and rural life generally, were to be more prosperous, the most economic production and marketing of commodities had to be pursued through specialization.  

VI  
As Orwin wrote, in 1930, there was no industry that appealed so widely to popular interest and imagination as that of farming. In his volume, The Land: Now and To-morrow, Stapledon perceived a revolution taking place in 'the national attitude towards nature and the countryside', most
obviously in the urban rather than rural population. A love of nature was latent in everyone, and the town worker was showing increasing determination to share the 'pleasure and beauties' of the countryside, through camping, cycling and walking. It was more than a matter of fresh air and exercise. Properly appreciated and used, the countryside might enrich the culture of the nation. In that sense, the use of land for promoting physical health and mental balance might become even more important than food production. Within that larger context, it was even more important that land should be perceived as the property of posterity.  

Such aspirations did not necessarily imply any conflict with farming. As John Dower, the author of the official report on National Parks, remarked in 1945, the remaking of a prosperous British agriculture was 'the most urgent need for the next ten years of our national life'. Given proper care for the landscape effect of 'matters of detail', the fuller cultivation advocated by Stapledon and others should enhance, rather than diminish, the scenic effect. Whereas extensive areas of the Lake District and Yorkshire Dales country had benefited from being turned 'brown side up', comparable areas in North Wales and the Peak District, where there had been neither ploughing nor tidying up, had retained their distinctly neglected and desolate look.  

Within this larger perception of farming in the countryside, it was entirely appropriate that disciplines beyond the agricultural sciences should contribute. In an article on 'Nationalism and land utilization in Britain', published in the Geographical Review in early 1937, the geographer, L Dudley Stamp, explored the implications of the abandonment of the free-trade policy that had dominated British foreign policy for almost half a century. Quotas and monopolistic boards were already being established, so as to plan and 'rationalize' agriculture. Stapledon's calls for a 'reconditioning' or 'stepping-up' of farming, district by district, from top to bottom, were beginning to be heeded. Through his influential advocacy, proposals were being made to disc-plough and re-seed even the hillsides of the uplands. For Stamp, such initiatives emphasized the need 'to analyze Britain's resources and discover how they may be utilized for the benefit of the whole country'.  

As those before him, Stamp drew consciously on firsthand observation made overseas, and the fresh insights brought by visitors to his own country. He toured the USA extensively in 1934. In the same volume of Geographical Review, under the heading, 'Is nationalism promoting erosion?', the Californian geologist, Charles F Shaw, warned of the dangers of making concessions to popular demand for greater self-sufficiency. Whilst the prospect of war might seem to justify such concessions, they might be neither good politics nor good economics in the longer term. During an excursion through the UK countryside, that followed the Third International Congress of Soil Science in 1936, participants had been assured that there was little erosion from the gentle English rainfall. From 'critical observation', Shaw could see for himself differences of up to 4 ft in the height of the soil surface above and below the walls and hedges that cut across many slopes on the chalk and other types of higher ground. For a self-sustaining programme of nationalism, it was essential that crops should be grown on the lowlands, and the uplands reserved under grass for animal feed and protection from soil erosion.  

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Stamp was uniquely placed to comment on trends in land use. Since the late 1920s, he had established and directed a ‘Land Utilisation Survey’. Through its annotated and coloured sets of Ordnance Survey 6-inch scale sheets that recorded the use of the entire land surface, ‘a snap-shot of pictures of Britain’ had been provided for the years, 1931–35, which would serve ‘as a standard of comparison with the past and a basis for planning for the future’. Free from any ‘political colour’ or ‘ulterior motives’, it provided an objective basis from which to determine how the ‘reconditioning’ of the countryside might proceed.\(^37\) In a schema, published as a table in the *Geographical Review*, Stamp sought to set out the consequences of Stapledon’s advocacy of progressively upgrading the productivity of each type of land use (Table 1). Only heath and moorland might undergo radical change. A third of this was regarded as suitable for disc-ploughing, seeding and rolling for conversion to good grassland, and a further third for afforestation. The remaining third, comprising such scenic areas as North Wales, the Lake District and Central Highlands, should be ‘consecrated to public use as national parks and for private shootings’. If such changes were associated with the setting of higher nutritional standards in the diet, the requirement for home-grown fruit and vegetables, and home-killed meat, would provide not only ready markets but would necessitate the large-scale ‘reconditioning’ of Britain’s agricultural resource.\(^38\)

The Land Utilisation Survey was the principal source of reference in the evidence submitted by the Royal Geographical Society to the Royal Commission on the geographical distribution of industrial population in 1938. The evidence recalled how some 800,000 acres, representing 2 per cent of the land surface of England and Wales, had been developed for industry, housing and airfields since 1918. Whilst well-drained, gently-undulating land, ideal for intensive cultivation and market-gardening, made up only 5 per cent of the total agricultural area, it was also the easiest and cheapest land to develop for other purposes. Finding no official source of reference, the Royal Commission invited Stamp to prepare a land fertility map, as a guide to the optimal location of industrial and other uses of land.\(^39\)

In the text that accompanied ‘A tentative land fertility map of England and Wales’, published in *Nature* in 1939, Stamp argued that the most certain guide in a long-settled countryside was the current and past use of land. Through trial and error, farmers had identified the optimal use of soils. For the most part, there had been remarkable stability, with almost all changes in agricultural use concentrated on soils of intermediate value. Using data from the Land Utilisation Survey as a guide, four categories were discerned, the land of highest agricultural value being defined as that used or suitable for market-gardening. Land of high agricultural value comprised the major ploughlands, first-quality grassland, and major stretches of good grassland. Land of intermediate value was categorized as the most suitable for designation as building land, or for its amenity value (especially poor heath). A fourth category of low agricultural value included moorland and rough hill-pasture, heath and lowland rough-pasture, and coastal marsh pastures and saltings.\(^40\)

Stamp became Chief Adviser on Rural Land Use to the Ministry of Agriculture in June 1942 and, in his book, *The Land of Britain: its Use and Misuse*, he recounted


\(^{38}\) Stamp, ‘Nationalism and land utilization’, p 14.


TABLE I
Possible changes in land use in Great Britain, as indicated by LD Stamp in 1937

<table>
<thead>
<tr>
<th>Present use</th>
<th>Percentage</th>
<th>Use after reconditioning</th>
<th>Percentage</th>
<th>Total percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arable – intensive (market gardening, etc)</td>
<td>2</td>
<td>Arable – intensive (market gardening, etc)</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Arable – farm crops</td>
<td>20</td>
<td>Arable – intensive</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Arable – farm crops</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Orchards and fruit</td>
<td>1</td>
<td>27</td>
</tr>
<tr>
<td>Permanent grassland – first class</td>
<td>10</td>
<td>Arable – farm crops</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>Grassland – first class</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grassland – other</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Rough grazing in enclosed fields (derelict or idle permanent grass)</td>
<td>9</td>
<td>Permanent grassland</td>
<td>9</td>
<td>22</td>
</tr>
<tr>
<td>Heathland, moorland, and other rough grazing, mostly unenclosed</td>
<td>26</td>
<td>Permanent grass</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Recreational, sporting national parks</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Forest and woodland:</td>
<td>2.5</td>
<td>For timber</td>
<td>3.5</td>
<td>11.5</td>
</tr>
<tr>
<td>Other economic</td>
<td>1</td>
<td>Other economic uses</td>
<td>2.5</td>
<td>2.5</td>
</tr>
<tr>
<td>Scrubland and uneconomic</td>
<td>3</td>
<td>Uneconomic</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Orchards and fruit</td>
<td>0.5</td>
<td>Ornaments and fruit</td>
<td>0.5</td>
<td></td>
</tr>
<tr>
<td>Residual (housing, industrial, roads, etc)</td>
<td>5</td>
<td>Residual (allowance for improvement of housing, etc)</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

how, in consultation with agriculturalists and the Soil Survey of England and Wales, a land fertility map was published for the whole country at a scale of 1:625,000, based on a ten-fold classification. It was a powerful tool in arguing for more conscious planning of the ‘mosaic’ of activities in the countryside – for those areas most suitable for a particular use or livelihood to specialize in that direction, whether it be farming, forestry, housing, industry or recreational development.

VII
Each generation rewrites its history. The first self-conscious environmental histories, mostly published in North America in the 1970s, have been described as the outcome of a moral purpose, with strong political commitments. As they matured, they took on the dimension of a scholarly enterprise. Farming is bound to be prominent in such histories. It provides an outstanding test-bed for assessing human competence in environmental management. As Orwin commented, it is, together with forestry, the only primary industry that comes close to having the capacity to create self-sustaining wealth. Whereas coal-mining or iron-smelting bring the world’s resources surely, if not measurably, nearer to the point of exhaustion, the recuperative powers of the soil

LD Stamp, The Land of Britain: its Use and Misuse, 1948.

hold out the possibility of food being produced for all time.\textsuperscript{43}

For some, the writing of environmental history is to draw on hindsight to set out what went wrong as an urgent warning to present and future generations. Often drawing on perspectives and information, not available to land users of the time, critiques have been written as to the abuse or abandonment of otherwise benign management-practices. The approach of this paper has been to draw on examples from both immediately before and during Collins’ ‘middle past’ of 1870–1940 in demonstrating how commentators and ‘expert’ advisers sought to bring fresh insights as to how the productivity of the land might be sustained. If Pell was concerned with over-investment, Lawes with manures and fertilizers, Elliott and Stapledon with grassing down, Orwin with specialization, and Stamp with land utilization, all revealed a degree of concern with both the physical and the socio-economic environments within which landowners and occupiers had to operate. The writings of Albert Pell reveal an acute awareness of the fragility of what had been achieved in terms of raising and sustaining the productivity of late-nineteenth century farmland. The analyses made of the trials and experiments, conducted to an unprecedented degree of rigour at Rothamsted, and the manner in which they were developed by others, reveal not so much the thoughtlessness of a generation that had lost its way, but rather a generation that challenged long-held assumptions. Stimulated through the shifts in market conditions, and major advances of understanding as to the processes by which crops flourish, it set out to discover whether the most effective ways of securing sustained development were being practised.

A sense of geographical and historical curiosity pervades the writings of the period. As Stamp remarked, in the first lines of his paper of 1940 on the ‘Fertility, productivity and classification of land in Britain’, few areas of comparable size in the world could exhibit such a variety of physical conditions. Orwin found recognition of that variety in the fact that farming was the most diversified of industries.\textsuperscript{44} Intrigued by the enterprise that men of wealth had brought to the land during the Industrial Revolution, ‘when farming really mattered to the nation’, Orwin wrote a pioneer study of the reclamation of the Exmoor Forest, both for its own intrinsic interest and as a means of interpreting how the present-day countryside had evolved. Published in 1929, the volume recounted how some 20,000 acres of wild moorland were converted to farmland. At first, there were vain attempts on the part of the owner to grow corn in the impossible climate. Tenants from the more fertile parts of the country came and went, pursuing with greater success a more mixed style of farming. Gradually, by a process of trial and error, a system evolved that was suited to the potentialities of the locality. Local farmers came to occupy the farmsteads that their predecessors had created with so much toil and money.\textsuperscript{45} Not only did Orwin put ‘historical flesh’ on the kind of retrospective appraisal attempted by Albert Pell and others of his earlier, disillusioned generation, but the case study illustrated how a mosaic of land uses had come to mirror, through long usage, what Stamp perceived to be the fertility of the land. While describing such figures as Elliot and Stapledon somewhat pretentiously as proto-ecologists, some environmental historians might dismiss their efforts as being largely irrelevant, in as much as any lasting solution to the uncertainties of agricultural markets could only come through leaving

\textsuperscript{43} C S Orwin, The Reclamation of Exmoor Forest, 1929.

\textsuperscript{44} C S Orwin, The Reclamation of Exmoor Forest, 1929.

everything to the micro-organisms of the soil. The same historians tend to perceive the task of conserving desired landscapes and wildlife at the present day as similarly a question of leaving it all to nature. Even if such faith were warranted, it would take decades, if not centuries, for such recolonization to occur. Such counsels of passivity have rarely been heeded, at least willingly, by those responsible for managing the rural environment. Rather, the challenge has been to see whether, through deeper understanding of the processes involved, goals might be realised more quickly.

The challenge, as taken up in the nineteenth century in respect of farming, may now provide a perspective for present-day efforts to sustain, rehabilitate and, in some cases, re-create wild plant and animal communities. The establishment and management of species of, say, the wetlands, heathlands and herb-rich grasslands require the same kind of scientific rigour that agricultural scientists strove to apply from the time of the first Rothamsted experiments. Not only do ecologists have a large backlog of research to make up, but the complexity of managing such plant and animal communities is even more daunting. A history of how the concepts and techniques of the agricultural sciences came to be developed, and of how knowledge was disseminated and applied, by those who directly worked the land, may further emphasize the challenge of developing a more informed base from which to tackle the uncertainties encapsulated by the concept of 'sustainable development' in the late-twentieth century.

William Paddison: Marsh Farmer and Survivor of the Agricultural Depression, 1873–96

By LINDA CRUST

Abstract

William Paddison was born in Lincolnshire in 1839 and farmed in the marsh area throughout the agricultural depression at the end of the nineteenth century. He rose from small beginnings to a holding of 100 acres and rode out the depression to emerge in a prosperous state. This paper evaluates the reasons for his success in difficult times and comments on the peasant as a survivor and on Paddison’s handling of labour. Primary sources used are Paddison’s own diaries and business papers. Paddison seemed to be the right man in the right place at the right time doing the right things but, at the time, he did not know this and his success was not evident until the depression was over. Thirsk has regretted that the annals of such men as Paddison are generally unrecorded: this paper starts to redress the lack of extant evidence of the business methods of medium-sized farmers.

The Duke of Richmond’s Commission of 1879–82 spoke of ‘severe and acute distress’ to farmers during the agricultural depression. Thirsk wrote much later that there were two classes of peasant proprietors during the depression: ‘those whose land was heavily mortgaged, and those who had had a longer start, who had paid for ... their land, and whose interest payments were low. The fortunes of each group were entirely dissimilar’. William Paddison (1839–1916), marsh farmer, was a peasant proprietor who belonged to the latter category. This paper will attempt to show how Paddison survived the depression through a variety of strategies, both personal and agricultural.

Paddison was a man who rose from unremarkable beginnings to become a prosperous farmer through an unpropitious era. He remained a peasant throughout his life in the sense that he never aspired to the trappings or way of life of a gentleman farmer, yet he was progressive in that he diversified when the old way of farming was no longer profitable and, atypically of a small farmer of his day, he kept accounts. Detailed information about this class of farmer at this time is rare so this paper gives a valuable and unusual insight into the fortunes of such a man.

There are many remarkable aspects of Paddison but the areas to be explored here are his survival, not only intact but prospering, through the agricultural depression at the end of the last century and the attitude to farm labourers of a man who was the grandson of a poor labourer and son of a very small farmer. How was it that he prospered through these difficult years for agriculture? Evidence will be offered from his diaries and from his farm accounts and notes as far as they are available and relevant.

In order to define and measure Paddison’s progress the following pattern has been chosen. Firstly, the geographical situation of Saltfleetby in the marsh is given. Secondly, Paddison’s origins are set out, followed by a section examining the peasant as a survivor. Fourthly, Paddison’s progress from poor man’s son to capitalist

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1 The author wishes to thank Dr Dennis Mills, the staff of the Lincolnshire Archives Office and of the Lincolnshire Life Museum. Lord Emile, English Farming Past and Present, 5th ed, 1961, p 380.
2 Thirsk, English Peasant Farming, 1957, p 312.
3 Lincolnshire Archives Office (LAO), Miscellaneous deposit 731.
is recorded. The next section gives a profile of Paddison’s farming and business methods and accounts. The penultimate section explores Paddison’s pattern of hiring labour and his attitudes to his employees and, finally, the reasons for his survival of the depression are evaluated.

William Paddison was born in Lissinglea in the Lincolnshire clay vale in 1839 but moved with his parents to the marshland village of Saltfleetby in 1844 where his father bought a holding of 21 acres with a house in this area of traditional small farms. For the last two centuries, the marsh area had been noted for its rich salt-grazing lands. Saltfleetby, at the time of the Tithe Commission’s map of 1839, had 23 per cent of its cultivated land in arable and 76 1/2 per cent in meadow and pasture – the reverse of the situation at Barton-on-Humber in the north of the county, for example. This balance was still maintained a decade later when Thirsk noted that a quarter of the land between Humberstone and Saltfleet was in tillage compared with almost none fifty years previously. Even so she stated that management of this marshland was bad, ‘a deplorable waste of resources’, mainly because of land wasted in fallow and poor rotation of crops.4 J A Clarke stated that marsh arable farming was ‘decidedly inferior to that of the wold land’ and ‘the large class of small [marsh] freeholders was not among the most experimental’.5 Men such as Paddison contradicted this statement and brought notable improvements to marsh farming, managing on small resources to drain land and enhance the feeding of stock.

The year 1892 seems to have been a low point in the depression for Paddison but it is difficult to tell as most of his writing on farming is pessimistic. The following 1892 letter (no month given – perhaps September) to the Daily Chronicle is worthy of Job.

Here we are in the marshes of Lincolnshire with our houses not far above the water after 48 hours of pouring rain during the latter end of last week. Hundreds of acres of corn are out in the field and some uncut. Our stacks are drenched with rain and will not be in condition to thresh for many weeks to come. The price of wheat has just tutch a lower point than it has done before for a period of one hundred years. The value of stock is at present below any level that it has reached during the last 26 years and scores of acres of rich marshland around where I am writing will pay during the season little more than is wasted for rates and tithes. During summer labour has been very expensive and every strong and active man has been able to carry away from his work the value of one sack of wheat weekly from the farm ... no ordinary farmer can exist no not even if he lived on air.6

But Paddison did not live on air. Even at this point he had £70 in the bank. If 1892 saw a dip in his fortune, by 1893 he had £340 in the bank.

Saltfleetby is a large triple parish on the east coast of Lincolnshire, just inland from Saltfleet Haven. The nearest market town is Louth, some 10 miles inland. The soil is loam with a clay subsoil and for centuries it has been noted for its rich salt-grazing lands. Paddison noted in his History of Sollaby (1907) that, when he was a boy, old people could remember the time when there were not more than two or three ploughed fields in Saltfleetby.7 By the end of the nineteenth century there was more arable land in the parish, but the pasture was (and is) still valuable.

Saltfleetby in the nineteenth century was an open village of many small owners (201 owners on the dikre reeve’s record of 1825). It was full of striving tenants and owners: fewer than 3 per cent owned over 100 acres and the majority owned less than 40 acres. At this date over half the land in the triple parish of 4620 acres (St Peters 2254

4 Thirsk, English Peasant Farming, pp 338, 343.
6 LAO, Paddison deposit 6/2/44.
7 LAO, Miscellaneous deposit 731/2.
acres; St Clements 1155 acres; All Saints 1211 acres) was owned by 'outners' — people who lived outside the parish but owned a few acres within the boundaries. The land was good and, although it was poorly managed, it patently supported many families on a small acreage. Many of these would also labour for others or follow other occupations — the sea, for instance, offered some spoils and all the usual trades of a large parish were to be found. The inhabitants were apparently ambitious and the proportion of owners living within the parish steadily increased. In 1846, when the Paddisons arrived in the village, land had already been rising in value for some years. In 1856, during the Crimean War, prices of wheat rose to £4–5 a quarter, and the price of land was further enhanced. From this time, land value rose until 1875 when it reached its peak of £100 an acre. Paddison wrote in his History of Sollaby that when, 'both land and food was excessively high and an agricultural labourer's wage was extremely low, even under these conditions, working men contrived to save enough money to buy a bit of land and sometimes build a house ... It was true that during the agricultural depression many of the mortgages claimed both land and houses, but this was no degradation to the men who by dint of labour and rigid economy acquired them at first'.

It was not possible for all hard-working owners to survive but Paddison was in a strong position by 1875. He had bought some of the land he farmed and had benefited by his father's and grandfather's financial carefulness; he was inspired by the work ethos around him, and he was intelligent and willing to be flexible and learn by his mistakes.

The Paddison family survived through parsimony, bordering on poverty. Paddison told the familiar stories of the era of his father being given bacon to eat and mother and children being pleased with a morsel. His mother gathered acorns to make tea in hard times and told the infant Billy of even harsher conditions in her own childhood. The habits of this sort of upbringing are notoriously difficult to break; Mrs Paddison senior's clothes revealed after her death that she had secreted crusts in her skirts as an insurance against possible hunger, and Billy himself was never tempted to be wasteful. His grandfather had saved a little from his labourer's wage of 11s per week (house and garden were tied but free), so William Paddison senior had a small inheritance. Nevertheless he, Billy's father, went into farm service for twenty-one years to increase his resources; then he married and took the tenancy of the small farm where Billy and his sister were born.

Paddison was reared in the Methodist tradition: his father was a Primitive Methodist but he attended a Wesleyan Sunday school and was a Wesleyan class member. He married at the age of forty and was childless. He worked 'all tides' in the Protestant tradition, and by 'working and scratting' he was able to rent some land in his own name and also to buy some. By 1871 Paddison father and son are recorded in the census as farming 80 acres and employing two labourers and a boy. There is no record of their holding in either 1881 or 1891. In 1892 he wrote in his diary 'The agricultural depression is so great that I cannot make farming pay. Labour seems more scarce and dear every year ... on a farm of 100 acres grass and 56 acres plough labour costs are £250 a year and I live in continual dread that I shall come to want'. In 1908 he retired.
from farming, having survived the depression in a reasonably prosperous state.

III

In Saltfleetby terms Paddison rose to be a substantial capitalist. His origins have been described, but to what social class could he be ascribed? As an old man he wrote that he had always felt himself to be a gentleman inside. He certainly had no social aspirations although he did regret his lack of formal education. When he was a young man he had been ambitious in the sense that he had wanted to better his financial situation. ‘When I was young I longed to be into business and possess sheep and beast and land but now I begin to long for rest’. He lived in the days before co-operative farming ventures. He wanted success and respect in his own right and for his own virtues, including the virtue of hard work. Although he became a larger than average farmer with 150 acres at the time of his retirement, he undoubtedly rose to that position from a very small base. Because of his changing and improving fortunes it is difficult to categorize him and, indeed, no category seems totally apposite. He was a capitalist trader/cultivator who benefited from the increasing prosperity of late Victorian society by trading in, or producing, goods outside the normal agricultural sphere.

It might be relevant here to compare Paddison with another Lincolnshire farmer of his day. Cornelius Stovin was a large tenant farmer at Binbrook some 18 miles from Saltfleetby. Stovin was also a Methodist but was of a higher social standing than Paddison. He was a tenant/capitalist farmer of 600 acres of Lincolnshire wold land, some 10 acres of which were plantations used by the landlord as a preserve for game. He retired from the tenancy of Binbrook Hall in 1892 and moved to a smaller farm at Hogsthorpe on the marsh near Paddison. From there he moved to other financially unviable, rented farms and eventually retired in some poverty in 1918. Compared with Paddison’s survival of the bad years and modest prosperity, Stovin’s is an unfortunate economic tale.

IV

As a young man Paddison saved £10 from what was doubtless a pittance allowed by his father and was able to buy a field on mortgage — 16½ acres for £1260. The mortgage was in three parts: £1000 from R P Chapman, the vendor; £200 ‘in another place’; and £50 on note from the vendor. Census returns for 1861 and 1871 record the following acreage for Paddison, Saltfleetby, but there is no indication of how much was owned and how much rented. In 1861 Paddison senior was given as a farmer of 21 acres (corresponding with the amount of land he bought in 1846); in 1871 the figure was 80 acres. The 1881 and 1891 censuses do not give an acreage. The Return of Owners of Land, 1873 does not name either William Paddison senior or junior, but the Samuel Paddison listed in Saltfleetby St Peters as owning 27 acres 2 roods 35 perches is likely to be William Paddison senior whose Christian name had been misrecorded. It was about this date, five years before his father’s death, that Paddison junior had started to purchase land himself on mortgage. It is probable that Paddison senior also rented land, and Paddison junior was certainly renting land from a Mrs Grant from 1867. He was discharged from this tenancy in 1893 to his great indignation. Some of the land he had underlet to a Mr Lusby who appeared to have taken over the tenancy on Paddison’s

12 BPP, 1874, LXII, Return of Owners Land in England and Wales, 1873.
dismissal. The next indicator of the acreage owned/farmed by Paddison junior is in his notes when he jotted down the amount he paid for poor rate, highway rate, and dike reeve’s rate. Again, this is partial information but it does suggest that he owned about 76 acres at this time. Of this, 46 acres were described as closes, with a meadow of 5 acres 22 perches and a cabbage garden of just under an acre; the acreage of the Minster Field (Paddison’s first youthful purchase) is given as 16 acres 2 roods. Mrs Grant’s land would bring the total to about 120 acres at this date. From this total, the jottings indicate that Paddison rented out allotments to others.

The Valuation Books arising from the Finance (1909–10) Act reveal that two years after retirement from farming, Paddison owned or rented just over 40 acres in two of the Saltfleetby parishes, St Peters and All Saints. This holding included 27 acres which he still rented from Sturdy’s Trust, 1 acres 2 roods rented from the School Managers, and 7 acres 2 roods rented from Lister’s executives. He let out small parcels of land to the tenant of a cottage he owned (1 acre 2 roods) and to Joe Hird his former foreman (3 acres). The pattern of tenure and ownership therefore appears rather untidy and complicated, but it does indicate the flexibility of the system in Saltfleetby and the possibilities it offered to an ambitious man not only to add to his holding in various ways but also to let out small parcels to other, poorer men, who might in consequence be beholden in some measure to him and able to offer labour.

V

Paddison kept account books and inventories, in which he stated his case lucidly when he felt himself to be wronged. A review of the papers left behind him gives an insight into his business practices. His failure to recognize that his foreman, Joe Hird, was cheating him is the only evidence of a blind spot in his monetary dealings. Habits of recording were probably handed down by his father. A small notebook amongst other papers headed ‘Farming account 1846–60’ was very likely compiled by Paddison senior. The book contains notes of payments for food, land tax, tithes, rent, cow-cake and lime. At the other end of the book are receipts for beasts sold, threshing, mowing, thatching. By keeping accounts, Paddison was in the minority of farmers of his day and herein could lie one of the major factors relating to his success. Paddison was an entrepreneur in the sense that he was a farmer/merchant and was willing to take a risk in new ventures. Yet he remained a peasant in the sense that he did not spend money on any status symbol during the depression. He records in his diary that his wife wanted him to buy a pony and trap, but he had seen another family fall into this pretentious, wasteful pattern and come to be bankrupt. He would have none of it.

Paddison’s accounts for 1881 show a sizeable profit of £1884 1s 6½d (Table 1). No profit is given for any other year but there is no reason to suppose that

<table>
<thead>
<tr>
<th>Items</th>
<th>£</th>
<th>s</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cereal and stock</td>
<td>438</td>
<td>19</td>
<td>6½</td>
</tr>
<tr>
<td>Servants’ wages</td>
<td>25</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Day labourers’ wages</td>
<td>139</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Rent</td>
<td>407</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tithe</td>
<td>58</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Rates</td>
<td>120</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total outlay</td>
<td>1189</td>
<td>5</td>
<td>9½</td>
</tr>
<tr>
<td>Total income</td>
<td>3073</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Profit 1881</td>
<td>1884</td>
<td>1</td>
<td>0½</td>
</tr>
</tbody>
</table>

Source: LAD, Paddison deposit 2/4.
Table 2
Cereal prices per quarter in Lincolnshire and the United Kingdom

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat</th>
<th></th>
<th></th>
<th>Barley</th>
<th></th>
<th></th>
<th>Oats</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UK s  d</td>
<td>Lincs s d</td>
<td>Louth s d</td>
<td>UK s d</td>
<td>Lincs s d</td>
<td>Louth s d</td>
<td>UK s d</td>
<td>Lincs s d</td>
<td>Louth s d</td>
</tr>
<tr>
<td>1886</td>
<td>31</td>
<td>0</td>
<td>30</td>
<td>3</td>
<td>29</td>
<td>7</td>
<td>26</td>
<td>7</td>
<td>24</td>
</tr>
<tr>
<td>1890</td>
<td>31</td>
<td>11</td>
<td>31</td>
<td>5</td>
<td>31</td>
<td>1</td>
<td>28</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>1895</td>
<td>23</td>
<td>1</td>
<td>22</td>
<td>9</td>
<td>22</td>
<td>9</td>
<td>21</td>
<td>11</td>
<td>21</td>
</tr>
</tbody>
</table>

Sources: BPP, 1888, X, Select Committee on Corn Averages; 1896, XCII, Agricultural Returns for 1895; LAO, Paddison deposits, 2/15.

Paddison's financial state was unhealthy at any time judging by his inventories and other jottings. An inventory of assets for 1890 shows a valuation of £2,271; that for 1891 £2,300 12s; that for 1892 reveals a slight dip to £2,081; in 1893 the amount improved to £2,328 6s. Although the precise date of the inventories is not given, it is probable that Paddison undertook them at the same time each year. In 1881 all types of sheep were listed as 'sheep'; in 1890 they were divided into ewes, lambs and tups; but in 1891 and 1892 they were again 'sheep'. Taking the 1890 lambs as a guide, the inventories were probably taken at the beginning of the year, a view supported by the fact that in that year three mares were in foal.

Comparison of Paddison's figures with prices is difficult as his inventories were sparse and not dated by month, and prices fluctuated greatly within one year. However, taking national figures, Lincolnshire prices, prices in Louth market and figures from Paddison's inventories the following information is offered (Table 2). In the three years identified Lincolnshire prices were slightly below the national average, and Louth prices were below the Lincolnshire average. Paddison's inventory of 1890 gives his own valuations as: wheat 35s per quarter, barley 30s per quarter and oats 17s per quarter. Therefore, wheat and barley are both shown as being valued higher than the national average market price, and oats are slightly below.

It is hard to draw any useful conclusion from this as a valuation is not a market price, and there is no way of knowing in which month Paddison made his valuation, but one can at least see a relationship between the national figures and Paddison's own.

The successful farmer during the depression was the one who managed to increase input - in other words, one who kept the land in good condition and had a high output, cultivating the land to full capacity. Paddison seems to have fulfilled this description. There is no mention of fallow in any of his papers but he obviously used fertilisers and attended to drainage. He was keenly aware of good husbandry. Beans and peas had been grown in Lincolnshire throughout the nineteenth century as part of the customary rotation in which they provided nitrogen for the wheat crop; but after 1890 they were produced for human consumption. There is some evidence that Paddison was willing to sell in small quantities in what would nowadays be termed, 'farm gate sales'. The market for bulbs also developed during the nineteenth century, and the snowdrop trade in particular seems to have been established in Lincolnshire in the last two decades of the century. One of the essentials of bulb culture is that they should be preceded by a crop that is heavily manured.

17 A Ashby, 'Bulb growing in south Lincolnshire', JRASE, 76, 1915, p 110.
TABLE 3

Cropping in Saltfleetby, 1867–1900

<table>
<thead>
<tr>
<th>Crop</th>
<th>Acreage in</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1867</td>
</tr>
<tr>
<td>Wheat</td>
<td>395</td>
</tr>
<tr>
<td>Barley</td>
<td>248</td>
</tr>
<tr>
<td>Oats</td>
<td>275</td>
</tr>
<tr>
<td>Beans</td>
<td>157</td>
</tr>
<tr>
<td>Peas</td>
<td>70</td>
</tr>
<tr>
<td>Potatoes</td>
<td>39</td>
</tr>
<tr>
<td>Turnips, swedes, mangolds</td>
<td>184</td>
</tr>
<tr>
<td>Cabbage</td>
<td>0</td>
</tr>
<tr>
<td>Fallow</td>
<td>17</td>
</tr>
<tr>
<td>Rotation grass</td>
<td>102</td>
</tr>
<tr>
<td>Permanent grass</td>
<td>2652</td>
</tr>
<tr>
<td>Parish total</td>
<td>4620</td>
</tr>
</tbody>
</table>

Sources: PRO, MAF68, Parish agriculture statistics.

Temporary leys under normal management were apt to give progressively less grazing after the first year. There is no evidence that Paddison fell into this trap. Although his outgoings were consistently high in the years for which data exist, his income was yet higher. Such a return would suggest that he maintained his efficiency, that his land management, including grassland, was effective.

At all times Paddison seems to have exploited quick-turnover crops such as potatoes, beans and fruit. Although his books all show that big profits were made in the last six months of the year, there was a flow of cash throughout the year. An undated entry in a small pocket book records the money in his purse at Louth Fair in a year which must have been about 1890: gold £54; silver £1 7s 6d. At the same time he records money at home as: gold £38; silver £1 5s; Smith’s rent £4 1 s 5s; tithe £9 9s; Ted’s tithe £1 8s 9d, surprising amounts to have had on his person. 19

Because of the non-degradable quality of wool, it could be stored until the moment for sale was right. In his capacity as a dealer, Paddison had ready cash available to buy at the right price, although he did not always buy and sell to advantage. In June 1895 an unhappy Paddison recorded in his diary that he had had ‘a very harrising day’. He sold 400 tod of wool to a Mr Pinning. A week later wool prices rose and he would have made £100 more if he had waited. At this date he had £400 in the bank, though he confided to his diary that he wished it were £1000.

The diverse nature of Paddison’s enterprises is evidenced by entries in his account book. In 1882 he paid 12s to an unspecified person or persons for leading granite for two days. 20 The parish was paid £1 4s by him for ‘kidding 400 kiddy’. Did he thus profit in a small way from parish

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20 LAO, Paddison deposit 2/5, inventory.
pauper labour or was he attempting to keep the poor rate down? In 1883 Paddison was involved in sales of seed barley and also cartloads of nitrate of soda the price of which, for 2½ cwts, was £1 14s. 2d.

There is no account of a shepherd's wage in extant records but in 1892 there is evidence that Paddison kept sheep at Grainthorpe together with a Mr Marwood. His account of turnip keeping is '86 sheep from 9 February 1892 £12 16s 4d'. So this was land used on a contract scheme but not rented.

There is little evidence of Paddison's buyers, apart from local transactions, but in 1893 there is a reference to 'black sheep sent to London £3 7s 11d' next to 'sheep killed to sell at home'. The railway came to Saltfleetby in 1877. Paddison was quick to see the advantage of this to a trader and when the opportunity arose he bought land next to the station; in 1880, when he married, he was able to rent a substantial farmhouse nearby. His yard adjoining the station yard put him in a prime position to receive consignments of coal from the Yorkshire coalfields. The population of the three Saltfleetbys peaked at 629 in 1881 by which time the coal-burning range had become universal. On his farm Paddison bred horses which he sold at Saltfleet Horse Fair so providing haulage animals for the distribution of his coal. Similarly Joe Hird, his farm man, was given full employment by using his labour both on the farm and in the coal business. In the period 1888–97, during the last years of the depression, his ledger includes sales of coal, corn, peas, sheep, hares, potatoes and cattle. He also traded in cabbages, cauliflowers, pig feed, ham, bacon, peas, flowers, plants, bulbs, vegetables and sold manure, straw and seed corn and turnip seed.

All this was sound practice. Wilson Fox, assistant commissioner to the Royal Commission on agricultural depression in Lincolnshire, observed in his 1895 report that farmers growing seeds, bulbs and vegetables were surviving the depression better than those concentrating on corn. Bulb growing was an innovation and a profitable one too. Paddison sometimes had a happy knack, or courage, to try new crops. The bulb industry grew up or expanded in response to the absence of profit from traditional crops, availability of cheap land in the depression, and the provision of access to urban markets by the railways. The years 1885–92 showed an increase in bulb growers in the Spalding area of 22-fold. Paddison was 50 miles from Spalding so was well removed from the main centre although in the same county.

Shipwrecks appeared to provide a little income for a man with transport and labour. On 9 December 1893 he recorded '2 oak posts, 20 ft of oak plank; 1 oak rail; long pieces of oak; ship's bell (10s) coal and leading - total £4 2s 6d'. In the same ledger sales of snowdrops in August 1895 were made to buyers in Long Sutton and Retford in quantities of 10,000, 15,000 and 20,000.

Intricate accounts were made with tradesman on a barter basis. For example the miller, the carpenter, the blacksmith and pig killer all appeared in accounts where services and labour were set against goods supplied. This suggests a small round of credit and debt which would ensure the continuation of labour. Paddison could afford to allow credit with local men to ensure a sale. At the end of August 1892 he sold a flecked heifer in calf to a Mr English for £18, 'and he pays me when he gets his harvest in'. The risk taken was probably small and short term with the

32 LAO, Paddison deposit 2/6.
33 LAO, Paddison deposit 2/3, farm accounts.
34 LAO, Paddison deposit 1/1, rough ledger 1888–97.
35 Ibid.
36 BPP, 1895, XVI, Reports of Assistant Commissioners to the Royal Commission on Agricultural Depression: Lincolnshire by Mr W Fox, p 123.
37 LAO, Paddison deposit 1/1/38.
38 LAO, Paddison deposit 2/2/180.
harvest imminent. On other occasions he lent poor men cash at a rate of interest. The only long-term debtor who caused Paddison some anxiety was the rector. Here was a delicate situation. Paddison was apparently restrained by some nicety from pursuing his debt through a solicitor, as he did of a man who flitted owing £8 rent on a piece of land. The rector was not likely to flit, but the debt must have been an embarassment and annoyance. The rector's debt reveals another diversification on Paddison's part. Paddison apparently supplied him with newspapers, and records that the rector owed £3 16s from 15 July 1891 to end of 1894.28

While he pursued debtors, Paddison sympathized with those in distress because of business failure in hard times, although this sympathy was tempered by a Victorian, nonconformist, cold comfort. In 1895 when a neighbour's sheep were sold at Louth market because of bankruptcy, he comforted the bereft farmer with the words, 'Whom the Lord loveth he chastiseth'.29 The neighbour died later in the year and Paddison recounted in his diary the man's downfall by mortgagees who treated him cruelly.

VI

It appears that Paddison’s practice was to hire a boy for the year for general duties. Joe Hird was a fixture for many years as general foreman, working in both the coal-yard and on the farm. Other labour was acquired locally on an ad hoc basis, sometimes at a daily rate (15s weekly for an experienced man in 1892), sometimes at piece rate, and sometimes by barter. There is also evidence that Paddison paid small private gangs at harvest time: for example, a man called North seems to have supplied a small gang in 1881.30 Outgoings in September of that year include ‘F North, harvesting £1 6s 1d; North and company harvesting £6 16s 5d; F North harvesting £4 14s Chapel [field] beans – North’s company £2’. In the same year machine men (presumably with a threshing machine) were paid 4s per day. In 1885 three ‘men at machine’ were paid only 9s, indicating a drop in wages between 1881 and 1885. In an undated entry between 1886 and 1892 (possibly 1889), details of an account with Frank North are recorded (Table 4).

This account is likely to indicate a mixture of piece and day rates. If Frank North was the middleman in these arrangements, the rate of payment must have dropped to even lower than 2s per day for most tasks. A little more, 2s 6d, was paid for the vigorous, dusty job of threshing. These rates would suggest that Paddison was paying less for his agricultural labour in this period, in contrast to Wilson Fox’s figures of summer weekly earnings of ordinary labourers at Louth, which between 1871 and 1891 were stable at 15s.31

In 1893 a servant girl called Ann came to live in the Paddison household at the wage of £10 a year. It would seem that Paddison gave his confined servants a form of written contract stating wages and sometimes duties. Ann was hired on an annual

<table>
<thead>
<tr>
<th>Items</th>
<th>s</th>
<th>d</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diking</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Diking Isaacs close</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Beans thrashing</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>3 days work</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>[day] thrashing</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>1 days work</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Peas thrashing</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>3 days hoeing peas</td>
<td>6</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: LAD, Paddison deposit 2/2.

31 A Wilson Fox, 'Agricultural wages in England and Wales during the last half century', Jnl Roy Stat Soc, LXVI, 1902, pp 273–348, appendix III.
If she fell ill, she would be paid for two weeks and then have to leave. Two weeks later on 23 November Ann was paid 5s. Joe Hird, the foreman, probably received more than one missive of advice. The following neatly sets out Paddison’s theory on man-management.

As to work try and find out all the most quick and best ways of doing it. Next, your management of men, these are far more difficult to deal with than animals. Some foremen have a great fear lest the men should not speak well of them, but one thing is quite certain, if a foreman does his duty to his master and fills the place for which he was hired, the men will not speak well of him ... Do not make yourself very familiar with your men, for that will breed contempt, always speak very pleasantly to them and be patient and willing to tell them anything about their work which they like to ask, but keep your plans unknown to them, and never for one moment enter into their conversation if it consists of old wives tales, pulling other people to pieces, or even meddling with the business of other people.

VII

If anyone could ride out the storm of a depression, it would be a man such as Paddison, intelligent, hard-working and mean. He accounted for pennies; he fought for his rights although he did not succeed in his grievance over the lost tenancy; he chased debtors but, in the case of the rector’s debt, he hung on and waited and charged interest. The legends of Paddison in the village today, handed on to grandchildren and great-grandchildren of his contemporaries, describe a rather crafty, unpopular man who drove a hard bargain and looked over the shoulder of his employees in a way that was interpreted as spying. Paddison was a farmer and trader by nature; he was reared in the ethos of hard work, and the combination of nature and nurture, in his case, made a successful man.

In the early years of the depression, the cause was largely ascribed to the weather. By the time of the Royal Commission in 1895 many agriculturists paid attention to the general economic context. Paddison himself, whilst always complaining of weather conditions, could see that the cause was deeper than that. In his rough letter-book he wrote to an unnamed person: ‘There are only two practical ways of raising the scale of agricultural prices – one protection, the other dealing with the currency. Removal of local burdens would not make more than one or two shillings an acre at the outside. The only remedy for the depression was to be found in the increased skill, energy, industry and thriftfulness of the persons engaged in the greatest of our interests ...’ It is unclear whether he was referring to farmers in this last sentence or to parliamentarians – or to farm labourers. It is interesting that he minimizes the burden of local rates and taxes as he was an ardent complainant about the payment of tithe. Saltfleetby did not have its tithes commuted at enclosure as did most, but by no means all, Lincolnshire parishes. Paddison’s main objection was that half the money paid in tithe went to the incumbent of the Church of England.

Falling prices due to the import of cheap grain combined with poor harvests and economic depression were the most conspicuous feature of the period 1875–95. Wheat and wool declined from the 1870s; cattle and sheep prices fell in the 1880s although less dramatically than wheat. National prices were not necessarily those of the Lincolnshire markets. Market prices given in returns include the middleman’s profit, while cereal prices were also seasonal, tending to fall in autumn and rise in spring. If a farmer could afford to hang on to commodities until after Christmas when prices rose he was in a position to gain: Paddison with money in the bank through-
WILLIAM PADDISON: MARSH FARMER

out the period was able to take advantage of this situation.

Paddison’s tale, seen with hindsight, is a pattern-book for economic survival. Several elements aided this survival: he was in a sound position at the start of the depression, having his farm stocked and money in the bank; his father died in 1878 which left him to make his own decisions, one of which was to buy land next to the railway station which reached Saltfleetby in 1877; he was flexible in his farming views and willing to diversify into coal and bulbs for instance; the land in Saltfleetby was excellent grazing land which was helpful particularly when corn prices were low; he was intelligent and literate, always ready to read, learn and observe, aiding his effectiveness as a farmer; he kept accounts and was a sharp businessman, keen to follow up debts, for instance; although he was childless, labour was available, sometimes on a semi-barter arrangement; Saltfleetby was an open village of many small owners which made land transfer of small parcels of land possible throughout his life, facilitating his accumulation of a holding; and he valued the Protestant ethics of hard work and carefulness with money to the point of meanness. These were the advantages Paddison held but there were disadvantages too. In 1895 he lost the tenancy of some land when the owner died, and although aggrieved he was by this date in too strong a financial position to be seriously wounded. Because he was willing to speculate in entrepreneurial fashion on wool, acting as a merchant, there was a loss at times but, on balance, his skill in merchandizing was productive.

One of Paddison’s strengths was that he was truly a mixed farmer so he could benefit from the various elements of that system. When it was not applicable, by the use of diversification, particularly coal and bulbs, he could use his labour and carts effectively and make a profit. His initiative to enter the bulb industry was an unexpected move in a marshland area. By such thrusts and sallies Paddison showed himself a worthy adversary of the depression. The recession was not insurmountable when attacked by the strength of such a marshland peasant-proprietor. Paddison was extraordinary in his enterprise and success. A wily mind and the convenience of the railway were assets that helped him to use his resources to the maximum. The land-ownership structure of the village made possible the advantageous acquisition of parcels of land as they arose. The rich grazing of the area combined with the virtual elimination of fallowing provided

Paddison fits his model in that respect but differs inasmuch as he matched other groups in rural society (notably large tenant farmers) in depending on his own and hired labour.

Political theorists at the time of the depression were convinced that peasant proprietors were natural conservatives. It was argued that small farms produced a greater output per acre and suffered less from falling prices than did the large farms. Whether this was so or not requires more substantial argument and examples, but Paddison by the time of the depression was neither small nor large. Orwin and Whetham argue that small farms flourished where they adopted intensified systems: one must conclude that Paddison, helped by circumstances, did the right things. One of Paddison’s strengths was that he was truly a mixed farmer so he could benefit from the various elements of that system. When it was not applicable, by the use of diversification, particularly coal and bulbs, he could use his labour and carts effectively and make a profit. His initiative to enter the bulb industry was an unexpected move in a marshland area. By such thrusts and sallies Paddison showed himself a worthy adversary of the depression. The recession was not insurmountable when attacked by the strength of such a marshland peasant-proprietor. Paddison was extraordinary in his enterprise and success. A wily mind and the convenience of the railway were assets that helped him to use his resources to the maximum. The land-ownership structure of the village made possible the advantageous acquisition of parcels of land as they arose. The rich grazing of the area combined with the virtual elimination of fallowing provided


36 Orwin and Whetham, History of British Agriculture, p 284.
both Paddison and the parish with a reasonably rewarding farming base. It would be hard to find a better model of a small man surviving the agricultural problems of the last quarter of the century. Thirsk writing of the agricultural depression in Lincolnshire noted that the ‘smaller details of personal enterprise have passed unrecorded’. 37 This paper offers a record of one such personal enterprise.

37 Thirsk, English Peasant Farming, p 113.
List of Books and Pamphlets on Agrarian History, 1994

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Brynmor Jones Library, University of Hull

BIBLIOGRAPHY

Abbots Bickington to Zeal Monachorum: a handlist of Devon parish histories, Devon County Council Libraries, Exeter.


Ballantyne, J and Smith, B, Shetland documents, 1580–1611, Shetland Times, Lerwick.

Charters of the Redvers family and the Earldom of Devon 1090–1217, Devon and Cornwall Record Soc, Exeter.

Derbyshire guide to the Record Office, Derbyshire CC, Matlock.

Derbyshire Record Offices: sources and resources, Derbyshire CC, Matlock, 1992.

Edwards, P, Rural life: guide to local records, Batsford.


History theses 1981–90: historical research for higher degrees in the universities of the United Kingdom, U of London Institute of Historical Research.

Hoyles, M, ed, Pleasant treatise: gardening books from 1560–1660, Pluto P.

James, A R, A bibliography of WW2 HMSO paperbacks ..., AR James, Southwick, 1993.


Kain, R and Oliver, R B, Tithe maps of England and Wales: cartographic analysis and county by county catalogue, Cambridge UP.

King, A, British and Irish archaeology: a bibliographical guide, Manchester UP.

Leechman-Gr€en, E, ed, Index of the probate records of the Consistory Court of Ely, 1449–1858, British Record Soc.

Masham Pecculier court: an indexed calendar of wills and administrations, Ripon Historical Soc.

Mashamshire records: a collection of documents relating to Masham and Mashamshire in the 17th and 18th centuries, Masham Local History Record Class.

North Yorkshire parish registers, North Yorks County Record Office, Northallerton.


Records of British business and industry 1760–1914, HMSO.

A resume of the publications of the Ordnance and Geological Surveys of England and Wales, (1909) reprint, David Archer, Newtown.

Rogal, S J, Agriculture in Britain and America, 1660–1820: an annotated bibliography of the eighteenth century literature, Greenwood.


Smith, D M, A guide to the archives of the Company of Merchant Taylors in the City of York, Borthwick Institute, York.

Sources for village history, North Devon Record Office, Barnstaple.

Stephens, W B, Sources for English local history, 3rd edn, Phillimore, Chichester.

Wallis, H, Historians guide to early British maps: guide to the location of pre-1900 maps of the British Isles preserved in the United Kingdom and Ireland, Royal Historical Soc.

GENERAL ECONOMIC AND SOCIAL HISTORY


Barnes, M, Root and branch: a history of the Worshipful

Billett, M, A history of English country sports, Hale.

Britnell, R and Campbell, B, eds, A commercialising economy, England 1686–1700, U of Hull P.

Davey, B J, Rural crime in the 18th century: north Lincolnshire 1740–80, U of Hull P.


Frenchman in England in 1784, Francois du de la Rochefoucauld, Caliban.

Harry: the story of an Essex countryman, Colne Engaine Historical Soc, Colchester.


Mingay, G E, A general view of the rural economy of England 1538–1840, Longman.


Phipps, J and James, P, From acorn to oak tree: the growth of the National Trust 1895–1994, Macmillan.

Johnson, J, Place names of England and Wales, (1915), facsimile Bracken.

Johnson, W H, Crime and disorder in late Georgian Affirion (Sussex), Downsway, Eastbourne.


Politics of the picturesque: literature, landscape and aesthetics since 1770, Cambridge UP.


Street, S, Remembered land: recollections of country life 1880–1914, Joseph.


Thompson, H V and King, C M, eds, The European rabbit: the history and biology of a successful colonizer, Oxford UP.

Tinniswood, A, Life in an English country cottage, Weidenfeld and Nicolson.

Weideger, P, Gilding the acorn: critical history of the National Trust, Simon & Schuster.
LIST OF BOOKS AND PAMPHLETS ON AGRARIAN HISTORY, 1994  207


MARTIN, M, A description of the western isles of Scotland, c 1695 including A voyage to St Kilda by the same author and A description of the western isles of Scotland, by Sir Donald Munro, (1934) reprint, Birin, Edinburgh.

MUNCKTON, T, Somerset paupers: unremembered lives, Wincanton P.


PAYN, W H, Oh happy countryman: a Suffolk memoir, Book Guild, Lewes.


SQUIRES, A E, A Lancashire centenary (Myerscough College), Myerscough College, Preston, 1993.

SQUIRES, A E, Leicestershire and Rutland woodlands past and present, Kairos P, Newtown Linford.

Two East Anglian diaries, 1641–1679: Isaac Archer and William Coe, Boydell, Woodbridge.

Victoria history of the County of Essex, vol 9: Borough of Colchester, Oxford UP.


Victoria history of the County of Oxford vol 3, 6, facsim edn, Dawson, Folkestone.

VIGAR, J E, Lost villages of Sussex, Dovecote, Winborne.


LOCAL HISTORY

ALLINSON, H, Borden: the history of a Kentish parish, Synjon, Petts Wood.


ARCHER, F, Farmers, craftsmen and music makers: life in a Worcestershire village between the wars, Alan Sutton, Far Thrupp.


BERRY, A W, Sudbury (Suffolk) common lands in the 18th century, A W Berry, Colchester.

BERRY, A W, Sudbury common lands 1801–1850, A W Berry, Colchester.


Chronicle of two villages 1894–1994 Basingbourne cum Kneesworth, Basingbourne cum Kneesworth Local History Group (Cambs).


CORDER-BIRCH, A, History of Great Yeldham (Essex), Halstead and District Local History Soc.

COURTNEY, P, Medieval and later Usk, U of Wales P, Cardiff.


DERRIMAN, J, Killigarth: three centuries of a Cornish manor, J Derriman, Morden.

DUMBLETON, M, Easthampstead (Berks) enclosure 1827: the holdings listed by owner, occupier and plot number, M Dumbleton, Bracknell, 1991.

DUMBLETON, M, Easthampstead (Berks) tithe apportionment 1841: the holdings listed by owner, occupier and plot number, M Dumbleton, Bracknell, 1991.


EVE, J, History of Horsham St Faith, Norfolk: story of a village, J R Eve, Norwich.

FLETCHER, I, Diary of Isaac Fletcher of Undewood, Cumberland, 1756–81, Cumberland & Westmorland Antiquarian & Archaeological Soc, Kendal.

GARNER, S R, Burslem: the story of an Axholme village, Old Granary, Doncaster.


HUNT, J, Some papers concerning the history of Romsley (Worcs), pt VIII Methodism in Romsley, Romsley and District Historical Soc, 1992.


JORNA, P, Efferker (E Yorks): 150 years of church and village, Highgate, Beverley.
Kent settlement (poor law) records: guide and catalogue, pt 2 West Kent (diocese of Rochester), G Rickard, Canterbury.
PINNOCK, R, Between the hills: the story of Lilley, a Chiltemn village, Banstead History Research Group, 1993.
POCKLINGTON, G R, Chelsworth: the story of a little Suffolk village, B J Quinton, Chelsworth.
PRIESTLAND, P, ed, Radcliffe on Trent (Notts) 1710 to 1837, Ashbracken, Radcliffe, 1990.
REMERY, P M, A political history of Abbey Combohir and its patron 1176 to 1282, ECS, Worcester.
ROBINSON, M, Quiet valley: memories of a South Down farm in the 1860’s, Turnastone P.
RUSSELL, R C, Aspects of the history of Caistor (Lincs) 1790–1860 with special attention to the 1850s, WEA, Nettleton, 1992.
SMART, I H, The development of Dartmouth millpond to 1846, Dartmouth History Research Group.
SUTTON, F, A history of Caddington (Beds) and its people, Friends of All Saints, Caddington.
VOICE, E, Hallerton and Hallertonians: the story of a Devon village and its inhabitants, Author, Halberton.
WARWICK, M, Eminent Victorians: the Forsters of Burley-in-Wharfedale (Yorks), Burley in Wharfedale Local History Group.

IRISH HISTORY

BARY, V, Houses of Kerry: some historical, genealogical & architectural notes, Ballinakella P.
CARTER, J W H, The land war and its leaders in Queen’s County 1879–82, Leinster Express, Portlaise.
DUFFY, P J, Landscapes of South Ulster: a parish atlas of the Diocese of Clogher, Inst of Irish Studies, Queen’s University Belfast, 1993.
JORDAN, D E, Land and popular politics in Ireland: Co Mayo from the Plantation to the Land War, Cambridge UP.
KERR, D A, Nation of beggars? priests, people and politics in famine Ireland, 1846–52, Oxford UP.
LITTON, H, Brief history of the great Irish famine, Wolfhoun, Dublin.
LOUGHEY, F, Bray diary 1797–1899, F Loughrey, Bray.
TRACES OF \n
AGRICULTURAL HISTORY AND RURAL INDUSTRIES

ALDERSON, L and PORTER, V, Saving the breeds: a history of the Rare Breeds Survival Trust, Pica, Robertsbridge.
AUSTEN, M, Changes in farming: the last 100 years, Faversham Society, Faversham (Kent).
FINEGAN, F W, A bit of skin: the story of a North Down farming family, F Finegan, Settle.
FRYER, L G, Knitting by the fireside and on the hillside: history of the Shetland handknitting industry c 1600–1900, Shetland Times, Lerwick.
GIBBONS, M, Two years on a Derbyshire farm: diary of Matthew Gibbons of Rowsley 1781–2 with a history of
LIST OF BOOKS AND PAMPHLETS ON AGRARIAN HISTORY, 1994

the Gibbons family of Rowsley, Derby and Manchester, 1700–1860, Allen & Todd, Bury.


JOY, D, Yorkshire’s farm life, Dalesman, Skipton.

LAMBERT, D, Researching a garden’s history from documentary and published sources, Landscape Design Trust, Reigate, 1991.

MUNCKTON, T, Chancellors Farm accounts 1766–1767, Harry Galloway, Weston-super-Mare.


PORTER, E, Yeoman of the Cotswolds: journey of discovery which traces the history of a Cotswold farming family back to the 14th century, Images, Worcester.

PUGSLEY, S, ed, Devon gardens: an historical survey, Sutton, Stroud.


WILLIAMS, M, Lumber Jill: her story of four years in the Women’s Timber Corps 1942–45, Ex Libris, Bradford on Avon.

ZELL, M, Industry in the countryside: Wealden society in the sixteenth century, Cambridge UP.
Conference Report: Spring Conference 1995
By JOHN CHARTRES

Sheffield put on its best display of spring sunshine for the duration of the conference, held at Ramnoor House, 10–12 April, thus diminishing, if not entirely banishing, organizer David Hey’s reputation as snowfinder-general. The conference was an equal success in academic and social terms for the forty-one members who attended.

While the Spring Conference does not profess a theme, the recurrent element of the sessions at Sheffield was that of landholding, and, with a single exception, papers concentrated upon those who owned, rented, or farmed the land. The late Dr Paul Nunn (Sheffield Hallam University) opened the conference with his paper ‘“No fit subject for rural knowledge”? (W Marshall): The Wentworth-Woodhouse estate and agriculture in South Yorkshire during the Industrial Revolution’, introducing his audience to some of the findings of more than twenty years work on one of the greatest estates of the country, one that provided the principal northern element of Sheffield’s ‘encircling by ermine’. The estate had been built principally before the accession of the second Marquis of Rockingham in 1750, the principal creator of the present great house, and was largely complete at his death in 1782. It had grown on a base of diversified and flexible agriculture, with a nest of surrounding urban markets, and as an integral bloc, much through the extensive acquisition of small parcels of land. From the 1780s, coal rather than farming was the principal motive of estate management policy, but financed much of the Fitzwilliams’ paternalist policy towards farm tenants in the difficult years of the earlier nineteenth century. Shifting management options for an estate of around 18,000 acres (plus much more in London, North Yorkshire, Northamptonshire, and Ireland) provided an important case-study.

From this, Professor David Hey (University of Sheffield) introduced the characteristic industry of Sheffield, through Mr Ken Hawley, Sheffield tool historian and custodian of Worleyn Forge, who presented his remarkable archive film covering the years from the 1930s, but much focused on the 1960s, in which the work processes and skills of many now dead edge-tool trades were recorded.

Mr Hawley’s collection of Sheffield and foreign edge tools, now deposited with the university, represents a unique world-class holding, and awaits a possible home in a special gallery at the Mappin, and provided physical exhibits in support of the film record. BAHS members were wisely confined to examining these sickles, hay knives, and scythe blades, since, with a small number of exceptions, few had ever used them in earnest, and the risks attendant upon a practical test were thus avoided.

In the third session, the following morning, Ms Jane Whittle (University of Oxford) explored ‘The Norfolk land market and inheritance patterns, c.1350–c.1600’, through a series of case studies of manors, primarily focused upon Hevingham. Her detailed analysis of land transfers showed this as an area of small landholdings, but one that displayed a significant trend towards engrossment in the sixteenth century, and marked price differentials between large and small holdings. By the 1540s, holdings of less than 4 acres were selling proportionately at four times the price of the larger units. This polarization was superimposed onto an area in which active land markets had been extant from the later thirteenth century, and where the volume of transactions had increased strikingly from the 1380s, as tenants moved the throw off the yoke of serfdom. Family inheritance practices and the existence of bondage land appeared to have protected the position of the smallholder, even in the ‘free’ market after 1420, despite the culture of a flexible approach to landholding. Though Hevingham was rich and diverse as an area of farming, it was no great hotbed of agrarian capitalism, even in the sixteenth century, and Whittle’s important long-term study echoed Tawney more directly than Robert Brenner in its findings.

Jeremy Burchardt (University of Reading), presented the final conventional paper, on ‘The allotment movement and rural social relations, 1830–1845’, which documented the spatial and temporal patterns of the creation of allotments, and sought to explain the results. Fewer than 10,000 were extant in 1835, rising strikingly to 100,000 in 1845, when the heaviest incidence lay in the southern and south-western counties, led by Somerset, but the majority of the 600,000 plots recorded in
1910 had been created after 1870. Political econom-
ists had opposed the movement, as retrograde and
threatening to recreate the Irish problem, but more
significant and effective opposition had come from
those with more direct interests in the land, prin-
cipally from farmers. Farmer hostility was apparent
in the use of the vestry to restrict creations, in the
charging of exorbitant prices for carting or manure,
and appears to have been founded in an inchoate
mix of fears of competition and the reduction of
the labour incentive, of thefts to feed the cottage
pig, whose manure was so critical to successful
allotment cultivation, and of concern for social
status, perceived as threatened by the upppity 'Johnny
Farmers' of the allotments. To compound the
problems, and to complete a splendid tour of the
rural politics of the period, Chartists too opposed
the movement, misrepresenting the Labourers'
Friend Society as paternalist, and inimical to their
own ideals of land settlement.

The final afternoon sessions were devoted to an
important and stimulating symposium, 'Who were
the farmers', led by Professors John Beckett and
Michael Turner, and Dr Bethanie Afon, whose
pre-circulated discussion paper argued that in wider
concerns with output and society, rural historians
may relatively have neglected to discuss the farmer.
Around this theme there were, successively, short
contributions from Turner himself, Professor
Gordon Mingay, Dr John Hare, Professor Michael
Thompson, Drs Alun Howkins, Ted Collins, Tony
Phillips, Peter Dewey, Brian Short, and Charles
Watkins, ranging in their coverage from wide
methodological issues to specific source problems
and opportunities. Contributions from the wider
conference emphasized sampling problems in recent
oral history approaches, and the significant omission
of the early modern period from the 'platform',
remedied by Professor Mark Overton's comments
on the two million or so surviving probate inven-
tories, of which half in some senses covered
'farmers'. Other delights in the wide-ranging
if ultimately inconclusive collective discussion
included two snippets from the 1941 Farm Survey
returns, presented by Charles Watkins: the record
of management deficiencies for one farmer tersely
stated 'lack of ability'; and, from another part of a
form, one record of 'other occupation', stated
'Foreign Secretary' [Anthony Eden]. The latter
could not surprise members of this society: one of
its former secretaries described himself on a dust-
jacket as 'farming 500 acres in the Cotswolds as an
antidote to academic life'. It did, however, raise
definitional issues of 'farmers' that need to be
resolved. The symposium usefully pointed up
the key concerns of Howkins and others with the
smallest 'land-users and entrepreneurs', the part-
time, and hobby farmer, the 'true' farmer, both
tenant and freeholder, and the 'horticulturalist'.
While the case of neglect was ultimately unproven,
except perhaps terminologically, the rich potential
of current and future research on 'farmers' was
clearly established.

The conference concluded with its customary
excursion, this time into the south-western part of
Sheffield's ermine girdle, as David Hey led a walk-
ning visit through Chatsworth Park, beginning at
Edensor, and including the shooting tower and
reservoirs. Much to everyone's surprise and delight,
the balmy weather continued unabated, and in a
very well-prepared tour, all learned a great deal
about Edensor old and new, and the development
of the park. There was, however, widespread
dismay to learn that the great landscape historian's
cliché slide, of the 'remaining' cottage of old
Edensor, was nothing of the kind, merely being
the later residence of the foreman carpenter who
was working on the new site. Despite this, the
walking tour provided a memorable conclusion to
an excellent conference, little blighted by the suc-
cessive exhaustion of three pumps of draught beer
in the Ranmoor House bar.

'Your water is a sore decayer of your whoreson dead body', according to the Prince of Denmark's gravedigger (Hamlet, act 5 scene 1 line 167), but wet Danish bogs have preserved not only Iron Age bodies, but also the wooden parts of medieval ploughs. It was the realization that the Danish National Museum was perhaps unique in possessing the material remains of the implement which was instrumental in the expansion of cultivation in temperate medieval Europe, together with her contacts with experimental archaeologists and those responsible for full-scale reconstructions of Viking ships, which persuaded Grith Lerche to construct a functioning copy of the wheeled mouldboard plough, and use it in a series of trials to find out how it worked and what traces it left in the soil.

'Agricultural technology should be, but seldom is, treated as one of the dominant themes of medieval history', according to M M Postan, in the opening quotation of this book, and agricultural historians have long been familiar with the association of the heavy plough, cultivation in common, and the expansion of cultivation on to heavy land, or land which was not permanently cropped. But was it really possible to plough an acre a day, did it really need eight oxen to pull it, did it produce a better seedbed than an ard, and how did it wear, how long did it take to produce the ridges and furrows associated with medieval fields, and what did the individual furrows look like? Might it, for example, be possible to distinguish between ard and plough furrows in archaeological contexts? These were the sort of questions which it was hoped to answer by reconstructing a plough modelled on the parts found in the bogs of Jutland and then using it over several seasons.

The remains of soles, sheaths, a beam, shares, coulters, wheels and axles, on which the reconstruction was based are carefully dated (they were mostly thirteenth to fifteenth century), described, and copiously illustrated. The business of making it is also exhaustively described and illustrated, and there are detailed instructions on how it could be set to plough deep or shallow by changing the positions of its various pegs and wedges. The two oxen originally harnessed to the plough pulled it for less than 10 metres and then refused to go any further. They were replaced by two large Jutland cart horses (and their drivers) provided, free, by the Carlsberg Brewery. Thereafter ploughing went on for several seasons, and produced an immense amount of data on the draught power required (measured by dynamometer), the speed of work, (and the way they were both affected by soil and tilth conditions), furrow widths and depths, the best way of driving and setting the plough, and the effect of ploughing on the land surface and the wear on the various parts of the plough itself. Everything that could be measured was measured, it seems, and the rest was photographed. For comparative purposes, Dr Lerche also describes her work on some fossil finds or the documents. The author explains that she 'wanted to learn by experimenting how [a plough] would function' (her italics) in practice, how its working parts would be worn, ... the whole question of the connection between the forecarriage and the draught equipment and team. The range of problems is seldom imagined before they have to be solved in practice'. And indeed, even the things that went wrong produced some useful data. During the third season's work, and again during the fifth season, the plough hit a boulder and broke. This happened, she surmises, because the horses she was using were stronger than medieval oxen, and so kept going after hitting the obstruction, but also because she had made some parts too strong. Had there been a weak link between the horses and the plough, it, and not the plough, would have broken, and this explains why, in the often-reproduced picture of a plough pulled by four oxen in the Luttrell Psalter (c 1340), the beam of the plough is linked to the draught-rope by what Lerche convincingly interprets as a ring of twisted osiers. The importance of this simple device, when one considers the labour cost of a plough and the likelihood of the assarting ploughman hitting hidden rocks and tree roots, becomes clear. This, argues Lerche (p 271), was the whole point of the heavy (difficult to pull, as she demonstrates) wheeled

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plough: the ard was well adapted to permanently cultivated land, but was no good for land reclamation or alternate husbandry. Therefore it is important, and, as Lerche demonstrates, possible, to distinguish between ard and plough marks in archaeological contexts. And there are other examples of such practical points: the documents suggest that nineteenth-century ploughs were easier to pull than medieval ones, and that spring ploughing might have been easier than autumn ploughing, but here are the dynamometer readings to prove it; plough beams are likely to last longer than other parts; a mere five seasons of ploughing will indeed produce a marked ridge and furrow effect; pebbles were inserted into the sole of the plough, and although they increased its draught, they also cut down the wear and tear so that it lasted longer.

This reviewer does not feel competent to pronounce on the extent to which Lerche’s results are vitiated by her employment of two strong horses instead of more, weaker, oxen or horses, but presumably the question is worth considering. No matter what the answer, this is still a book for the shelves – assuming they are large and well-made shelves, because the book weighs over 5 lbs and each page is 14 inches wide – of anyone interested in ploughs and the effects of ploughing, fields, and archaeological reconstructions.

PAUL BRASSLEY


These three publications, which are part of the new series of guides issued by the Public Record Office, are to be warmly-welcomed, offering well-written, authoritative information, attractively produced and at reasonable prices. Jane Cox has written an introduction to the PRO for family historians making a first visit either to Chancery Lane or Kew. This could be read with advantage by any student beginning research in what she describes as ‘the finest archive of its kind in the world’. The complexities of the PRO system, from obtaining a reader’s ticket to finding the appropriate references and ordering documents, are explained clearly, with numerous charts, plans, check-lists, suggestions and lively cartoons. Naturally, much of the specific guidance is concerned with genealogical sources, and for family historians this will be very useful, since they are provided with many lines of research, answers to problems they may encounter, lists of potentially-fruitful sources, the location of other records in London, and even the suggestion of a pub to visit when all else fails. This provides a good, easily-understood introduction to the PRO, and many experienced readers will wish that it had been available to aid their first faltering attempts to use the collections.

The guide to *Using Manorial Records* has been published jointly with the Royal Commission on Historical Manuscripts, and Mary Ellis has produced a useful introduction to the subject, setting out clearly and with good illustrations the varieties of manorial records and their value for local or family historians. Inevitably, not all the intricacies and local variations of this complex subject can be explored in a short guide, and there is always a danger of over-simplification and of suggesting that the extraction of useful information from these sources is an easy task. Generally these pitfalls are avoided. There is a good introduction to the manorial system, its origins, working and the records which it produced, while common terms and usages are clearly explained. The guide provides a good general survey of the subject, offering encouragement to inexperienced researchers, warning against unrealistic expectations and providing advice on locating material and using the various finding aids. It also includes information on the Manorial Documents Register maintained by the Royal Commission on Historical Manuscripts.

Richard Hoyle is well known for his work on Tudor taxation and for his editions of the taxation records of Yorkshire and Gloucestershire. In this clearly-written and useful guide he explains the various forms of Tudor taxation including the much-used ‘lay subsidy rolls’ of 1524-25, the methods of collection and the records produced, as well as describing the ways in which these sources can be used in studies ‘of place, people and prosperity’. The records generated by the various methods of assessment and collection are far from straightforward, either to use or to interpret, but the subject is clearly explained with interesting examples drawn from many parts of the country. Researchers will find the explanations of the coverage of taxes, the categories of wealth assessed, and documentary sources as well as of the national records, and will also be greatly assisted by the guidance on finding the required returns, using the finding aids, and making sense of the fragmentary or confusing returns which exist for some counties. Particularly useful are the references to local sources...
and printed lists, and the bibliography of tax returns in print and to sources for the Military Survey of 1522 and the Loans of 1522–23. Excellent practical advice is given on finding and using the records, and on their potential value for local studies, including the initial warning to 'be prepared for disappointment', the exhortation to look for printed editions before making an expensive journey to the PRO, and the final comment 'Like all documents, the lay subsidy returns are a tease from which the historian can (sometimes) tease the truth'.

J H BETTEY


Despite the many examples in recent decades historians have frequently remained suspicious of spoken rather than written documents, although it is difficult to see why. Perhaps the sheer volume of reminiscence which might be released, and the difficulty of ordering it, has led to a barely concealed fear of being overwhelmed by trivia. This book faces bravely and makes a strong case for the adoption of oral history as a tool in the traditional apparatus. The inspiration comes from the author's own postgraduate work on agricultural labour in the East Riding some twenty years ago; yet how many of the stream of theses on recent history since have tried to follow his example? It has to be said that there have been few readily available guides for research students and this book will help to fill that gap. Its expected audience is, however, much wider — the army of local historians who have emerged in active groups since the late 1960s, most of whom are amateurs in the best sense of the word.

Initially the work is a handbook in methodology and there are very useful chapters on technology and techniques. But it is far more than that and at times the case Caunce makes for his enthusiasm rather exceeds the needs of its intended audience. That oral history has come largely out of a 'people's past', 'history from below' and so on, cannot be doubted but Caunce is not always critical about this. We are told here that the offerings are 'genuinely democratic', with no real examination of what that means. At times the book becomes rather lost in the wider arguments for the methodology's existence and the illustrative material is chosen for this rather than its claimed immediate audience. Drawing on the author's own experience, much of the book is illustrated by photographs from the north; a pity, since the value of what is being said far transcends such regional limits. Discussion of the relationships between interviewed response and iconography in photographs would have helped considerably — the two are often bonded together rather indiscriminately. There is a salutary warning against over-romanticizing and 'heritage' production, although the work is itself producing a variant on that.

Perhaps the most surprising omission in a work aimed at the 'local' historian is the use of interviewing in the process of reconstructing place. It is, after all, the fact of and concern for locality that starts many of Caunce's intended readers off on their own postgraduate work on agricultural labour in the wider arguments for the methodology's existence and the illustrative material is chosen for this rather than its claimed immediate audience. Drawing on the author's own experience, much of the book is illustrated by photographs from the north; a pity, since the value of what is being said far transcends such regional limits. Discussion of the relationships between interviewed response and iconography in photographs would have helped considerably — the two are often bonded together rather indiscriminately. There is a salutary warning against over-romanticizing and 'heritage' production, although the work is itself producing a variant on that.

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Part I has seven chapters, starting with one by Phil O'Hare in which the early county boundaries, the various attempts to divide the county which culminated in the Ridings, and the further subdivisions into wapentakes and hundreds and parishes and deaneries are discussed. The question of the stability of boundaries is also considered. Themes from this chapter are taken up in the next four. K Mary Hall uses the Domesday Book mainly as a basis of a discussion of pre-conquest estates and their relationship to the boundaries of wapentakes, hundreds and 'shires'. A strong correlation between wapentake boundaries and Anglo-Saxon multiple estates was found in the North Riding, much less in the West Riding, and a very complex relationship between hundreds and estates in the East Riding. Ann Alexander looks at the written evidence of perambulations and the nature of boundary markers, and chapters four and five develop this theme further. The development of boundary stones from unmarked natural stones to the erected stones of the nineteenth century is traced from the field notes of the late J Howard Davies, and, in chapter five, May Pickles argues persuasively that roads do not serve as boundaries because they pre-date them as rivers or watersheds do, but because there is a coincidence of requirements for both the road and the communities which share the boundary, and that where this coincidence is found, as in the Vale of York, both road and boundary are very ancient.

M Ecclestone considers the natural factors which have produced townships with detached parts in some wapentakes in modern South and West Yorkshire. Three distinct types of detachment are found and related to the density of Domesday villis. Finally in part I, D A Spratt has studied prehistoric and medieval boundaries on the North York Moors; these are discerned by reference to ancient remains and are related to medieval and modern township boundaries.

Part II consists of an introduction and six chapters which examine in detail the boundaries of estates with surviving early descriptions. Jennifer Kanen deals with the interesting case of Crayke, a detached part of the Palatinate of Durham, the editors, singly and in pairs, deal with the boundaries of Amounderness, Sherburn, Howden and Old Drax, Newbald, and Patrington.

This is a volume which will prove fascinating to all with an interest in the county and of great value to all concerned with regional history. It is well illustrated with line drawings and photographs. The editors are to be congratulated on their work, as are the members of the Yorkshire County Survey.

DAN BYFORD


Between 1539 and 1545 John Leland made summer journeys through the north-west, the west country, the west Midlands, the north-east, and around Bristol. His record of these journeys is best known by L T Smith's five volume edition (1906-10), reprinted in 1964. This beautifully printed and lavishly illustrated edition provides the first alternative to Smith's.

Dr Chandler begins with a learned and readable introduction, which includes a useful bibliography. The volume is well-indexed, vital in a work of this kind. He has limited his edition as far as possible to topographical material (excluding Wales and the Channel Islands) and has reorganized it into county entries, material dispersed through the original being drawn together for the first time. Chandler's other major change is to render Leland's antique prose into modern English. Given that this edition, although abbreviated, still consists of some 200,000 words, one is filled with admiration for Chandler's labour. The following short extracts from Smith's original edition and Chandler's modernizing illustrates his approach which is 'to grasp the meaning of Leland's words and then to express that meaning in straightforward English'.

The river of Severn breaketh into 2 armis in the medowes a little above Gloucester, whereof the principal arme striketh hard by Gloucesture towne syde, the other goith throughge a great bridge at the west ende of the cawsey at Glucoster and a lorde benethe Lantony Priorie they meete togethre. This isle or medowis betwixt these 2 armis is al very goodely medow ground, and that about Lantony, for cheese there made is in [great] price (Smith, vol 2, p 63).

The River Severn divides into two channels in the meadows a little above Gloucester. The main channel turns to flow right beside the town and the other passes through a large bridge at the western end of Gloucester causeway. This island or middle ground between the two channels is all excellent meadowland, as is the area around Lantony: cheese made there commands a high premium (Chandler, p 176).

Here Leland's 76 words have been reduced to 65, but more importantly the meaning of the text is now made clear. This is Chandler's great achievement, to make Leland accessible and understandable.

Was it worth the effort? That is problematic for Leland remains as infuriatingly opaque in modern as in antique English. How one wishes that he had added more topographical and less historical information. His best descriptions are of the towns; the agrarian historian *per se* can gain little from his rural descriptions. Indeed what is striking is his absence of feel for the countryside compared say with later writers like Norden. From the rural historian's point of view, perhaps his most interesting recurring theme is his commentary on bridges which are one
of the few features of the rural landscape to be regularly described.

Should we then abandon Leland as a topographical source? Surely not. His town descriptions are invaluable, and even where he only hints as to the countryside, his is often the earliest description since Domesday Book. And for most purposes this edition, because of its clarity and readability, supplants all earlier editions. No local historian should be without Chandler's edition of Leland.

C J HARRISON


'I allow no man for a judge who hath not done something of this nature himself'; thus one county historian, Robert Thoroton, in his preface to The Antiquities of Nottinghamshire (1677), and the unspoken motto of all editors of book reviews. In that light this reviewer will immodestly drop hints of his qualifications to judge a Festschrift, the class into which this volume strictly falls, but first satisfying the impatient by the briefest of summings up, not difficult on this occasion since this very substantial and generously illustrated book is a triumph in its conception, its organization and its execution.

The editors and publishers, it will be noticed, have refrained from using the Teutonic term in their title. 'Festschrift' is indeed a word of dread for booksellers and readers alike, the best of the class being generally the sort of book that one might recommend libraries to buy without feeling that the demands of respect and piety will bring one to buy it oneself. But not here, for respect and piety have produced not a Festschrift but a real book and a permanent work of reference.

The saddest Festschriften are those which are a miscellany of unconnected pieces with no editorial direction set. A symptom is an invitation to contribute but no indication of a general title nor the names of other contributors: it was a mistaken kindness many years ago for me to join the Perrry Festschrift. If contributors cannot be harnessed to atheme the best solution, as in the Postan and Finberg tributes in the Economic History and this Review, is surely to dedicate a special issue of a learned journal, a place with a secure sales but where no one expects the contents to be other than a ragbag but at least ensuring a few more readers than for the pseudo-book Festschriften.

The relevance of these remarks is the brilliant innovation of the editors and publishers of this Elrington tribute. They have become the patrons of a collective work of scholarship and reference which could be divided among different authors, here as many as forty-eight, without artificiality and with a discontinuity that is as natural, given the number of English counties with historians, as Bach arriving at forty-eight for the preludes and fuges in the Welltempered Klavier.

The very variety of the historiography of county histories also lends itself to multiple authorship and, it must be said, to a degree of readability not usually associated with authors drawn from the VCH stable, making it much more than a bibliography with commentary. It is full of information, made the more accessible by another evidence of the breeding in the Senate House stable, a fine thirteen-page index. Which county record series was the first to publish a twentieth-century archive item? How many (deceased) county historians have finished up in (a) bankruptcy, (b) lunacy or (c) both? How many county history projects (in our own time or the past) have run to completion? (Fig 7 is an interesting map of the progress of the VCH to 1993.)

Again, the tribute book would be outstanding among its kind if only for its prompt appearance. Planned in September 1991 in advance of the retirement of the General Editor of the Victoria County History, it appeared three years later - the more astonishing when no fewer than forty-eight contributors had to be marshalled. It is thus an exemplar for anyone editing future marks of respect from juniors in our trade to their seniors. I much regret that Eric Sigsworth did not live long enough to read what I had written (some three or four years earlier) for his Festschrift, and it was a near thing with the Tawney Festschrift. Its editor left the galley proofs dawdling so long on his desk under a pile of unanswered letters and other delayed commissions that one contributor, fearing that an obituary would precede the tribute, risked burgling the editor's room and setting the printing process in motion. The editor appeared unashamed, even shameless.

Perhaps a thicker skin than normal is an essential attribute of a Festschrift editor, especially when (as must have happened even with VCH contributors under the Elrington whip) there are laggard contributors who, like the tolerant reviewer of Baker's long-delayed history of Northamptonshire (quoted on p 298) thought that a 'topographical manuscript, like wine, is generally the better for keeping'. There is a current Festschrift that has been nine years in an unopened bottle, one contributor (not myself) inadvertently advertising it in a footnote reference to his 'forthcoming' article.

When a thesis on the historiography of the academic Festschrift comes to be written, as it surely will...
will, its author will be sure to hear some strange stories if he knocks on the door of editors and contributors still living. I myself suffered many years ago as an editor-designate who found that the potential recipient was so detested that too many declined to contribute for even a slim volume to grace the shelves.

Here, on the other hand, the contributors have clearly relished the part of their lives spent under their erstwhile taskmaster. The plates in this tribute comprise portraits of twenty-four county historians and in the frontispiece Christopher Elrington joins the pantheon, surrounded by a mountain of VCH volumes but clutching Middlesex to his bosom, perhaps recalling Macaulay (quoted p 270): 'An acre in Middlesex is better than a principality in Utopia'. A utopia indeed would be the completion of all the English counties, in which time they will be supplemented but not supplanted by a new sort of county history which deals with a county rather than the sum of its parishes; or perhaps by regional histories in the fashion of the Cambridge Agrarian History of England and Wales.

_BOOK REVIEWS_

MAURICE BERESFORD


This volume is concerned with three hundreds in west Somerset, the fourth topographical volume since the county's Victoria History was re-established. It adopts the usual contemporary practice of the VCH, with discrete parish sections on manors, economic history, mills, fairs, local government, religion, education and charities. There are lengthy parish introductions, with coverage of inns and taverns, national events, social and cultural activities and for Bridgewater, the centrepiece of the volume, sections on overseas trade, industry and population. Coverage of issues and events is comprehensive and illustrates perfectly the incremental drift which has characterized recent VCH volumes. Particularly noteworthy in this volume are reviews of settlement patterns, generously and usefully illustrated by redrawn tithe maps, and architectural descriptions which draw on the county's strengths in the recording of vernacular buildings.

The account of Bridgewater rejects the traditional etymology of the first place-name element, arguing that the bridge was not constructed until c 1200 and that the name is rather to be derived from ON brygja 'quay or jetty' or an unattested OE brýcg, a 'plank between ship and shore'. The place was thus in origin a trading settlement on the west side of the river Parrett. The argument, attractive though it is, has not thus far persuaded local reviewers and is not helped by the necessity of having to follow it in four separate places (on pp 192a, 193b, 195a and 217b). This illustrates the tensions between significant narrative and encyclopaedia, and the excavations which often face the user. Bridgewater remained a small market town embedded in its local agrarian landscape, with a greater role as a port town in the eighteenth and nineteenth centuries. The format of parish accounts, however, leave little room for this symbiotic relationship to be explored.

The wider territory covered is that of the lower Parrett valley between the Quantock ridge and Sedgemoor, bounded on the north by the Bristol Channel and to the south by the river Tone. In one parish account after another the evidence of a shift from arable farming to a growing emphasis on livestock from the seventeenth century is adduced, but the single page of introduction to the volume is a miserly contribution to synthesis. Detail is included for each parish, as befits the effort at universal history, but the general user faces real difficulties in trawling the indices when inequality of evidence is not always reflected in equality of treatment. Seaweed, collected and burnt at Stogursey between the fifteenth and early nineteenth centuries, described under 'Stogursey, Fisheries', indexed under 'Crops, less usual', was one of the monopolies claimed by the lords of Cannington Hundred. Who knows whether it was a significant part of local farming. Of clover, we learn that it features in seventeenth-century inventories in North Petherton, Padnoller, Spaxton, that it was a 'new crop' in Pawlett in 1711, that 'small farmers' grew it in Wembdon in the 1670s, that its growth featured in tenancy agreements at Broomfield in 1660, that it was introduced at Chedzoy by the mid-eighteenth century and tithed at Goathurst in 1789. Can one trust the trends which are seemingly reflected?

These are the endless mixtures of reward and irritation that must be borne when using the VCH. The considerable scholarship which can unravel the tenurial history of North Petherton, with its thirteenth-century and over fifty post-conquest holdings, is drawn also to the authentic voice of the antiquarian in those sections which chronicle local connections with the good and the great. Geoffrey Chaucer, one learns, was forester of Petherton Park after 1391. A company of Bath comedians rented the Bridgewater assize hall in 1736, see 'recreation, comedians', the only entry. Did market and fair activity in Lyng really end when neither cattle nor farmers turned up in 1907, replaced by apparently
competing ginger bread stalls at the two local pubs until 1939? See 'Economic activity, car boot sales' perhaps.

PHILIP MORGAN


Michael Zell's *Industry in the Countryside* is an extensively researched and well documented study of rural cloth-making in the Weald of Kent in the sixteenth century. The study is set within a broad social and economic context, examining not only the distribution, structure, output, and market destinations of the Wealden textile industry (and to a lesser extent those of the Wealden iron, metalware, and leather industries) but also the prevailing inheritance customs, pattern of landholding, farming practice, occupational structure, and demographic development found in the region, all of which are shown to have influenced—or been influenced by—the expansion of textile production. Zell explores the origins, charts the progress, and analyses the short-term consequences of rural industrialization in the Weald, and in addition utilizes the impressive array of social and economic data he has collected and analysed to assess the validity of a number of historical theories of industrial growth and organization, including 'proto-industrialization'.

Despite numbering among Britain's second rank clothing regions in terms of size and output, the Kentish textile industry made a significant contribution to national exports of high quality woollens during the sixteenth and early seventeenth centuries and provided employment—albeit frequently part-time or seasonal—to a large proportion of the Weald population. High quality, heavyweight, 'dyed in the wool' broadcloths were produced in six Wealden parishes in and around Cranbrook and low quality kersies in the northern Weald. The organization of the broadcloth industry was dominated by self-financed capitalist clothiers operating the putting-out system while kersey manufacture resided in the hands of independent petty clothier-producers. Many clothiers combined cloth-making with farming and landownership. Zell argues convincingly that the substantial investments made in land and property by leading entrepreneurs from the Kentish textile industry during the sixteenth century were motivated more by business acumen than by social ambition. He asserts that such investments not only served to combat the effects of inflation and high taxation but also enabled clothiers to extend credit to overseas merchants and thus obtain the best prices for their cloth on the London market. It was not until the late sixteenth century, Zell points out, that the sons of successful Wealden clothiers began to desert trade and set up as gentlemen. Dual employment was common throughout the Kentish textile industry and undoubtedly contributed to the low wage levels found among spinners, weavers, and clothworkers.

Though the study is essentially confined to the sixteenth century Zell provides a brief examination of the demise of cloth-making and the onset of deindustrialization in the Weald in the seventeenth century. There is clear evidence to support his view that the major cause of the decline of Wealden cloth-making was its failure, through lack of investment and entrepreneurial leadership, to respond to the changing pattern of supply and demand for woollen cloth in domestic and continental markets by developing lighter woollens or new drapery products, but the contribution made by a number of other—often inter-related—factors should not be underestimated. Whilst Zell acknowledges the detrimental effects of the growth of native woollen production in central and northern Europe and the disruption of continental markets during the Thirty Years War, he does not take into account the comparative dearth of English high quality woollens, the result both of the heavy burden of taxation imposed at home and abroad and of the limited scope available for prime cost reduction in high quality woollen production, which prevented the Wealden textile industry from maintaining an adequate share in the contracting market for heavy woollens. The effects of national commercial policy, the self-interest of the regulated trading companies, changes in the quality and availability of wool supplies and the disruption of trade during the Civil War period might also have been considered in his overview of the decline of Wealden cloth-making.

Zell's assessment of 'proto-industrialization' is limited mainly to the first stage of the theory of pre-industrial economic development advanced by Mendels and other writers, and particularly to those aspects relating to the origins of proto-industry and to demographic trends. His research confirms that in many ways the Weald of Kent was a model proto-industrial area where peasant manufacturers combined farming with handicraft industry to produce woollens for international markets. Almost all of the preconditions associated with the development of proto-industry were present in the Weald, and demographic growth and high population density, caused by higher rates of family formation and immigration, display similar trends to those found in other sixteenth-century centres of cottage industry. He does not, however, explore in detail the stimulus provided to commercial farming by rural industrialization or the relationship between
Wealden towns and their rural hinterland. Zell concludes that the proto-industrialization model is most convincing as a comparative model describing the social and demographic impact of rural industrialization and has little value as a predictive model for the development of modern factory industry.

Michael Zell's *Industry in the Countryside* is well written and highly readable, though some readers would doubtless have welcomed the use of subdivisions within chapters. The index is well organized but brief and could usefully have included significant personal names. Throughout the book Zell makes good use of tables and figures to support and supplement information provided in the text. Surprisingly, the standard of cartography is rather disappointing. The usefulness and interest of the maps provided is much reduced by the absence of reference data such as the names of major clothing manufacturers. The usefulness and interest of the maps provided is much reduced by the absence of reference data such as the names of major clothing manufacturers.

In conclusion, one is reminded yet again of D C Coleman's comment that we should be grateful for the research encouraged by 'proto-industrialization' than for the concept itself. Michael Zell's study of Wealden industry and society is a welcome contribution to the study of industrial development, organization, and achievement in the sixteenth century and to the historiography of the wool-textile industry.

**CHRISTINE JACKSON**


The long-running study of Stoneleigh and its buildings is a key source for the vernacular architecture of midland England, and for the debate on the chronology of post-medieval rebuilding. It is based on three exceptional sources. These are, firstly, the surviving houses of Stoneleigh and Ashow, secondly, a series of 559 probate documents, 55 of which are of direct relevance to the houses under discussion, and finally a body of records which serve to set the houses and their occupants in the context of their holdings and of the incomes which the latter could provide. It is indeed this last topic which has frequently been lacking from research centred on vernacular buildings, and the significance of the author's approach to the relationships between the farm and the farmhouse needs to be stressed. Apart from the probate material the key archives consist of a pre-Dissolution survey of Stoneleigh Abbey lands dating from 1533, maps, surveys and rentals for the post-Dissolution Stoneleigh estate, and Hearth Tax assessments over the years 1662–74. This is an exceptional collection, the only weakness being the lack of parish registers earlier than 1634.

Dr Alcock's book is introduced by a statement of the extent and potential of the archival and physical evidence, followed by a detailed examination of the houses surveyed, with matching records, divided by period and by social grouping. The sixteenth-century houses which derive from medieval traditions of construction are set apart from the more comfortable houses erected from the late sixteenth century onwards. Attention is given to the standards of comfort of economic groups, differentiated by evidence drawn from the probate records. There is a brief discussion of the demographic and economic changes encountered in the village as a whole, with indications of farming systems and of village trades. Finally, Stoneleigh is placed in a wider context, of Warwickshire and beyond, in a chapter which is tantalizingly brief. Within the central sections, houses are dealt with in a systematic yet flexible pattern. Typically, the measured plan and elevation of a house, sometimes with a photograph and with a brief digest of the structural features, is placed adjacent to a historical outline. Relevant documents, notably probate inventories, are reproduced with comment. For some houses there are few documents, while for others which do not survive there are inventories which are valuable for evidence of structural form or for portrayal of typical ranges of belongings. An outstanding feature from the archaeological viewpoint is the attention given to the houses of the poor, which have been identified in numbers sufficient for Dr Alcock to ask whether there has been under-recording elsewhere. He is able to demonstrate the survival of structures recognizably the documented two and three-room houses of the seventeenth century and to identify archive references to squatter cottages, finding a pattern similar to that seen by Trinder and Cox during their work on Telford. The Stoneleigh estate map of 1766, re-drawn to identify waste land but reproduced here at too small a scale for easy reference, shows this extension to the village housing stock. A wider consideration is the contribution which research on Stoneleigh makes to the national picture of change in housing standards. It is now a commonplace that the time-scale suggested by Hoskins for his 'great rebuilding' was too short. It has been shown by Dyer and Wrathmell that there is evidence for late-medieval improvement, as per capita incomes rose in the fifteenth century. By contrast, some areas, particularly in the Pennine uplands, were late to change, with improvements in comfort a seventeenth- rather than a fifteenth- or sixteenth-century occurrence. In Stoneleigh, there are houses which can be shown on stylistic grounds, reinforced...
by tree-ring dating, to have been built in the
fifteenth century, so further consideration of the
extent of late-medieval change, prompted by Dyer's
work to which the author refers, might have been
appropriate in chapter 4. Overall, Alcock's evidence
adds to the traditional view of change in the housing
stock of the midlands: whatever may or may not
have been happening to standards before the
Dissolution, there was a significant improvement
from the latter decades of the sixteenth century
onwards, with a series of developments in the style
and size of houses stretching through to the eight-
teenth century, the time when conventions of polite
architecture began to affect the appearance of the
more substantial farm houses.

The book is well produced, although there appear
to have been some cost-constraints: more photo-
graphs would have been helpful; there is no bibli-
ography; the index, which separates persons and
topics, has no entries for places. One disappointment
is that the book appears to have been com-
pleted at an early stage in the gathering of
dendrochronological dates from the midlands, for
the determinations for houses at Stoneleigh are
mentioned only in passing.

DAVID CROSSLEY

COLUM GILES and SUSANNA WADE MARTINS, eds,
*Recording Historic Farm Buildings*, Historic Farm
A conference on the recording of historic farm
buildings was held at the Kings Manor, York, in
January 1994: the papers which were presented are
reproduced here in a publication co-sponsored by
the Royal Commission on the Historical
Monuments of England. They reflect the growth
of interest and of field survey in the twenty-five
years since Peters' pioneer study of farms in
Staffordshire awakened archaeologists and econ-
omic historians alike to the potential of the subject.
The contributors are Susanna Wade Martins on
documentary research in the recording process,
Eurwyn Wiliam on methods of recording with
reference to north-east Wales, Edwin Course on
recording farms in Hampshire, Susan Denyer on
documenting National Trust farm buildings in the
Lake District, Jeremy Lake on problems of listing,
Jane Wade on recording farm buildings in Kent,
and John Shaw on identifying farming systems from
building evidence in Scotland. The papers, and the
digest of discussion, highlight current matters of
interest: stress is given to complementing field and
archive research, to problems of sampling and of
access, and to the use of building-detail to show
the kinds of equipment and the systems of farming
formerly in use. Reading these contributions raises
the question of the extent to which the archaeolog-
ical recording of farm buildings has assisted in their
preservation and sympathetic re-use. It is true that
these studies have aided the provision of guide-
lines for list-revision, but for the majority of listed
buildings, at Grade 2, securing protection has relied
on attitudes of local authority planning departments
and the vigilance of local observers. There is a
diversity of official reactions to threats or to pro-
posals for conversion: it is the minority of planning
officers who are prepared to help applicants for
listed-building-consent towards sympathetic rem-
edies to problems of making use of awkward or
redundant buildings. The circulation of this brief
and easily-read set of papers may add to their
numbers.

DAVID CROSSLEY

J V BECKETT and J P POLAK, DOROTHY RIDEN, DAVID
KIERNAN, eds, *A Seventeenth-Century Scarsdale
Miscellany*, Derbyshire Record Society, XX,
While the editing and publishing of primary sources
is always welcome in the interests of greater accessi-
bility, such works frequently do not provide their
readers with a clear context in which to place the
primary material. However, in this admirable book
such a pitfall is generally avoided by different editors
providing a lengthy, but clear introduction to each
of the three sections. The items in the miscellany
– the Scarsdale Surveys of 1652–62; the
Autobiography of Leonard Wheatcroft, 1627–1706;
and Lawrence Oxley's Accounts, 1672–81 – present
varied and interesting insights into seventeenth-
century life in north-east Derbyshire.

All the introductions provide some details of the
nature and disposition of the source and the conven-
tions used in the editing. They also highlight
deficiencies within the source and set it in a local
or family context. In addition, the first introduction
ranges further and presents a fuller perspective. The
reader is given a clear national, regional and local
context in which to place the four Scarsdale
Surveys. Detailed endnotes are provided and an
appendix contains a useful analysis of the 1652 and
1662 surveys. As with most surveys of this period,
the information collected varies from township to
township and over time. However, the introduction
provides a commentary on the sources enabling
even the non-specialist to make sense of the
accompanying documents. The surveys presented
in the book are deposited in three record offices,
Sheffield, Nottingham and Derbyshire. In bringing
them together, a readily accessible source book is
provided, giving information on local methods of
taxation (including soldier ratios) and on many
aspects of the local economy (farming, mining, metal trades, etc).

The Autobiography of Leonard Wheatcroft which includes the narrative of his son, Titus, provides an insight into the life of a man who was, among other things, a teacher, a parish clerk and a gardener. It is a useful addition to similar work which is available for the period, by capturing the attitudes of such people and their relationships with family and community. It also shows the extent of mobility and the importance of kinship networks with Leonard and his family travelling great distances, sometimes on foot, to visit each other. The introduction to the section provides a wealth of detail about the family and the provenance of the document but it would have been helpful if the source had been placed in a broader context. There is, however, a useful glossary accompanying the Autobiography.

The final source, Oxley's Accounts, provides information on a lead merchant’s modus operandi in the seventeenth century, particularly in terms of shipping lead to London, dealings with merchants and methods of payment. For example, the settling of bills frequently involved complex transactions. To avoid sending cash long distances, bills for payment due for lead sold in London were often offset against purchases in the capital by Derbyshire lead merchants, and this invariably involved a chain of debtors and creditors. The introduction includes an interesting analysis of the Derbyshire lead industry, but some reference to both the industry nationally and developments in other areas in the period would have provided a clearer context for understanding the source.

The three documents are very different, which makes their inclusion in this miscellany all the more fascinating. Material is provided here which gives a broad perspective and helps the researcher to feel the pulse of the Scarsdale community in the seventeenth century.

CHRISTINE HALLAS


This study of the estate steward is based on estate papers from counties as far apart as Northumberland and Cornwall, which Hainsworth has studied on periodic visits to England from his base at Adelaide. It grew out of his original work on Sir John Lowther in Cumberland during the 1990s, which was published by the British Academy in 1983 and it is based, inevitably, on the enormous correspondence kept up by the more efficient stewards (and owners!) when they were physically separated.

First and foremost the steward managed the estate, and that gave him a critical role in the relationship of landlord and tenant. He had to serve locally as his employer's voice, eyes and ears, and as his local ambassador mediating between 'otherwise irreconcilable extremes' (p 5). Hainsworth dissects the roles. He looks at how men became stewards, how they carried out the duties involved, including those of election agent, dispenser of charity, defender of the landlord's interests, and clerk of the works for building projects. He examines the relationships they developed with their employers, and the numerous problems they encountered, as, for example, in making financial returns to their master in London.

Hainsworth has written a useful guide. My main reservations are first that the limited time span (broadly defined as 'later Stuart') gives little opportunity for him to show how the role changed and developed; and second that there is not really enough attention paid to the problems encountered by landlords when it came to disciplining and controlling the steward. A couple of references apart, Hainsworth’s stewards are all upright and honest. Perhaps they were, but given the literary emphasis on how to choose an honest and trustworthy man one is forced to wonder whether they really were such paragons.

J V BECKETT


This is an attractively produced book on the history of sheep in Norfolk, Suffolk and Cambridgeshire, from Domesday Book to the present day. It is accessible, profusely illustrated, and should appeal to a wide readership. At the same time it is a scholarly work with sound academic credentials. It embodies much new research, has considerable quantitative information on the spread of new breeds in the nineteenth century, and has a good bibliography.

Before the nineteenth century the dominant sheep breed in the region was the Norfolk, a 'black faced, horned, leggy animal suited to ranging over wide areas of heath and stubble'. This was the animal at the heart of the East Anglian foldcourse, valued for its fine wool and its dung, rather than for its mutton. The Norfolk survives today, although not in a pure-bred form, and the later chapters of the book are devoted to a discussion of the few breeding flocks remaining in the twentieth century.

From the late eighteenth century onwards the
Norfolk was eclipsed by new breeds more suited to the new husbandry involving the cultivation of turnips and clover in enclosed fields. A more docile animal was required for these conditions, and the availability of better fodder meant that the production of mutton became a much more important part of farm enterprises. The first of these new breeds was the Southdown, probably introduced by part of farm enterprises. The first of these new breeds was introduced to the region about the same time. Both were extensively promoted through the famous sheep-shearings under the patronage of Thomas William Coke.

As the nineteenth century progressed a number of crosses or half-breeds developed, such as the 'Leicester and Down', but the most successful was the 'Down and Norfolk', which was to achieve lasting popularity as the Suffolk, a cross between the Southdown and the Norfolk. The Suffolk was developed in two regions of Suffolk in the mid-nineteenth century, but it was not until 1886 that the Suffolk Breed Society was formed.

Twenty-six pages of the book are devoted to a meticulous analysis of the spread of new breeds from 1790-1860 by Susanna Wade-Martins. By using the evidence of farm sale particulars she is able to map and graph the diffusion of Southdowns, Leicesters, and half-breeds, while also tracing the 'disadoption' of the Norfolk. Curiously, farm sale particulars are described as a 'little-used source' and the bibliography book excludes the work of John Walton who pioneered the use of this source for the study of the diffusion of new sheep and cattle breeds in the nineteenth century.

The original work here on the diffusion of sheep breeds would have benefited from explicit comparison with Walton's. This failing is symptomatic of the book as a whole, since, despite its bibliography, it does not engage with the existing literature on English agriculture in the nineteenth century. But there is much new information here for the agricultural historian to quarry, and the background story to the most popular sheep breed in Britain today.

Evidence of Swing's activities in Lincolnshire. The principal purpose of Russell's volume is to publish documents collected in his lifetime's work under the auspices of the WEA and the Adult Education Department at the University of Hull. Most, but not all derive from the local press, and historians will no doubt quarry this material. Russell's principal argument is that farmworkers' energies behind the incendiarism which dominated social protest between 1830 and the later 1850s were increasingly channelled into the numerous Friendly Societies which developed from the late 1850s, and into Dissent, notably Primitive Methodism. If the Friendly Societies were somewhat eclipsed by farmworkers' trade unionism and the 'Revolt of the Field' in the 1870s, Primitive Methodists played an important part. Both organizations survived the collapse of unionism in the late eighties. Lincolnshire farmworkers' unionism is also documented in these pages. The period from the mid-1840s to the early 1870s remains the dark age of English agrarian labour history. Russell's thesis deserves systematic analysis throughout the English regions, though historians who engage in such an exercise and aim to lighten the darkness, should not overlook the importance of multi-farious criminal activity, whether categorized as social protest or not. Nor should they ignore especially the temporary combinations and strikes over harvesting contracts which also characterised the golden age of farming in the mid-Victorian years. Violent protest against itinerant Irish labour - periodically virulent in Lincolnshire and elsewhere - also warrants more than token acknowledgement.

ROGER WELLS

K D M SNELL, ed, ALEXANDER SOMERVILLE: Letters from Ireland during the Famine of 1847. Dublin: Irish Academic Press, 1994. 219 pp. IR£12.95; DONALD E JORDAN, JR, Land and Popular Politics in Ireland: County Mayo from the Plantation to the Land War, CUP, 1994. 369 pp. £21. The commemoration of the Great Irish Famine of 1845–50 is bringing to light previously unknown undervalized sources. This is evident in the publication of diaries such as Robert Whyte's and this reviewer's editing of John J Laird's account of famine passengers to Grosse Isle, which will shortly appear in Béilife. These and the recent analytical works of Christine Kinealy, Donal Kerr and Cormac Ó Gráda are important in that they help us re-evaluate our approach and understanding of this great catastrophe. Alexander Somerville's letters during 1847 are another source in this process. The situation in 1847 is made more significant by the other famine years, being called 'Black '47'. The crises of
1845 and 1846 resembled the periodic potato famines of the 1820s and 1830s and did not create the widespread panic that was aroused in 1847, when the potato crop was a total failure.

Alexander Somerville came to Ireland to report for his newspaper, the Manchester Examiner, and the letters were written between February and April. Coming from a Scottish agricultural labourer's background he had a certain sympathy with the Irish and the poverty and destitution that they endured. He had been to Ireland in 1843 and was able to see the catastrophe that was about to descend on Ireland because of its rising population, subdivision of holdings and dependency on the potato. Blaming the landlords, he stated that they were 'at the bottom on the scale of honourable men'. Somerville was as scathing of Catholic landowners as he was of their Protestant counterparts: the nationalist politician, William Smith O'Brien coming in for particular condemnation. He criticized them because they contributed little to the relief efforts. However, others, like George Henry Moore and the Marquis of Sligo, got into financial difficulties because of their benevolence. While he was critical regarding the landlords, he does not attack the British government for its response to the Famine. His argument was that if it was not for the generosity of the British people the situation in Ireland would be worse.

Somerville's account differs from many of the other tourists who visited Ireland before and during the Famine in that he used different contacts and sources to secure his information. Not surprisingly, the landlords, their agents and the local clergy were not his main source. Throughout his writings he compares and contrasts the regions he visits with areas in Britain as to agriculture, size and population. He realized that changes were needed and advocated a system which would facilitate the easy transfer to commercially-minded landlords, not to the tenants. Unfortunately, he gives few graphic accounts of the effects of the Famine itself. There are hardly any descriptions of the suffering and despair which are evident in the contemporary writings of poverty and distress in post-Famine Ireland. One would have thought that as he was reporting for a newspaper that graphic illustrations of hunger would have been included. Nowhere is this more startling than in Strokestown where no information is provided of the conflict between the tenants and the principal landowner, Denis Mahon. Somerville was more inclined to provide background information and make suggestions as to how the situation could be improved, as with how the power of the river Shannon could be used. He was trying to cover as much of the country as possible and thus confined himself to those centres which were accessible by public transport. Consequently he never came into contact with those areas where the hunger and distress were greatest: Connemara, West Cork, West Mayo and West Kerry.

While the letters informed English readers of the background situation in Ireland during the Famine, they did not tell of the level of destitution in the country. While the letters will inform to-day's readers of what the English were being told, the book does not rank as being of major significance for those wishing to know the day-to-day events during this great catastrophe.

During the Famine an Irish emigrant on arriving in New York was asked where he was from and replied, 'Mayo, God help us!'. This attitude prevails to the present day and in the opening analysis to his book Donald Jordan states that Mayo was the poorest county in Ireland. When the Famine occurred there were nearly 400,000 people in the county and it had the highest rural population density in Ireland. Mayo was plagued by the subdivision of small, poor holdings and an unhealthy reliance on the potato. It was therefore inevitable that the Famine of 1845–50 had such a major impact, with the population declining to 274,000 in 1851.

The book is based on a thesis which was centred round Mayo between 1846–81, and while the first one hundred pages deal with Mayo up to 1846, the main core examines the county after the Famine. Unfortunately, this unbalances the overall approach and one must question the publisher's insistence to pursue this course. While the post-1856 sections are analytical and incisive, the earlier sections are primarily narrative. Nevertheless, Jordan provides an important insight into the economic, social and political situation, as is exemplified with his treatment of the growth and decline of the linen industry – the mainstay of the Mayo economy in the eighteenth and early nineteenth centuries. He also argues that the agrarian radicalism on the 1870s and 1880s had its origins in the last decades of the eighteenth century. Before the 1790s there was little protest or agitation against authority or landlordism because of strong economic activity. It is correctly pointed out that the 1798 French invasion had no lasting impact on the county, but declining economic factors and the continuing threat of famine produced the agrarian agitation. Unfortunately, the excellent work of Desmond McCabe on crime and society in pre-Famine Mayo was not consulted to indicate the people's attitude to law and order in this period.

Over the last two decades the study of the county
unit has been gaining prominence, starting with James Donnelly's study of nineteenth-century Cork, followed by Mary O'Dowd's work on seventeenth-century Sligo and Thomas P Power's more recent analysis of eighteenth-century Tipperary. The county approach has much to recommend it, as it examines the community from the bottom up, rather than the more traditionalist approach from the top down. At times, Jordan fails to utilize this approach, as some of his conclusions are transposed from the national scene onto the county unit, as with his treatment of the Famine, the Ladies Land League and the rise of the urban groups within the boards of guardians. He was not aware of the work of many of the researchers who have completed and published work on Mayo over the last ten years. There is also the failure to consult the Murray Papers in the Dublin Diocesan Archives on the Famine in Mayo and the Mansion House Relief Committee Papers in the Dublin City Archives.

Jordan divides the county into a periphery and core, the latter being in the Ballina, Westport, Castlebar and Ballinrobe region, comprising large farmers who were agriculturally more progressive. Unfortunately, he tends to over emphasize the significance of the zones, for it is incorrect to state that parishes like Glenisland, Islandeady, Addergoole and Kilmeana (in the core) were different from Carracasde, Mulrany or Glenamoy (in the periphery). Subdivisions, involvement in seasonal migration and the wholesale destitution of the 1840s and 1879–83 were common to all of them. However, he is correct in his assertion that parts of the county, and especially those in the extreme east and west, continued to have a pre-Famine existence until 1881, largely due to the importance of seasonal migration remittances from Britain and the selling of eggs. One of the strengths of the book is an account on the pre-Famine social background, and detailed maps and charts are provided. The analysis of rents in the county is an example of how the local and national situation are often at variance, as he points out that the Marquis of Sligo and the Earl of Lucan, among the largest landlords in the county, extracted rents which were well above the national level. This indicates that further research needs to be carried out on other localities before the national picture that W E Vaughan has argued can be accepted.

The section on the Land League is well focused, bringing together the theories of Clark, Bew and Feingold on the land question within Mayo. The reader is provided with the political, social and economic backgrounds, and the national and local analysis complement each other. Detailed surveys are provided of the Irishtown and Westport land meetings, the clergy's role, the Boycott affair, the 1880 general election and the divisions which beset the local movement from the summer of 1880. There are also excellent accounts of the contributions of James Daly, John J Louden, J W Nally and others, which highlight the significance of local individuals. While there are faults, mainly brought about by the publisher, this is a book which will be an essential text for anybody interested in researching the Irish Land War at a local or national level. More importantly, it is an important contribution to the growing volume of material on nineteenth-century Mayo.

GERARD MORAN

OWA BOONSTRA, De waarde van een vroege opleiding: een onderzoek naar de implicaties van het alfabetisme op het leven van inwoners van Eindhoven en omge- gende gemeenten, 1800–1920, AAG Bijdragen 34, Wageningen NL, Landbouwuniversiteit, 1993. xvi + 464 pp. 67 tables; 21 figures; 2 illustrations. No price stated [Also published as a doctoral dissertation for the Agricultural University of Wageningen, and commercially by Verloren (Hilversum), Hfl 50].

This is a study of the disappearance of illiteracy in the Netherlands, one of the most literate nations of Europe. By 1890 only 5 per cent of Dutch bride-grooms and 10 per cent of brides were still unable to sign their names in the marriage registers. The decline of illiteracy is dealt with in a wide sweep covering the general trends in the whole of Europe (chapter 2), but Boonstra also has his own particular approach: he wants to investigate the relationship between increasing literacy and the process of modernization in the Netherlands. To that end he takes a substantial dataset from Eindhoven (an industrializing town in the later nineteenth century, and home of the electronics giant Philips) and five surrounding administrative localities. The data document some 20,000 individuals, sampled from households recorded in the population registers for the years 1850, 1890, and 1921. Each individual has a host of variables attached (including of course whether he or she can produce a signature), which are designed to inform us about the individual's and household's social mobility, and demographic and migratory behaviour. These data are all fed into a series of computer packages, in order to 'investigate whether those who learned to read and write chose a more modern behavioural alternative' (p 6). The results tell us, generally speaking and with reservations, that they did.

There are inevitably problems with this subject. The theoretical debate engaged is that surrounding 'modernization', which has been very well aired over recent decades but which is by no means...
resolved, and indeed it is back with us more than ever because of the whole post-modernist debate now current. Boonstra maintains — reasonably — that economic, social and cultural 'modernization' in the nineteenth century went together with a decline in literacy, and that there was an interdependent mutuality between literacy and modernization, each facilitating a little more of the other in turn. At a local level, certain illiterate parents caused their children to learn to read and write, while others did not. Boonstra seeks to document that difference and to explain it. The idea seems fine, but it is the exposition which is problematic. How do you operationalize or measure 'modernization', even if it can be agreed that the concept is a valid one? Boonstra opts for three sets of variables, covering reproductive behaviour, migratory behaviour, and social mobility. Essentially, the hypothesis to be tested is that literate people will be more likely to conform to 'modern' demographic patterns (like a lower marriage age and lower child mortality), will be more prepared to travel further from their birthplace in search of economic opportunity, and will tend to work in a profession different from those of their parents. The problems are twofold: on the one hand the hypothesis hardly needs proving, in that one would expect 'modern' people to behave in a more modern way, but on the other hand there are unresolved issues about the direction of causation, and whether a particular kind of behaviour is essentially 'modern' in the first place, as opposed to any other kind. Given these problems, Boonstra does very well. He is masterly in dealing with his quantitative material. Not only is he enviably at home with advanced statistics and computer packages (he has authored several guides to the methods and sources of quantitative history), but he appears to be something of a specialist in the methodology of this kind of multi-variable analysis. His prose style is by no means the archetypically alienating one of the 'hard' social scientist, but is varied and even intimate — on occasion almost verging on the 'Dear Reader ...'. His dataset is second-hand, collected some time ago by armies of volunteers under the supervision of two senior demographic historians, Henk van Dijk and Ad van der Woude. This was done back in the days of punch-cards, and could have been a nightmare to use, but Boonstra views it as a virtue: why do all that work if the dataset is sitting around just waiting to be used? One of the most complicating aspects of social history in the Netherlands is the question of religious denomination, but by choosing a monolithically Catholic area (which was well behind the Calvinist north in its advance towards the literacy of the masses), Boonstra neatly sidesteps the problem without invalidating the analysis.

The subject under investigation is an important one: the economic transformation of Europe in the long nineteenth century was probably dependent more than anything else on the social modernization of rural and small town populations (Milward and Saul, Development of the Economies of Continental Europe 1830–1914, 1977, p 529), and it is especially for that reason that this book is important to historians of agriculture. It is also falls squarely in the tradition of the ‘Wageningen School’, with its easy mastery of complicated quantitative data about a single region over a long timespan. Partly because Boonstra did not collect his own data, the material is not always capable of providing the answers required of them (chapter 8 on migration), and sometimes the answers are contradictory (chapter 7 on social mobility). There are problems with the whole concept of what is 'modern' behaviour, and the ways in which it is linked to the development of our own world today. But this meticulous study (with a well translated English summary) goes some way to sorting out the issues at stake.


This book is a complex mixture of political history, but employing an agrarian base, in which a sharply critical gaze is cast over neo-classical views on the role of the market. In addition it is written by a rural sociologist. In consequence, for a book of fewer than 180 pages of actual script, an awful lot of reading has gone into it. Some scholars may think their views have been distilled too radically. The author is concerned with the dilemma which faced late nineteenth-century governments in reaction to the agrarian crisis of depressed prices. This dilemma was the confrontation in choice between the maintenance of free market forces against calls for increasing state intervention. In political terms an important focus is on the strength of the landed interest in domestic political affairs. The analysis is in three parts: it opens with two thought-provoking introductory chapters in which the conventional historiographical account of the rise of agrarian capitalism is laid bare; a series of four chapters follows on the phases of agricultural development from 1846 to 1919 and beyond (1846–73, 1873–late 1890s, 1890s to WW1, WW1 and beyond); and it closes with a short chapter of 'Discussion'. The author starts from the modern European system of price support which interferes with the market and encourages unnecessary farm surpluses. Furthermore, the persistence of price support may
be related to the political strength of the agrarian sector. This starting point is easily transferred back to the late nineteenth century if it is thought that agrarian protectionism was at the beck and call of hegemonic landed elites in many European states. If this was the case then protectionism as a reaction in some countries to price collapse precisely displayed the continuing influence of landed society. In doing so, amongst other things, it stultified an agricultural system which demonstrably was undergoing change. The author believes, however, that any understanding of the role and reactions of late nineteenth-century states to the crisis facing agrarian capitalism can only be understood if at first the characterization of the rise of agrarian capitalism is correct. The author maintains that there is a false understanding of that prior rise. Historiography has placed too much emphasis on the power of landed society relative to the rising commercial interests of the eighteenth and nineteenth centuries, and too little emphasis on their interlocking development. Nevertheless, the crisis for agrarian capitalism was brought to a head in the last quarter of the nineteenth century when the free market and agricultural overproduction resulted in a prices depression, squeezed profit margins for the landed interest, a resurgence of family farming in some places, and a fear in the minds of some European states of a future dependence on external supplies. The culmination of the crisis was the call for protection.

The four countries employed to investigate the politics of this dilemma are well chosen – they are good representatives of the general evolution of industrial capitalism, but in terms of political evolution they exhibited a great deal of variation, as they did also in the development of agrarian capitalism and agricultural structures. Britain is characterized as the classical country of agrarian capitalism, the Netherlands as a country where family farms were more common, and the mixture of larger estates and smaller farms encountered in both Germany and the USA placed those countries somewhere in the middle. Given this mix of situations with their divergent histories and rates of economic change, it is little wonder that the reaction of the individual states to the agrarian crisis of overproduction was as it was, different. To this extent the author, in my opinion, comes to no startling conclusions. He does so by giving a very standard, but nevertheless very good agricultural history of the period 1846–1919, but in which attempts at revisionism and counter-revisionism are not always convincing. The way that the changing situations in the four countries are crafted into the story is very clever and the range of reading is immense, but the promise which was held out in the introduction is never brought back into focus in what is a rather short chapter of final discussion.

Perhaps where this book begins to make a worthwhile contribution is the fact that it comes in the wake of Avner Offer’s thought-provoking study of 1989 of the agrarian interpretation of the First World War. The extended agricultural base of Britain into its empire suggested that protection was not necessary, in contrast to the narrowness and therefore vulnerability of the agricultural base of the central European powers, whose empires were small and ill-developed in terms of new and expanding agricultural resources, and who never envisaged such a long campaign. The virtues of a high degree of self-sufficiency in food production, and also of stock piling and access to external supplies, was exposed during the four years of seemingly interminable conflict. In this thesis Britain survived because of the strength of its agricultural base overseas, through its empire and trading affiliations, while the German crisis was the product of liberal agricultural policies during the preceding decades of agricultural distress. But the German war effort might have ended earlier if it had not been for protection during those same decades. Apparently therefore, protection for her did not guarantee anything except in delaying the outcome.

MICHAEL TURNER


This study makes a careful, painstaking examination of agricultural changes in the state of Tennessee between 1850 and 1880. It is concerned with analysing the character of the farming before the Civil War and as changed by that conflict, and is based on a sample of eight of the state’s counties. This is a small sample, but the counties are chosen to illustrate three different farming regions, the mountain and valley district of eastern Tennessee, the more fertile middle region of the state, and the south-west, which was the home of cotton and the plantation system. Although the author emphasizes the diversity he finds, he is concerned also to stress the existence of certain fundamental similarities, in the scale of the farming, the extent of self-sufficiency, and the distribution of wealth. He argues that self-sufficiency, so far from supporting an admirably independent way of life, was associated with poverty, and the greater the remoteness from markets the greater the poverty.

The effects of the war and abolition of slavery were necessarily most felt in the south-western plantation region, but the author finds that in some respects similar changes were experienced
over all three regions. All showed a fall in the size and value of the farms, an increase in the numbers of farm units, an increased role for tenancy, and a decline in food output and self-sufficiency. One effect of abolition was to bring about a massive redistribution of wealth (slaves making up a high proportion of pre-war wealth), resulting in a reduction in the pre-war disparities in wealth across the regions.

It is interesting, however, that factors other than the war, abolition, and post-war agricultural reorganization, were also influential. Tenancy increased, in part, because of a rise in the white population and a movement of landless whites to become occupiers of farms. The majority of the freed slaves, however, remained despite some exceptions at the bottom of the social ladder as wage labourers, rather than becoming sharecroppers or tenants. The post-war decline in self-sufficiency, also, was in part due not only to the increase in tenancy, and consequently cash crops, but also to the falling proportion of land and livestock to farm population.

Dr McKenzie is modest on the implications of his research. As he remarks, there is no guarantee that his eight counties are typical of the vastly larger area of the whole state, nor that Tennessee is itself typical of the South as a whole. But he certainly points to directions in which further research might proceed, and his findings will make historians of the South more cautious in framing broad generalizations which neglect the true diversity of agricultural experience.

G E MINGAY


In the course of the two decades preceding 1914 wheat production in Argentina rose by 100 million bushels, and in Canada by over 150 million bushels. Argentina came to produce 12.6 per cent of world wheat exports, and Canada 14.2 per cent. In Argentina the wheat acreage rose by more than 12 million acres, in Canada by well over 7 million acres. In both countries expansion of wheat production was affected by the growth of the world market and by world prices for wheat; it was affected also by the large flow of immigrants wishing to make good, and the availability of imported capital.

There, however, the similarities end. The theme of this book is the need to shift the emphasis away from external influences, and to draw attention to the internal factors which resulted in markedly different structures of land-holding and land exploitation.

In Argentina, despite political and social sentiment in favour of creating a class of owner-farmers similar to that of the wheatlands of the United States, arable farming came to be dominated by tenants of large estates. Liberal, indeed excessively liberal, land laws failed to plant communities of owner-farmers, primarily because the large-scale ranchers were already there, and in the absence of government controls ranchers and speculators were able to obtain an even more extensive grip upon the land. Over much of the country arable farmers leased their land from the estancias, and since the object of the farmers was to make money quickly and then move on, it suited them to have short-term leases which did not commit them to large investments in fixed capital.

In Canada, by contrast, the future wheat lands were unoccupied, and settlement came later than in Argentina. Canadian farmers became owner-occupiers primarily because land was freely available and was cheap, partly because buying land, if only for speculation, was seen as the avenue to wealth. Shortage of labour, intensified by the ease with which farmworkers could convert themselves into farmers, meant dependence on the family unit, and on machinery, to a greater extent than in Argentina, while Canadian policy discriminated in favour of immigrants from northern Europe who intended to establish permanent farms. Argentina, on the other hand, adopted a more open policy which attracted southern Europeans, especially Italians, whose objective was to accumulate savings in the countryside and then either return to Europe or move to the cities. For these migrants high wages and low rents were the attractions; for Canadian migrants cheap land and the prospect of enjoying a more prosperous life as independent permanent farmers in a new country;

Eventually it was the continued inflow of migrants which undermined the prospects for achieving success in both countries. In Argentina the excessive inflow pushed up rents for those wanting to farm, and pushed down wages for those intending to make good as farmworkers. In Canada land worth farming was not unlimited, and in time land prices rose. The farmers’ need of capital for establishing their farms put them at the mercy of banks and other lenders, and especially so when wheat prices plummeted in 1894–5; they suffered again in the financial crisis of 1914 and again in the depression of the 1930s. With less capital at stake as tenants, Argentine wheat growers were not so exposed to such risks. In any case, they found it difficult to borrow from banks and had to rely for what capital they needed on merchants and other informal lenders, while with lower debts and more short-term operations they suffered less from falls
in prices. Ultimately it was the different pattern of land exploitation in the two countries that determined the nature and success of the farming enterprise. The highly detailed exposition of this theme is embedded in a discussion of the historiographical background to frontier development in the two countries, and more widely. Apart from his own researches the author has delved deeply, and thoughtfully, in the great expanse of relevant literature. The result is a work of greater depth, scope, and significance than the title might suggest.


The central issue here is the shift to continuously higher rates of productivity increase in American agriculture in the middle 1930s, a shift which coincided with the introduction of New Deal regulation of farming. The significance of the change may be judged from land productivity figures for the corn belt. In the years between 1917-19 and 1928-29 the number of bushels per acre rose by only 0.9 per cent; but in 1928-29 to 1938-39 by 27.0 per cent (and continued to rise thereafter). Labour productivity also rose, the number of hours required to raise an acre of corn falling by 11 per cent in the 1920s, and by as much as 17.8 per cent in the 1930s.

What lay behind this remarkable move to greatly higher levels of productivity? The answer in this book is that the effects of New Deal intervention in the market changed the investment climate for farmers and encouraged them to take up the tractors and other machines which had been neglected previously because of fear of incurring excessive financial outlays. The new regime of stable prices and new sources of credit, together with lower interest rates, caused manufacturers to extend the length of their loans and induced farmers, despite the depression, to make new initiatives in investing in machinery. In the corn belt the number of tractors roughly doubled between 1930 and 1939, and at the latter date as high a proportion as 80 per cent of some types of farms had tractors.

Ultimately, the rapid growth in productivity, falling prices after the Second World War, and changes in government support, led to a thinning out. The more efficient and aggressive farmers invested in more land and more advanced technology; the smaller and weaker ones gave up voluntarily. The proportion of foreclosures by lenders remained very low until the middle 1980s. By then, however, the prosperity of the 1970s had encouraged farmers to further extend themselves, and now, in the 1980s, the markets failed them: a combination of reduced exports, falling farm incomes and higher interest rates led to a collapse in land values, with many heavily-indebted farmers unable to service their loans.

This is merely the bare bones of an intensively-researched and highly detailed exposition. Agricultural regulation in America has long been a much discussed subject and is a complex story in itself. What is important here is the integration of the effects of farm policies with farmers' investment decisions and the changing character of the farm structure. Despite enormous injections of taxpayers' money, farming remained an uncertain and risky business, the more so when, in the late 1970s, a third of the farm acreage was devoted to export markets, leaving farmers heavily exposed to the consequences of unforeseeable fluctuations in the value of the dollar.


The Centre for Business History at the University of Leeds was founded in 1992 as a multidisciplinary regional research centre. With commendable speed it seized the opportunity of the centenary of the city's incorporation the following year to publish ten essays on the histories of leading Leeds businesses, ranging from such well-known names as Burton's, Tetley's and Waddington's to the locally famous, such as 'Soapy Joe's', the soap manufacture of James Watson and Sons Ltd. Each of the individual histories has been presented in the wider context of the city's economic development over the last hundred years. Leeds is different from most of its northern neighbours in not being too reliant on a single industry; instead, its varied structure has served it in good stead during the economic downturn of the 1980s and '90s. Diversity is the most striking feature of the Leeds economy that is revealed by these studies. That, and the way that the city has successfully adapted to change in the later twentieth century. The strong local roots that were so characteristic of early Leeds industry are no longer as evident, now that the clothing firms have declined or disappeared, while other firms have expanded into national or international businesses. The diversity of the local economy is still clear, however, from the estimate that over 20,000 companies now operate within the Leeds Metropolitan District, 89 per cent of them employing less than 25 people.
Agricultural historians will find chapter 5 of most interest. There, John Chartres traces the history of Joshua Tetley & Sons since its involvement in the tied-house trade from 1890 until its merger into the Carlsberg-Tetley plc group and Allied-Lyons Retailing Limited just over a hundred years later. Joshua, the third son of William Tetley, maltster, wine and spirit dealer, of Armley, had purchased the brewing business of William Sykes, at Salem Place, Hunslet Lane, in 1822, which Sykes had already run for thirty years as one of the six common breweries of Leeds. By the third quarter of the nineteenth century Tetley’s was the sole survivor of this early group and the largest brewing enterprise not only in Leeds but probably in Yorkshire. It remained extraordinarily dominant in and around Leeds. Until 1890 Tetley owned no public house property, but then, somewhat belatedly, it switched policy and followed the pattern that was already well established in London and the other leading cities. Another major change in 1892 saw the adoption of bottling in response to competition from nearby firms in Burton and Tadcaster. The consequent growth of the business led to improvement of the plant and the demolition of outmoded buildings. The twentieth-century history of the firm is related here to national developments, culminating in the giant mergers of the 1960s onwards and the enforced severance of the tie between the brewery and the public house estate in 1993. The history of the national brewing history is encapsulated in this illuminating history of a single firm, a Leeds business that has grown from a regional supplier to a household name.

Other chapters deal with the histories of the Yorkshire Post Newspapers, the Leeds Permanent Building Society, the public supply of gas, John Waddington, Montague Burton, Joseph Watson, and Charles Thackray, with an introduction, and a concluding chapter on the economy of Leeds in the 1990s. This collection of essays makes business history accessible to a wide readership. Each one tells an interesting story in a readable manner, while at the same time being scholarly and well-documented. The illustrations are often striking and at the same time being scholarly and well-documented. The illustrations are often striking and

David Hey


Richard Lacey’s book is certainly interesting, informative, and entertaining: it belongs to the genre of 'popular science' rather than history, eschews academic stuffiness, and is nothing if not easy to read. But it is not what its title suggests – it is not a history of food. Apart from a few sketchy backward glances at farming in remote antiquity, there is very little on how food was produced or what people ate in the past.

Instead, the author, professor of clinical microbiology in the University of Leeds and a well-known media critic on food issues, takes the reader systematically through the frequently unsavoury details of modern food production and processing, consumption of food, and retailing and cooking of food. One learns a good deal about cholesterol and polyunsaturated fats, the alarming number and variety of food additives (often of uncertain long-term effects), and the not inconsiderable risks of suffering food poisoning. Some dangerous practices of popular takeaway establishments are pointed out, while the housewife’s management of her refrigerator does not escape censure. Professor Lacey considers, among many other matters, the disturbing nature of modern intensive rearing of livestock, the hazards of cook-chill catering, and the potential risks of modern food production methods.

He is also less than enthusiastic for the present fad of bottled water which, he says, is not much more risky than tap water ... the price is no more than that of lager, the plastic bottles are not less biodegradable than any other plastic bottles, the weight of carrying them around must surely be good exercise, and they must provide good employment for thousands of people and help use up some of the world’s excess natural resources to provide energy needed for their distribution.

By contrast, the author finds not a single instance of poisoning from contamination of commercially produced beer. Indeed, since, as he notes, beer kills salmonella bacteria, it may be regarded as an antiseptic.

The old-fashioned kinds of breakfast cereals are described as ‘one of the major successes of the food industry’. Slimming diets, however, though generating large revenues for their producers, generally fail – primarily, he argues, because they involve eating. And the author is lucid and informative on the importance of vitamins, medicinal herbs, sugar, salt and fibre. He concludes with an extended discussion of ‘the ideal diet’.

Perhaps the major point which is of special relevance to agricultural historians is Professor Lacey’s telling argument against the divorce of arable from animal husbandry in modern agriculture, and the current obsession with efficiency and high output. Mixed farming systems, and the traditional role of livestock in maintaining soil fertility, have become obsolete, leading to excessive use of fertilizers, over-production, and the absurdity (long part of farm policy in the United States) of paying farmers for not farming. Public insistence on cheap food fosters high production and cruel methods of
intensive rearing of livestock, while the power of supermarket demand for unblemished produce of standard sizes necessitates heavy use of chemicals and appalling methods of livestock production. The nub of the problem is the overriding influence of market forces. But, asks Professor Lacey, is the public willing to make the changes, and pay the price of having more environment-friendly, safe, and humanely produced food?
NEWS ON CONFERENCES

The BAHS holds three conferences a year. The first is its annual residential Spring Conference held at a different location each year in early April. The second is a one-day conference on a local history theme on a Saturday in September, again at a different location each year. There is good news about last September's conference held in Birmingham; initially it looked as though it would have to be cancelled because of insufficient support. However, as a result of the persistence of the organizer, Richard Hoyle, in encouraging a late rally in registrations, a number of members were able to enjoy an exciting programme of papers on Midlands agriculture in the eighteenth century.

Members of the society who feel they would like to attend a conference at this time of the year, and can suggest either local themes and venues, or strategies, which they believe would tap an existing market and draw in a significant audience are invited to contact the Autumn Conference organizer, Richard Hoyle of the University of Central Lancashire at his home address, 37 Lower Bank Road, Fulwood, Preston PR2 4NS. This year's conference will be held in Winchester in conjunction with the Hampshire Record Office on the theme of medieval Hampshire. Bethanie Afton will be conference secretary and the date of the meeting is Saturday 28 October. The final conference is also a one-day conference which is held at the Institute of Historical Research, Senate House, University of London on the first Saturday in December. For the last six years this conference has been organized by Peter Dewey from Royal Holloway College, University of London, Egham. Peter is now taking a well earned rest after six successful conferences, and for 1995 he will be handing over to John Broad of Whitelands College, University of North London. John has arranged a conference for Saturday 2 December on the theme of 'Farming and the Farm'. Speakers will be Susanna Wade Martins, Christopher Thornton, Tony Phillips, and Colum Giles. Susanna Wade Martins's latest book Farms and Fields has just been published by Batsford in their 'Know the Landscape' series.

Looking ahead to 1996 the Spring Conference then will be held at Roehampton, Surrey. The local organizer is Peter Edwards, Department of History, Roehampton Institute of Higher Education, Digby Stuart College, Roehampton Hill, London SW15 3PH. Peter has already arranged a number of speakers whose papers will include, Peter Atkins on the geography of food production, Dorian Gerhold on local landownership patterns, a symposium featuring Sylvia Seeliger, Judy Gielgud and Wendy Thwaites on women in agriculture, Malcolm Thick on market gardening and Terry Gourvish on the brewing industry. As an added attraction, after the papers the conference will also involve a field trip to Young's Brewery at Wandsworth on the final Wednesday morning! The dates that you should keep free in your 1996 diary are Monday 1 April to Wednesday 3 April, and further details can be obtained either from Dr Edwards or the BAHS Secretary. The 1997 Spring Conference will be held at the University of Portsmouth from Monday 6 to Wednesday 8 April and Dr John Chapman, University of Portsmouth, Buckingham Building, Lion Terrace, Portsmouth, PO1 3HE, will be the local organizer.

CALL FOR CONFERENCES PAPERS

The society is always glad to hear from those willing to offer papers at conferences. If you have one to offer you can either contact one of the conference organizers, or the BAHS Secretary who acts as an overall conference co-ordinator. You should supply a title for your paper and some details, preferably in the form of a short synopsis, together with an indication of which conference(s) you will be available to deliver it to. The address of the organizers of the forthcoming conference are given above. The BAHS Secretary is Dr Richard Perren who can be contacted at the Department of History and Economic History, Taylor Building, University of Aberdeen, Old Aberdeen AB9 2UB, Fax 0224 272300.

REQUESTS FOR HELP

As part of our service to readers Notes and Comments now includes a section under this heading. This is designed for all members of the BAHS, but particularly those who are not attached to an academic institution. We hope this will provide assistance for two types of problem. Firstly, those thinking of carrying out research and who have chosen a topic, but are not too sure where to begin, or want to know who else has worked on that particular subject. And secondly, those who are well into a project but need further information to fill in gaps, or require advice on methodology. From time to time we have published lists of research in progress, but as there are intervals of some time between their appearance it is hoped this spot will fill the gap where someone wants information in the short term. This service is open to all members and if you feel it might be of some help to yourself, you are urged to send your name and address, along
with your request, to the Secretary of the BAHS, Dr Richard Perren, Department of History and Economic History, Taylor Building, University of Aberdeen, Old Aberdeen, AB9 2UB.

A REQUEST FOR HELP
John Smedley is currently working on some seventeenth-century Cornish farm accounts. To further this research he wishes to compile a comprehensive bibliography of material on the agrarian history of Cornwall. He is particularly interested in farming practices and agricultural techniques, as well as the history of all social classes within the Cornish countryside and the position of farmers as leaders within the local community. He would like anyone who feels they can help with references and information to contact him. Mr Smedley lives at 6 Treventon Rise, St Columb, Cornwall TR9 5AY, Tel 0637-880004.

Notes on Contributors

J A CHARTRES is professor and chairman of the School of Business & Economic Studies, University of Leeds. He is a former secretary of BAHS, and was editor of the Review, 1984–94. He has written on transport, domestic trade, and agrarian markets in early modern England, and contributed to volumes V and VI of The Agrarian History of England and Wales.

LINDA CRUST was born at Goxhill, Lincolnshire. After settling in Leicestershire, where she married, raised a family and trained as an English teacher, she returned to Lincolnshire. There, abetted by many farming relatives, she became engrossed in local and agrarian history. In the mid-1980s she discovered the Paddison diaries in the Lincolnshire Archives Office and has subsequently concentrated on their analysis.

NORMA LANDAU is a professor in the History Department at the University of California at Davis. She has published The Justices of Peace 1679–1760, as well as articles in Bulletin of the Institute of Historical Research, Historical Journal, Albion, Continuity and Change, and Eighteenth-Century Studies. She is now working on two projects: one on the regulation of migration in early modern England; and one on the justices of eighteenth-century Middlesex.

DR E H HUNT has taught economic and social history at the London School of Economics since 1969 and has published extensively on various aspects of British labour history, including the agricultural labourers. S J PAM teaches history at Queens' School, Bushey, where he is deputy headmaster. He is completing a PhD thesis on Essex agriculture between 1850 and 1914, the source of much of the original research for the present article. Both are Essex men.

JOHN SHEAIL is a senior principal officer and head of the Environmental Management Section of the Institute of Terrestrial Ecology (Natural Environment Research Council, at Monks Wood, Huntingdon, Cambridgeshire). He is Visiting Professor of Geography in the Loughborough University of Technology. He has published books and papers on the historical ecology of British wildlife, the emergence of policies for managing the natural environment, and the history of the environmental sciences.
Stewards, Lords and People: The Estate Steward and his World in Later Stuart England, by D R Hainsworth  
Black Faces: A History of East Anglian Sheep Breeds, by Peter Wade-Martins  
Three Lincolnshire Labourers' Movements, by Rex C Russell  
Alexander Somerville: Letters from Ireland during the Famine of 1847, edited by K D M Snell; and Land and Popular Politics in Ireland: County Mayo from the Plantation to the Land War, by Donald E Jordan, Jr  
De waarde van een vroegere opleiding: een onderzoek naar de implicaties van het alfabetisme op het leven van inwoners van Eindhoven en omliggende gemeenten, 1800–1920, by Owa Boonstra  
The Failure of Agrarian Capitalism: Agrarian Politics in the United Kingdom, Germany, the Netherlands and the USA, 1846–1919, by Niek Koning  
One South or Many? Plantation Belt and Upcountry in Civil War-Era Tennessee, by Robert Tracy McKenzie  
Frontier Development: Land Labour and Capital on the Wheatlands of Argentina and Canada 1890–1914, by Jeremy Adelman  
Regulation and the Revolution in United States Farm Productivity, by Sally H Clarke  
Hard to Swallow: A Brief History of Food, by Richard W. Lacey  
Notes and Comments  
Notes on Contributors

THE BRITISH AGRICULTURAL HISTORY SOCIETY

Articles and correspondence relating to editorial matters for the Agricultural History Review, and books for review, should be sent to The Editors, Agricultural History Review, Department of Geography, University of Keele, Keele, Staffordshire ST5 5BG.

Correspondence about conferences and meetings of the Society, and about more general matters, should be sent to Dr R. Perren, Secretary BAHS, Department of History, The University, Aberdeen AB9 2UB.

Correspondence on matters relating to membership, subscriptions, details of change of address, sale of publications, and exchange publications should be addressed to Dr E J T Collins, Treasurer, BAHS, Rural History Centre, The University, PO Box 229, Reading RG6 2AG.

Enquiries and correspondence relating to advertising should be sent to Dr J R. Walton, Department of Geography, University College of Wales, Aberystwyth SY23 3RA.

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Contributions and letters on any aspects of the history of agriculture and rural society and economy should be sent to the Editors. Articles are normally expected to be about 8,000 words in length, but manuscripts of up to 15,000 words are also welcomed. Proposals for Supplements, of length intermediate between the long article and the book, normally not exceeding 30,000 words, should also be sent to the Editors. Intending contributors are advised first to obtain a copy of the Review's 'Notes for Authors and Reviewers' from the Editors. The Society does not accept responsibility for the opinions expressed by contributors, or for the accidental loss of manuscripts, or for their return if they are not accompanied by a stamped addressed envelope.