

The **AGRICULTURAL HISTORY REVIEW**



VOLUME 30 1982

PART I

*

An Eighteenth-Century Land Agent: The Career of Nathaniel Kent (1737–1810)

PAMELA HORN

'The Art and Craft of Chicken Cramming': Poultry in the Weald of Sussex 1850–1950

BRIAN SHORT

The Economics of Horses and Oxen in Medieval England

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G E MINGAY

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An Eighteenth-Century Land Agent: The Career of Nathaniel Kent (1737–1810)*

By PAMELA HORN

I
WHEN Nathaniel Kent died at Fulham on 10 October 1810 an obituary in the *Gentleman's Magazine* enthusiastically proclaimed it to be 'universally allowed that no professional man ever rendered more substantial services to the agriculture of his country than the late Mr. Kent'. Yet, despite the contribution to agrarian reform which he made — and which included supervision of the royal estates at Richmond Park and Windsor Great Park during the 1790's — relatively little is known of his life or methods.¹ This article attempts to remedy some of the deficiencies.

Nathaniel was born in 1737, the son of Ambrose Kent of Penton Mewsey in Hampshire. His early life remains obscure, though it is known that his elder brother, also named Ambrose, went up to Oxford in the mid-1740's. Subsequently he became a fellow and bursar of Magdalen College. Nathaniel, by contrast, was destined for government service and at the beginning of 1755, when aged about eighteen, he obtained a clerical post at Portsmouth dockyard under Mr Fiennes Eddowes, a former Oxford man in his early thirties, who was subsequently to be made a Surveyor of Customs. Two years later, still under Eddowes's direction, he was involved in the supervision of French prisoners captured during the Seven Years'

War.² His next move came when he secured a secretarial position on the staff of Admiral Geary, a rear-admiral of the white, who served as post-admiral at Portsmouth from 1760 to 1762. When that employment came to an end, he managed to obtain a similar appointment with Sir James Porter, minister-plenipotentiary at Brussels from 1763 to 1765.

This early period on the fringes of government service was a difficult one for the young Kent. As Sir Lewis Namier has pointed out, departmental secretaries were the personal dependants of the ministers (or others) whom they served, and, as such, were often in a delicate relationship with their superiors. A quarrel or a failure to please could lead to their being cast adrift after years of diligent service. 'Both the dignity and inferiority of the chaplain or curate at a big country house attached to their persons and position', wrote Namier: 'they had to know a great deal and not expect too much, to be qualified to sit at the table of their chief and, in most cases, be satisfied with the lowest places at it.'³ To Kent, however, the post's main recommendation seems to have been its 'gentlemanly' status. He even declared himself ready to serve Sir James Porter as secretary in Brussels, 'without a farthing salary', apart from board and lodging. And when Porter left Flanders at the end of 1765, Kent received from him a mere £23 6s 2½d for the full period of his service, i.e. a salary of £18 8s 2½d, plus travelling expenses of £4 18s.

Porter went first to the Hague, where he stayed with Sir Joseph Yorke, the British

*I am indebted to Her Majesty the Queen for her gracious permission to quote from the Royal Archives.

¹ There is a brief account of Kent's life in G E Fussell, 'Nathaniel Kent, 1737–1816' [sic] in *Journ of the Land Ag Soc* V, 1947, p 46. He is included in Peter Eden (ed), *Dictionary of Land Surveyors and Local Cartographers of Great Britain and Ireland 1550–1850*, Folkestone, 1975, p 154.

² *B Lib*, Egerton 2157, fol 143. For information on Eddowes, see *B Lib*, Add MSS 28,232, fol 117; Add MSS 28,233, fol 110; and Add MSS 38,457, fol 191.

³ Sir Lewis Namier, *The Structure of Politics at the Accession of George III*, 2nd edn, 1961, pp 36–7.

ambassador, before travelling on to England, while Kent remained in Brussels to settle bills, arrange for the packing and despatch of furniture, books, and plate, and to wind up his employer's affairs generally. At the same time he was given temporary employment by the new minister-plenipotentiary, William Gordon, pending the arrival of the latter's German secretary. It was during these months, from December 1765 to the spring of 1766, that Kent's despair at his financial plight reached a peak. He expressed his bitter disillusionment in correspondence with Sir James Porter, as on 23 December 1765, when he gloomily assessed his current circumstances:

after a Chain of unprosperous Events during the Space of Ten Years and Ten Months faithfull [*sic*] Service under the Government, all which time I have been the Sport of Chance, the foot-ball of Fortune, ever settling never settled, ever beginning as often interrupted and put back to begin again, I find myself with only one Friend to rely on . . . which is yourself . . . I am very sure, you will do every thing you can towards mending my Ragged Fortune, which I have too long been darning with frugallity [*sic*] and Oeconomy [*sic*] since nothing will now do but a Speedy and thorough Repair. 'Tis hard . . . to give up all pretension and expectation from those whom I have so long served with unwearied dilligence, [*sic*] assiduous Care, Labour and risque, yet having experienced the cruel disappointment of more than a Thousand fallacious promises, I abandon them . . . such men as Mr Fiennes Eddowes, are surely the worst of Murderers, but for him, I had long since been settled in Life, now God knows when I shall.

If Admiral Geary had courage, equal to his regard for me, after having been upon the footing of 150£ per annum established Salary from Government surely he might obtain for me some Naval employment, they are daily disposed of, to those who have much less pretension.⁴

By this time Kent's cash resources were so limited that when he was invited by Porter to join him at the Hague as soon as his Brussels duties were completed, he had to refuse once he had learnt the cost of lodgings. As he wryly observed: 'if Heaven was now to be

possessed at the Hague, my circumstances and situation would check my flying to it'.⁵ Shortly afterwards he asked Porter's advice about settling temporarily in Lille: 'I am told I cannot waste time in a more cheap, or better Place, any where here about'.

Yet, despite his parlous position, Kent clung obstinately to his 'gentlemanly' status — to what he called 'that little decent Pride, which every one must observe who would wish to keep up a Correspondence and Associate with, Gentlemen'. It was on these grounds that he looked askance at a proposal from Porter that he might be employed by Sir Joseph Yorke at the Hague to manage the latter's accounts, etc. As he told Porter, it was not the task itself that he objected to, 'but the footing and sphere I should have been in'. Equally, when the new minister-plenipotentiary at Brussels seemed likely to offer him an appointment which fell short of a secretaryship, he felt he must reject it:

if he means to keep me as a Super-Intendant over His Houshold [*sic*] without the Character of Secretary I would not stay on any consideration [he wrote to Porter], nay I would a Thousand times rather be upon the footing which I was with you without a farthing Salary than to occupy an inferior Sphere under Mr G — although he was to give me £200 a year, such a Sinking would be a disgrace to my former Services under you, Admiral Geary &c. and absolutely as disagreeable to my Brother and all my other Friends as to myself. Mr G. proposes my Boarding out of his House out of a delicacy which he has of not affronting his German secretary. The inconveniences to me will be few, but the thing itself will be prejudicial to Mr G. — His Servants seeing me excluded from his Table will begin to drop all respect to me, they will Naturally want to be familiar, and I shall have no authority over them. The English who visit here will no longer look upon me as a Gentleman, or as a Person with Creditable Connections, but as a kind of an upper Servant obliged to attach himself to Mr. Gordon by distress, tho' he had once the honor to be upon a higher footing with you.⁶

Thanks to his 'little decent Pride', therefore, Kent found himself in the spring of 1766 without either job or prospects. But salvation was now to come from an unexpected

⁴ *B Lib*, Egerton 2157, fol 114. As regards William Gordon, prior to his appointment in Brussels he had been minister-plenipotentiary to the diet of Ratisbon.

⁵ *B Lib*, Egerton 2157, fol 126.

⁶ *B Lib*, Egerton 2157, fol 128.

direction. During the three years he had spent in Flanders he had taken great interest in the husbandry methods of the Flemish people, which he considered to be 'in the highest perfection' in any part of Europe. 'No spot was there to be found that was not highly cultivated.'⁷ Enthusiasm for agricultural improvement was growing in Britain at this time, and so when Kent returned to England he was invited by Sir John Cust, then Speaker of the House of Commons, to write an account of the Flemish farming methods. The Custs were Lincolnshire landowners, and it may have been on this account, or as a result of prodding from Sir James Porter, that the invitation was extended. In any event the task was completed satisfactorily and with Sir John's support and that of Thomas Anson, MP for Lichfield and brother of the famous Admiral, Lord Anson, Kent was persuaded to embark on a career as agricultural adviser and improver. Anson promised to help him in his new work, and Kent referred gratefully to him as 'the true friend of merit, and the encourager of science wherever he found it'.⁸ From an early stage Kent was given the management of Anson's property in Norfolk, and Rippon Hall, Hevingham, which was to be his residence in the county, formed part of that estate.⁹

At about the same time Kent enlisted the aid of a second valuable ally, Benjamin Stillingfleet, the naturalist, whom he described as 'the English Linnaeus', and whose acquaintance he may have made through another East Anglian landowner, Robert Marsham of Stratton Strawless, himself an enthusiastic botanist.¹⁰ In 1760 Stillingfleet had published a book on grasses in which he distinguished between 'good' and 'bad' herbage, and

provided illustrations of the specimens best calculated to produce the richest hay and sweetest pasture. With his help, Kent learned to take 'Nature' as his guide in deciding upon the innate properties of the soil. His ideas of land values were formulated 'not from local enquiry which might mislead my judgment, but from the wild plants and grasses; . . . Accordingly, when I found the oak and elm as trees, and the rough cock's-foot and meadow fox-tail as grasses, I was assured that such land was good. And where I found the birch tree, the juniper shrub, and the maiden-hair, and creeping bent-grasses, I was equally certain that such land was poor and sterile.'¹¹

II

From these tentative beginnings, Kent went on to establish a major land agency business. By the 1790's he had even acquired two partners — his nephew, William Pearce, and John Claridge, and had established an office at Craig's Court, Charing Cross, London, where landowners could apply for estate valuations 'for purchase and sale . . . and calculations of every denomination that can affect them, are made upon terms of moderation; and those terms always stated before the business is undertaken'.¹² Doubtless his previous secretarial experience stood him in good stead in making these commercial arrangements.

But in the initial stages, progress was slow, with Kent heavily dependent on the interest and support of his friends. One of the first projects with which he became involved was property development in Yarmouth, probably for the Anson family, who owned land in the town. Later they were to build up a political connection there, and by 1789 Kent was assuring his employer of the possibility of 'some Branch' of the family coming forward as MP for the town: 'I think it is at least worth while to keep up a good understanding with

⁷ *Gentleman's Magazine*, LXXXI, Pt I, 1811, p 183.

⁸ Ibid; Sir Lewis Namier and John Brooke, *The House of Commons 1754-1790*, I, 1964, p 23.

⁹ Nathaniel Kent, *Hints to Gentlemen of Landed Property* 1st edn, 1775, p 170. Information provided by Norfolk County Record Office.

¹⁰ R. W. Ketton-Cremer, *Felbrigg: The Story of a House*, Ipswich, 1976 edn, p 146 and *Gentleman's Magazine*, LXXXI, Pt I, 1811, p 183.

¹¹ *Gentleman's Magazine*, p 183.

¹² Kent, *op cit*, new edn, 1793, pp 267-8.

the Corporation — for we see that Parliamentary Interest is the first Interest in the Kingdom'.¹³

Another early venture was the management of the estate of the future politician, William Windham, to whom he was probably introduced by Stillingfleet, since the latter had been appointed a guardian of Windham on the death of his father in 1761. Kent began to manage the Windham property in about 1770, when his employer was only twenty. Under his direction the parish of Felbrigg, Norfolk, which was at the heart of the estate, was entirely enclosed, with most of the 400 acres of former common and heath converted into arable or planted with trees. Initially Windham had encountered opposition to his enclosure plans from a young yeoman farmer but thanks to Kent's conciliatory approach, the difficulty was smoothed over and the farmer persuaded to sell his land, and to accept a tenancy drawn up on advantageous terms.¹⁴ As a result of these measures, the Felbrigg property rose sharply in value, while both the population and crop yields were increased.¹⁵ Under Kent's guidance, Windham also exchanged property in the Sudbury area of Suffolk with the Wodehouse family. In 1793 part of this land was sold for the then high figure of £11,100, though the rental had yielded only £275 7s per annum.¹⁶

As in the case of the Ansons, Kent helped Windham with his electioneering, and in November 1806, shortly before their professional relationship ended, the latter wrote to thank him for the 'votes & exertions of yourself and your Son'.¹⁷ At the general election of 1806 Windham had been elected MP for the county of Norfolk, but the contest was subsequently declared void as a result of a

petition alleging breaches of the Treating Act.¹⁸ Over the years, Windham visited Kent at his home, and after one excursion to Kent's Fulham address, Coleshill Cottage, he declared that he must himself acquire a London residence 'out of town'.¹⁹ Coleshill Cottage, despite its modest title, was a handsome white-fronted house surrounded by an attractive garden, and was to be the Kent family home for more than forty years. Kent first moved in during 1770, having transferred almost certainly from another Fulham address, and after his death his widow continued in occupation until 1814.²⁰

Through connections like these, Kent built up his professional contacts and his expertise. In 1775, he published the influential *Hints to Gentlemen of Landed Property*, which described both his management methods and his philosophy. The work was based entirely on personal experience: 'Nothing is borrowed from books, or built upon hearsay-authority'. In the opinion of the *Monthly Review* it was the product of a 'very sensible man' whose advice was of particular value to the smaller landowner.²¹

At the outset, Kent firmly declared that a 'Competent knowledge of Agriculture [was] the most useful science a gentleman [could] obtain; it [was] the noblest amusement the mind [could] employ itself in'.²² But in his view, the major requirements for any estate's prosperity were a rational layout, good drainage and a linking of soil types to the crops

¹⁸ DNB entry for William Windham.

¹⁹ Mrs Henry Baring (ed), *The Diary of the Right Hon. William Windham, 1784-1810*, 1866, p 43. There are several references to Kent visiting Felbrigg, as on 24 July 1784: 'Kent called while I was at breakfast', or an August entry: 'Soon after I got up, Kent came'.

²⁰ C J Feret, *Fulham Old and New*, 3, 1900, pp 50-1, and T Faulkner, *An Historical and Topographical Account of Fulham*, 1813, pp 274-5. Kent rented the property. See also Fulham Rate Books 1763-71, PAF 1/27 and 1812-15, PAF 1/38 at Shepherd's Bush Library, Archives Dept.

²¹ *Monthly Review*, Old Series, LIII, 1775, p 467. The reviewer was John Langhorne, the poet, who was a prolific reviewer for the *Monthly*.

²² Kent, op cit, 1st edn, p 8.

¹³ Staffordshire Record Office, D615/P/1/27 and information from Staffordshire Record Office concerning the Ansons owning land in Yarmouth.

¹⁴ R W Ketton-Cremer, op cit, p 175.

¹⁵ Kent, op cit, 1st edn, pp 257-8.

¹⁶ *B Lib*, Add MSS 37,918, fol 191.

¹⁷ *B Lib*, Add MSS 37,918, fol 135. See also *B Lib*, Add MSS 37,908, fol 50, for Kent's involvement in the 1790 election, on Windham's behalf.

they most favoured.²³ Like his fellow agrarian reformers, Arthur Young and William Marshall, he strongly advocated enclosure to replace the old system of commons and open field cultivation. Where land was enclosed and suitable crop rotations introduced, it would 'in the course of a few years, make nearly double the return it did before'.²⁴ He was a strong supporter of the Flemish eight-course system of rotations or, failing this, of the six-course Norfolk system, which came 'as near to the practice of the *Netherlands*, as any made use of in England'. However, he recognized that in some areas a conversion of former arable land to pastoral purposes might be the most beneficial outcome after enclosure.²⁵ Later he was to put forward ingenious proposals for improving common land *without* enclosure, by the use of communal labour to carry out drainage, clearance of scrub, and other necessary operations, but there is no evidence that these ideas were ever put into practice.²⁶

Leases were deemed essential for the best cultivation of an estate, though Kent realized that many landowners rejected such arrangements, because they wanted to keep their tenants 'in a state of submission, and dependence'.²⁷ Throughout his career he remained convinced that only with leases could a 'respectable yeomanry, and a well-cultivated country' be created, with tenants secure enough to embark upon drainage work and the 'claying, marling, and chalking' which were needed to improve the soil. However, he probably exaggerated the problems of tenants-at-will in that few landlords would expel efficient farmers at short notice merely to satisfy a whim, and it was common for

families to continue on the same farm for generations.²⁸

A third theme of the *Hints to Gentlemen of Landed Property* was Kent's belief in the importance of small farms. This was based upon his observations of Flemish agricultural methods. And although he admitted that the soil in Britain did not allow a 'universal plan, of farms so low as twenty, and thirty acres, which subsists in *Flanders*', he considered that holdings of an annual value of £160 should form the maximum on any estate. Since he appeared to base his calculations on a rent of around £1 per acre, this would fix the upper limit of farms at about 160 acres; the lowest limit should be 30 acres. Overall, he believed that holdings with a yearly value of £30 to £80 ought to outnumber those of a more substantial size. On an estate valued at £1000 a year, there should be one farm rented at £160; one at £120; one at £100; two at £80; two at £60; two at £50; three at £40; and four at £30. This would support sixteen families, whereas 'the generality of estates of 1000 l. a year, do not support a third part of sixteen families'.²⁹ Here again, though, his pessimism seems overdone, for as late as 1830 family farmers employing no labourers made up nearly half of all occupiers, and in areas where there was access to urban markets for milk, dairy produce, poultry and vegetables, smaller men were able to hold their own.³⁰

In favouring the small producer, Kent differed from most of his fellow 'experts'. William Marshall, for one, emphasized the importance of capital and of large-scale production if agricultural improvements were

²³ Ibid, pp 11–17.

²⁴ Kent, op cit, new edn, p 255.

²⁵ Kent, op cit, 1st edn, pp 71–3.

²⁶ [Nathaniel Kent,] 'Hints for the General Improvement of Commons, recommended to the consideration of every person concerned', *Annual Register* for 1780, 1788, pp 143–5.

²⁷ Kent, op cit, 1st edn, pp 95–6.

²⁸ William Marshall, *Review and Abstract of the County Reports to the Board of Agriculture*, III, York, 1811, p 251 noted, for example, that on the Duke of Bedford's Cambridgeshire estate, although the farms were held at will 'a spirit of improvement pervades the minds of every tenant'. David Grigg, *Agricultural Revolution in South Lincolnshire*, Cambridge, 1966, p 132, notes it was not until about 1815 that the principle of tenant right was established in Lincolnshire, at a time when tenant investment was growing considerably. See also David Grigg, op cit, p 135.

²⁹ Kent, op cit, 1st edn, pp 217–18.

³⁰ G E Mingay, *English Landed Society in the Eighteenth Century*, 1963, p 96.

to be pursued, noting that, '*The small Farmer* is obliged to raise such crops as will pay him best for the present, and avoid every expense of which he does not receive the immediate advantage, by which means his farm and himself are always kept in a state of poverty'.³¹ But for Kent, this disadvantage was outweighed by the need to 'enable industrious servants who have saved their wages, or whose good conduct entitles them to credit, to establish themselves . . . in business; and likewise to afford settlements, for the children of greater farmers to begin the world with'. Small producers were also careful to cultivate 'every obscure corner' of their holding, while a man working on his own account was likely to operate 'more cheerfully, zealously, and diligently' than if he were employed by another. 'His wife and children are likewise of great service to him, especially if his gains depend much upon a dairy. And in general, the children of these little farmers prove the most useful people the country produces. The girls make the best dairy-maids; the boys the best gentleman's bailiffs; the best head-men in larger farms; the best persons to superintend, and manage cattle; and, in a word, the most regular servants, in most capacities.'³²

Kent was anxious to promote good relations between landlord and tenant. One way of achieving this was for owners to encourage their tenants to take an interest in the state of the farm buildings. On the Anson estate in Norfolk the tenants were allowed 'all necessary materials for repairs', though they had to bear a share of the wage costs involved, up to a maximum of six per cent of the rent. Anything above that figure was paid for by the landlord. Thanks to this arrangement the property was well maintained and relations between owner and farmers cordial.³³

A second possible cause of friction was

game preservation. The wise landlord would 'not . . . be too tenacious of his game, and where he is obliged to inflict punishment for its protection, to do it with lenity and mildness, which will secure the object better than great severity'. For farmers were the 'natural guardians of the game; and where they are treated by their landlords with confidence, they will always protect it much better than a game-keeper'.³⁴

Finally, Kent showed concern for the welfare of the labourers. At a time when the as yet unreformed Arthur Young was declaring that 'every one but an idiot [*sic*] knows, the lower classes must be kept poor, or they will never be industrious', and was advising: 'I would have industry enforced among the poor; and the use of tea restrained. Nothing has such good effects as work-houses', Kent adopted a very different stance. As he observed in *Hints to Gentlemen of Landed Property*, estates were 'of no value without hands to cultivate them'. Consequently, the labourer 'is one of the most valuable members of society; without him the richest soil is not worth owning'. To ensure the comfort of his workers must be an object 'highly deserving the country gentleman's attention'.

Cottage improvement constituted one important area of reform. 'The shattered hovels which half the poor of this kingdom are obliged to put up with, is [*sic*] truly affecting to a heart fraught with humanity', he declared. 'We are all careful of our horses, nay of our dogs, which are less valuable animals; we bestow considerable attention upon our stables and kennels, but we are apt to look upon cottages as incumbrances, and clogs to our property; when, in fact, those who occupy them are the very nerves and sinews of agriculture. . . . Cottagers are indisputably the most beneficial race of people we have.'³⁵ To assist would-be improvers, he

³¹ Marshall, *op cit*, I, York, 1808, p 132, quoting from J Bailey and G Culley, *A General View of the Agriculture of the County of Cumberland*.

³² Kent, *op cit*, 1st edn, pp 214-15.

³³ *Ibid*, p 170.

³⁴ *Ibid*, new edn, p 278.

³⁵ *Ibid*, 1st edn, pp 228-30. The earlier quotations from Young are in John G Gazley, *The Life of Arthur Young 1741-1820*, Philadelphia, 1973, pp 72-3.

included plans of model cottages at the rear of the book.

Next to accommodation, food was of prime importance. Where small farmers had dwindled in numbers, labouring families found difficulty in buying milk, butter and other small items in their own parish. For 'the great farmers have no idea of retailing such small commodities, and those who do retail them, carry them all to towns'. The result was that they had to pay higher prices at the market or to the local mealman and baker.³⁶ To combat this, Kent favoured cottagers being supplied with plots of land on which they could keep a cow and a pig, and raise vegetables. In his view, the labourer who had such concessions was a more faithful servant to his employer. He had 'a stake in the common interest of the country, and is never prompt to riot in times of sedition, like the man who has nothing to lose'. Clearly on grounds of self-interest the propertied classes should make such provisions, and where the farmer proved reluctant to supply plots, the landowner should endeavour to meet the deficiency.

In 1797, in a broadsheet on *The Great Advantage of a Cow to the Family of a Labouring Man*, he developed the theme further. Not only would such a scheme enable cottagers to obtain their milk more cheaply, and, where a pig was kept, their meat, too, but it would benefit the health of the families. 'Milk is the natural Food for Children, . . . For my Part, I have been for many Years, so impressed with the Propriety and good Policy of this Plan, that I have never failed giving it all the Encouragement I possibly could; and flatter myself, that in the different Estates which I have had the Regulation of, with the Assistance of my Partners, . . . we have been instrumental in establishing a great Deal of real Comfort.' One of the firm's recent successes in this regard was the Earl of Egremont's property in Yorkshire, where extensive reorganization had been carried out

in 1796. As a consequence a high proportion of cottager tenants had secured small closes on which they could keep a cow. Here, as elsewhere, he believed much good could be done merely 'by paring off a few Acres from a large Farm, or by breaking up one Farm out of Twenty, which may frequently be done, without Injury to any Person, it is rather a Matter of Surprize, that this Thing is not oftener done than it is'.³⁷

In fact as early as 1775–76, when Kent was employed by the second Earl of Hardwicke to revalue his estate at Hardwick and Haresfield in Gloucestershire, one of the changes proposed was for a cottager, hitherto paying a rent of £1 5s a year for a house and garden, to have this doubled and to receive a small orchard as well, 'to assist him in keeping a Cow, as this small portion may be of great comfort to the Poor Man'. The land was to be taken from a farmer whose holding was about 118 acres and for whom its loss would be of 'no material consequence'.³⁸

However, Kent recognized that not all cottagers could obtain land, or, when they had such access, could afford to purchase a cow or pigs to stock it. In these circumstances, one possibility was for larger farmers to run a few cows for their labourers with their own herd. A rent of 2s a week could be levied for each animal by the farmer, who would also keep any calves born. The merit of the system was that the cow's milk would in these conditions 'be more certain, by her being more regularly kept, and having greater Scope and Change of Food; and no Time in mowing

³⁷ Kent, *The Great Advantage of a Cow to the Family of a Labouring Man*, broadsheet, 26 December 1797, in British Library, 1865.c.14(29). Survey of the Yorkshire Estate of the Earl of Egremont by Kent, Claridge and Pearce, vols I and II, Petworth House MSS 3075 and 3076, consulted at West Sussex Record Office. On p 5 of vol I it was noted that taking six acres from a nearby Farm had 'made two very comfortable Places for Two industrious Labourers, by enabling each of them to keep a Cow'.

³⁸ The Survey and Valuation is in the British Library, Add MSS 36,236. The survey was carried out in the autumn of 1775 and the spring of 1776 (fol 72). Kent also noted (fol 66) that the farmers were to be given notice to quit 'so that their farms could be remodelled', after which they would be readmitted.

³⁶ Kent, op cit, 1st edn, pp 263–4.

and making Hay for her, would be lost by the Labourer'.³⁹

It was also essential that labourers should have flour at prices they could afford. Farmers ought, where possible, to supply their own men with cheap bread corn, when the market level was 'high and oppressive to them'. 'It is but reasonable that the human servant should fare as well as the animal servant', Kent averred: 'a farmer does not give his horse a less quantity of oats because they are dear, nor is it reasonable that the ploughman or the thresher in the barn, should have less for his penny, because his master gets a great price'.⁴⁰ Significantly, when in 1791 Kent came to manage Windsor Great Park on behalf of George III, one of his early improvements was the erection of a small water-mill where flour was ground and sold to the estate labourers at 16d a stone. It was an arrangement which represented 'a saving of at least twenty per cent from what it would cost them to buy it from the mealmen or shopkeepers'.⁴¹

Lastly, Kent was concerned with the broader aspects of the contemporary debate on poverty. Perhaps with his own early struggles in mind, he wrote in a new edition of his book, published in 1793: 'There are two principles, which should be kept alive as much as possible, in the minds of the poor; pride, and shame, the former will lead them to the attainment of comfort, by honest means, and the latter will keep them from being burthensome to their neighbours'.⁴² A distinction must be drawn between 'the lazy and profligate wretch' and the hard-working man who had fallen on difficult times through no fault of his own. For this reason, he opposed the houses of industry (i.e. work-houses) which were being established by incorporations of parishes in certain parts

of England, particularly East Anglia, during the second half of the eighteenth century. 'A man born to no inheritance, who assiduously devotes his whole life to labour,' he declared, 'has as great a claim upon the neighbourhood, where the labour of his youth has been devoted, as the worn out soldier or sailor has to Chelsea or Greenwich; and this reward ought to be as honourable, as it is comfortable, and not to be administered in a way that is repugnant to that natural love of rational freedom which every human mind sympathizes in the enjoyment of'.⁴³ One solution was to establish a pension scheme to which men would contribute during their active years and whose funds could then be invested to provide a small income for the old and decrepit. In this way, 'the latter part of a poor man's life would terminate in comfort'. Another possibility was the setting up of friendly societies. Here the 'rich and opulent' could give encouragement by adding 'little donations to the poor man's nest egg'. Lord Harcourt's example at Nuneham Courtenay, Oxfordshire was particularly worthy of imitation, for there 'if a poor man puts a penny into the social box', Harcourt contributed another: 'if a farmer or tradesman contributes a shilling, he adds another; and by this means the poor rates are kept low, and the spirit of the peasantry unbroken'.⁴⁴

Kent's anxiety about the welfare of the poor was clearly evident in the first edition of the *Hints to Gentlemen of Landed Property* when it appeared in 1775, but a number of his ideas were refined and developed during the succeeding two decades. Unlike such fellow writers as the Rev David Davies, Kent was never a simple paternalist. He believed in fostering a spirit of self-help and independence among labouring people, and in upholding the dignity of their position. Perhaps this was a lesson learnt during his own earlier struggles. Nor did he favour resort to the poor rates to provide sustenance for needy

³⁹ Kent, *The Great Advantage of a Cow*, pp 2-3.

⁴⁰ Kent, *Hints to Gentlemen*, new edn, p 285.

⁴¹ Kent, *Some Particulars of the King's Farm at Windsor in 1798*, Oxford, 1802, p 26. William Pearce, *A General View of the Agriculture of Berkshire*, Board of Agriculture Report, 1794, pp 68-9.

⁴² Kent, *Hints to Gentlemen*, new edn, p 283.

⁴³ Kent, *A General View of the Agriculture of the County of Norfolk*, 1796, p 171.

⁴⁴ Kent, *Hints to Gentlemen*, new edn, p 283.

families, along the lines of Thomas Gilbert's proposals, and later those of Speenhamland itself. Many of his arguments were, indeed, echoed in the debates on poverty and social reform at the end of the nineteenth century and the beginning of the twentieth.⁴⁵ In his own day they were to be largely ignored.

III

In the meantime, Kent's professional reputation and his business activities were growing apace. Unlike most other land agents of his day, he never became exclusively associated with one employer but always retained his professional freedom. Here, too, the hardships of his earlier years, when he had been dependent on the vagaries of patronage, may have influenced his decision. But inevitably this policy involved him in much travelling and in explanations to would-be clients about the tightness of his schedule. Thus an invitation in August 1774 to value part of the Earl of Hardwicke's estate in Gloucestershire was answered by an offer to undertake the work some months later: 'my time is all carved out till the very end of November, but if as I said before, the intire completion of it on this side Christmas would answer his Lordship's purpose, he should not be disappointed and I should think myself much obliged to him'. Lord Hardwicke decided to accept these assurances, and was evidently so satisfied with the outcome that he extended the contract in the following year.⁴⁶

Kent, for his part, was anxious to establish a system of management which could be easily maintained after his departure. 'When the Estate is thus regulated', he told the Earl, 'your Lordship will have a perfect Knowledge

of its condition, and it may afterwards be superintended by any Person with little trouble.' At the same time, he felt himself 'more capable of suggesting proper Covenants and defeating Tenants' objections, than a Lawyer, whose experience may have been less in such kind of business'.⁴⁷

Kent specialized in the improvement of estate layouts. But, where necessary, he also suggested appropriate crop rotations and techniques of animal husbandry, as well as supervising the sale of timber and agricultural produce. This applied, for example, during the 1790's on the royal estate at Windsor. Elsewhere he and his partners undertook the collection of rents and the drawing up of leases on behalf of clients. Even in the 1770's, Kent was providing these services for Sir Charles Cocks on his estates in Worcestershire and Gloucestershire.⁴⁸

Where reorganization was carried through, an estate's value could be increased sharply. On part of the second Earl of Hardwicke's estate during 1775-76, Kent raised annual rents from £1171 19s 6d to £1482 12s 3d. On one farm, where the rent jumped from £85 17s 6d to £118 14s 6d, he noted that the holding had been made more convenient by adding to it part of a neighbouring property. In addition, as 'several small Closes are laid together, there might be a great many Pollards taken down and disposed of, which would be an Improvement to the Land'. On another farm of 139 acres, the rent was increased from £110 10s to £146 11s 6d a year. Here essential drainage work was to be carried out and thistles eradicated.⁴⁹

The revaluation of the Earl of Egremont's estate in Yorkshire brought even more substantial changes. This was completed in 1796-97, largely by Kent's partner, John Claridge. A survey of the 24,000-acre estate

⁴⁵ Maurice Bruce, *The Coming of the Welfare State*, 3rd edn, 1966, p 152. See, for example, Lloyd George's comment in 1909 that it was hard that an old workman should have to find his way to the gates of the tomb, bleeding and footsore, through the brambles and thorns of poverty'. Derek Fraser, *The Evolution of the British Welfare State*, 1973, p 32.

⁴⁶ *B Lib*, Add MS 35,612, fol 43; Add MSS 35,695, fol 57; Add MSS 35,695, fol 66; and Add MSS 35,695, fol 71.

⁴⁷ *B Lib*, Add MSS 35,695, fol 71.

⁴⁸ In April, 1775, Kent noted that he was 'going into Worcestershire to collect Sir Charles Cocks's Rents', *B Lib*, Add MSS 35,695, fol 66. See also Kent, *Hints to Gentlemen*, 1st edn, p 191.

⁴⁹ *B Lib*, Add MSS 36,236, fols 27 and 36.

revealed that much of it was seriously under-rented, the only exception being a thousand or so acres held around Tadcaster, where the previous agent had been guided by the suggestions of enclosure commissioners. As a result of Kent & Co's proposals, the rent was raised from £12,850 to £19,099, and during the course of the next fourteen years, further increases were secured. By 1811 the gross rental was above £25,000, or approximately twice the 1796 figure. For managing the estate, Kent, Claridge and Pearce charged their customary $3\frac{1}{2}$ per cent on its net yield. This gave fees ranging from £465 5s 1d in 1803 (a year when outgoings 'incident to the estate' were particularly heavy at £4734 13s 6d) to £704 18s 8d in 1806 (when the estate outgoings were a mere £161 7s). From 1804 the payment of property tax also adversely affected net yields and hence the partners' commission.⁵⁰

For this fee, Claridge supervised the running of the estate, controlled the payment of bills, and had oversight of the plantations and of timber sales. He was allowed a good deal of latitude in his professional judgments, but when he appeared to be embarking on a radically new policy, his actions were queried by the Earl of Egremont's auditor. Thus in October 1797 the presentation of two inn signs to publican tenants was raised. In his reply, Claridge pointed out that in one case (the Angel Inn, Topcliffe) improvements had been carried out which had turned this 'House . . . on the Great North Road . . . from being a miserable Pothouse' to 'as comfortable a Public House, or small Inn, as any between London and Edinburgh'. In the second case, the sign had been given 'as an Ornament to the Village and an Improvement to the place'. Similarly, the loan of two guineas to a poor tenant was queried on three separate occasions in 1799–1800, even though Claridge emphasized that by his

action the man had been able to pay his rent, and had been 'able to go on the ensuing year . . . if a seizure is made he becomes a charge on the parish and the House is considered as held by the overseers'. However, to the auditor, such an innovation was a matter for Lord Egremont himself 'who alone can decide on its propriety'. In spite of the smallness of the sum, the principle of granting aid 'without his Lordship's previous concurrence seems to demand consideration'. On a further occasion, when discussing rent arrears, it was pointed out by the auditor that the tenant should always be reminded 'of the old fashioned principle, that the Landlord's rent is the very first payment, to which he is above all others to attend'.⁵¹

Yet, despite these queries and criticisms, the firm continued to superintend the estate until Kent's death in 1810, and thereafter Claridge appears to have managed it on his own. During the 1790's, therefore, the partners were simultaneously supervising estates as far apart as the Windham and Anson properties in East Anglia; the Egremont property in Yorkshire; and, most prestigious of all, George III's estate at Richmond and Windsor. The scrupulous care with which the surveys were conducted and the reports drawn up also suggests that alongside the three principals — Kent, Claridge, and Pearce — there must have been a considerable staff of subordinates to assist with measuring and with the writing up of material. Certainly G F Thynne, who became a partner in the business some years after Kent's death, was already engaged on clerical and valuation work by 1808, while Kent refers to help given by a clerk named Wright when he was surveying the Windsor estate in December 1796. There is also evidence that in minor valuation cases, the

⁵⁰ Yorkshire Abstract in the Petworth House MSS, Document 404, and Survey of the Yorkshire Estate, Vol II, Petworth House MSS, Document 3076, p 299.

⁵¹ Petworth House MSS, Document 404; the 1799/1800 example in Petworth House MSS, Documents 3099–3101; the comment about rent occurs in Document 3099, June 1800.

firm sub-contracted part of their work to local agents.⁵²

IV

Not surprisingly, the intervention of a firm of outside professionals was sometimes resented by the permanent stewards of the landowners concerned. On the Earl of Hardwicke's estate in the mid-1770's, Kent's efforts to meet the agent were repeatedly frustrated. Although he announced his arrival at Gloucester on three separate occasions, the man always evaded him. The third time he decided to apply to the bailiff instead and was given 'a candid account of every thing I asked'. Kent therefore made no further effort to meet the agent, 'and he was as shy on his part, for though I was in Gloucester part of five days the last visit which I made, and which he knew the first day from Fryor [the bailiff], he never came near me'. However he added in a placatory vein: 'I should . . . be sorry that he should forfeit your Lordship's good will by any rudeness . . . to me'.⁵³

On William Windham's estate in the early 1780's, there was similar ill-feeling between Kent and the steward, William Cobb, though the latter had originally been engaged on Nathaniel's recommendation. On one occasion Cobb was sharply reproved by his employer for his attitude:

Your letter to me was foolish, that to Mr Kent was not only absurd but in the highest degree impertinent. You seem totally to have forgot the distinction due to the different ranks of life. Mr K. has always done you justice. He gives you full credit for your good qualities: but knows what I could not fail to perceive that you have a most unbounded share of vanity together with as great (or greater) a degree of obstinacy. [I]n the original dispute I shall not at all interfere.⁵⁴

⁵² A letter from John Claridge, 14 April 1803, refers to the valuation of copyhold property in Warwickshire by a Mr Eagle, a sub-agent. British Library, Add MSS 40631C, fols 220–221. For Thynne, Shepherd's Bush Library, Archives Dept, DD/303/16/3, and information provided by Staffordshire Record Office.

⁵³ *B Lib*, Add MSS 35,695, fol 71.

⁵⁴ R W Ketton-Cremer, *op cit*, p 175, and R W Ketton-Cremer, *The Early Life and Diaries of William Windham*, 1930, p 211.

A third example of these conflicts of interest, this time to Kent's disadvantage, occurred in 1806–07, also on the Windham estate. By that date Windham had become dissatisfied with Kent's methods, believing his property to be under-rented and under-valued compared to its true market position. So he called in another agent, a Mr Budd, as a second opinion. Kent anxiously predicted that the new man would 'endeavour to bring a separation between us'. The point at issue was Windham's estate near Sudbury, and Budd came up with a much higher figure than the £40,000 minimum put forward by Kent. Windham sharply expressed his discontent to the latter: 'you cannot be surprized . . . when a property which you had valued at £40,000, I was immediately after offered between 60 and 70 thousand & should now be induced with difficult to take £80,000 — & [with] the loss which for some 3 or 4 years I have been sustaining in Rent . . . partly, tho' not entirely in that proportion'. Kent defended himself by declaring that if the estate had been sold on his recommendation it would have been auctioned in four lots, and 'by means of the Hammer' would have fetched its full value. He also suggested that any prospective purchaser who had offered over £60,000 for the property probably cherished 'a delusive hope of forming a [political] Interest' in the nearby borough of Sudbury and was, therefore, not concerned with its agricultural potentialities.⁵⁵ He advised Windham to close with the offer immediately, for he would 'never afterwards' have so good a one. But Windham was not persuaded and in the autumn of 1807, he took his business away from Kent, thereby ending a connection which had lasted more than 36 years.⁵⁶

Fortunately, most of Kent's business relations ended more happily than this. His connection with the Holkham estate in Norfolk, for example, apparently began in 1785, and continued during the 1790's, when

⁵⁵ *B Lib*, Add MSS 37,918, fols 135, 149, 191, 231, and 239.

⁵⁶ *B Lib*, Add MSS 37,918, fol 149.

he was employed on several occasions to carry out valuation work or to arrange for the leasing of property. In 1791, a payment of £241 12s was made to 'Messrs. Kent, Claridge & Co. for valuing different farms'; in 1795, the sum was £76 10s 11d, and in 1796, £63 16s.⁵⁷ Later, Holkham's owner, Thomas Coke, chaired a meeting of the Norfolk Agricultural Society held in March 1808 at which Kent was presented with an embossed silver goblet, adorned with the emblems of Agriculture and Justice, on behalf of the county's landowners and tenants. At the presentation, reference was made to the respect and esteem in which he was held 'for his integrity and impartiality between landlord and tenant, in his profession as a surveyor of land, and for his liberal and upright attachment to the interests of Agriculture'. In his reply, Kent picked up this theme, declaring that when a gentleman put his estate 'into my hands, I considered it was the highest trust he could repose in me; it was leaving it to me to mete out his fortune by allotting him what I thought proper upon the object submitted to me'. However, he admitted that when in doubt as to the rival claims of landlord and tenant, he had always given 'the turn of the scale' to the latter. He emphasized, too, his concern for land improvement, pointing out that an embankment between the washes in neighbouring Lincolnshire which had 'secured land from the sea, to the amount of 200,000 l. in value, was principally brought about and effected by my advice'.⁵⁸

V

Nevertheless, there is little doubt that the pinnacle of Kent's career was his management

of the royal estates at Windsor and Richmond. It is to this we must now turn. The proposal for the former project was first made in a letter from General Harcourt, then groom of the royal bedchamber, in February 1791. At the time Kent was in Norfolk on business, and so John Claridge, who opened the letter, contacted Harcourt on his behalf. After discussion, it was agreed that Kent should be interviewed on 24 February. In the meantime the strictest secrecy was to be observed, for Harcourt warned that if the matter became public knowledge 'applications innumerable may be made from other quarters'.⁵⁹

Kent paid his first visit to Windsor on 1 March. At that date the four thousand or so acres of the Great Park were covered with ant-hills, moss, fern and rushes, interspersed with dangerous bogs and swamps. Under Kent's direction, a new and more productive régime was to be introduced, with the King's support and encouragement. Among the major changes was the conversion of about 1400 acres of former parkland into two farms — one organized on the Norfolk system of crop rotations, and the other on a modified Flemish system.⁶⁰ In addition, extensive drainage work was to be carried out in the Park itself. To execute this, the Kent partnership hired John Ridgeale, an Essex expert. Ridgeale was 'to bring at least six good workmen' with him and was to be paid on a piecework system, plus a salary of £1 1s per week to act as supervisor. Interestingly, despite the importance of his task, Ridgeale was unable to sign his name, save with a mark. Nevertheless, he carried out his work efficiently and continued to be employed for several months each year during the next decade.⁶¹

Other alterations were also set in hand and by 18–20 July 1791, Kent noted that he had 'Measured and staked out all the intended

⁵⁷ Holkham estate audit books on microfilm at the Bodleian Library, Oxford, MS Film 691 for the 1791 figure and MS Film 955 for the period 1795–96. Peter Eden, 'Land Surveyors in Norfolk 1550–1850,' *Norfolk Arch*, 36, Pt II, 1975, p 147.

⁵⁸ *Gentleman's Magazine*, LXXXI, Pt I, p 183. The Lincolnshire project may have been the drainage of fens around Boston for Sir John Cust and others in the later 1760's. Lionel Cust, *Records of the Cust Family*, Series III, 1927, p 290.

⁵⁹ Royal Archives, RA Add 15/359.

⁶⁰ Kent, *Some Particulars*, p 9. William Pearce, *op cit*, pp 65–6.

⁶¹ Royal Archives, RA Add 15/371.

Buildings, upon the Norfolk Farm, which I shall now be able to explain to his Majesty'.

Alongside his supervision of the overall layout and cultivation of the farms and Park, Kent was concerned with staff recruitment. This included the bringing in of Norfolk youths to help with ploughing on the Norfolk Farm, the appointment of an expert from Dorset to carry out thatching work, since Nathaniel considered the art of reed-thatching to be 'remarkably well understood' in that area, and the recruiting of a shepherd from Wiltshire.⁶² Because of their general land agency commitments, he and his partners were able to spend only a few days each week or fortnight at Windsor. So the day-to-day running of the farms was put into the hands of bailiffs — one for each — with a steward in overall control. But it is clear that Kent intended to keep a careful eye on them. On 31 May 1792 he noted that the 'Norfolk Men' had been particularly glad at his arrival because 'the state of their Land designed for Turnips requires the utmost attention at this crisis — I am sorry to remark that they have not had the assistance they ought to have had . . . Gave the most urgent orders to Mr. Frost, [the steward] to bend his whole Strength to the preparation of the Land . . . but I do not mean to rely upon promises, but either to go down myself or send Mr Pearce a day or two almost every Week, till these Seeds are sown and to do it at such irregular intervals, as may not be known before hand to any Person but His Majesty, which I have no doubt will insure all the Success that can be derived from zeal and precaution.'⁶³

Early in 1793 he began to issue journals to his supervisors, with directions on how to enter in them each day the work done by the different teams of men and horses: 'told them, that I should compare the Work with the Entries every Monthly Visit, and if I should

find any deficiency, I should think it incumbent on me to report the same to *His Majesty*. Gave them likewise to understand that if any of the Men should at any future time absent themselves from their Work, except from Illness, and they should neglect to represent the same to Mr. Frost . . . so that they may be stated proportionably short in the Monthly Pay List *His Majesty* will be acquainted by me with such neglect, and either of them who shall be found to connive at any neglect or Idleness must expect to be removed from his Posts.'⁶⁴ A similar policy had been introduced on the Richmond estate just over a month before, with the Kent partnership assuming the management of that property from the end of March 1792, following the death of the former Ranger, the Earl of Bute.⁶⁵

Another innovation was the use of a stock book to ascertain which animals were making the best returns; Kent thought it would also serve the purpose of guarding 'against *Imposition and Collusion*' — presumably on the part of the bailiffs.⁶⁶ Cropping and field books were likewise introduced, while in 1796 a new system of issuing orders was brought forward. Under this Kent and his partners wrote their instructions in the steward's order book and also on duplicate cards. These were to be handed to the various sub-agents, and on the first Sunday in every month a report was to be prepared as to how far the instructions had been carried out. In addition, so that the most senior workers could gain practical experience of Norfolk farming methods, Kent arranged for them to pay brief visits to that county.

⁶⁴ Kent's Journal of Windsor Great Park, vol II, pp 59–61.

⁶⁵ Kent's Journal of the Progressive Improvements in Richmond Park, p 35. This volume is also in the Royal Library, Windsor.

⁶⁶ Kent's Journal of Windsor Great Park, vol I, pp 120–1. However by August 1793 (vol II, pp 167–9), it was discovered that 'two Oxen which originally cost Nine Pounds and two Steers, which cost Eight Pounds each, could not be made out, and . . . they were by His Majesty's permission given up'. Kent sternly added that in future 'the whole' was to be settled 'in a way to guard against mistakes'.

⁶² Nathaniel Kent's Journal of Windsor Great Park, vol I, 1791–92, p 80 in the Royal Library, Windsor; *B Lib*, Add MSS 42,072, letter dated 31 August 1794, and William Pearce, *op cit*, p 66.

⁶³ Nathaniel Kent's Journal, vol I, pp 142–7.

Care was taken to examine the background of the labourers and in July 1791 a detailed list of those employed at Windsor was drawn up. Of the 44 males working in the Park or on the farms, 12 had been with the estate for 15 years or more. Kent noted that he 'had taken the age of each Artificer and labourer . . . with a View, to put the heavy and quick Labour upon the strong and active Men . . . Their residence I took, to enable me hereafter to dispose of the Work, in such a Manner as to save as much unnecessary walking in the Morning and Evening to and from the Work, as possible. — And my reason for taking their Families and the length of Time they had worked on the Spot was to see which may be most intitled to any little indulgencies or confidence.'⁶⁷

Kent's anxiety about the labourers' welfare likewise led to the provision of model dwellings on the Flemish Farm and, as we have seen, to the sale of cheap flour from the estate water mill. Indeed, during the famine years of 1795, workers were given the option of receiving part of their wages in flour instead of in cash alone. On other occasions, oxen and sheep were killed, and their meat sold at cheap rates to the men. Nevertheless, his concern for their well-being did not prevent him from dealing severely with those who transgressed. One man who, without permission, had gone upon 'an idle Frolick to London' was dismissed, 'partly as a punishment for his bad behaviour, and partly as an example to other labourers'.⁶⁸

Among the main agricultural experiments carried out on the Windsor farms was that of using oxen instead of horses as working animals. The object was to economize in the consumption of fodder, and, at the same time, to increase the supply of meat, since at the end of their working life, the oxen could be sold to the butcher. The King himself took a personal interest in this project, and among the Royal Archives is a memorandum from

him, suggesting improvements in the feeding of the animals.⁶⁹ Other schemes included the bringing in of implements from different parts of the country for trial purposes, so that Norfolk ploughs were used on the Norfolk Farm, while Suffolk ploughs were imported from their county of origin for use on the heavier soil of the Flemish Farm.⁷⁰

The main reorganization of the Windsor estate (which was a far more substantial task than that at Richmond) was completed by Michaelmas 1797. In the autumn of the following year Kent reported on the progress made. On the credit side, formerly barren land had been brought into cultivation and several 'useful Experiments' carried out, while the fact that the work 'may in some Measure have contributed to His Majesty's Amusement and Health' was 'of all Things the most valuable to the Community'. Only one thing was wanting and that was to make a profit. Kent confessed himself 'surprised and mortified' that 'instead of a surplus *each Farm* should be minus'. But he added significantly: 'I know that the Rents shod^d. be returned, and would be returned if the Responsibility could be so impressed upon the Minds of all the different Superintendants, so that they might act with the same Zeal as a Farmer does for his own immediate Interest . . . Suffice it, that on my Part nothing shall be wanting to point out from Time to Time what is proper to be done to promote good and profitable Husbandry and to avoid Error.'⁷¹ In this there is an echo of Kent's old faith in the diligence of the small farmer working on his own account as compared to that of the hired hand, who had to be carefully supervised.

That is the last of Kent's detailed reports to the King on the Windsor estate, though the firm continued to handle its financial disbursements until at least the autumn of 1801, and to examine the accounts for two further years. Happily by 1799–1800 a profit had

⁶⁷ Kent's Journal of Windsor Great Park, vol I, p 10.

⁶⁸ Ibid, pp 143–5.

⁶⁹ Royal Archives, RA Add 15/389 (1 January 1797).

⁷⁰ Kent's Journal of Windsor Great Park, vol I, p 88.

⁷¹ Kent's Journal of Windsor Great Park: The Farms. There is only one Report in this volume.

been earned on both farms, amounting in the case of the Norfolk holding and a small adjoining property to £575 16s (or £40 16s over and above a suggested 'rent' figure); for the Flemish farm it was £831 16s 9d, or £246 16s 9d above the 'rent'. The partnership likewise supervised Richmond Park and Farm to the end of the century, with the agricultural enterprise here concentrating on dairying and the grazing of store stock. Significantly some of the Richmond labourers had earlier worked at Windsor, including the bailiff, Thomas Gooch.⁷²

VI

But if these royal improvement schemes were the most prestigious contracts undertaken by Kent and partners, his importance as a land agent and valuer was recognized by others. In 1801 he was even described in an Act of Parliament as 'an eminent Land Surveyor', when he was employed to value the late Earl of Orford's estate in Norfolk.⁷³ He was also involved in the purchase and sale of urban land, as in 1800 when he was concerned with the disposal of property at North End, Fulham. A few years later his firm was extensively involved with the Clerk of the Goldsmiths' Company in negotiations over property leases in Fulham.⁷⁴

As recognition of his professional achievements, Kent was elected a member of the Society of Arts, a body which since its inception in 1754 had sought to promote agricultural improvement. And when the Board of Agriculture was formed in 1793, he was one of the first to be invited to write a county report — that upon Norfolk. A revised version of the work was published in

1796, and on 24 May in that year the Board wrote to congratulate him on 'presenting them with so interesting a work, so creditable both to them and to its author'.⁷⁵ Subsequently he was paid £300 to cover publication expenses, 'he accounting with the Board for what had been sold by other booksellers', apart from the publisher, George Nicol. He also communicated with the Board on such topics as the cultivation of potatoes and spring wheat, the desirability of labourers being allowed to keep a cow, and the need for a general enclosure bill to cheapen and simplify the legal procedures associated with that operation.⁷⁶

Kent died of apoplexy in October 1810, but almost to the end of his life he remained actively engaged in his profession. From 1804 his eldest son, Charles, began to take part in the business, and after Nathaniel's death, he and William Pearce continued in partnership together.⁷⁷

When he died Nathaniel Kent left an estate valued at more than £24,000.⁷⁸ It was a far cry from the impoverished young man of 45 years before who had been forced to contemplate 'wasting time' in Lille because of its cheapness. There is little doubt that this change of fortune was attributable to the businesslike manner in which he had conducted his affairs, and the way in which he had raised land agency, for the first time, to the level of a distinct and honourable profession. Thanks to his management of

⁷⁵ Board of Agriculture Letter Book, B XIII at Museum of English Rural Life, Reading, fol 134.

⁷⁶ Board of Agriculture: Register of Letters, etc, received 1793–1822, B XII, entries for Nathaniel Kent, and Letter Book, B XIII, entry for 3 March 1795; also Minute Book of the Board of Agriculture, vol I, B I, entry for 1 June 1798.

⁷⁷ Information provided by Staffordshire Record Office; Peter Eden, *Dictionary of Surveyors*, p 302, and B Lib, Egerton 3007, fol 128.

⁷⁸ PRO, PROB 11/1515, fol 508 and IR 26/164, item 184. Mrs Armine Kent outlived her husband by almost 16 years and was buried at Fulham in August, 1826, aged 78. See All Saints parish records at Fulham. In 1795/96, William Pearce became a close neighbour of Kent, by moving into the house next door. Fulham Rate Book PAF/1/34 at Shepherd's Bush Library, Archives Dept.

⁷² Windsor Great Park Accounts 1799–1800, pp 30 and 40, and Kent's Journal of the Progressive Improvements in Richmond Park, p 35.

⁷³ Local and Personal Acts, 41 Geo 3 c119, 2125 (bound volume at the British Library). I am indebted to Dr Peter Eden for drawing my attention to this reference.

⁷⁴ Shepherd's Bush Library, Archives Dept, DD/191/6 and DD/303.

large estates he had been able to advance general farming standards and to point the way towards further improvements. In his careful and methodical fashion, with his emphasis on administrative efficiency, and on

the proper recording of experiments, he had made a significant contribution to the progress of the 'agricultural revolution' itself. It was to this his contemporaries paid tribute at his death.

Notes and Comments

WINTER CONFERENCE 1981

The Winter Conference was held in London on Saturday 5 December. As in previous years, it was shared with the Historical Geography Research Group of the Institute of British Geographers. A student sit-in forced a last minute change of venue from the Polytechnic of Central London to the Institute of Historical Research, and the Society owes thanks to Professor F M L Thompson and the staff of the Institute for making a room available. For the first time in several years the conference was attended by fewer than 50 people, but those attending heard an interesting and varied range of papers on the theme 'Government Policy and Agriculture'. Speakers were as follows: Dr Lucy Adrian (Cambridge) 'The market in domestic wheat in the closing years of the Corn Laws'; Dr John Kingsbury (City), 'Central-local relations in English Land Reform, 1888-1930'; Dr Peter Dewey (Royal Holloway), 'Government policy and farm profits in Britain, 1914-18'; and Professor Andrew Cooper (Waterloo, Canada), 'British agricultural policy in the inter-war years — a study in Conservative politics'. Thanks are due again to Drs Baker and Phillips for organizing such a successful conference.

SPRING CONFERENCE 1982

The Spring Conference will be held at Hamilton Hall, University of St Andrews, 5-7 April 1982. Speakers include Dr Michael Ryder 'Medieval sheep and wool types', Dr R B Weir, 'Distilling and Agriculture 1870-1939', Ms Sarah Banks, Ms Lisa Frierman and Dr Ian Whyte. The conference will include an excursion into northern Fife led by Dr Graeme Whittington. Full details and a booking form are inserted into this issue of the *Review* but any enquiries should be addressed to the Secretary.

LOCAL HISTORY AT LEICESTER

Members may be interested to hear of the publication of a bibliography, edited by Alan Everitt and Margery Tranter, entitled *English Local History at Leicester 1948-1978*. This contains references to more than 1200 publications by past and present staff and students of the Department of English Local History at the University of Leicester, together with an introduction by Professor Everitt which surveys the work of the Department in its first 30 years. Copies are available from Professor Everitt price £1.85, and the bibliography will be reviewed in a future issue of the *Review*.

'The Art and Craft of Chicken Cramming': Poultry in the Weald of Sussex 1850–1950

By BRIAN SHORT

THE poultry industry of Sussex, while perhaps not as widely-known as that of South Lancashire or Eastern Norfolk, serves to illustrate several facets of agrarian life. It demonstrates the inter-relationship of the social and physical environment; it shows the importance of environmental and spatial factors in the development of an innovation; and it shows how, by the development of a relatively minor aspect of agrarian economy, small undercapitalized farmers and labourers could weather severe economic fluctuations. Above all, it illustrates how an industry could develop in rural England based on peasant traditions and with little of the encouragement afforded to other branches of agriculture by the gentry, nobility and landowners.

I. *The Wealden Environment*

The Weald constitutes a clearly-defined region in south-eastern England. Fine-grained silts and silty sandstones alternated with heavy 'bottomless' clays to produce a landscape of diversified relief and poorly drained soil. In the Kentish High Weald and in the Western High Weald, relatively flat dissected plateaux surfaces contrasted strongly with a series of sharply-incised, darkly-wooded ghylls — the headwaters of the rivers Ouse, Cuckmere, Rother, and Medway — on the edge of Ashdown Forest and along the Forest Ridge which forms the central, highest section of the Weald. The deep clay of the Low Weald forms a horseshoe-shaped depression stretching into Kent, Surrey and Sussex, and presenting agriculturalist and traveller alike with problems which were indelibly described in contemporary literature. Neither High nor

Low Weald offered good farmland in abundance; problems of soil acidity and drainage were common to both heavy clay and the fine compacted sandstones; and podsolization was a feature of the higher altitudes of the Ashdown and Broadwater Down Forests. A great diversity of relief, soil, drainage, vegetation, and micro climate thus provided the background to Wealden society and economy.

II. *The Social Environment of the Chicken Industry*

The Weald was for long a dependency of the areas around it. As an area containing much waste used for common grazing of swine and latterly cattle, its settlement pattern was younger and less definable than that of the neighbouring downland and areas of Tertiary rocks around the coasts of south-east England. Late settlement in the outliers of coastal manors took the form of scattered, isolated farmsteads and small hamlets. A common pattern therefore by the nineteenth century was for poly-nuclear settlement with few centralized villages and no single family or squirearchy to control parish affairs. Much of the heathland was marginal, and squatters had been common in the medieval period with the consent of the manorial lords, and again in the eighteenth century when much of the upland and strictly marginal soils of Heathfield were settled. Today areas such as Watkins Down (Punnetts Town) still bear the signs of this later development, with small rectangular fields on poor soils which are now reverting to scrub and gorse, and on which horses rather than cattle or crops are to be found. The Wealden commons were often

loosely defined areas, and as a consequence disputes over common rights and boundaries were fairly frequent. During the eighteenth century disputes in the Forest Ridge area between the Chichester family and the Ashburnhams were long and protracted, probably originating in the purchase of the manor of Burwash by Ashburnham from the Chichesters (Pelhams) in 1767.¹ The lack of control over supposedly lawless and uncontrollable people was a point noted by many. Anglican parsons, anxious at the spread of non-conformity and the lack of large congregations in the area, inveighed against the Wealden 'heathens' whilst the open nature of the parish vestry meetings, with no strong squirearchical presence, could do nothing to stop a constant influx of settlers. By 1850, therefore, there had been a long tradition of independent settlement in the area.²

Nevertheless the Weald was a strongly-endowed area in resource terms and did have the ability to offer a living for those prepared, and able, to look outside the traditional structure of agriculture. Water, fuel, and raw materials were abundant, and there was a diversity of craft industry and manufactures. In the parish of Heathfield in the mid-nineteenth century there was employment in tanning, brickmaking, gloving, spinning and weaving, milling, rope-making, quarrying, and wood cutting. Hemp and flax were spun, and although the iron industry which had brought prosperity to the area was now dead, the poultry industry could latterly provide employment for all members of the family. Heathfield, therefore, offered a potential multiplicity of employment and had many craftsmen who were also smallholders. Labourers here moved between agriculture and non-agricultural occupations and travelled from place to place in Sussex at the particular harvest periods concerned with hay, cereals,

hops, fruit, tanning, and work in the woods in the winter months.³

However, Heathfield, like many of its Wealden neighbours, actually suffered severe problems of poverty and lack of employment. The resources were abundant but they could not be stretched effectively to provide a decent living for more than a few. Without even the wealth of charities which one might expect in the closed downland parishes the poor rates soared during the nineteenth century. Between 1801 and 1851 the population of Heathfield nearly doubled from just over 1200 to just over 2200. Landownership in the parish was diverse. In 1842 Sir Charles Blunt, MP for Lewes, held more than 1000 acres, and Augustus Fuller owned 800 acres, but the remainder of the parish was divided among over 130 separate landowners. A select vestry was said to exist in 1820, comprising sixteen leading figures of the parish and headed by Blunt, but by 1831 vestry meetings comprised all the inhabitants of Heathfield paying poor rates. The overseer reported in 1834 that there was no select vestry, decisions being made by the 'majority of the Parish in vestry assembled'. Although even the later nineteenth-century inhabitants of small hamlets in the Heathfield area, such as Rushlake Green, might look up to leading families such as the Darbys or the Dunns, this could not in any way match the strong patterns of patronage and deference exhibited in the downland to the South.⁴

III. *The Beginnings of the Poultry Industry*

It is against this social and environmental background that the poultry industry developed. By its very nature the origins are obscure, for poultry have long been a common-place feature of farming; and additionally have long been regarded as a pre-

¹P Lucas, *Heathfield Memorials*, 1910, p 10.

²R. Heath, *The English Peasant*, 1893 (reprinted 1978), ch XI, 'Wealden Life and Character', pp 189-206.

³Lucas, *op cit*, pp 96-103.

⁴BPP, Poor Law Commissioners 1834 (10), Appendix B: Answers to questions circulated by the Commissioners in Rural Districts; *East Sussex Record Office* (ESRO), TD/E 16, Heathfield Tithe Map and Schedule.

quisite of the farmer's wife and family, rather than an essential and integral part of the farming economy. The ancient practice of fattening chickens is described in detail in Heresbach's *Booke of Husbandry* (B Googe's translation of 1557).⁵

The early centre of the poultry industry in Sussex appears to have been around Horsham, 'the great emporium of capons', where by 1673 a flourishing trade had already been established with London. However, at this time and in this area of West Sussex, poultry reckoned at 6d per bird, never amounted to more than about £2 in any inventory so far examined. By 1800 there were still 'great stores of poultry' accumulating weekly from places such as North Chappell and Kirdford, where the 'Dorking fowls', fattened on barley flour, milk, pot-liquor, and molasses, were conveyed by carrier from Horsham to London.⁶

Although poultry were no doubt ubiquitous by the nineteenth century, interest in fattening and rearing spread gradually eastwards across the High Weald to finally become located around Heathfield. It is said that the idea of sending chickens to London via the carrier, to benefit from the higher prices, occurred in 1788 to Mrs Kezia Collins of Cade Street, Heathfield. Her husband began collecting chickens (higglings) from the neighbourhood, and fattening for the market then began in the area. However, the industry was also noted around Hastings, where a rudimentary localized trade had been built up, although not as yet extending to London. Hastings fowls were still extremely cheap, and by 1837 Lord Ashburnham, the fourth Earl, was attempting to introduce the black cock of Scotland into the High Weald, building on

the established local interest in this part of Sussex.⁷

There are many conflicting accounts of the origins of artificial fattening (cramming) but certainly fattening in Heathfield can be dated to about 1830–34, and S C Sharpe's book *The Sussex Fowl* (1920) includes drawings made of prizewinning Sussex fowls in 1847. The 1832 edition of Baxter's *Library of Agricultural and Horticultural Knowledge* includes a description of cramming and fattening as 'kindly furnished us by one of the first higglers in Sussex, as practised by him for many years with the greatest success'.⁸ Interestingly there was no reference made to what must have been a very thriving local activity in the report of James Farncombe in his prize essay on the agriculture of Sussex in 1850; the writing of James Caird in his tour of England in 1850–51; nor in the critical review of Wealden agriculture by Léonce De Lavergne in 1855.⁹ It would seem that these writers concentrated only on agriculture as demonstrated by the larger tenant-farmers and landowners. Few writers ventured into the depths of the High Weald around Heathfield and so were unable to describe this exception to an otherwise largely unprofitable agriculture.

IV. Location and Expansion 1850–1914

The industry was firmly established around Heathfield by the 1860's and certainly did not rely on the late nineteenth-century depression for its popularity in the area. Higglers were noted in the 1861 census where James Honeysett from Dallington was returned as a 'higgler and farmer of 3 acres', obviously

⁵ Lucas, op cit, p 97.

⁶ A Young, A tour in Sussex, *Annals of Agriculture*, XI, 1789, p 255; R Blome, *Britannia*, 1673, p 225; W Albery, *A millenium of facts in the history of Horsham and Sussex*, 947–1947, 1947, pp 113, 115; Rev A Young, *General view of the agriculture of Sussex*, 1813, pp 391–2.

⁷ Lucas, op cit, p 96; The Skinner Journals (*B Lib*, Add MS 33,649); B M Short, 'Agriculture in the High Weald of Kent and Sussex 1850–1953 (unpub PhD thesis, Univ of London, 1973) p 189.

⁸ J. Baxter (Printer, Lewes), *The Library of agricultural and horticultural knowledge*, 1832, p 498.

⁹ J Farncombe, 'On the farming of Sussex', *J RASE*, XI, 1850; J Caird, *English Agriculture in 1850–51*, 1852; L de Lavergne, *The rural economy of England, Scotland and Ireland*, 1855.

combining a smallholding with the carrying of poultry between rearer and fatterer and on to the point of departure for the London or South coastal market.¹⁰ In this area a large number of labourers and small farmers were noted in 1871 as keeping from eight to sixteen brood-chickens to supply fatteners and living:

In remote places away from the villages and hamlets, their favourite spots being the light dry soil of the commons, and the higher grounds clothed with heather and short grass.¹¹

In 1864 over 163 tons of fatted chickens were dispatched from Heathfield to London by one carrier, and by 1871 the figure was estimated at 200 tons, although this figure should be doubled to include chickens reaching London through other channels, and those destined for the south coast. By the mid-1870's the well-established Heathfield carrier was conveying about 224 tons of produce to market. This was fully ten years before costs of grain began to fall and was at the height of the price boom in cereals. By 1879 small parcels of land had been taken in for chicken runs around the Ashdown Forest, and in 1895 the industry was said to have been established in Heathfield from 'time immemorial'. By the 1880s the concentration in Heathfield was very marked, with a rather uniform distribution elsewhere throughout the High Weald (Fig 1). The focal area of the industry was defined in 1895 as stretching from Rotherfield in the north to Hellingly in the south; and from Buxted in the west to Brightling in the east; all were within easy reach of the railway stations at Heathfield, Uckfield and Ticehurst.¹²

The locational factors accounting for the fowl industry at Heathfield have never been adequately discussed. Maintenance of a relatively large rural population on small

farms had always relied greatly on the availability of non-agricultural resources, and an early fostering of 'enterprise and commercial spirit'¹³ was attributed to the iron works and the supplying of timber. But probably more important was the agricultural poverty of the area; the soils, largely derived from Ashdown beds here, were difficult to work; and headward erosion by the Rother, Ouse and Cuckmere combined to form a very dissected terrain hampering arable farming. The area therefore concentrated on the fattening of livestock, and had then moved into dairying by the 1870s. By 1877 the Rose Hill estate, Brightling, had been used 'to a considerable extent for dairying' although railway access from here was poor and there was only one general carrier per week to Hastings and none to Tunbridge Wells as late as 1889.¹⁴ However, skim milk and animal fats were thus available for chicken fattening, together with quantities of oats, grown for both cattle and poultry. In return the poultry industry contributed large amounts of manure, and many fatteners kept a few acres of grassland to utilize this valuable by-product. Fowls therefore fitted rather well into a loosely integrated agricultural system in this area. Here, too, there was adequate shelter provided by ghylls and luxuriant shaws and roadside verges, no longer large enough for the commoning of cattle, but ample for chicken coops situated so that the birds could obtain grit from the roads and insects from the hedgerows and grass. In the small Heathfield hamlets such as Cross-in-Hand, Punnetts Town and Rushlake Green much available grassland was utilized for this purpose, and the green at Rushlake Green was often covered with the coops belonging to individual families. One can disregard older theories that the 'dry sandy soils' of the areas suited the 'scraping Persian bird', as suggested by Wolff in 1880, but the poor physical environment containing small farms

¹⁰ PRO. RG9/Dallington Census enumerators schedule 1861; Heath, *op cit*, p 182.

¹¹ Heath, *op cit*, p 182.

¹² Heath, *op cit*, p 182; H W Wolff, *Sussex Industries*, c1883, pp 29-44; Short, *op cit*, pp 177, 190; R H Rew, Report of the Royal Commission for investigation into the agricultural depression, BPP, 1895, XVI, pp 3-4.

¹³ Rew, *op cit*, p 4.

¹⁴ B Lib, Maps 137 b 10 (6), Rosehill Estate sale catalogue; Short, *op cit*, pp 132, 190.

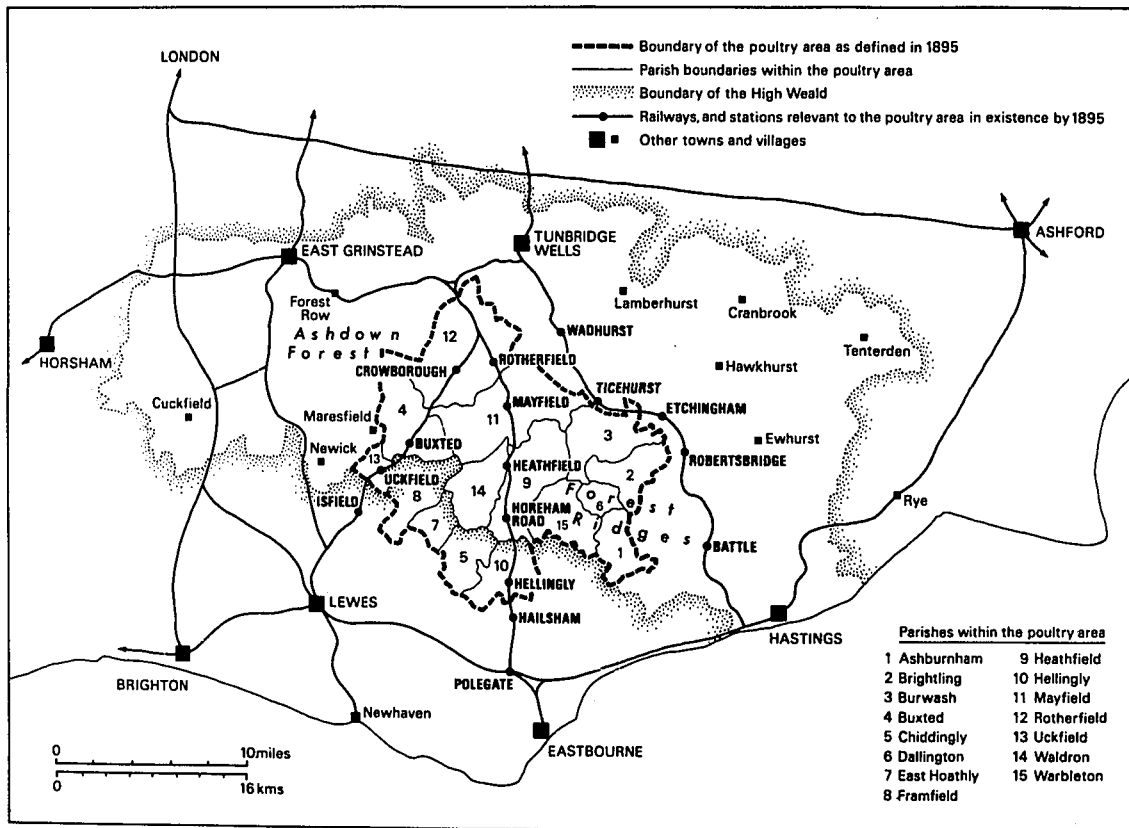


FIGURE 1
Poultry in the High Weald in the 1880's.

operating at an intensive level, and an agricultural system that could benefit by the inclusion of poultry, were factors leading to the establishment of this industry in this area.¹⁵

Once established the location was reinforced by the carrier services which, by 1889, were in the hands of only two men. One firm, that of Mr Bournier, operated from Uckfield; and another by Mr Bean, from Heathfield; but it existed only by the carriage of poultry from farm to railway station and returning imported poultry from Ireland or Kent to the fatteners. In 1876 Bean's firm carried over £24,000 worth of chickens to market.¹⁶ However, the railway became the

key to success; markets were immediately more accessible, and the local trade bolstered by the influx of residents. Rider Haggard went so far as to say that:

were it not for the fowl industry and for the fact that many rich men from London occupy large houses, which absorb much produce at a good price, it would go very hardly with both tenant and landlord.¹⁷

The London & Brighton Railway Company attached a special van to passenger trains three times a week, more efficient than the old carrier service, but insufficient in the height of the season in July to October, before the game season began on the wealthy tables of London. In 1885 £60,000 worth of dead poultry was sent from Heathfield station, rising to £140,000 in 1895 and £150,000 in about 1900. The period after 1892 witnessed a

¹⁵ Taped interview with Mr Oliver Atkinson, kindly supplied by Mr C Ravilious, University of Sussex Library. Wolff, op cit, p 182.

¹⁶ Rew, op cit, p 10; Wolff, op cit, p 41; Heath, op cit, pp 34-5.

¹⁷ H Rider Haggard, *Rural England*, 1902, p 135.

particularly large increase, and at a time when the price of wheat in Sussex was at its lowest over 1840 tons were leaving Uckfield and Heathfield constituting at least a ten-fold increase in output since 1864. By 1913 1200 tons were leaving the area.¹⁸

The onset of the depression acted as a stimulant to the industry since many were 'bound to find something beyond corn and stock to make . . . farming pay in these times'.¹⁹ The numbers of fowls kept were therefore increased, or perhaps taken over by the farmer himself rather than being left as a sideline for his wife. Investment in machinery was a necessity; the fattener's cramming device was a variant of the sausage-machine, with an attached gutta-percha tube for forced feeding, which was manipulated by one or two men. Coops and incubators were purchased by rearers, together with large quantities of feeding stuffs. Higher wages were paid to lure men away from agriculture; and the skilled 'crammer' commanded a good wage. With these initial investments made, the industry grew by a cumulative causation process.

There were no specialist poultry farms in this period, although for many farmers fowls were the most remunerative branch of agriculture. Many different people turned to the trade. Small traders and labourers kept a few coops by the roadside; small farmers reared perhaps 60 head per year; while larger farmers could dispatch up to 8000 fowls each year. Mr Kenward of Waldron supplied this number from his 200-acre farm and the fatteners handled much larger numbers, although the figure of 2000 dozen a quarter quoted from Mr Joseph Olliver of Warbleton seems excessive, if possible. In a taped interview with his nephew, aged 99 in 1980, Joseph Olliver was remembered as continually collecting chickens by cart from Kent with his brother Jack and other members of the family. They would set out on Sunday nights and

return on Wednesday afternoons. No attempt was made to maintain a particular breed here; the old Sussex 'barn door' or 'dung hill' type had proved a ready fattener, and possibly constituted another broad location factor. But by the later nineteenth century the preferred chickens were mainly Dorkings, Brahma-Dorking crosses and Buff Orpingtons. A reputation was gradually built up for the Heathfield 'Surrey' fowl, and once established, served also to increase the momentum of growth. The Sussex Poultry Club was formed in 1903.²⁰

The industry had grown by a series of distinct movements. The diffusion from Horsham to Heathfield had taken place by the 1840s, and centralization resulted from the construction of railway stations at Ticehurst (in use by the mid-1850s), Uckfield (by 1868) and Heathfield (built in 1880). Many tried to maintain a 'close borough',²¹ but the secrets of production spread rapidly throughout the Heathfield area during the depression, bringing still more people into the trade.

The keynote in the organization of industry was horizontal integration, for each stage represented a change in location (Fig 2). Rearing and fattening were distinct branches, although many people changed from one to the other; and a few could combine higgling with either of the two branches, often being larger farmers or those dependent on family labour.

I brought up five girls and four boys . . . we used to fat chickens all the year round, so as to average the good and bad pay. We bought the chicks, giving 1/8d to 3/9d each according to the time of year. We used to go round with crates collecting 2 or 3 evenings in the week.²²

Rearing took place on farms of all sizes; the larger ones growing their own oats and milk, and the small all-grass farms buying in grain. By the 1890's the demand for chickens from

¹⁸ Rew, op cit, p 4; A D Hall, *A Pilgrimage of British Farming 1910-1912*, 1913, p 47.

¹⁹ Rew, op cit, p 6.

²⁰ Short, op cit, p 193; C Whitehead, *A sketch of the agriculture of Kent*, J RASE, 3rd ser, X, 1899, p 474, S C Sharpe, *The Sussex Fowl*, 1920, pp 19-23.

²¹ Haggard, op cit, p 116.

²² A Day, *Glimpses of rural life in Sussex*, 1927, p 17.

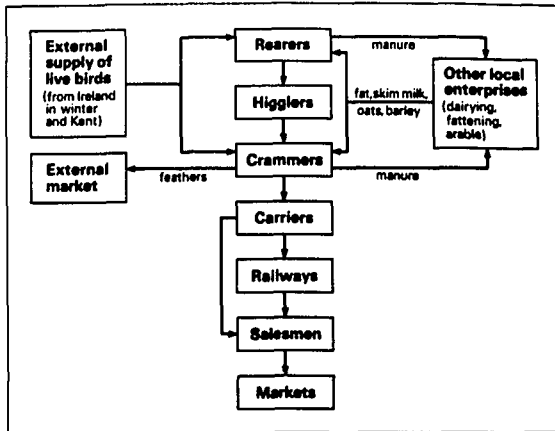


FIGURE 2

The structure of the Heathfield poultry industry before 1914.

fatteners exceeded the supply, and rearing was considered the better proposition, especially since initial costs were lower. Some labourers in the Heathfield district were said to make as much as £10 profit per annum by breeding chicks. But there was little organization in the industry at this time, and in the hatching season between October and May, strong Irish competition was experienced. Although inferior and slower to fatten, birds from central and southern Ireland were arriving by the late 1890's at the rate of up to 300,000 per annum, and consignments of Welsh fowls were also noted as arriving in Uckfield. Birds came too from the Kentish High Weald where the industry, started in imitation of Heathfield, had proved largely unsuccessful and was now confining itself to supplying Buff Orpingtons to the Sussex Crammers. Production in Kent centred on the parishes of Benenden, Goudhurst, Headcorn, Marden, Cranbrook, and Biddenden. But even allowing for this competition, and for investing in coops, incubators and food, profits could be between 8d and 1s 4d a bird. The selling of eggs was justly considered unprofitable in the area.²³

²³ ESRO, Add MS 3416; E Brown, 'The marketing of poultry', *J RASE*, 3rd ser, IX, 1898, pp 275-7; W Hurst, *All about Sussex fowls and the chicken fattening industry*, c1904, p 38; Haggard, op cit, p 121.

While some rearers supplied live fowls to the London market, most traded with the higglers, roving in a 10-mile radius, although sometimes travelling much further — 50 miles was not exceptional — in search of birds to sell to the Heathfield fatteners. They were supposed to 'run over one another' to get the custom, operating at a commission of about 2s a dozen and travelling in light carts or with wicker baskets strapped to their backs; but more often they had their own customers, each being visited once a fortnight. Higglers were said to operate two or three times a week, implying a ratio of four to six rearers to each fatterer, but great variation must have existed.²⁴ The fatteners received the birds at between 2 to 4 months of age from a higgler, keeping the birds until ready for cramming at 4 to 7 months. Initially kept in pens and fed on oats and water, they were then crammed by machine for 2 weeks twice a day, with a mixture of ground oats, milk and fat, 100 birds being fed in 20 minutes. The scale of enterprise varied from those who fattened by the dozen when the market was favourable to those such as Joseph Olliver, with a labour force of 6 men and 20 women casual workers.²⁵ Mr Olliver's nephew claimed that his uncle was the first man in Sussex to fatten chickens using the cramming machine, and before that he fattened by hand.

and the method that he adopted was, they had long rows of pens on stilts, long rows in a shed, a covered shed, . . . more a roof over. And the runs were about level with the man's waistcoat, the machines were on wheels and they pushed them along, and the birds came level with the tube. They pushed the tube down their throat and fed them. It was very quick. It was six birds in each pen, and probably five or six pens in one coop, a long coop that was sub-divided. I can see them now.

²⁴ Haggard, op cit, pp 120-1; E M Bell-Irving, *Mayfield, the story of an old Weald village*, 1903, p 182; Hurst, op cit, pp 36-7, Rew, op cit, p 5; Day, op cit, p 17. The poultry-fattening districts were, by the 1880s, often loosely referred to as the 'higgling districts', but the stricter sense of the term is reserved for an alternative to those who were chicken 'carriers' (Wolff, op cit, p 30).

²⁵ W Fream, 'Some minor rural industries', *J RASE*, 3rd ser, V, 1894, p 298; Rew, op cit, p 5; Wolff, op cit, p 33.

Killing, picking and stubbing followed; the latter provided piece work for local families.

... and the chicken were brought home from Kent and put into coops and fattened by cramming, and after perhaps two or three weeks they were ready for ... the London market. When they were ready ... on about Monday, Tuesday and Wednesday there was the killing. Men went and did the killing, and the women sat around and stubbed the birds, that's pulled the feathers out. The men pulled the feathers out when they wrung their necks. When they wrung their necks the thing would be often sort of jumping about, and they would throw them down. Sometimes they would jump up and start running, but they would pull all the wing feathers, the main the big feathers. The women did the finishing and that was called stubbing. And I think they got about a penny a chick. What the men got for killing I don't know.²⁶

A contemporary estimate of this process was that a man could kill and pick between 2 and 3 dozen per day, and that 4d a dozen was paid for 'stubbing', although a 'dextrous higgler' could deal with as many as 15 fowls per hour.²⁷ After pressing into a 'nice and appetizing' shape and packing, 1s a dozen was charged by the carriers for collecting and delivering to the station, their roles having shrunk proportionally to the extension of the railway network through the area. Fowls were conveyed to Leadenhall and occasionally Smithfield, where a salesman could gain as good a price as possible, with subsequent extraction of his middle-man's profits. Although the lack of contact between producer and salesman was a disadvantage, the middleman's charges were generally thought fair.

The cost of fattening was 8s to 9s a dozen, while market prices ranged from 1s 8d in summer to 3s 6d or 4s in May; the latter being early chickens following after the 'game season'.²⁸

Poultry was by far the biggest money earner in the Heathfield area. Vertical integration was unknown, and the rather loose

organization tended to depress profits of the fatterer especially when a scarcity of reared birds increased the costs. Complaints of foreign competition, not only in chickens but also in geese and turkey, were made; while other grievances included fear of distemper in tightly-packed communities, and the Agricultural Holdings Act, which omitted corn fed to chickens as qualifying for compensation.²⁹ There is little doubt, however, that the growth of the industry before 1914, together with increased urbanization and improved communications, mitigated the severities of the depression felt elsewhere in Sussex and throughout the country. Indeed, in the report of the Royal Commission of 1895 it is stated by Henry Rew that:

The 'ladder' from weekly wages and prospective work-house to occupation or ownership of land and independence, which it is so desirable to set up for the industrious rural labourer, is provided by means of poultry.³⁰

V. *Decline and Recovery 1914-21*

The period 1914-21 comprised two conflicting trends, since between 1914 and 1918 poultry numbers were reduced owing to the lack of imported food; but from 1919 onwards the development of smallholdings and the land settlement schemes reinstated poultry so that by the time of the Corn Production (Repeal) Act of 1921 their numbers had once more increased. After 1914 'the backyarder became a new manifestation of patriotism', and as one of the 'three P's' (Pigs, Potatoes and Poultry), poultry were increasingly important to the allotment holder.³¹ Newspaper columns such as that by S C Sharpe, poultry inspector and an instructor with the East Sussex County Council, were printed to encourage the small producer. Nevertheless, the decision was

²⁶ Taped interview supplied by Mr C Ravilious.

²⁷ Wolff, op cit, p 41; *The library of agricultural and horticultural knowledge*, 1832, p 498.

²⁸ Haggard, op cit, p 120.

²⁹ *The Crowborough Weekly*, 19 Dec 1903, p 2; Rew, op cit, pp 16-17.

³⁰ Rew, op cit, p 15.

³¹ *The Sussex Express*, 15 Feb 1918, p 4.

taken to fix the prices of damaged grain and horse and poultry mixtures to prevent diversion of cereal from human to animal consumption. Oats and barley therefore could no longer be fed to poultry without serious financial losses, and while the 'backyarder' could continue by feeding domestic scraps, larger producers were badly hit. In Sussex poultry numbers fell from 965,132 in 1913 to 692,810 by 1919, and in the Heathfield area production fell by nearly 50 per cent between 1913 and 1915, being negligible by 1918. Increased fixed costs of feed, fixed prices for the sale of poultry, and increased prices for eggs, all contributed to the decline of the Heathfield industry. A slight benefit to the Heathfield area from the production of pit-props, 30 to 40 train loads being dispatched periodically, together with charcoal and munitions, did little to offset this decline.³²

The war killed it. They couldn't get food and the things to do it with. It killed the industry for the time being, and it never survived to be as it was. There probably were 100 dozen went up everyday from Heathfield station.³³

During the war more eggs were sold, rather than hatched — a move encouraged by the establishment of County Council Egg Stations for selected breeds, and by the activities of co-operatives such as the Buxted Agricultural Society, registered in 1916, which by 1919 handled milk, eggs and feed, and sought expansion into neighbouring Mayfield, Heathfield and Hailsham. At the operator level such general factors as good drainage, a southerly aspect, a small stream and the provision of shelter (either woodland or hazel wattles) were contributory to the development of small poultry enterprises all over the High Weald. Such factors were further enhanced by egg-laying competitions, newspaper articles, and the work of poultry inspectors in the favourable post-war economic environment. Typical of the area were the ex-servicemen, combining poultry

farming with fruit at Battle and Heathfield, and the Bungalow Egg Farm at Horeham Road begun by two women in 1918, and Heaselands Farm, Cuckfield, where one of the first large-scale brooder houses was introduced.³⁴

By 1921 Heathfield parish was still dominant in terms of poultry numbers, although since the 1880's there had been considerable change elsewhere. In 1921 there were 327,965 head of poultry in the High Weald, of which 90.5 per cent were fowls and 9.5 per cent ducks, geese and turkeys. Most areas of the High Weald showed gains in poultry numbers during this period. By 1921 the war had popularized the 'backyarder', promoted small poultry units, and encouraged greater use of the motorized lorry as opposed to the former reliance on the railway. There had therefore been some dispersal of interest away from the original centre of production. Urbanized areas around Cuckfield and Tunbridge Wells, and the more eastern Forest Ridge groups of hamlets and farms around Battle and Burwash, now became significant. Overall, a more uniform distribution of poultry numbers could be discerned by this period.³⁵

Reflecting the slight eastward shift in emphasis, a poultry food manufacturer from Rye had begun in 1920 to use lorries to deliver the supplies 'with a view of overcoming the recent increased heavy railway transit and delivery charges particularly on small consignments, and for the convenience of our many customers in outlying districts'. Delivery was restricted to the eastern High Weald in Sussex, and penetrating as far as Lamberhurst in Kent. The fact that the firm could afford to send lorries to Lamberhurst from Rye and yet not touch parts of Mayfield, Heathfield and Battle well within the same radius, indicated the eastward dispersal as well as anything else could have done.³⁶

³² R H B Jesse, *A survey of the agriculture of Sussex*, 1960, p 106; *Sussex Express*, 27 Dec 1918, p 4.

³³ Atkinson, *op cit*.

³⁴ *Sussex Express*, 20 June 1919, p 3; 21 Nov 1919, p 4; 23 Jan 1920, p 4; Jesse, *op cit*, p 70.

³⁵ Short, *op cit*, pp 262-5.

³⁶ *Sussex Express*, 7 May 1920, p 9.

With the passing of the Corn Production (Repeal) Act in 1921 the price of cereals again sank to the level at which they could economically be fed to poultry. Both egg and table bird production increased, though with the Heathfield centre less dominant than formerly. With increased use of local advertisers and co-operative marketing schemes, and with the advent of broilers imminent, the beginning of a poultry 'agribusiness' can be envisaged.³⁷

VI. *Structural Change in the Inter-War Industry 1921-39*

The peak of inter-war poultry production was obtained in the Weald in 1933, with over 895,000 birds being returned in the June Census, since the depression in farming had once again pushed more farmers into the keeping of poultry.³⁸

A locational change occurred at this time. In 1924 over half the total poultry production registered in the Weald was accounted for in the parishes to the south and east of the Ashdown Forest and on the Forest Ridge, and with the Heathfield area alone accounting for 25 per cent of the total Wealden production. Between 1924 and 1928 numbers of poultry in the High Weald increased by over 80 per cent and at the height of the inter-war period a movement eastwards began. The Tenterden and Wadhurst areas gained in significance, together with Ewhurst and Cranbrook by 1938. Increases in the north and east had by 1938 split the original nucleus around Heathfield into two unequal portions; the Heathfield-Battle and Maresfield area accounted for one-third of the total, while the Tenterden-Ewhurst and Cranbrook area accounted for just over one-fifth. Peripheral growth had thus occurred during this time of

expansion. By 1933 there were 2876 poultry keepers in the region, ranging from 100 at Forest Row to 349 at Heathfield, with the number of keepers being more evenly distributed than the poultry themselves were in that year. Generally the established production centres possessed more birds per keeper, but the scales of production at this time varied more than at any previous time since farmers' wives and 'backyarders' were contrasted with farmers beginning to use battery farming systems. In 1925 it was stated that 'Artificial incubation is fast gaining its hold on the poultry industry', and by 1929 a battery system was operating at Furnace Farm (Cowden) and '... must be regarded as something more than a freak'. At Ticehurst battery production was used for Light Sussex breeds or crosses, and in 1931 Heydown Poultry Farm (Heathfield) had been modernized by the installation of a battery system. At another Heathfield Farm a 'Giant Incubator' hatched out 9600 eggs at a time, but most operators still only envisaged poultry as a branch of the general mixed farming economy.³⁹

One writer in 1929 enumerated the facts behind buying an ideal poultry farm. These included a southerly or south-easterly aspect; a gravel or light soil; hard road; proximity to a railway station; water supply; and wood — preferably fruit trees — for shelter. In addition there were several advantages to be gained from beginning in an established poultry community: transport facilities; ready availability of food at more competitive prices; advice; co-operation; and the probable existence of an auction market.⁴⁰

Marketing methods had also changed since the pre-war period. Even before the war greater individual mobility had begun to edge the higgler from his last intermediate position, carrying between farm and station,

³⁷ See G Sykes, *Poultry: A modern agribusiness*, 1963, p 1.

³⁸ Short, *op cit*, p 329, From 1926 the numbers of poultry were recorded more accurately since poultry returns were made a compulsory part of the June returns. In 1884-86 and in 1924 questions on poultry in England and Wales were asked in connection with the census on production, but were often over-looked and therefore inaccurate.

³⁹ Short, *op cit*, pp 329-31; *Sussex Express*, 6 Feb 1925, p 2; W M Elkington, 'Poultry in agriculture', *J RASE*, XC, 1929, p 155; *Sussex Express*, 30 Jan 1931, p 13; 29 May 1931, p 13; 27 Dec 1929, p 2.

⁴⁰ E Bostock-Smith column in *Sussex Express*, 16 Aug 1929, p 3.

and by the 1920's very few were still operating.⁴¹ Instead producers dealt directly with fatteners and there was a consequent increase in Sussex markets for poultry. Heathfield market was still pre-eminent, being controlled by a firm of auctioneers in conjunction with a small livestock auction.

The Watsons had a market every Tuesday at the Crown Hotel in the yard, outside the Crown Hotel. That draws a lot of people in Heathfield. They sold there by auction every Tuesday morning chicken, and produce and some pigs and some cattle, probably half a dozen cattle and perhaps ten or twelve pigs. But any amount of eggs and other produce. You could buy such things as early potatoes, veg, fruit as it came into the market would be sold and they were very cheap as a rule. You could buy them cheaper than you could . . . privately, really. I may have sometimes bought apples there at 9d per half a bushel. . . .⁴²

There was room for 3000 to 4000 birds in the wooden crates, sold together with butter, fruit, vegetables, dead poultry, and rabbits. But most of the trade was in store chickens received from a wide radius. Trade doubled between 1925 and 1929, although finished chickens were not sold here but direct to salesmen in London. The haul to Smithfield, Leadenhall or Billingsgate was by 1926 nearly always made by road. Messrs Routh and Stevens began in 1921, using two lorries to convey chickens between Heathfield and London. By 1925 they had ten lorries collecting peds (wooden cages for transporting poultry) and eggs from individual farmers at 1d per bird, and these were conveyed to London on each evening of the working week. There was less handling and bruising of the birds than when higglers and railways were used, and one important feature of this particular firm's service was the backhaul of chicken feed and empty peds.⁴³

Facing such competition the services offered by the Southern Railway 'chicken train' improved. A flat rate of 1d per bird was

charged for door to door collection and delivery to salesmen, the old additional collection charge deleted, thereby attempting to undercut road services which often levied pre-war rates plus collection charges. The advantages of reliability, punctuality, suitable vans, and speed, were advertised; trains arriving in London by mid-day. The return of peds was also a feature of this revised service. During the 1930's two main co-operative societies competed for the collection and marketing of farmers produce. The Heathfield Poultry Keepers Association doubled both membership and orders between 1922 and 1925, and by 1931 the annual general meeting received a very satisfactory report indeed.⁴⁴

Competition came from the Stonegate and East Sussex Farmers' Cooperative Society, founded in 1926 for the door to door collection and marketing of eggs from the Hawkhurst and Etchingham areas for sale in Tunbridge Wells. Originally centred on Eatonden Manor Farm, branches were established at Newick in 1932 and Wye in 1933. The former branch was a bold venture, outflanking the Heathfield poultry keepers' sphere of activity which also just included Newick. By 1935 Stonegate was recognized as the largest national mark egg packing station in the country, achieving a throughput of 21 million eggs in 1934, in spite of overproduction and a drop in egg prices between 1926 and 1934. In the far western High Weald the Horsham Poultry Association was conceived in 1932, but confined its activities to Horsham and the surrounding Weald clay area, later becoming the South-Eastern Poultry Producers Association.⁴⁵

Structural changes had occurred in the Wealden Poultry industry since the war. In some ways it had become more complex. The addition of many small producers and fatteners among ex-servicemen, aided by improved transportation, increased the number of small fatteners in the district; and

⁴¹ Ministry of Agriculture, fisheries and food, Economics Series 11, *Report on the marketing of poultry in England and Wales*, 1926, p 65.

⁴² Atkinson, op cit.

⁴³ *Sussex Express*, 22 May 1925, p 16; 25 July 1930, p 13.

⁴⁴ *Sussex Express*, 16 March 1925, p 3; 5 June 1931, p 8.

⁴⁵ *Sussex Express*, 11 Jan 1935, p 2; Jesse, op cit, p 74.

road transport firms claimed that their services had also enhanced this trend. Secondly, the pre-war dependence on fowls had been diversified by a greater post-war reliance on egg production. The latter had actually caused many to fear for the physique of the Sussex bird, and therefore these were often replaced by more utilitarian breeds, kept for work rather than showing. The Sussex fowls were therefore dropping out of shows by about 1935. County egg stations had been established in the 1920's to disseminate information, and by 1925 there were six in the Weald. Finally the rise of co-operative marketing schemes, perceived to be essential among so many small producers, had also changed the structure of the industry. Schemes guaranteeing to take all the produce of individual farmers were particularly popular in an industry vulnerable to over-production.⁴⁶

Conversely some simplification of the industry had been introduced by the streamlining of the horizontal integration of the industry (Fig 3). Motor transport had rendered the higgler unnecessary, produce now going directly to London or being transferred to the nearest railway station for the 'chicken train'. The Heathfield-Polegate railway was still, therefore, a magnet for farmers of all sizes. But no vertical integration was attempted and no-one produced and marketed their own eggs or birds. Few farmers even grew any cereal food on their all-grass holdings, relying instead on imported grain for fattening.⁴⁷

VII. *The end of Heathfield Dominance* 1939-50

The industry having prospered in the inter-war period, 639,922 poultry were recorded in the High Weald in 1939. The largest poultry

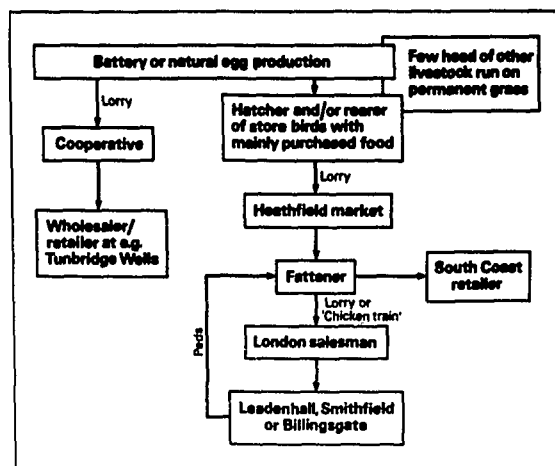


FIGURE 3

The structure of the Heathfield poultry industry in the interwar period.

concern, the Stonegate and South Eastern Farmers' Cooperative Society, registered record profits in 1938 with a turnover ten times that of 1926, and a new packing station was opened at Heathfield. Ten vans now supplied the area between Margate in the east and the Thames in the north.⁴⁸

The industry's pre-war problems had been the threat of foreign imports, disease and a maintenance of constant standards of grading and packing. Now, in addition, pigs and poultry became a war-time low priority issue, since their needs for cereals and by-product concentrates coincided directly with those of humans. Difficulty was experienced in obtaining food and this entailed problems in rearing home replacements; and with restricted internal movement and imports, flock numbers fell rapidly, with attempts to maintain large numbers sometimes leading to disease and thus indirect diminution. By 1943 there had been a decline of over 60 per cent in High Wealden poultry numbers, with owners instructed to reduce flocks by two-thirds. Losses were smaller at Tunbridge Wells and Hastings than in the rural areas, owing to the prevalence of the 'backyarder' with very small numbers of birds. Numbers

⁴⁶ Ministry of Agriculture, Economics Series, op cit, pp 76-7; *Sussex Express*, 16 Jan 1925, p 11.

⁴⁷ Short, op cit, pp 335-7; Jesse, op cit, p 68; E W H Briault, *The Land of Britain: Sussex (East and West)*, LXXXIII, 1942, p 539.

⁴⁸ *Kent and Sussex Courier*, 27 Jan 1939, p 9; 10 March 1939, p 9.

of poultry in urban areas were undoubtedly understated in the agricultural returns since many were kept on holdings of under a quarter acre. Large conurbation local authorities allowed tenants to keep poultry at this time, and Tunbridge Wells was criticized by the 'National Utility Poultry Society' for refusing to do likewise. At Heathfield the loss was over 76 per cent and its superiority was now quite markedly reduced.⁴⁹ While food shortage and other problems have been detailed, there were others to be faced. Petrol rationing adversely affected the heavy distribution undertakings from Stonegate; and although free collection boxes and packing materials were still advertised, the profits were depressed, particularly since eggs were also subject to government price manipulation. Eggs were subject to retail and wholesale price fixing. Maximum prices were lifted but reimposed after the loss of Danish and Dutch imports, with a profit margin set after 1942 by the government. From 1941 a distribution zoning scheme operated with hinterlands around major packing stations, such as Stonegate. Unfortunately many members of the co-operative were 'zoned out', thereby again disrupting production. The Stonegate zone consisted of an L-shaped catchment area between Robertsbridge, Crawley, Newick, Brighton, and Newhaven which entailed unnecessary travelling, since no attempt was made to minimize movement and costs. However, one advantage gained at this time was an increased interest in product quality, since to gain more reliable stock the East Sussex Agricultural Committee began to organize Poultry Accredited Breeding Stations. By December 1942 there were 23 in East Sussex, and therefore when poultry numbers increased again after the war there was a parallel increase in quality.⁵⁰

Nationally, poultry numbers fell from 60 million to 32 million between 1939 and 1943, rising again to 73 million by 1951; and in the High Weald the period 1943-53 witnessed an increase from 254,153 to 792,670. Changes in numbers of poultry were accompanied by changes in the composition of the flocks. In 1939 over 95 per cent were fowls, but the distribution varied such that ducks, turkeys and geese were commoner away from Heathfield. By 1943 fowls constituted under 90 per cent of the total since ducks and geese, kept on poor grass or common forest land, were affected less than the intensive battery hens or turkeys. In both years the greatest diversity was to be found in and around urban Haywards Heath, Hastings and Tunbridge Wells. By the 1950's the advent of the broiler industry meant that fowls once more assumed their prominence and accounted for 90 per cent of total numbers.⁵¹

Although the wartime disruption had cut flocks by about two-thirds in 4 years, the demand by the early 1950's resulted in an increase of nearly 24 per cent over 1939 by 1953. However, the gains were spatially uneven since there had been large urban increases compared with losses in the areas around Cranbrook, Heathfield, Wadhurst, and Burwash. The failure of Heathfield to regain its previous dominance was one aspect of the pre-war locational trend to the east, hastened by the war, in an industry now more than ever almost completely divorced from its natural environment, and more dependent on road than rail transport.

VIII. *Change in the Poultry Industry of the Weald 1850-1950*

The factors which had encouraged the concentration of poultry in the Heathfield area by 1850 had nearly all vanished by 1950. The physical environment, so unfavourable for agriculture, yet so useful for the rearing of

⁴⁹ *Sussex Express*, 4 Dec 1942, p 7; *Kent and Sussex Courier*, 10 March 1939, p 9; 24 May 1940, p 7; Short, op cit, pp 415-21.

⁵⁰ K A H Murray, *Agriculture*, 1955, p 133; *Kent and Sussex Courier*, 27 Sept 1940, p 5; 27 Dec 1940, p 3; 12 Feb 1943, p 2; 27 Oct 1944, p 4; *Sussex Express*, 18 Dec 1942, p 7.

⁵¹ Short, op cit, p 420.

small numbers of poultry, had become a factor of less importance with the advent of broilers and artificial environments. The social structure of the Heathfield area — heir to the open parish of the early nineteenth century and an area known for its fierce independence in religion and trade — had quite changed. The late-Victorian colonization and the twentieth-century suburbanization and settlement by ex-servicemen and urbanites had quite transformed the character of the region. The railway, taking over the role of the higgler, was itself superseded by

motorized transport, and this effectively freed the producers of poultry and eggs from their nineteenth-century locations. As the spheres of contact, knowledge and expertise widened, so too did the spread of poultry and egg producers.

By 1950 therefore the Heathfield industry had virtually vanished. The wartime periods had battered its pre-eminence, but over a longer period it was a changing society, economy, and above all, technology which finally displaced this quite remarkable rural nineteenth-century peasant industry.

Notes on Contributors

ALLAN G BOGUE is the Frederick Jackson Turner Professor of History at the University of Wisconsin, and is currently president of the Economic History Association, past president of the American Agricultural History Society, and president-elect of the Organization of American Historians. Among the best-known of his numerous publications are: *Money at Interest: The Farm Mortgage on the Middle Border*; and *From Prairie to Corn Belt: Farming on the Illinois and Iowa Prairies in the Nineteenth Century*. His most recent book is *The Earnest Men: Republicans of the Civil War Senate*. He is working at present on a social history of the Corn Belt during the twentieth century.

PAMELA HORN, well known for her books on nineteenth-century rural society, is a part-time lecturer in Economic and Social History at Oxford Polytechnic. At present she is working on a book dealing with the 'Changing Countryside' from 1870 to the First World War. She is also engaged in research into the tithe riots in Pembrokeshire between 1886 and 1891-92.

JOHN LANGDON is working on a PhD thesis in the University of Birmingham. A former chemical

engineer, he is now particularly interested in problems of medieval technology, especially those relating to the introduction of the work-horse to English farming.

DR J E MARTIN is a social scientist undertaking research for the Department of Scientific and Industrial Research, Wellington, New Zealand, into the role of labour and horticulture in New Zealand's future development. His doctoral thesis was on English agrarian development and peasant revolt from 1100 to 1700, with a focus on the early-modern period. Present research interests include the history of rural labour and rural unionism in New Zealand.

BRIAN SHORT is lecturer in Human Geography at the University of Sussex, and specializes in Historical and Rural Geography. His research interests have centred around the agrarian history and rural communities of south-east England, and particularly the Weald. He is a contributor to the forthcoming *Agrarian History of England and Wales 1640-1750*; and is currently working on a Regional History of south-east England with Dr Peter Brandon.

The Economics of Horses and Oxen in Medieval England¹

By JOHN LANGDON

I

DESPITE some argument to the contrary,² it has generally been assumed that the ox was the dominant draught animal in medieval English farming.³ This opinion is based mainly on demesne accounts, which show oxen as almost always outnumbering horses.⁴ This is particularly the case in the key matter of ploughing, where the horse seldom made much impression beyond its inclusion in the mixed plough-teams of horses and oxen popular on demesnes in the south-eastern part of the country.⁵ As expected, the horse was commonly used for hauling and harrowing, but, despite its theoretical advantages of speed, stamina, and longer life, total conversion to the animal for all facets of demesne farming was comparatively rare.⁶

This state of affairs was reflected in the agricultural treatises of the time, which were firm in their preference for the ox, particularly as a plough-beast. The case was put most clearly in Walter of Henley's *Husbandry*, written towards the end of the thirteenth century.⁷ Walter admitted a possible advantage for the horse in ploughing stony ground where oxen would tend to slip, but countered the advantage of speed by saying that the 'malice' of the ploughmen would not allow the horse plough to go any faster than if it were pulled by oxen. He also pointed out that when ploughing hard or heavy ground the horse was almost useless, repeatedly coming to a standstill while the slower ox managed to pull through.

But the keystone to Walter's argument was economic: horses were simply more expensive to keep than oxen. They consumed more of the expensive fodder, oats, and cost more to maintain, particularly in shoeing. To prove his point, Walter drew up a crude comparison of costs, itemized in Table 1.

TABLE 1
Walter of Henley's Horse/Ox
Cost Comparison (per animal)

	Horses	Oxen
Oats (in winter)	8s 2d	2s 4d
Pasture (in summer)	1s	1s
Shoeing	4s 4d	—
Total (per year)	13s 6d	3s 4d

Much is missing from this list of costs. Although he mentions hay, straw and chaff

⁷ Oschinsky, op cit, particularly p 319, cc 36–41.

¹ I am indebted to Dr C C Dyer and Professors R H Hilton and P D A Harvey for kindly reading over and commenting on various drafts of this paper.

² Notably Lynn White, Jr, *Medieval Technology and Social Change*, Oxford, 1962, pp 57–69.

³ J Z Titow, *English Rural Society 1200–1350*, 1969, p 38; E Miller and J Hatcher, *Medieval England — Rural society and economic change 1086–1348*, 1978, p 227; H S Bennett, *Life on the English Manor*, Cambridge, 1937, p 90; Lord Ernle, *English Farming: Past and Present*, 6th edn, 1961, p 13; J H Moore, 'The Ox in the Middle Ages', *Agriculture*, XXXV, 1961, pp 91–2; G E Fussell, *Farms, Farmers, and Society*, Lawrence, Kansas, 1976, p 111.

⁴ For example, of the 77 manors used to construct Table 2 below, the ratio of oxen to adult horses approached 3 to 1 (1342 oxen as against 532 horses), ranging from 9 to 1 in the north to about 6 to 4 in the south and east. Only 5 of the manors had gone completely to horses.

⁵ For specific examples of mixed plough-teams, see R Lennard, 'The Composition of Demesne Plough-teams in Twelfth-Century England', *Eng Hist Rev*, LXXV, 1960, pp 201–2.

⁶ See note 4. For the various merits of the horse, see White, op cit, p 62; R J Forbes, *Studies in Ancient Technology*, II, Leiden, 1955, pp 83–5; N Harvey, 'Walter of Henley and the Old Farming', *Agriculture*, LIX, 1953, p 491; Dorothea Oschinsky, *Walter of Henley*, Oxford, 1971, p 162.

as part of the feeding regime, Walter obviously considers them as being of a minor nature and does not assign a value to them. Nor does he try to assess depreciation, although he was clearly aware of it since he does mention that when a horse gets old he loses all but the worth of his hide, while the ox, with 10*d* of summer grass for fattening, can be sold for as much as he originally cost.

Nevertheless, Walter's figures, incomplete as they are, carry considerable weight. If the 4 to 1 ratio in costs represented anything close to reality, they must have given a sizeable boost to the continued use of oxen on the demesne. How much faith should we put in Walter's figures, though? At least one commentator has suggested that they were probably inaccurate and may in fact have been made up to suit his argument.⁸ Also, there is the curious fact that, although oxen were dominant on the demesne, in some areas at least they seem to have been almost completely eliminated from peasant agriculture. This is particularly noticeable in the Suffolk and Bedfordshire lay subsidy studies of E Powell and A T Gaydon, where the demesnes clearly held the majority of oxen and the peasants the majority of horses.⁹ In short, we have not only to investigate the precision of Walter's remarks, but also to explain this relative lack of enthusiasm for the use of the ox by that very sector which seemingly had most to gain from the economic advantages that Walter so clearly attributed to the beast.

The investigation will be accomplished in two stages. First, I shall attempt a detailed cost analysis to determine to what extent Walter's figures were correct. With one exception, this will be done using demesne accounts centred around the late thirteenth century, in order to bring the analysis into

chronological line with Walter's remarks. Second, through the use of a suitable manorial example, I shall attempt to explore how much influence this economic consideration had in shaping peasant and demesne policy as regards the medieval use of the two animals.

II

Proceeding with the first stage, the cost of keeping horses and oxen falls into three main categories: (a) feeding; (b) general maintenance, that is, shoeing, harnessing, stabling, and so on; and (c) depreciation.

(a) Feeding

Essentially, this involved only four items: oats, hay, straw and pasture. Chaff, although mentioned by Walter, is rarely entered in the accounts as a feed and so is ignored here, and the same applies to more extravagant fodders, such as bran and various types of horse-bread, which were generally fed only to riding horses or privileged household cart-animals.¹⁰ Notably excluded, too, are legumes, that is, peas, beans and vetches, which, although used on occasion, do not figure largely as a feed for draught animals in the accounts until after 1350.

Of the commonly employed feeds, however, the major item was oats, and the reeves, bailiffs, or other manorial officials were very careful to enter the amounts consumed on the dorse of each account. Table 2 contains a region by region summary of these entries for 77 manors, covering the period 1250–1320.¹¹ For the purposes of this analysis,

¹⁰ As in the c1270 Beaulieu Abbey stable accounts; S F Hockey (ed), 'The Account-Book of Beaulieu Abbey', *Camden Soc*, 4th ser, XVI, 1975, pp 260–3. I would also like to express my gratitude to Mr Kyle Rae for drawing my attention to this use of high-grade feeds for horses.

¹¹ The manors sampled, in order of region as they appear in the table, were Thornham and Hanworth, Norfolk; Peasenhall, Cratfield, Framlingham, Stonham, and Clopton, Suffolk; Newport, Birdbrook, Kelvenden, and Borley, Essex; Meldreth, Cambs; Houghton and Sundon, Beds; Standon, Berkhamsted, Wheathampstead, Wymondley, Amwell, and Ashwell, Herts; Iver, Cippenham, and Turweston, Bucks; Isleworth, Ashford, and

⁸ *Ibid*, p 163.

⁹ E Powell, *A Suffolk Hundred in the Year 1283*, Cambridge, 1910; A T Gaydon, 'The Taxation of 1297', *Beds Hist Rec Soc*, XXXIX, 1959, especially p xxviii. Animal heriots in the south and east of England often indicate the same trend, as, for instance, in the case of Cuxham discussed below.

the horses have been subdivided into cart-horses (*equi carectarii* or occasionally just *equi* in the accounts) and plough-horses (*affri*, *stotti* and *jumenta*). Although inevitably there was some overlapping in function — affers, stotts and *jumenta*, for instance, often did harrowing and carting as well as ploughing — this distinction between horses for carting and horses for ploughing is a common convention in the accounts, especially in the south and east.¹²

As expected, horses consumed considerably more oats per year than oxen. There is, as well, a very sharp distinction between cart- and plough-horses, the former consuming over three times as much of the grain as the latter, partly because carting was a year-round occupation compared to the somewhat seasonal nature of ploughing. Finally, a strong regional trend is evident with the oats consumption for both horses and oxen tailing off towards the west and north. Presumably this was because of increasing availability of pasture, but there is also the factor of reduced labour, particularly in the case of horses as they became increasingly excluded from ploughing towards the north and west, and even from hauling and harrowing on occasion.

Also to be noted from Table 2 is that the oats rations for plough-horses and oxen suggested by Walter were seldom followed in practice; as can be seen, none of the regional

Hayes, M'sex; Battersea, Morden, and Croyden with Cheam, Surrey; Hampstead Ferrers, Berks; Westerham, Gillingham, Lyminge, Saltwood, and Charing, Kent; Chalvington and Tangmere, Sussex; Stretton, Rutland; Pury, Wellingborough, Radstone, and Naseby, Northants; Bingham and Wheatley, Notts; Holywell, Lincs; Cuxham, Watlington, Launton, and Whitchurch, Oxon; Bourton-on-the-Hill, Hardwicke, and Todenham, Glos; Sutton-under-Brailes and Knowle, War; Pershore, Worcs; North Waltham, Bishop's Sutton, and Crawley, Hants; Mere and Cowesfield, Wilts; Exminster, Tiverton, Hemyock, Topsham, Plympton, and Honiton, Devon; Skipton, Holme, Roecliffe, Howden, Burstwick, Cleton, Easington, Keyingham, and Little Humber, Yorks; West Derby, Lancs; Finchale, Durham. Space prevents a detailed list of sources; several of them, however, are referred to later in the article.

¹² For example, see J A Raftis, *The Estates of Ramsey Abbey*, Toronto, 1957, pp 129–30.

TABLE 2
Yearly Oats Consumption by Horses and Oxen

Region (No of manors)	Cart-horses (qrs/animal)	Plough-horses (qrs/animal)	Oxen (qrs/animal)
East Anglia (12)	7.04	3.03	0.87
Home Counties (18)	8.28	2.59	0.46
Kent & Sussex (7)	4.92	3.37	0.06
East Midlands & Lincs (8)	6.11	1.29	0.25
West Midlands & Oxon (10)	6.64	1.29	0.22
Hampshire & Wilts (5)	3.63	0.83	0.32
Devon (6)	1.05	0.70	0.01
The North (11)	1.42	1.13	0.16
National average ¹³	6.65	2.02	0.34
Average cost (@ 2s 4½d/qr) ¹⁴	15s 9½d	4s 9½d	9¾d
Walter of Henley's rations (qrs/ animal) ¹⁵	—	4.08	1.23

averages reaches his figures for either animal. However, it must be said that the regional averages do hide some quite high totals for individual manors. Nine of the 77 manors making up Table 2 did in fact exceed Walter's rations for plough-horses, and another five exceeded or at least equalled those for oxen. So, although Walter's rations were very seldom followed to the letter, they do seem to have formed a reasonable upper range. Possibly Walter was describing a situation that might have existed on a well-run demesne in East Anglia or the Home Counties. Nevertheless, even in ordinary circumstances annual oats costs could be quite heavy. Those for a cart-horse were parti-

¹³ That is, the average of all 77 manors, *not* of the regions.

¹⁴ The average price of oats for the period 1276–1300 (D L Farmer, 'Some Grain Price Movements in Thirteenth-Century England', *Econ Hist Rev*, 2nd ser, X, 1957, p 212). No price distinction is made between the threshed oats fed to horses and those on the sheaf generally given to oxen.

¹⁵ As calculated from Walter's figures; Oschinsky, *op cit*, p 319, cc 38–40.

TABLE 3
Detailed Draught Stock Feeding Costs for
Certain Archbishopric of York Manors, 5 November 1373 — 6 May 1374

Manor	Affers and Jumenta						Oxen				
	No	Oats	Peas	Hay	Straw	Total	No	Oats	Hay	Straw	Total
Sherburn, Yorks	3	5½	—	21½	—	27	27	3½	21½	27½	52
'Coughous', Yorks			No horses				8	—	19½	33½	53½
Cawood, Yorks			No horses				30	4½	21½	39	64½
Beverley, Yorks	4	—	—	16½	—	16½	18	—	16½	51½	67½
Skidby, Yorks	4	17½	20	11½	—	48½	27	—	11½	46½	58½
South Burton, Yorks	6	—	26½	22½	—	49	26	3½	22½	48½	74½
Wetwang, Yorks	8	15½	32½	—	2½	50½		No oxen			
Southwell, Notts	4	—	7½*	—	—	7½	18	—	—	30	30
Laneham, Notts	4	—	—	20	3	23	6	—	20	3	23
Scrooby, Notts	3	30½	—	10½	—	40½	18	5	10½	39½	54½
Average		8½	10½	12½	¾	32½		1½	15½	35½	53
Percentage		26.0	32.8	38.9	0.2			3.3	29.7	67.0	

*Peas and beans

cularly onerous, virtually equal to the value of the beast itself.¹⁶

The next important items of feed, hay and straw, have been lumped together for convenience in this analysis. In any case, they were largely interchangeable, straw being used to save on hay or even oats whenever possible, especially for cattle.¹⁷ Evidence about the draught stock consumption of this mainly home-produced hay and straw is unfortunately very scarce, since only the extra-manorial purchase of these fodders is normally entered in the accounts. However, we do have some indications. The best I have found come from a set of archbishopric of York accounts covering a six months' vacancy from 15 November 1373 to 6 May 1374.¹⁸

During this period all the hay, straw, oats and peas used as draught stock feed on 10 manors in Yorkshire and Nottinghamshire were recorded, perhaps as a charge to the incoming archbishop. As a result we have a uniquely detailed breakdown of all feeding costs except pasture, which, when separated from the accounts and with some adjustments made, were calculated in terms of cost per animal as shown in Table 3.

The figures are startling. Here in the north hay and straw make up the lion's share of feeding costs, nearly 40 per cent for horses and over 95 per cent for oxen. The very high cost of straw for oxen is especially noticeable, but accords well with Fitzherbert's statement that 'oxen wyll eate but straw, and a lyttell hey'.¹⁹

Other accounts for hay only show similar results, and on the basis of these and the archbishopric of York accounts above educated guesses as to the average hay and straw

¹⁶ Cf the cart-horse purchase and selling prices used in the depreciation calculations below.

¹⁷ The use of straw as a feed, sometimes mixed with hay, is well supported by Walter and his colleagues (Oschinsky, *op cit*, pp 327, 333, 339, 397, 439), wheat and oats straw both being mentioned.

¹⁸ PRO SC6 1144/10.

¹⁹ *The Book of Husbandry* by Master Fitzherbert, 1534 edn, ed by W W Skeat, 1882, p 16.

portion of the total feeding costs (excluding pasture) for each animal across the country were made as follows: cart-horses, 20 per cent; plough-horses, 30 per cent; oxen, 85 per cent. These are pitched somewhat lower than the archbishopric accounts would indicate, but take into consideration other areas of England, particularly the south and east, where oats played a greater part in the total feed in place of hay and straw. Using these proportions, then, and extrapolating from the national average oats costs in Table 2, we obtain average cost figures for hay and straw across the country of 3s 11½d, 2s ¾d and 4s 7½d for cart-horses, plough-horses and oxen respectively.²⁰ In view of the scarcity of direct evidence, these costs of course are highly conjectural, but at least should provide a guideline by which we may be able to judge medieval performance in these matters.

The cost of pasture is much easier to ascertain. Walter estimates its cost at 1s per animal per summer term, and this seems more or less right, although normally such charges do not figure in the accounts unless it is pasture outside the manor that is used. Where such charges are given, however, the agreement is usually good.²¹

(b) *General Maintenance*

The primary cost here was for shoeing horses, for which Walter assigned a charge per animal of 1d per week, or 4s 4d per year. Even a casual glance at the accounts shows this to be wildly inflated, and a more detailed look confirms it. The average shoeing cost per animal for 47 manors across the country was as follows:²²

	<i>Average Shoeing Cost per Year</i>
Cart-horses	14d
Plough-horses	9d

²⁰ Thus $(20/80) \times 15s\ 9\frac{1}{2}d = 3s\ 11\frac{1}{2}d$ (cart-horses); $(30/70) \times 4s\ 9\frac{1}{2}d = 2s\ \frac{3}{4}d$ (plough-horses); $(85/15) \times 9\frac{1}{2}d = 4s\ 7\frac{1}{2}d$ (oxen).

²¹ Eg Oschinsky, *op cit*, p 162n.

²² The manors being Thornham, Norfolk; Monks Eleigh and Clopton, Suffolk; Bocking, Hadleigh, Birdbrook, Feering, Kelvenden, and Borley, Essex; Sundon, Beds; Cippenham

Unlike oats consumption there was no clear regional trend, although there was often a great variation from manor to manor, depending on the work required of the animals. Oxen were also shod on occasion but at such a low cost (generally 1d or 2d per animal per year) and on so few manors that for all practical purposes the average outlay was nil.

Other maintenance costs, such as harnessing equipment, repairs to stables, and bedding, were of a minor nature, and a survey of the accounts indicates a charge of 6d per animal per year would adequately cover them all. Care of the animals was normally part of the ploughman's or carter's duties, and consequently only an occasional charge for extra labour was involved here.

(c) *Depreciation*

The annual depreciation of the demesne draught animals can be calculated using the formula:

Purchase price at start of demesne career —
selling price at end

No of years active service in between

The most difficult variable to determine is the number of years active service, or average demesne life, but this can be worked out from a series of consecutive or nearly consecutive accounts by simply dividing the average number of animals on the demesne by the average number replaced per year. The results

and West Wycombe, Bucks; Isleworth, Knightsbridge, and Ashford, M'sex; Wymondley, Aldenham, and Ashwell, Herts; Battersea, Surrey; Avington, Berks; Hollingbourne and Westerham, Kent; Elton and Slepe, Hunts; Stretton, Rutland; Radstone and Naseby, Northants; Wheatley, Notts; Long Bennington and Holywell, Lincs; Cuxham, Oxon; Knowle, War; Pershore, Worcs; Garway, Hereford; Hambledon, Beaworth, and Old Alresford, Hants; Mere and Cowesfield, Wilts; Roecliffe, Howden, Burstwick, Skipton, Keyingham, and Little Humber, Yorks; Bamburgh, Northumberland; Cockermouth, Cumberland.

TABLE 4
Average Demesne Life of Various Draught Animals

Manor	No of Accounts	Average Demesne Life (yrs)		
		Cart-horses	Plough-horses	Oxen
Crawley, Hants	17	8.5	4.5	6.2
Cuxham, Oxon	8	9.6	6.4	4.7
Forncett, Norfolk	10	—	5.6	4.7
Bourton-on-the-Hill, Glos	15	6.0	7.1	5.8
Knightsbridge, Middlesex	20	6.9	5.0	5.1
Birdbrook, Essex	21	4.7	5.7	5.3
Westerham, Kent	10	6.0	4.1	3.8
Average		7.0	5.5	5.1

for a sample of manors across the south of the country are shown in Table 4.²³

Using these figures, we can now calculate the various depreciations. The purchase and selling prices employed are those of Farmer, averaged for the period 1276–1300.²⁴ Thus we have:

Average Depreciation of Cart-horses =

$$\frac{16s\ 10\frac{3}{4}d - 7s\ 10\frac{1}{4}d}{7.0} = 1s\ 3\frac{1}{2}d$$

Average Depreciation of Plough-horses =

$$\frac{10s\ 10\frac{1}{2}d - 4s\ 11\frac{3}{4}d}{5.5} = 1s\ 3\frac{1}{4}d$$

²³ Sources as follows: N S B and E C Gras, *The Economic and Social History of an English Village*, Cambridge, 1930, pp 373, 377, 383 (Crawley, 1276–1300); P D A Harvey (ed), 'Manorial Records of Cuxham, Oxfordshire', *Oxfordshire Rec Soc*, L, 1976, pp 181–314 (Cuxham, 1289–98); F G Davenport, *The Economic Development of a Norfolk Manor 1086–1565*, 1906, pp 33–5 (Forncett, 1272–1300); Westminster Abbey accounts WAM 8239–8256, 8230 (Bourton, 1287–1308); WAM 16380–16402 (Knightsbridge, 1289–1313); WAM 25398–25424 (Birdbrook, 1295–1319); WAM 26389–26402 (Westerham, 1296–1306). Where possible, the inclusion of heriots, waifs, and confiscations was avoided. These animals were almost always sold very quickly after being received and consequently would reduce the figures significantly.

²⁴ D L Farmer, 'Some Livestock Price Movements in Thirteenth-Century England', *Econ Hist Rev*, 2nd ser, XXII, 1969, pp 2–5.

Average Depreciation of Oxen =

$$\frac{11s\ 6\frac{1}{2}d - 9s\ 10\frac{3}{4}d}{5.1} = 3\frac{3}{4}d$$

Two points stand out from these calculations. First, oxen, as expected, fare much better in terms of depreciation than horses. Second, depreciation costs in general are patently of minor consideration compared to those of feeding.

III

Totalling up all the above costs, we can now construct a more or less complete economic comparison between the animals under consideration. This is shown in Table 5.

As expected from Walter's figures, horses, and particularly cart-horses, did cost more to keep than oxen. They consumed more in the way of oats and also cost more in general maintenance and depreciation. The difference, however, particularly between plough-horses and oxen, was nowhere near as marked as Walter would have it. The cost of keeping an ox in real terms was fully 70 per cent that of a plough-horse, perhaps more given the uncertainty of the hay and straw figures. Only when hay and straw are excluded does the relative difference between the cost for

TABLE 5
 'Operating' Costs of Horses and Oxen in Medieval England

	<i>Cart-horses</i> (cost/animal/yr)	<i>Plough-horses</i> (cost/animal/yr)	<i>Oxen</i> (cost/animal/yr)
(a) <i>Feeding</i>			
Oats	15s 9½d	4s 9½d	9¾d
Hay and Straw	3s 11½d	2s ¾d	4s 7½d
Pasture	1s	1s	1s
Total	20s 9d	7s 10½d	6s 5d
(b) <i>Maintenance</i>			
Shoeing	1s 2d	9d	—
Other Costs	6d	6d	6d
Total	1s 8d	1s 3d	6d
(c) <i>Depreciation</i>	1s 3½d	1s ¾d	3¾d
GRAND TOTAL	23s 8½d	10s 2d	7s 2¾d
Walter of Henley's figures	—	13s 6d	3s 4d
Grand Total excluding hay and straw	19s 9d	8s 1¼d	2s 7½d

plough-horses and oxen approach that 4 to 1 ratio that gave such force to Walter's argument.

Does this lack of agreement between the foregoing analysis and Walter's argument totally invalidate his figures? Did he deliberately ignore hay and straw in order to improve his case? It seems unlikely, since Walter's figures appear to be sincere. Except for the wildly inflated shoeing costs (which, as Dorothea Oschinsky suggests, may have been intended by Walter to include depreciation as well),²⁵ his figures do often agree more or less with those found in the accounts. It is curious, though, that hay and straw consumption is so widely ignored, both in Walter and the accounts. One possibility is that, due to transportation costs, there may have been an inclination among manorial officials to think of hay and straw as being essentially without market value and hence more suitably treated as a virtually free source of food for the demesne animals. This was not

strictly correct, of course. Even ignoring the potential worth of labour services, there were, for example, associated costs of hay-making — mainly extra labour — that were a direct drain on manorial cash reserves. Also, there were possibilities of selling hay and straw locally, to both tenants and outside customers, which gave them some value at least. Nevertheless, in terms of decision making, the concept of hay and straw as being essentially without accountable worth is one that Walter and his manorial colleagues seem to have considered valid, and as such it gave a decided bias to the demesne use of oxen rather than horses.

IV

On the other hand, this does not explain the presence of a horse-oriented peasantry that could be found as far west as Oxfordshire. At demesne cost levels the horse would have been ruinous to the average villein's budget. To show how the peasant got round this difficulty and managed to fit the animal into his

²⁵ Oschinsky, *op cit*, p 163.

pocket-book, so to speak, I have chosen as an example the Merton College manor of Cuxham in south-east Oxfordshire, for which the records have largely been made accessible through the excellent work of P D A Harvey.²⁶

Cuxham after 1293 had a demesne arable of about 270 standard acres, for which there was a working stock of around 3 cart-horses, 4 affers (or plough-horses), and 12 to 16 oxen.²⁷ Two ploughs, each probably with a team of 2 horses and 6 oxen, were the norm, although very occasionally a third plough, drawn mainly by horses, was employed as well.²⁸

On the peasant side, 1 freeman and 13 families of customary tenants holding a half-virgate of 12 acres apiece had land sufficient to require their own draught animals and ploughing equipment.²⁹ With the exception of the freeman, who, it appears from trespass presentments, had both horses and oxen, the rest had only horses, generally 2 to a holding according to the trespasses.³⁰

From the evidence, slight as it is, there was little co-aration. In 1288–89, for instance, when there were only 8 half-virgate holders on the manor (5 were added from 1290 to 1293), bread was supplied for a plough-boon involving 16 men with 8 ploughs.³¹ Since only half-virgaters ever owed full ploughing services at Cuxham, it seems likely that these 8 ploughs coincided with the 8 half-virgate holdings then in existence, and that each holding was thus self-sufficient in ploughing stock and equipment, even though, as seen above, these plough-teams must have been very small indeed.

Nevertheless even 2 plough-horses, if maintained at the demesne level, would seem an almost insupportable drain on a holding as small as the Cuxham 12-acre half-virgate. Clearly some accommodation had to be made, particularly in the matter of feed. Fortunately the Cuxham material provides some clues as to how this was done. First, in regard to the ploughing stock at least, it is virtually certain that the peasants' draught animals were used much less intensively than the demesne animals. As mentioned above, the Cuxham demesne totalled some 270 acres, which were cultivated under a three-field system. Allowing for a double ploughing of fallow (the normal practice), this meant that 360 acres needed ploughing every year. The tenant contribution to this ploughing was negligible, a quarter of an acre for each of the 13 half-virgate holdings or $3\frac{1}{4}$ acres in all. Consequently, if 2 demesne ploughs are assumed, each plough-team was responsible for nearly 180 acres per year. Even with an optimistic ploughing rate of an acre a day, this still meant 180 days ploughing.³²

On the other hand, peasant animals were put to the plough for a much shorter period of time. Assuming again a double ploughing of the fallow, a Cuxham half-virgate would require 16 acres of ploughing, or $16\frac{1}{2}$ including the rood owed to the lord. Even if co-operation between neighbours did occur, doubling the size of the plough-team from, say, 2 to 4 animals, a peasant's horses would still only be required at the plough for $32\frac{1}{2}$ acres, or, at the above acre a day, $32\frac{1}{2}$ days' work. Harrowing and carting would have to be added to this, of course, whereas on the demesne this would largely be handled by the cart-horses, but even so it is doubtful that this would make up the yearly work load to anything like that for the demesne animals.

In consequence, peasant animals had a much easier life than those on the demesne

²⁶ In his *A Medieval Oxfordshire Village*, Oxford, 1965, and 'Manorial Records of Cuxham', op cit.

²⁷ Harvey, *Med Ox Vil*, pp 39–46, 164–5.

²⁸ Ibid, pp 57–9.

²⁹ Demonstrated most clearly on the holding of Robert Oldman, the reeve, who definitely had his own plough and ploughing animals. Ibid, pp 69–70; 'Manorial Records of Cuxham', p 639.

³⁰ Harvey, *Med Ox Vil*, pp 131, 174–5.

³¹ Harvey, 'Manorial Records of Cuxham', p 172.

³² Probably more, since even the normally sanguine Walter indicates that seven-eighths of an acre a day was a more likely figure for most of the year's ploughing (Oschinsky, op cit, pp 315, 317).

and this enabled the tenant to cut down considerably on his costs for keeping them, especially those for feeding. For one thing, it appears that the Cuxham peasants scarcely bothered at all with oats.³³ Instead they grew vetches which, for them at least, were a much more flexible crop suitable for all animals, although perhaps less specifically good for horses. A detailed tax assessment for 1304 shows the Cuxham peasants growing up to 3 acres of vetches each, although how much of this was fed to their horses as opposed to the other animals they owned is debatable.³⁴ Instead it would seem they relied more on the cheaper fodders of hay, straw, and, in particular, pasture.

Of the first two, certainly the most available was straw, something that almost every tenant had as a residue from the harvest. Although more likely to be fed to his other animals, particularly any cattle he had, it did have some value as bedding for his horses and perhaps as an emergency feed for them if needed. Straw could also be bought from the demesne.³⁵

Hay, though, was another matter. Never was it sold to the Cuxham tenantry. In fact, there seems to have been a chronic shortage of the fodder on the manor, since the demesne purchase of hay from outside the manor occurs regularly in the accounts. Presumably the Cuxham peasant largely did without, although he may have had a little of the 'allotable' meadow referred to in the 1356-57 account.³⁶ And, of course, he might have had the same opportunities for outside purchase as did the demesne.³⁷

Pasture was distinctly more promising. Again it could be bought from the demesne, but it is likely that the Cuxham peasant looked to cheaper sources. First among these must have been the commons, but un-

fortunately the Cuxham records throw almost no light on them. Certainly they were not inexhaustible, since even demesne animals were often forced to go outside the manor for pasture.³⁸

More intriguing is the question of trespasses, which seemed to go well beyond the bounds of occasional infringements. Altogether 413 cases were recorded against the lord's corn, pasture, and meadow from 1279 to 1358, an average of 7 trespasses per court. Some of the trespasses were quite determined, the most prolific examples occurring over two courts in 1343 and one in 1346, when 82 instances were brought involving 53 horses, at least 40 sheep (probably a great many more), and undisclosed, but quite likely large, numbers of cattle, pigs, ducks and geese.³⁹ The transgressors represented almost all levels of the Cuxham tenantry: half-virgaters, freemen, *famuli*, and even a few people from outside the manor. Yet there is no sense of outrage at this mass infringement; all were fined at the usual levels of 1d or 2d per horse, less for smaller animals. In fact, the number of trespasses in the court rolls often approaches that appropriate for licences rather than fines, like the assize of ale, and perhaps they were considered as such, condoned as long as they did not get out of hand. If so, as a source of pasture, trespasses on the demesne must have ranked alongside the commons.

The diet of the Cuxham peasant's horses, then, appears to have been heavily loaded towards the cheaper staples of pasture and perhaps straw. This is consistent with the low amount of work expected of the animals. When periods of high exertion did occur, vetches, rather than oats, were used; hay probably much less, simply because it was scarce at Cuxham. Finally, it is almost certain that this diet would have remained essentially the same whether the peasant had horses or oxen, and thus the economic bias in favour of

³³ Harvey, *Med Ox Vil*, pp 130-1.

³⁴ Harvey, 'Manorial Records of Cuxham', pp 712-14.

³⁵ Eg 'Manorial Records of Cuxham', p 214.

³⁶ *Ibid*, p 562; *Med Ox Vil*, p 29.

³⁷ As in the 1378 case of John Lacheford, who was killed while fetching hay (presumably for his own use) from nearby Wheatfield. Harvey, *Med Ox Vil*, pp 101-2.

³⁸ *Ibid*, pp 99-101.

³⁹ Harvey, 'Manorial Records of Cuxham', pp 681-6.

the ox which Walter saw and of which feeding costs formed the major portion would largely evaporate in the case of the Cuxham peasant.

In any case, any economic disadvantage still accruing to the horse would have been swallowed up by the other benefits the peasant saw in the animal. For example, horses were much more versatile than oxen. They could pull a cart; they could be ridden; they could be used as pack-animals — all functions that an ox performed awkwardly or not at all. Also, with its use in smaller teams, the horse was better suited for things like ploughing little bits of land in closes or in awkward corners of the open fields. And then there was the increase in ploughing speed promised by the horse, which no doubt could be very useful at times, particularly on level ground and light soils.⁴⁰

With respect to their purchase horses were much more flexible as well. For instance, while it was virtually impossible to buy a cheap ox because of its ever present value as meat, it was very possible to buy a cheap horse. It seems inevitable, for instance, that the demesne cast-offs would be bought by peasants and, as we can see from the figures used in the depreciation calculations, the average selling price for plough-horses in particular was less than half that for oxen. The range of prices for these horses was much greater as well. Demesne affers, for instance, could be bought for as little as two shillings or as much as ten, or even more.⁴¹ Consequently the peasant could chop and change; if he wanted to increase his cultivation beyond his single plough or to free himself from the need to co-operate with a neighbour, he could do so by buying a horse or two, adjusting the quality of his purchase to suit his budget. The comparatively stable price of an ox during its adult life tended not to allow this sort of flexibility.

⁴⁰ Fitzherbert (ed Skeat), *op cit*, p 16.

⁴¹ As at Knightsbridge, M^xsex, where an affor was sold for 2s in 1309–10 (WAM 16399) and another for 10s 4d in 1312–13 (WAM 16402).

V

In conclusion, economic factors played a major part in determining the distribution of horses and oxen in medieval England, and certainly no more so than on manorial demesnes. As Walter of Henley indicated and as the preceding analysis confirms, the manorial officials found they paid out less when they used oxen instead of horses. The tendency to discount hay and straw encouraged the use of oxen even more. This did not mean, however, that this policy could not at times be overturned by technical or environmental considerations. There were some demesnes which did go to all-horse farming despite the higher costs involved, such as those in the Chilterns, where stony soils seem to have encouraged the use of horses.⁴² But demesnes of this type were few in number, and even if conditions did allow manorial officials to take advantage of the greater ploughing speed of the horse, most preferred to follow the economic line and use some oxen at least.

The position was markedly different for the peasant. For one thing, hay and straw costs were much more of a reality for him than for the demesne, and consequently it reduced the economic attractiveness of the animal which mainly fed on them, that is, the ox. Second, not having to employ his draught animals as intensively as on the demesne he could dispense with some of the more expensive fodders, like oats, which horses in particular consumed. This cut the economic gap between horses and oxen even further. Third, on holdings as small as the Cuxham half-virgate, where draught animals would often have to perform all sorts of tasks, the horse was eminently more versatile. All in all, even as the demesne was persevering with the ox, it is not difficult to see why the peasant, for equally sensible reasons, would cheerfully switch to the horse. In many parts of medieval England, it appears he was doing precisely that.

⁴² D Roden, 'Demesne Farming in the Chiltern Hills', *Agric Hist Rev*, XVII, 1969, p 14.

Enclosure and the Inquisitions of 1607: An Examination of Dr Kerridge's Article 'The Returns of the Inquisitions of Depopulation' *

By JOHN MARTIN

SINCE Kerridge's incisive intervention into the field of agrarian history in his article of 1955 regarding the enclosure movement in the Tudor and early-Stuart period, anyone who ventures there must preface their remarks by acknowledgement of the force of Kerridge's argument.¹ As a result, little confidence may be retained in the basis of analysis of enclosure in that period — the statistics which may be derived from the returns of the Inquisitions of Depopulation. At the beginning of the twentieth century Gay had made the task of analysing enclosure by these means his own preserve. Now, some 25 years have passed since Kerridge's article without any re-examination of his position, while at the same time commentators on the enclosure movement have largely failed to take account of his criticisms of such statistics. Here, I propose to make an initial contribution towards reinstating confidence in the value of the findings of the Inquisitions of Depopulation for agrarian history by focusing upon those returns of 1607.

Throughout my own work on the agrarian policy of the Tudor and early-Stuart state, the nature and extent of enclosure, and on the Midlands Revolt of 1607, I have been forced to confront Kerridge's position in some detail.² For my immediate purposes it was

important that I was able to view the returns of the Commissions with some confidence in order to make a detailed analysis of the revolt which set these enquiries in motion, and to link such enclosure riots to precise instances of enclosure as recorded by the Commissions. Nonetheless, conclusions regarding the enquiries of 1607 apply equally to Kerridge's more general observations on the returns throughout the preceding century.

In opposition to Gay, Kerridge argues that the figures relating to enclosure, depopulation, and conversion provided by the Commissions do not give an adequate basis from which to calculate the extent of enclosure. Kerridge suggests that these figures were only the preliminary basis upon which further legal action could be taken in order to establish the guilt or innocence of the accused encloser, rather than proof of an offence against the agrarian statutes. Thus, enclosure was proven only when conviction of the encloser was secured. Contrarily, Gay, Leadam, and Parker have uncritically accepted these figures as indicative of the extent of enclosure itself.³ Kerridge, however, delineates the considerable number of stages in the legal process involved in securing a conviction — a procedure which he argues was not followed through in most instances of information regarding enclosure.

* I would like to thank Dr A L Beier of Lancaster University, without whose encouragement I would not have been introduced to the substance of English agrarian history.

¹ E Kerridge, 'The Returns of the Inquisitions of Depopulation', *Eng Hist Rev.* LXX. 1955.

² J E Martin, *Peasant and Landlord during the Development of Feudalism and Transition to Capitalism in England*, unpubl PhD thesis, Lancaster Univ, 1979, esp ch 9 and 10, and Part III. ♫

³ E F Gay, 'Inclosures in England in the Sixteenth Century', *Quarterly Jnl Economics*, XVII, 1903; and idem, 'The Midland Revolt and the Inquisitions of Depopulation of 1607', *Trans Royal Hist Soc*, ns, XVIII, 1904. I S Leadam (ed), *The Domesday of Inclosures, 1517–1518*, 1897; and idem, 'The Inquisition of 1517. Inclosures and Evictions', *Trans Royal Hist Soc*, ns, VI, 1892. L A Parker, *Enclosure in Leicestershire, 1485–1607*, unpubl PhD thesis, Univ of London, 1948; and idem, 'The Depopulation Returns for Leicestershire in 1607', *Trans Leics Arch Soc*, XXIII, 1947.

However, in spite of Kerridge's carefully framed and intricate analysis of the legal process, we must accept that these figures are related to enclosure in some sense, even if their usage is tempered by our awareness of these difficulties. There is no other means of quantifying the extent of the enclosure movement available to us. Yelling suggests that we must accept such statistics, subject to reservations.⁴ I shall argue on the basis of an analysis of the nature of the social production of these statistics that they may be accepted as the *minimum* extent of illegal enclosure in the period. By contrast, Kerridge implies that much of this information on enclosure was inaccurate because the courts failed to convict the enclosers. I shall now examine his argument in detail in order to establish, firstly, that he should not infer lack of guilt from a failure to convict; secondly, that there were many more convictions than Kerridge suggests; and thirdly, that the source of information for the presentment of enclosers was relatively reliable.

I

Kerridge concludes that, in spite of many presentments, there were few convictions. For example, he suggests that in Leicestershire, 'although there were hundreds of presentments, only four convictions have come to light'.⁵ However, on the other hand, Kerridge is unable to provide *one* instance in which an encloser was positively adjudged to have been innocent. It is important to note this fact initially. His conclusion that enclosers were not guilty derives from two indirect and untenable arguments: (a) the association of defendants' pleading of special circumstances or inaccuracies in the information with innocence; and (b) the association of the lack of evidence of conviction with innocence. In the first, he accepts the encloser's claims at face value and

as the accurate rendition of the situation, a decision which lacks validity, since it was in the defendant's interests to argue that he was not liable to prosecution. For example, Kerridge builds much of his case in this respect on the instance of Thomas Humphrey of Sweptstone in Leicestershire, in which he suggests that Humphrey apparently escaped conviction on the grounds that his enclosed land was cultivated by convertible husbandry. Indeed, this example features in Kerridge's work on the agrarian economy of the period.⁶ Nonetheless, Humphrey was convicted of enclosure, conversion, and depopulation, and fined £20; he was considered one of the most notorious enclosers in the county by rebels in 1607 and was ordered to appear before the Privy Council in London for his deeds.⁷

Furthermore, the means of sidestepping the legislation were well known: we are not able to assume lack of guilt in a wider sense, even if the encloser escaped on a technicality. Aside from the commonly used strategy of claiming that the enclosure preceded the retrospective date of enquiry, means of camouflaging the true nature of the enclosure or of keeping an insignificant amount of tillage served to escape the legislation. One such person who did not escape attention was Lord Clifton, who enclosed and caused depopulation in Buckworth, Huntingdonshire. He had attempted to avoid the statutes by drawing up fictitious leases and ploughing one 'rigg' of each of ten 'tenants' lands, while in fact he himself pastured sheep on these lands. In spite of these elaborate precautions, he was convicted and fined £50.⁸

Secondly, the lack of evidence of con-

⁴ J A Yelling, *Common Field and Enclosure in England, 1450-1850*, 1977, pp 21-2.

⁵ Kerridge, 1955, op cit, p 226.

⁶ Ibid, p 224; E Kerridge, *Agrarian Problems in the Sixteenth Century and After*, 1969, pp 194-8, transcription of PRO, STAC 8/16/13, m 2, Thomas Humphrey's answer. E Kerridge, *The Agricultural Revolution*, 1967, pp 190-1.

⁷ PRO, C 82/1759, June 1608. Historical Manuscripts Commission (HMC), Hastings MSS, IV, p 193. Martin, op cit, n 25, pp 708-9.

⁸ HMC, Salisbury MSS, XXI, 1609-12, pp 89-91, 21 July 1609, letter from the Assizes, Huntingdon, where Clifton's case was heard. PRO, C 82/1759, June 1608.

victions in the sources is just as much *lack of evidence of innocence* as it is of guilt. I have already noted that Kerridge is unable to provide any instances in which enclosers were found to be innocent. In these circumstances, there is no direct means of resolving the question of guilt or innocence but all the evidence we have suggests that when proceedings took place convictions were secured. Moreover, it seems that a considerable number of enclosers failed to appear in order to defend themselves, in which case further proceedings were not required to establish guilt. I have located several lists of offenders who were to have 'Nihil Dicit' entered against them if they had not answered the charges within the next few days. These lists contain 52 names.⁹

In support of my argument, we may note that Kerridge failed to discover the many convictions which exist in addition to the 30 which he cites. I have located another 40 convictions together with a further 46 probable convictions of those who refused to plead their case. I have been able to trace 25 of the convictions cited by Kerridge as follows. From Miscellanea of the Exchequer we find recorded 15 convictions for Northamptonshire: Gregory Isham, Euseby Isham, Ferdinando Baude, Thomas Tresham, William Saunders, Robert Osborne, Robert Dillon, Daniel Ward, William Samuel, Gilbert Pickering, Anthony Palmer, Thomas Gascoigne, Walter Montagu, Lewis Tresham, and Edmond Mountstephen. Kerridge suggests that there were four convictions for Leicestershire. From cases in the Court of the Star Chamber it appears that Henry Barkeley, Henry Hastings and Walter Hastings were convicted (although I failed to trace Kerridge's reference to the Receipt Books). In addition, Edward Hartopp of Burton Lazars was convicted at the Leicester Assizes.¹⁰ Others convicted were Francis Popham and

Elinore Thorold, both of Lincolnshire. I was unable to trace 3 more convictions, cited by Kerridge as recorded in the Receipt Books. Another 6 convictions must be recorded in the Memoranda rolls — a source I have not checked — to make a total of 30 convictions. Of these, 4 are traceable by Kerridge's reference to Sir Edward Coke's letter to the Privy Council on 2 September 1607.¹¹ This adds Thomas Tyrringham, Edward Tyrell, Thomas Throckmorton, and Lord Clifton to the list, leaving only 5 of Kerridge's 30 convictions unaccounted for.

However, this is by no means a complete list. Firstly, confirmation of convictions and fines exist for the following offenders noted by Kerridge: Robert Osborne, Anthony Palmer £20, Gilbert Pickering £20, Lewis Tresham £40, and Walter Montagu £20.¹² Secondly, a document found misfiled in the State Papers for 1631 is of the period 1608–09 and gives us a further 9 convictions and the fines levied on these Lincolnshire offenders: Charles Hussey £80, Henry Aiscough £20, Hammond Whichcoote £40, Edward Carne £30, William Wrage £30, Edmund Bussey £10, Robert Tirwhitt £10, and John Tredway £10.¹³ Two other sources confirm this dating: John Tredway was among those who failed to answer the charge of depopulation in November 1607; while William Wrage, who was noted as having been called before the Court of the Star Chamber, was fined £30 in April 1608.¹⁴

Thirdly, further convictions are indicated by a list of those who had reformed their offences by July 1609.¹⁵ Edward Tyrell, Thomas Tyrringham and Lord Clifton were again mentioned (there was a strong resistance from the latter two against reformation), while offenders from Cambridgeshire, Norfolk and Suffolk — counties not included

¹¹ PRO, SP 14/48/4.

¹² PRO, SP 14/40/85; PRO, E 401/1883, Mich, 1608; PRO, E 401/1882, Easter 1608.

¹³ PRO, SP 16/206/71.

¹⁴ PRO, E 124/5/90d; PRO, C 82/1757, 30 April 1608.

¹⁵ HMC. Salisbury MSS, XXI, 1609–12, pp 89–91.

⁹ PRO, Exchequer Decrees and Orders, E 124/5/90d, 106d and 220d; E 124/6/37, 43, 43d, 45, and 94d.

¹⁰ PRO, E 163/17/8; PRO, STAC 8/16/13, mm 9 and 10; Kerridge, 1955, op cit, p 223.

in the warrant for Commissions — were noted. Local enquiries must have been instigated in other counties as a result of the Midlands inquisitions.¹⁶ This list gives us a further 22 names from counties included in the Inquisitions — 4 from Buckinghamshire, 3 from Bedfordshire, and 15 from Huntingdonshire — in addition to 4 from Cambridgeshire, 8 from Suffolk and 4 from Norfolk.

Finally, the class of Chancery Warrants in the Public Records Office (C 82) yields the names of others who were convicted, together with a note of the fines levied upon them: Thomas and John Woodward £20, Basil Brooke £20, Thomas Borough £10, Thomas Throgmorton £20, John and George Bale £20, Thomas Humphrey £20, Mary Astley £40, and Richard Breter £20. This class also includes a record of at least 26 offenders already noted, the fines imposed upon them, and their assurances for the speedy reformation of their depopulations.¹⁷

In sum, another 40 convictions have been located, making a total of some 70 in all. This may be supplemented by the 52 offenders who failed to answer the charges of depopulation and who were thus about to have 'Nihil Dicit' entered against them. It is more than likely that the vast majority of this group were convicted as a result. Indeed, we have a record of the conviction of 6 of them: John Bale; John Tredway; Elinore Thorold; Henry Hastings; Walter Hastings; and Thomas Tresham.¹⁸ Thus, the number of probable convictions which I have been able to trace is well over the hundred mark: there were many more convictions than those which Kerridge found. We are able to analyse the definite

convictions by county (insofar as the county may be identified):

Huntingdonshire	16
Northamptonshire	15
Lincolnshire	12
Leicestershire	9
Suffolk	8
Buckinghamshire	4
Cambridgeshire	4
Norfolk	4
Warwickshire	3
Bedfordshire	3

The prominence of Huntingdonshire and the seeming lack of importance of Warwickshire is misleading, considering the minor offences in the former and the seriousness of enclosure in the latter. This aside, the ranking order of the counties is roughly what one would expect, given our knowledge of the revolt and the enclosure commissions which followed it.

II

In spite of finding considerably more convictions than Kerridge cites, the number of convictions obtained falls well short of the number of presentments, of which there were some 300 for Leicestershire, and a minimum of 260–280 for the three counties Bedfordshire, Huntingdonshire and Buckinghamshire alone.¹⁹ We may expect that there would have been many presentments for other counties which figured highly in the returns, in total perhaps about 1000. Moreover, Kerridge may well have failed to note some convictions as a result of the length of time that proceedings took; his last noted conviction was in November 1609.²⁰ However, there is some evidence to suggest that proceedings continued until after this time. In 1608 Hobarte, the Attorney General, wrote

¹⁶ Warrant for Depopulation Commissions, PRO, C 82/1747, August 1607. See HMC, Salisbury MSS, XIX, 1607, p 220; and E M Leonard, 'The Inclosure of Common Fields in the Seventeenth Century', *Trans Royal Hist Soc*, ns, XIX, 1905, p 126.

¹⁷ PRO, C 82/1758, May 1608; 1759, June 1608; 1760, July 1608; 1763, October 1608; and 1764, November 1608.

¹⁸ PRO, E 124/5 and 6. See note 9.

¹⁹ Kerridge, 1955, op cit, p 225 (figures from Leicestershire). HMC, Salisbury MSS, XIX, 1607, p 220, Henry Hobarte, Attorney General to the Earl of Salisbury, 18 August 1607 (figures for Bedfordshire, Huntingdonshire and Buckinghamshire).

²⁰ Kerridge, 1955, op cit, p 226n.

to the Earl of Salisbury in order to send him a renewal of Commissions for compositions for depopulation because the previous Commissions stipulated payment of fines before pardons could be granted.²¹ This implies that proceedings against enclosers were largely instigated some time later. Also, Leonard suggests that special proceedings were taken by judges of Assize in response to letters from the Privy Council in July 1609.²² Thus, it is likely that some fines were paid later than 1609 and that records of this must be of a later date.

There are two reasons for the disparity between the numbers of presentments and the numbers of convictions. Firstly, as I have suggested above, many convictions have yet to be traced. Secondly, the state's intent in the prosecution of enclosers was to make an example of the most serious instances, rather than to pursue rigorously each and every technically guilty party. To this end, the Privy Council issued a general order to the Justices of all counties concerned to submit the names of several of the most important offenders in their county, in an action which was calculated to pacify the rioters.²³ James I, himself, indicated that punishment of depopulators would be selective and exemplary:

I must also remember you that something may be done upon the unlawful depopulators, lest the diggers call us fair counters but evil payers, having made a fair popular show without substance. Let therefore some symmetry be used between justice upon the diggers and them that punished them the cause to offend, that as a great number was put in fear and but a very few punished of the one sort, so there may be some one or two at least of the other sort punished exemplarily, being of the principal offenders and of worst fame, so as 'pena ad paucos metus ad plures' may therefore be extended.²⁴

Furthermore, in 1609, Coke wrote to inform the Privy Council that the conviction of 'some fewe' had resulted in a 'staye in others

for doinge the like (as we hope)'.²⁵ The state was also more concerned with preventing new offences than with the relentless pursuit of old ones, in which effective restoration was very difficult, especially if depopulation was complete. This attitude is illuminated by the second point in a discussion document of the early seventeenth century, concerning the practice of issuing pardons for offences against the agrarian statutes.²⁶ There it was suggested that the pardoning of past offences should be allowed, but that this dispensation should not be granted for future offences.

Thus, even if a complete list of convictions existed it is unlikely that it would approach the numbers of presentments. There were many minor offenders who were technically guilty under the law but whose offence took the form of co-operation in their landlord's wider scheme of enclosure and depopulation. Kerridge mistakenly believes that any presentment should have led to conviction if the offender was guilty; this is not the case. In addition to a mistaken belief in the uniform and universal application of the law, Kerridge assumes that the Courts were entirely neutral in applying the law. But, it is more likely that bias was shown in favour of enclosers, especially in the Assizes, where local gentry and Justices of the Peace sat in judgement over their peers, just as cases of jury-packing by enclosers in the initial hearing of information were not uncommon.²⁷ It is also apparent that, for example in Northamptonshire, Justices of the Peace collaborated with convicted enclosers by issuing false certificates of restoration of houses of husbandry and reconversion of land from pasture to arable. In this county, three of the four Justices concerned with certification were also well-known enclosers — William Tate, Thomas Tresham (of Newton) and Gilbert Pickering.²⁸ As a result, a discrepancy between

²¹ HMC, Salisbury MSS, XX, 1608, p 299.

²² Leonard, *op cit*, p 126.

²³ HMC, Hastings MSS, IV, p 193 (for Leicestershire).

²⁴ HMC, Salisbury MSS, XIX, 1607, pp 355–6.

²⁵ PRO, SP 14/48/4, 2 September 1609.

²⁶ British Museum (BM), Harleian MSS, 7616, f 6.

²⁷ R. H. Tawney, *The Agrarian Problem in the Sixteenth Century*, 1912, pp 263, 385. Gay, 1904, *op cit*, pp 224–6.

²⁸ PRO, E 163/17/8.

presentments and convictions does not necessarily imply an over-estimation of enclosure in the Returns of the Commissions, as Kerridge suggests. The reasons for such a discrepancy may be sought in the above considerations.

III

In the light of these comments, the extent to which we take the Commissions' returns seriously depends more upon the social context within which the enquiries were made than on the legalistic argument concerning convictions which Kerridge employs. He merely dismisses the quality of the information by stating that 'it is difficult to put implicit faith in returns that are hardly more than collections of informations from various informers'.²⁹ But who were these 'informers', and are we able to assess the information which they provide? More generally, Beresford argues that informers proliferated and inflated the numbers of offences against the regulating statutes.³⁰ However, his strictures have little relevance for offences against the agrarian statutes, since only 4 per cent of all informations laid before the Exchequer in the period 1519-69 were of this nature, and less than half this percentage concerned enclosure.³¹ Of the informations concerning the agrarian statutes, most involved small-scale engrossing in regions other than those mainly affected by depopulating enclosure. The agrarian legislation was not lucrative for avaricious informers, while informing did not focus on those parts of England where enclosure was such a problem. Furthermore, Beresford's point largely rests on the fact that the Westminster courts heard

the information, in which case the informer would be protected from the accused by the distance and the expense involved in travel to London. However, many of the prosecutions of the enclosure statutes were at the local Assizes. In fact, the Earl of Salisbury pointed out in his response to objections to the Depopulation Act of 1597 that this very practice restricted the activity of professional informers.³²

The Commissions themselves were even less vulnerable to the problems caused by professional informers since they sought information in the counties concerned and made use of local peasants in an attempt to record the extent of illegal enclosure. Within their Returns, each parish had recorded for it the acreages enclosed and converted, the houses decayed, the barns and stables decayed, lands severed, tenants evicted, and highways blocked, together with the individuals who were responsible for these offences.³³ Some care was taken to ensure that the selected Commissions were 'such as are least interested in the enquirer of enclosures'. In other words, Commissioners were to be free from any suspicion of enclosing themselves, a proviso which proved to be difficult to fulfil. As the Earl of Rutland commented, he had sent up the names (for the Commissions) of 'such as are least interested in these depopulations, which I do assure you was a hard task'.³⁴

The Commissions were directed to bring before them 'sufficient fytt and lawfull men . . . by whome the trewth maie best be knowne'.³⁵ The Returns indicate what sort of people were considered suitable for this purpose. In Leicestershire oaths were taken from the minister and two of the most

²⁹ Kerridge, 1955, *op cit*, p 225. Beresford supports these conclusions. M W Beresford, 'Habitation versus Improvement: the Debate on Enclosure by Agreement', in F J Fisher (ed), *Essays in the Economic and Social History of Tudor and Stuart England*, Cambridge, 1961, pp 49-50.

³⁰ M W Beresford, 'The Common Informer, the Penal Statutes and Economic Regulation', *Econ Hist Rev*, 2nd ser, X, 2, 1957.

³¹ M W Beresford, *The Lost Villages of England*, 1954, ch 4.

³² HMC, Salisbury MSS, XIV (Addenda), pp 37-8.

³³ Returns of the Depopulation Commissions — PRO, C 205/5/4, 5 and 6. Warrant for these Commissions — PRO, C 82/1747, August 1607.

³⁴ BM, Additional MSS, 11,402 (Abstracts of the Register of the Privy Council), f 128, July 1607. HMC, Salisbury MSS, XIX, 1607, p 208, reply to the Earl of Salisbury, 6 Aug 1607.

³⁵ PRO, C 82/1747.

substantial men of each parish.³⁶ In Northamptonshire oaths were taken from several, often elderly, peasant farmers — those who were considered reliable, experienced, and knowledgeable cultivators of the land, often in the very parish to be investigated.³⁷ For example, in Floore three husbandmen were committed to oath; in Church Brampton, two husbandmen; in Orton, a husbandman of 60 years of age; in Geddington Magna, Oakley and Thrapston further husbandmen; in Bosiat, two husbandmen of 50 and 67 years of age; and in Haselbech, three husbandmen, one 34, one 57 and the third 67 years of age. Two of the informants for Haselbech, William Gilbert and Thomas Elborough, are to be found in the enclosure agreement for the parish of some 10 years earlier.³⁸ The former held one and a half yardlands in Haselbech (which were to revert to Thomas Tresham on his death), and the latter (a yeoman of Brixworth in the enclosure document) shared one yardland with another tenant in this parish.

In many instances, the informants themselves must have had their livelihood affected by the enclosure. For example, those who rioted at Chilvers Coton in Warwickshire in June 1607 presented a local Justice of the Peace, Sir John Newdigate, for enclosure and depopulation in the parish.³⁹ Similarly, rioters at Ladbroke in the same county presented a yeoman for enclosure and depopulation.⁴⁰ Robert Bradshaw, husbandman of Priors Hardwick, presented William Burton,

yeoman of Ladbroke, for enclosure and depopulation and for stopping the highway in the latter parish in 1607. Burton had already been indicted at Sessions held at Warwick some six or seven years earlier for the same offence. Most of the inhabitants of the villages which were clustered on the south-east of Ladbroke and who used the highway through Ladbroke to Warwick protested — eg those from Priors Hardwick, Priors Marston, Boddington, Byfield, and Chipping Warden. Two other local inhabitants, Thomas Harris of Harbury and Richard Wynckles of Chipping Warden, also testified on this matter at the Commission which was held at Warwick in 1607. Other similar examples might be cited, given detailed and local research into specific instances of enclosure.

As a result, the Commissions' information was derived from peasants in the locality who had intimate and first-hand knowledge of the parishes concerned and who were familiar with the changes which had taken place. I would suggest that this information represented the reality of illegal enclosure and depopulation far more closely than did enclosers' attempts to avert the application of the law. The Commissions' returns may be considered as a relatively accurate estimation of the *minimum* illegal enclosure of the period. Parker has demonstrated in the case of Leicestershire how these figures systematically under-represent the extent of the enclosure movement, and it must be remembered also that the Commissions concerned themselves solely with enclosure which offended the statutes. Of course, the Commissions recorded this form of enclosure precisely because it had the most detrimental impact upon the peasantry and was the object of attack by the rebels in 1607.

I have shown that Kerridge's arguments are not convincing. He is unable to cite one proven case of innocence; the number of convictions was considerably larger than he suggests; and on balance, we should prefer the evidence provided for the Commissions for prosecution, rather than defendants'

³⁶ J Nichols, *The History and Antiquities of the County of Leicester*, 1795–1811, III, 2, pp 593–4n.

³⁷ PRO, C 205/5/5.

³⁸ Northamptonshire County Records Office, Isham MSS, I (L), 3947. Martin, *op cit*, pp 367–72.

³⁹ Martin, *op cit*, pp 410–14. Sources used: PRO, STAC 8/15/21, STAC 8/221/1, and SP 16/257/129. The last-cited document is clearly a list of Warwickshire depopulators recorded in 1607, in spite of being filed as a return of the Commissions of the 1630's. For discussion of this point, see W E Tate, 'Enclosure Acts and Awards Relating to Warwickshire', *Trans Birm Arch Soc*, LXV, 1949.

⁴⁰ Martin, *op cit*, pp 399–410. Sources used: PRO, STAC 8/10/18, STAC 8/15/12, STAC 8/63/8, STAC 8/68/3, and SP 16/257/129.

pleadings. In conclusion, we may utilize the source known as the Returns of the Inquisitions of Depopulation, at least those of 1607, with greater confidence than suggested by Kerridge. The value of his strictures is that they force us to consider these returns not as an isolated source from which we may extract and compile statistics on enclosure at will, but as the product of a particular institution with specifiable goals and means of attaining them

— the Tudor and early Stuart state and its attempts to regulate enclosure. The social production of this information necessarily involved the class to which this state bore a close relationship — the peasantry.⁴¹ With this in mind we may again approach this essential historical source for agrarian history with confidence.

⁴¹ The questions raised here are discussed in Martin, *op cit*, ch 8 and 10.

Farming in the North American Grasslands: A Survey of Publications, 1947–80*

By ALLAN G BOGUE

I
IN 1931 Walter Prescott Webb published *The Great Plains* in which he argued that the experience of pioneering in the Great Plains region was so different from that encountered in the eastern forest lands of the United States that the settlement process was checked, pending the development of new technologies and institutions.¹ Webb's book helped to inspire James C Malin, a young historian at the University of Kansas, to launch a major investigation of the history of the North American grassland, drawing upon a wide range of related scholarly disciplines and concentrating particularly upon the adaptation of Anglo-American agricultural settlement to the unique challenges of a sub-humid grassland environment. Webb proclaimed the Great Plains as a region characterized by at least two of the following characteristics — relative flatness, treelessness and aridity, a definition that placed most of the region between the Mississippi and the Rockies

under his scrutiny, as well as the grasslands of the Great Lakes states and major portions of the geographic provinces beyond the *cordillera*. The 'grassland' of particular interest to Malin stretched westward from the tall grass prairies of northern Indiana through the Grand Prairie of Illinois, thence flaring out to the northwest and southwest to merge with the more embracing grasslands of the 98th meridian states and so onward to the foothills of the Rockies. Much of Malin's detailed work concerned Kansas, where a unique series of federal and state census manuscripts and a magnificent collection of local newspapers at the Kansas State Historical Society allowed the development of particularly rich local studies.

Relying particularly upon these sources, Malin, between the years 1933–47, published a stream of intensive local studies of agricultural adaptation in Kansas. The best known of these publications is his classic article on the turnover of farm population in Kansas and the monograph, *Winter Wheat in the Golden Belt of Kansas*. In 1947 he published *The Grassland of North America: Prolegomena to its History*, a wide ranging investigation of the development of knowledge about the grasslands and in a section of this volume he summarized his studies of agricultural settlement. *The Grassland* was truly a seminal work and in this bibliographical article I shall summarize some of the major trends in the writing of the agricultural history of the prairies and plains that have been evident since its publication. Our focus will be particularly on the grassland area of most interest to Malin, embracing the prairie triangle and the southern and central plains region of the

*This is the first of a series of bibliographical articles on recent developments in American agricultural history. It is hoped to follow it in subsequent issues with discussions of other regions. The article is a condensation of one published originally in *The Great Plains Quarterly*, 1, Spring 1981, pp 105–31, and is reprinted here by permission of the editor of that publication [editor].

¹ Walter P Webb, *The Great Plains* (Boston: Ginn and Co, 1931). For recent secondary comment see: Gregory M Tobin, *The Making of a History: Walter Prescott Webb and the Great Plains* (Austin: University of Texas Press, 1976) and Necah Stewart Furman, *Walter Prescott Webb: His Life and Impact* (Albuquerque: University of New Mexico Press, 1976). Fred A Shannon, *An Appraisal of Walter Prescott Webb's The Great Plains: A Study in Institutions and Environment*, Social Science Research Council Bulletin 46 (New York: Social Science Research Council, 1940) is an elaborate commissioned critique that Webb refused to accept seriously.

central and northern plains and rocky mountain states.² Though less imperial than Webb's region it is one that includes significant portions of the modern corn belt, most of the central and northern small grain producing regions, and a certain amount of ranching country.

In the first half of *The Grassland*, Malin summarized findings in ecology, climatology, geology, geography, and the soil sciences that he considered essential to an understanding of the grasslands and adaptation to their environment, along with a summary of the observations on these matters by early explorers in the plains country. The second part of the monograph is entitled 'Historiography' and here Malin discussed, among other topics, the historical development of ideas about the grassland region and presented a series of chapters summarizing the conclusions concerning population, agriculture, land tenure, operator turnover, and farm organization that he had developed during the previous decade and a half. *The Grassland of North America*, therefore, provides a convenient summary of Malin's research on agricultural development and farming as it stood in the mid-1940's; thereafter, he devoted much of his writing, to other subjects.

Systematic study of the census returns in a sample of townships in the various rainfall belts of Kansas allowed Malin to generalize about the processes of settlement with a precision unmatched to that time. He discovered that settlers in Kansas de-

monstrated similar patterns of persistence, whether they lived in the generally humid climate of eastern Kansas or in the more arid regions of western Kansas. During the first few years, any particular census cohort of settlers showed a high rate of loss. After 10 years there usually remained only some 30 to 50 per cent of the new settlers of a decade earlier, or their direct descendants in the male line. Thereafter, attrition was less marked. Usually the outflow of settlers was relatively constant, irrespective of good times or bad. But in depression, the replacement flow of new settlers normally diminished, producing absolute decline in numbers of farm operators in some areas. Although Malin did not pay particular attention to the foreign-born farmers, he believed them to be highly persistent in the first generation, although conforming to the native-born patterns in the second and third generations. Most settlers, he discovered, came to Kansas from non-contiguous states, a fact suggesting that they encountered major problems in adapting their farm practices to the sub-humid climate of the central and western part of the state. Malin presented data that he interpreted in one presentation as demonstrating 'a relatively normal age distribution', among frontier settlers; elsewhere he described frontier male operators as 'conspicuously middle-aged'.

Malin emphasized the tendency of farm operators to enlarge their holdings in times of prosperity and for smaller size units to proliferate in times of depression. Various other considerations were reflected in the changing size of farms as well, he believed, including climate, changing systems of communication and transportation, and mechanization; the availability of financing later became important, particularly after 1910. He did not detect an ever-persisting tendency toward the development of larger farms from the settlement period onward throughout Kansas and was sceptical of the argument that the federal system of land disposal had provided plains country settlers with land units which were too small for

²Since it is possible to mention only part of the relevant literature, I refer the reader particularly to the following bibliographical guides, published by the Agricultural History Center, University of California, Davis: Earl M Rogers, comp *A List of References for the History of Agriculture in the Mountain States* (1972), *A List of References for the History of Agriculture in the Great Plains* (1976), *A List of References for the History of Agriculture in Iowa* (1979), and Douglas E Bowers and James B Hoehn, comps *A List of References for the History of Agriculture in the Midwest, 1840-1900* (1973). See also: Rodman W Paul and Richard W Etulain, *The Frontier and the American West* (Arlington Heights, IL: AHM Publishing Corp, 1977) and also note the 'Recent Articles', section published in the *Western Historical Quarterly*.

effective operation. He emphasized the problem of evaluating census estimates of farm size since the pioneers typically used the federal lands and those of non-residents as grazing commons. Farms in Kansas became permanently larger only after farm mechanization and the stabilization of population in the western communities was well under way.

Even in eastern Kansas, where the environmental setting clearly allowed the corn-livestock patterns of agriculture to which many of the Kansas settlers were accustomed, Malin found that the combination of farm enterprises had changed over time. Although the proportion of land planted to corn stabilized fairly early, the proportions of supplementary crops changed markedly through the nineteenth and early twentieth centuries. This tendency was more evident in central Kansas where climatic differences from year to year made it very difficult to decide upon the best long-run combination of crops. Malin discounted early reports of bumper crops as real estate 'booming'. He believed that the farmers themselves made the fundamental evaluations of regional agricultural capabilities and cropping combinations; the adaptation process, Malin believed, was a kind of 'folk movement'.

Malin argued that 'few' Kansas farmers of the nineteenth century could have produced much to sell. He suspected that the 'evils and abuses' of the economic system that contributed to the growth of farm protest movements were probably much exaggerated. 'In overall effect', he concluded, 'the hazards of weather on crops and prosperity were greater than the hazards of price.' But he also wrote that 'inadequate capital resulting in small badly equipped farms was almost as serious an obstacle to successful occupancy of the plains as the difficulties of adaptation'. Malin argued that tenant mobility was only slightly greater than that of owner operators. In general he was prepared to accept the economist's view that tenancy allowed the most effective combination and management

of land, labour and capital possible at a particular time.³

Malin was not infallible. His quantitative data suggest that he over-emphasized the normality of the frontier population structure and some of his other readings of quantitative data are arguable. He probably understated the contribution of the agricultural scientist to agricultural adjustment in the grassland after 1910. The significance of some materials that he introduced in his narrative was not adequately explained. It is also true that Malin was selective in his treatment of the history of the evolving agriculture of the prairie-plains. But taken as a whole, *The Grassland of North America*, is one of the relatively few *tours de force* in the historiography of western America.

II Post-Malin Surveys

Malin termed his summative volume on the

³James C Malin, *The Grassland of North America: Prolegomena to its History* (Lawrence, Kansas: James C Malin, 1947; currently available, Gloucester, Mass: Peter Smith, 1967, fifth printing with *Addenda and Postscript*). Although this volume presents an excellent summary of Malin's agricultural research the following are basic to a full understanding of his work: 'The Turnover of Farm Population in Kansas', *Kansas Historical Quarterly* 4 (November 1935), pp 339-72; 'The Adaptation of the Agricultural System to Sub-Humid Environment: Illustrated by the Activities of the Wayne Township Farmers' Club of Edwards County, Kansas, 1886-1893', *Agricultural History* 10 (July 1936), pp 118-41; 'Local Historical Studies and Population', in *The Cultural Approach to History*, edited by Caroline Ware (New York: Columbia University Press, 1940), pp 300-7; 'An Introduction to the History of the Bluestem Pasture Region of Kansas: A Study in Adaptation to Geographical Environment', *Kansas Historical Quarterly* 11 (February 1942), pp 3-28; *Winter Wheat in the Golden Belt of Kansas: A Study in Adaptation to Subhumid Geographical Environment* (Lawrence, Kan: University of Kansas Press, 1944). Three articles, initially published in *Scientific Monthly* during 1950, 1952 and 1953 appear in the *Addenda to the Grassland of North America* (1967) and in some degree present refinements in his thinking after the initial publication. For commentary see: Thomas H LeDuc, 'An Ecological Interpretation of Grasslands History: The Work of James C Malin as Historian and as Critic of Historians', *Nebraska History* 31 (September 1950), pp 226-33; Robert G Bell, 'James C Malin and the Grasslands of North America', *Agricultural History* 46 (July 1972), pp 414-24. The quoted passages are found in Malin, 'Local Historical Studies', pp 300, 305 in *The Cultural Approach*, edited by Ware; *The Grassland of North America*, pp 289, 307; 'Adaptation of the Agricultural System', p 140.

grasslands a 'prolegomena'. Gilbert C. Fite has come closest to accepting the challenge implicit in the word in *The Farmer's Frontier: 1865-1900*, part of the Histories of the American Frontier Series. But there were other agricultural frontiers in the United States during the same period and Fite could, therefore, devote only about half of his thin volume to the prairie and plains frontiers of the late nineteenth century. However, it is an excellent summary of the general behaviour of pioneer farmers. Fite was particularly effective in describing the vulnerability of the pioneers to the vagaries of prices and precipitation — the date when a settler occupied his claim might strongly influence his chances of success or failure. Fite's description of government relief efforts at the state and local level was a major contribution, and he caught the optimism of the boom time settler well. He described major adaptive efforts, including the search for appropriate crops, the adoption of summer fallowing, the growing understanding of the crucial importance of wheat as a crop in the central plains and beyond, and efforts to irrigate crops where surface or underground water supplies seemed to promise success. He commented perceptively about the operation of the land laws and the implications of debt.

The Farmer's Frontier is primarily a book of generalization, illustrated and enlivened by specific illustrations or cogent quotations. There are no turnover estimates to be found in these pages, nor foreclosure nor interest nor tax series. In his summary chapter, Fite noted that the 'basic problem was one of working out and adapting proper farm organization patterns to fit natural conditions on the Great Plains', but he did not develop this hypothesis as a central theme.⁴

Other authors have made significant recent contributions to our understanding of grassland agriculture. For the reader who wishes a capsule treatment of agricultural settlement in the plains country, Robert G Athearn and

W Eugene Hollon provide a choice in books that are essentially regional surveys. The authors of the more recent state histories of the region have generally included useful, but all too brief, reviews of agricultural development, and some summary articles are highly useful. Apparently prepared in ignorance of Malin's work, highly episodic in its use of historical material, and written with prescriptive intent, *The Great Plains in Transition*, published by the sociologist, Karl F Kraenzel in 1955, contains much interesting material and some very useful citations to sources.⁵ But deeper understanding of the growth of intensive agriculture in the grasslands is only to be gained by consulting the work of authors who have published more specialized articles and monographs.

III *Problems of Perception*

We understand the pioneer farmers' initial perceptions of the grassland much better today than a generation ago. At that time only Malin had addressed this issue in detail, but in his presidential address to the Association of American Geographers in 1968, Walter M Kollmorgen examined 'geographic perceptions colored by eastern conditions, which led to misguided efforts to project westward certain basic man-land relations that proved inoperative in the drier grasslands'. He argued that the incursion of settlers into

⁵ Robert G Athearn, *High Country Empire: The High Plains and Rockies* (New York: McGraw-Hill, 1960); W Eugene Hollon, *The Great American Desert: Then and Now* (New York: Oxford University Press, 1966). Among state histories, see Carl Abbott, *Colorado: A History of the Centennial State* (Boulder: Colorado Associated University Press, 1976); T A Larson, *History of Wyoming* (Lincoln: University of Nebraska Press, 2nd edn, 1978); James C Olson, *History of Nebraska* (Lincoln: University of Nebraska Press, 1955); Michael P Malone and Richard B Roeder, *Montana: A History of Two Centuries* (Seattle: University of Washington Press, 1976); Elwyn B Robinson, *History of North Dakota* (Lincoln: University of Nebraska Press, 1966); William F Zornow, *Kansas: A History of the Jayhawk State* (Norman: University of Oklahoma Press, 1957). Note the sketch by John T Schlebecker, 'Agriculture in Western Nebraska, 1906-1966' *Nebraska History* 48 (Autumn 1967); pp 249-66, and Earle D Ross, *Iowa Agriculture: An Historical Survey* (Iowa City: State Historical Society of Iowa, 1951) as illustrative of badly-needed types of surveys.

⁴ Gilbert C Fite, *The Farmers' Frontier, 1865-1900* (New York: Holt, Rinehart and Winston, 1966), p 233.

regions that should have remained as cow country were based on three misguided geographic perceptions concerning: rain-making; irrigation; and dry farming. Even reputable scientists and public officials argued that cultivated soil absorbed greater amounts of water than soil under grassland cover and that tree cover enhanced the moisture available. Some government scientists, as well as real estate promoters, greatly overestimated the irrigable potential of the high plains. The feasibility of dry farming was also greatly exaggerated, Kollmorgen argued; and federal approval of enlarged homestead legislation suggested that larger holdings alone were sufficient to guarantee the success of settlers in the high plains.⁶

Kollmorgen's address illustrated the very considerable interest that historical geographers displayed during the 1960's and 1970's concerning the perceptions and images that Americans entertained of the grasslands during the nineteenth century. Martyn J Bowden and others have concluded that eastern educational and *élite* circles believed during the 1840's and 1850's that the trans-Missouri West was a Great American Desert. But midwesterners and common folk generally continued to regard the area as a region of prairie-plains that could be settled in the same way that the great prairie triangle east of the Missouri was being settled. This finding challenges the contentions of Webb, Henry Nash Smith, and others that the conception of the plains as a desert markedly restrained the westward flow of settlement during the mid-nineteenth century. According to Bowden, the western state officials, railroad officers, and promoters who boomed the central and high plains regions after 1870, exaggerated the degree to which the desert image or myth had formerly held sway in their efforts to emphasize the striking climatic changes that attended cultivation.

⁶ Walter M Kollmorgen, 'The Woodsman's Assaults on the Domain of the Cattleman', *Annals of the Association of American Geographers* 59 (June 1969), pp 215-39. For the quotation, see p 216.

In general, historians in recent years have not greatly advanced our understanding of the ways in which settlers perceived the plains environment.⁷ However, David M Emmons' study of the boomer literature of the central great plains shows the influence of the research by geographers, and is a gracefully written and detailed account of the promotional efforts that influenced the thinking of many western settlers during the 1870's and 1880's.⁸

IV *The Mobility of Farm Populations*

Malin's view that midwestern settlers were highly mobile was corroborated in the research of A D Edwards, of the United States Department of Agriculture during the 1930's. In the 1950's and 1960's, Mildred Throne, William L Bowers and Allan G Bogue provided additional corroborative evidence in research dealing with the prairie regions of

⁷ Martyn J Bowden, 'The Great American Desert and the American Frontier, 1800-1882: Popular Images of the Plains', in *Anonymous Americans: Explorations in Nineteenth-Century Social History*, edited by Tamara K Hareven (Englewood Cliffs, NJ: Prentice-Hall, Inc, 1971), pp 48-79, and 'Desert Wheat Belt, Plains Corn Belt: Environmental Cognition and Behavior of Settlers in the Plains Margin, 1850-99', in *Images of the Plains: The Role of Human Nature in Settlement*, edited by Brian W Blouet and Merlin P Lawson (Lincoln: University of Nebraska Press, 1975), pp 189-201. The notes in these two articles include citations to other illustrations of the *genre* that are not cited here. See also G Malcolm Lewis, 'Changing Emphases in the Description of the Natural Environment of the American Great Plains Area', *Institute of British Geographers Transactions and Papers* 30 (1962), pp 75-90; 'The Great Plains Region and its Image of Flatness', *Journal of the West* 6 (January 1967), pp 11-26, and 'The Recognition and Delimitation of the Northern Interior Grasslands during the Eighteenth Century', in *Images of the Plains*, pp 23-44; Bradley H Baltensperger, 'Agricultural Adjustments to Great Plains Drought: The Republican Valley, 1870-1900', in *The Great Plains: Environment and Culture*, edited by Brian W Blouet and Frederick C Luebke (Lincoln: University of Nebraska Press, 1979), pp 43-59; Leslie Hewes, 'The Great Plains One Hundred Years after Major John Wesley Powell', in *Images of the Plains*, pp 203-14. Henry Nash Smith, *Virgin Land: The American West as Symbol and Myth* (Cambridge, Mass: Harvard University Press, 1950) has had tremendous scholarly impact, but was inadequately documented.

⁸ David M Emmons, *Garden in the Grasslands: Boomer Literature of the Central Great Plains* (Lincoln: University of Nebraska Press, 1971).

Illinois and Iowa. They reported turnover rates among farmers similar to those found in Kansas by Malin. They also found some tendency for persistence to increase within census cohorts after the initial ten years but to lesser extent than did Malin. Those least likely to be found in succeeding census enumerations tended to be younger, possessed of less property, and more frequently unmarried than those who remained. Actually such differences were not very striking, and perhaps these authors should have been most impressed by the small degree of the differences between movers and stayers.⁹

Malin and later scholars were less in agreement concerning the relation of ethnicity to migration. Bogue discovered impressive rates of turnover among some of the foreign-born farmers of Bureau County, Illinois, in the mid-nineteenth century, and Merle Curti discovered high turnover among the foreign-born groups in Trempealeau County, Wisconsin in an area on the fringe of the mid-continent grassland.¹⁰

More recently scholars have turned their attention to settler mobility in the central regions of Kansas and Nebraska. Richard G Bremer's study of agricultural change in the Loup River country of Nebraska presents farmer persistence data covering the years 1890–1970. Bremer used local assessment records to develop cohorts of farmers at 5-year intervals, selected to reflect the ethnic composition and topographical and social conditions of the region. The striking turnover rates again appear in this research

but Bremer was also able to estimate loss in the cohorts due to death. This factor, however, did not generally affect the turnover rate substantially during the first decade in which the cohort was under study. Nor did Bremer find persistence much affected by drought, economic boom or depression. But he did discover that there was some tendency for persistence to increase among the farmers over extended periods of time, a phenomenon linked to the ageing process among his farm operators. Bremer agreed with Malin's central contention, 'migration tendencies may not be explained solely in environmental terms', and concluded that 'intensive further exploration into this problem area is greatly needed'.¹¹

D Aiden McQuillan has examined the role of ethnicity in farming and tenure practices in nineteenth-century Kansas. In one article he contrasted the mobility of native Americans, Swedes, Mennonites, and French Canadians in the central region of the state. McQuillan prepared turnover data extending from 1875 to 1925 and found that the immigrants were 'slightly more stable than the Americans'. But the 'mobility rate for both immigrants and Americans was high' and 'differences between the foreign-born and native-born were always very small', as were 'differences among the three immigrant groups'. He suggested that the higher proportion of second generation farmers among the French Canadians might explain the greater mobility of that group.

McQuillan also investigated the personal determinants of migration. He calculated the average capital assets, age, and family size of migrants and persisters within his various sample and control groups. Then he was able to compare the group means in 210 different instances. Most of the comparisons demonstrated the familiar fact that wealthier and older farmers and those with most children were least apt to move. But the

⁹ A D Edwards, *Influence of Drought and Depression on a Rural Community: A Case Study in Haskell County, Kansas*. US Farm Security Administration Social Research Report 7 (Washington, 1939). Mildred Throne, 'A Population Study of an Iowa County in 1850', *Iowa Journal of History* 57 (October 1959), pp 305–30; William L Bowers, 'Crawford Township, 1850–1870: A Population Study of a Pioneer Community', *Iowa Journal of History* 58 (January 1960), pp 1–36; Allan G Bogue, *From Prairie to Corn Belt: Farming on the Illinois and Iowa Prairies in the Nineteenth Century* (Chicago: University of Chicago Press, 1963), pp 8–28.

¹⁰ Merle Curti, *The Making of an American Community: A Case Study of Democracy in a Frontier County* (Stanford: Stanford University Press, 1959), pp 65–77, 140–3, 218.

¹¹ Richard G Bremer, *Agricultural Change in an Urban Age: The Loup Country of Nebraska, 1910–1970* (Lincoln: University of Nebraska, 1976), p 139.

differences between the means were usually small and statistically insignificant.¹²

V *Land and Tenure Issues*

Popular media, historical fiction and local myth have exaggerated the degree to which settlers in the grasslands acquired land directly from the federal government and particularly the importance of the Homestead Law. In the tall grass country the cash auction and private entry procedures of the Land Act of 1820 and the preemption laws, particularly that of 1841, were the major federal acts invoked by settlers prior to 1860, although the flood of military land warrants authorized in the years 1847–55 changed the picture somewhat. Even in the central and high plains of the nineteenth century the Homestead Act was less dominant than suggested. Of course, the more serious students of the American land disposal system have always emphasized its complexity and described the special grant policies of the federal government — the wagon road, canal, railroad and state grants, as well as the swamp land, agricultural college, timber culture and desert land acts and the use of script or other miscellaneous methods of land disposal. In a much reprinted article of 1936 Paul W Gates suggested that the Homestead Law was crudely grafted upon a land system that was more attuned to the wishes of special interest groups than to those of the family farmer. Since many interpreted Gates's article as suggesting that the Homestead Law was a failure, he returned to the subject during the centennial observances of the statute. Now he pointed out that the 160-acre unit was appropriate in size for much

of mid-America, and that settlers using the law patented a relatively high proportion of entries there prior to the mid-1870's, as well as in California. Some 67 per cent of entry men were successful in Dakota Territory in that period, while 'slightly less than 50 per cent of the original homesteads were carried to patent' in the country generally.¹³

Prior to 1960, Gates maintained that the activities of large scale land speculators made it more difficult for settlers to obtain farms and contributed to the early development of tenancy and class structure in pioneer communities. But the more precise calculation of speculator profits by the Bogues and others suggested that the financial returns to speculators were probably similar to the returns on other forms of frontier investment over long periods of time, although sometimes very high in the short run. Seddie Cogswell, Jr, and Donald Winters found little connection between speculative activity in frontier areas of Iowa and later rates of tenancy there.

Revisionists also emphasized that the advertising of land speculators enhanced the flow of immigration, thus creating a market for the products of actual settlers, and paid their share, and perhaps more, of the taxes that supported frontier governments and schools. However, the older view persists, and Yasuo Okada's important study, *Public Lands and Pioneer Farmers; Gage County, Nebraska, 1850–1900*, published in 1971, is close in view to Gates's early positions. In 1978 Reginald Horsman concluded an address on the historiography of the public domain in

¹² The relevant articles are: D Aidan McQuillan, 'The Mobility of Immigrants and Americans: A Comparison of Farmers on the Kansas Frontier', *Agricultural History* 53 (July 1979), pp 576–96. Quotations appear on p 585. See also 'Territory and Ethnic Identity: Some New Measures of an Old Theme in the Cultural Geography of the United States', in *European Settlement and Development in North America: Essays on Geographical Change in Honour and Memory of Andrew Hill Clark* edited by James R Gibson (Toronto: University of Toronto Press, 1978), pp 136–69.

¹³ The most recent comprehensive summary of United States land disposal policies is Paul W Gates, *History of Public Land Law Development* (Washington US Government Printing Office, 1968) which contains a comprehensive bibliography. The articles which best illustrate his view of the homestead law are: 'The Homestead Law in an Incongruous Land System', *American Historical Review* 41 (July 1936), pp 652–81; 'The Homestead Act: Free Land Policy in Operation, 1862–1935', in *Land Use Policy and Problems in the United States* edited by Howard W Ottoson (Lincoln: University of Nebraska Press, 1963), pp 28–46; 'Homesteading in the High Plains', *Agricultural History*, 51 (January 1977), pp 109–33. The quoted passage is on p 37 of the latter article.

the midwest with the admonition that 'the time has come to revise the revisers'.¹⁴

Is there quantitative evidence to support the old views? To some degree Okada has tried to provide such data and, when further refined, they showed that speculation was associated with 27–44 per cent of the variation in tenancy found from township to township in Gage County in 1880. This is not a trivial relationship but Okada did not show that it was a long persisting one.¹⁵ Nor is the older view convincing in terms of simple economic theory. If land speculation had been

extremely lucrative, additional investors should have been attracted until competition for buyers forced the speculators to cut their offering price to levels commensurate with the productive value of the land.

Gates has himself retreated somewhat since 1960 from his earlier positions on speculation, tenancy, and the land disposal system generally. In 1964 he described American land policy as 'liberal, generous and enlightened . . . whatever its weaknesses'. Although his magisterial study of public land law development (1968) reiterated earlier positions in some respects, Gates attributed tenancy largely to the passing of land from one generation to the next rather than to speculation, except in Illinois and Iowa. And in 1977 he suggested that the various acquisition options in the federal land disposal system provided a 'flexibility' that allowed farmers to develop economic units on the High Plains despite the limited size of the homestead law unit.¹⁶

There has been some effort during the last generation to provide detailed studies of the operation of the land laws at the local level. Several scholars have analysed particular types of land alienation — homestead, timber culture, forest lieu land, script entries and so on. Some of these studies have mainly involved comparison of entries and patent totals at the state level; others were based on intensive examination of the pattern of land entry and proof in more restricted areas. Primarily such authors have evaluated the success of the law under study in contributing to the successful establishment of actual settlers. Contributing to somewhat broader perspective are the few studies that trace relationships between the various types of land disposal laws and elements of the farm development process. C Barron McIntosh, for instance, has studied the use of timber culture entries in the Sand Hills of Nebraska and concluded that the timber culture acts

¹⁴ Gates, 'The Role of the Land Speculator in Western Development', *Pennsylvania Magazine of History and Biography* 66 (July 1942), pp 314–33, and reprinted in Gates, *Landlords and Tenants On the Prairie Frontier: Studies in American Land Policy* (Ithaca: Cornell University Press, 1973), pp 48–71, along with other essays of interest to the agricultural historian of the grasslands. Allan G Bogue and Margaret B Bogue, "'Profits' and the Frontier Land Speculator", *Journal of Economic History* 17 (March 1957), pp 1–24; Robert P Swierenga, 'Land Speculator "Profits" Reconsidered: Central Iowa as a Test Case', *Ibid* 26 (March 1966), pp 1–28; *Pioneers and Profits: Land Speculation on the Iowa Frontier* (Ames: Iowa State University Press, 1968); 'Land Speculation and its Impact on American Economic Growth and Welfare: A Historical-geographical Review', *Western Historical Quarterly* 8 (July 1977), pp 283–302; Seddie Cogswell, Jr, *Tenure, Nativity and Age as Factors in Iowa Agriculture, 1850–1880* (Ames: Iowa State University Press, 1975); Donald L Winters, *Farmers Without Farms: Agricultural Tenancy in Nineteenth-Century Iowa* (Westport, Conn: Greenwood Press, 1978). Homer E Socolofsky has distilled many years of research and publication on the Midwest's most notorious landlord in *Landlord William Scully* (Lawrence: Regents Press of Kansas, 1979). Everett Dick, *The Lure of the Land: A Social History of the Public Lands from the Articles of Confederation to the New Deal* (Lincoln: University of Nebraska Press, 1970), Yasuo Okada, *Public Lands and Pioneer Farmers: Gage County, Nebraska, 1850–1900* (Tokyo: Keio University, 1971); Reginald Horsman, 'Changing Images of the Public Domain: Historians and the Shaping of Midwest Frontiers', in *This Land of Ours: The Acquisition and Disposition of the Public Domain. Papers Presented at an Indiana American Revolution Bicentennial Symposium, Purdue University . . .* (Indianapolis: Indiana Historical Society, 1978), p 80.

¹⁵ Okada, *Public Lands and Pioneer Farmers*, pp 103, 176, includes three townships in which his proxy for speculation (agricultural college and state internal improvement entries) did not appear. Inclusion of these observation points raises Pearson's r from .52 to .66 and r^2 to .44. Only examination of the alienation history in these townships can answer the question of whether it was appropriate to include them. But doing so still leaves more than half of the variance unexplained.

¹⁶ Gates, 'The Homestead Law in Iowa', *Agricultural History* 37 (April 1964), p 78, *History of Public Land Law*, p 771, 'Homesteading in the High Plains', p 109.

primarily fostered the use of dummy entrymen by cattlemen. Still more broadly focused is Okada's study of Gage County, Nebraska, in which he considered the various types of alienation and tried to link them to settlement processes generally, a very rewarding research design.¹⁷

Most historians have disregarded the secondary land market, although the evidence on farmer turnover suggests that many pioneers in a region must have acquired their land from other farmers. And persisting operators often enlarged their holdings. The processes by which the grassland farmers expanded holdings, exchanged them, sold them, or passed them on to sons, or other relatives, has been too little studied. Was the cyclical rise and fall in farm size that Malin detected prior to 1900 in Kansas and the long-term increase thereafter typical of other grassland states? How were these trends related to the plans of innumerable individual farmers, whose operations in many cases must have gone through stages dictated by a family cycle or life course in which young operators began with minimal holdings of land, added to them to utilize the growing pool of family labour and ultimately dissipated them as they assisted sons or sons-in-law to establish themselves? Of the farmer land holders listed in the federal censuses of 1860 and 1870 in an Iowa township, 43 per cent were involved in 6 or more land transactions during their years of residence there, while 18 per cent of

them participated in more than 10.¹⁸ Study is yet needed of the initial government land market and even more of the private market in farm land.

VI *Environmental Adaptation*

During the last 40 years of the nineteenth century, recurrent droughts made it clear that rain did not indeed follow the plough necessarily and that one year's precipitation was no forecast of the next. The farmers of the grasslands, therefore, adopted a number of ameliorative strategies: (1) environmental modification; (2) the use of irrigation or reclamation; (3) moisture conservation practices; and (4) changes in crop and livestock combinations, including the introduction of plant varieties from elsewhere that were particularly suited to the semi-arid environment.

(1) Rainmaking, or pluviiculture, found supporters during the dry years of the 1880's and 1890's, and cranks, crooks, and charlatans argued that bombardment with dynamite or gunpowder could break drought. Others released rain-producing gases into the atmosphere under appropriate financial arrangements. To the embarrassment of some, the Congress charged the Department of Agriculture with experimentation in this challenging field and its chief investigator, Robert Dryenforth, became known to derisive plainmen as Robert Dryhenceforth.¹⁹

Potentially more valuable — though not all agreed — were efforts to effect environmental modification through tree planting. Thomas R Wessel and W H Droze have shown that interest in tree planting was a continuing theme in the plains country from the late nineteenth century to the 1930's. The settlers

¹⁷ Homer E Socolofsky, 'Land Disposal in Nebraska, 1854-1906; The Homestead Story', *Nebraska History* 48 (Autumn 1967), pp 225-48, 'Success and Failure in Nebraska Homesteading', *Agricultural History* 42 (April 1968); pp 103-8; Lawrence B Lee, 'The Homestead Act: Vision and Reality', *Utah Historical Quarterly* 30 (Summer 1962), pp 215-34; C Barron McIntosh, 'Forest Lieu Selections in the Sand Hills of Nebraska', *Annals of the Association of American Geographers* 64 (March 1974), pp 87-99, and 'Use and Abuse of the Timber Culture Act', *ibid* 65 (September 1975), pp 347-62. See also McIntosh 'Patterns from Land Alienation Maps', *ibid* 66 (December 1976), pp 570-82 for an interesting analysis of settlement in general in the Sand Hills of Nebraska. For an examination of a state grant see Agnes Horton, 'Nebraska's Agricultural College Land Grant', *Nebraska History* 30 (March 1949).

¹⁸ Bogue, *From Prairie to Corn Belt*, pp 50-3.

¹⁹ See, particularly, Walter Kollmorgen and Johanna Kollmorgen, 'Landscape Meteorology in the Plains Area', *Annals of the Association of American Geographers* 63 (December 1973), pp 424-41; Hollon, *Great American Desert*, pp 154-5; Clark C Spence, *The Rainmakers: American 'Pluviiculture' to World War II* (Lincoln: University of Nebraska Press, 1980).

themselves tried to establish shade trees, groves and hedges. Various land grant railroads encouraged the planting of trees, as did western state and territorial governments. Nebraska's efforts, including the proclamation of Arbor Day, were particularly notable, and western agricultural colleges and agricultural experimental stations developed experimental plantings. With the passage of the Timber Culture Act in 1873 the federal government officially approved the movement. Although that statute was repealed in 1891 federal interest continued. The Division of Forestry of the Department of the Interior, the Forest Service of the United States Department of Agriculture, and that department's dry land experiment stations all engaged in the search for varieties of trees and cultural practices that would enable settlers to develop timber lots, windbreaks, or shelter belts, and shade-protected farmsteads. In the mid-1920's the Bureau of Plant Industry of USDA began to supervise tree distribution programmes, and Congress approved an appropriation for the study of erosion control plantings in the South Dakota Sandhills at the conclusion of the decade.

The dust storms of the spring of 1934 prefaced notable departures in the resource policies of the Roosevelt administration. In July Franklin D Roosevelt promised to create a shelter belt of trees stretching from northern Texas to the Canadian border. It would check soil erosion, he suggested, and modify the effect of the plains country climate. Decried by sceptical experts and congressmen, the shelter belt subsisted largely on WPA funds under the supervision of the Forest Service until 1942 when oversight was transferred to the Soil Conservation Service. During the first 10 years of the project some 220 million trees were cultivated, of which 82 per cent survived. By 1944 the beneficial effects of the programme were generally recognized, wrote Allan J Soffar in 1975.²⁰

²⁰ Thomas R Wessel, 'Prologue to the Shelterbelt, 1870 to 1934', *Journal of the West* 6 (January 1967), pp 119-34, 'Roosevelt and the Great Plains Shelterbelt', *Great Plains*

(2) Irrigation activity would never dominate intensive agriculture in the grasslands east of the mountains as it did in the mountain and inter-mountain regions of the west. It became most important initially in the foothills on the western rim of the grasslands and in the upper valleys of the rivers that rose in the Central Rockies, particularly the Arkansas and the South and North Platte. In Colorado, the activities of the Union Colony Association in the Valley of the Cache La Poudre River in 1870, headed by Nathan C Meeker, agricultural editor of the *New York Tribune*, sparked a period of irrigation fever in the territory and new state in which co-operative groups and corporations developed a variety of projects and others died stillborn. Kansans of the western Arkansas Valley shared this enthusiasm and developed various small water diversions during the 1880's, only to discover that the activity of the Coloradans had exhausted their water supply. Similarly there was minor activity in the south-western corner of Nebraska during this decade. Wyoming for the most part was still cattle kingdom at the time and the few thousand farmers in that territory did not develop activity comparable to that in Colorado. Although the achievements of the early irrigators were not highly impressive, except perhaps in Colorado, the legislators and constitution makers in various western states and territories laid the foundation of systems of water law and administration during the 1870's and 1880's.

The disastrous years of the late 1880's and early 1890's brought interest in irrigation to fever heat in the western grasslands and the arid West and the emergence of an 'irrigation movement' in which skilful editors, like William E Smythe and Joseph L Bristow,

Journal 8 (Spring 1969), pp 57-74; W H Droze, 'Changing the Plains Environment: The Afforestation of the Trans-Mississippi West', *Agricultural History* 51 (January 1977), pp 6-22; Allan J Soffar, 'The Forest Shelterbelt Project, 1934-1944', *Journal of the West* 14 (July 1975), pp 105. By 1944 the project 'had evolved into a complete and valuable program'.

trumpeted the gospel.²¹ The promoters organized regional and national irrigation congresses and land speculators and land grant railroads added irrigation to the lures that they used to attract settlers into the region. Irrigation prophets of the 1890's saw a bright future not only for the irrigation district based on stream diversion and the impoundment of water in reservoirs but for well irrigation based on aquifers, particularly those with artesian properties, as in south-western Kansas and in the James river valley of South Dakota. But only in Nebraska, of the central and northern plains states, were there as many as 1000 irrigation farmers in 1900; and only in that state did the number expand substantially during the first 30 years of the twentieth century.

While reinforcing the trend toward irrigated agriculture in Colorado, Wyoming and Montana, the irrigation boom of the 1890's, also set the stage for the passage of the National Reclamation Act of 1902. Despite early projects on the North Platte and the Belle Fourche, the bulk of the Bureau's activity would lie beyond the western rim of the plains country. The promise of artesian wells was found to be limited. However, some farmers, as Sageser has demonstrated in Kansas, practiced petty irrigation on the basis of windmill pumping and, later, the use of the internal combustion engine. The impetus of the 'dirty thirties', great improvements in pumping equipment, and the use of cheap natural gas as a power source sparked a fantastic expansion of irrigation agriculture on the Texas high plains, and the example was noted farther to the north. The problems of the Bureau of Reclamation during its first quarter century constrained its staff from

beginning more than one additional project within the basin of the Missouri between 1907 and 1933. But in the New Deal years, and thereafter, dam building was authorized that had significant implications for some grassland farmers.

Despite the size of the reclamation bibliography, historians have thus far provided very uneven treatment of irrigation agriculture in the grasslands. There is no monograph dealing with the central and northern plains comparable to Donald E Green's treatment of irrigation on the Texas High Plains between 1910 and 1970, a volume that also includes a useful summary of the early years of irrigation on the high plains as a whole. However, Henry C Hart's *The Dark Missouri* is a mine of information about the development of water use planning and management by government agencies in the Missouri Valley to the mid-1950's.²²

Historians have perhaps done best in describing the changes in water law that westerners believed essential if they were to exploit the agricultural potential of this region most fully. In a series of excellent articles, Robert G Dunbar traced the development of the Colorado system of prior appropriation of irrigation water and irrigation district supervision and administration, and the extensive degree to which it spread to other states. More recently he has published a splendid account of the development of ground water appropriation law showing that 'the English rule of absolute ownership proved as unsatisfactory to water users in the dry climates of the West as had the riparian doctrine'. Even so, relatively few historians have given much attention to the revision of water law in the West, although it is one of the best examples of institutional innovation

²¹ A Bower Sageser, *Joseph L Bristow: Kansas Progressive* (Lawrence: University Press of Kansas, 1968). See also this author's 'Windmill and Pump Irrigation on the Great Plains 1890-1910', *Nebraska History* 48 (Summer 1967), pp 107-18. Smythe's career is described briefly by Martin E Carlson, 'William E Smythe: Irrigation. Crusader', *Journal of the West* 7 (January 1968), pp 41-7 and in Lawrence E Lee, 'Introduction', in *The Conquest of Arid America* by William E Smythe (Seattle: University of Washington Press, Americana Library, 1969), pp xvii-xliii. See also the state histories listed in note 7.

²² Donald E Green, *Land of the Underground Rain: Irrigation on the Texas High Plains, 1910-1970* (Austin, University of Texas Press, 1973); Henry C Hart *The Dark Missouri* (Madison: University of Wisconsin Press, 1957). For the best succinct account of the federal government's role in reclamation see Gates, *Public Land Law Development*, pp 635-98. But see also Michael C Robinson, *Water for the West: The Bureau of Reclamation, 1902-1977* (Chicago: Public Works Historical Society, 1979).

in that region. Legal scholars, however, have contributed articles to state law journals on the subject of state water rights that display varying degrees of historical content.²³

John Wesley Powell's contribution to an understanding of western aridity and his dramatic fall from position of revered prophet to reviled pariah has been much described, although perhaps still not as perceptively as his apparent importance justifies. Powell met his greatest defeat as a government scientist and bureaucrat when he failed to persuade the Congress that his plans for the survey of western irrigation resources were appropriate, and the explanation of his failure lies partly in his refusal to tell plains representatives and promoters what they wished to hear about the irrigation potential of their region. Of the two great publicists of the movement of the 1890's, Smythe and Bristow, we have as yet only a biography of Bristow, and but one chapter in it is devoted to the irrigation movement. Timothy J Rickard has argued recently that plainsmen believed that they would become part of a great irrigated western empire but were unable to reclaim sufficient acreage to serve as 'a base for a new economic system'. High failure rates among the irrigators, uncertain markets, engineering problems, and administrative difficulties all thwarted the visionaries of the 1890's and the early twentieth century. Noting that the national irrigation movement 'ended with very little success in 1914', Rickard concluded 'in the Great Plains . . . the utopian connota-

tions of irrigation were even sooner rejected'.²⁴

James C Olson has suggested that the observer looking eastward from the top of Scotts Bluff, must conclude 'that irrigation has supplied at least part of the answer to the problems involved in the occupation of the plains by an agricultural population'. But, in a concise review of the current history of 'The North Platte Oasis', L Carl Brandhorst emphasizes the frequency with which water supplies have proven inadequate in that irrigated district, the high variability of yields, and the additional production needs and cost factors experienced by irrigation farmers there. Powell's predictions and the 'boasts' of the Bureau of Reclamation remain unfulfilled, Brandhorst maintains, even in this highly touted region. R Douglas Hurt has described the increased use of irrigation in the more humid areas of Kansas as well as the intensification of agriculture that centre pivot irrigation has allowed in the western part of that state and elsewhere. He has also noted the problem of dropping water tables that has accompanied the increased use of well irrigation.²⁵ We seem particularly, however, to lack studies that bring out the unique character of farming beside the 'ditch'.

(3) Denied irrigation water by location, lack of resources, or other reason, many

²³ Robert G Dunbar, 'Water Conflicts and Controls in Colorado', *Agricultural History* 22 (July 1948), pp 180-86, 'The Origins of the Colorado System of Water-Right Control', *Colorado Magazine* 27 (October 1950), pp 241-72, 'The Search for a Stable Water Right in Montana', *Agricultural History* 28 (October 1954), pp 138-49, 'The Significance of the Colorado Agricultural Frontier', *Agricultural History* 34 (July 1960), pp 119-25, 'The Adaptation of Groundwater-Control Institutions to the Arid West', *Agricultural History* 51 (October 1977), pp 662-80. For the quotation, see p 680. Illustrative of the law journal approach are: William J Burke, 'Western Water Law', *Wyoming Law Journal* 10 (Spring 1956), pp 180-7, and Wells A Hutchins, 'Western Water Right Doctrines and their Development in Kansas', *University of Kansas Law Review* 5 (May 1957), pp 533-83.

²⁴ William C Darrah, *Powell of the Colorado* (Princeton: Princeton University Press, 1951), particularly pp 299-314; Wallace Stegner, *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West* (Boston: Houghton Mifflin Co, 1954), pp 295-345. Important additional perspectives are provided by William Lilley, II and Lewis L Gould, 'The Western Irrigation Movement 1878-1902: A Reappraisal', in *The American West: A Reorientation*, University of Wyoming Publications, p 32, edited by Gene M Gressley (Laramie: University of Wyoming, 1966): 57-74 and Thomas G Alexander, 'The Powell Irrigation Survey and the People of the West', *Journal of the West* 7 (January 1968), pp 48-54. Timothy J Rickard, 'The Great Plains as Part of an Irrigated Western Empire, 1890-1914', in *The Great Plains: Environment and Culture*, edited by Blouet and Luebke 91, pp 93-4.

²⁵ Olson, *Nebraska*, p 329; L Carl Brandhorst, 'The North Platte Oasis: Notes on the Geography and History of an Irrigated District', *Agricultural History* 51 (January 1977), pp 166-72; R Douglas Hurt, 'Irrigation in the Kansas Plains since 1930', *Red River Valley Historical Review* 4 (Summer 1979), pp 64-72.

western farmers put their faith in the development of tillage methods that would use available moisture supplies most efficiently, practices that were dubbed dry farming, or euphemistically, scientific farming. Malin included a particularly useful discussion of the development of the listing process in *Winter Wheat in the Golden Belt of Kansas*. A major monograph on the subject of dry farming subsequent to 1890 did not appear until Mary W Hargreaves published *Dry Farming in the Northern Great Plains: 1900–1925* in 1957. In this well-researched narrative she described the geographic character of the northern plains beyond the 100th meridian, the emergence of Hardy W Campbell and other apostles of dry farming techniques, and the promotional forces that sustained them, as well as the modifications and counter-suggestions developed by Ellery C Chilcott of the USDA and other dry-land scientists. Hargreaves described in detail the general development of settlement in the eastern counties of Montana and the western counties of the Dakotas but her analysis of the farm regime lacked the richness of Malin's analysis, in part because farm-by-farm agricultural census information is not available for the student of twentieth-century agriculture in most western states.²⁶

We know the promotional story of the semi-arid plains country after 1900, including James J Hill's energetic admonitions, presented to the farmers at fairs and other farm gatherings in the 'empire of the two northers', urging them to 'rotate your crops; diversify into livestock; fertilize your lands with the manure the livestock will produce; select better seed; and learn how to prepare the ground and cultivate your land in the most scientific manner'. In a retrospective paper of 1976, Hargreaves concluded that, as late as the 1920's, dry farming for most settlers was merely 'farming in a semi-arid

region without irrigation'. She maintained that 'fallow practice was rare. . . . Cultivation even on cropland was scanty. . . . New crop varieties and improved strains were developed slowly and accepted reluctantly'. However, the combination of livestock enterprises with wheat growing was increasingly common.²⁷

Drought on the northern high plains between 1917 and 1921 turned the major thrust of settlement into the central and southern plains, Hargreaves suggests, and both regions had become disaster areas by the mid-1930's. But the dry farming region demonstrated its recuperative and productive power after 1940 when moisture again became adequate, and operators there drew upon the hard won experience of the farmers of the area and the accumulated wisdom of the dry land agricultural experiment stations. Improved fallowing practices, including stubble-mulching, light seeding, the use of fertilizers (and later herbicides), improved plant varieties including alfalfa strains, and judicious diversification in livestock enterprises in an agricultural economy that was characterized by great advances in mechanization and the development of increasingly large farm units, proved that the region had the capacity to be much more than a country of ranches. Even so, drought years after 1950, 'the filthy fifties', reaffirmed the fragile basis of cropland agriculture in the high plains. But also, according to R Douglas Hurt, these years demonstrated that the conservation techniques available to plains country farmers, and the programmes of emergency aid available from state and federal governments, were sufficient to prevent rural tragedy of the sort experienced during the 1930's.²⁸

(4) Farmers also tried to adapt to the grass-land environment by making changes in crop and livestock combinations, and in so doing

²⁶ Mary Wilma M Hargreaves, *Dry Farming in the Northern Great Plains, 1900–1925* (Cambridge: Harvard University Press, 1957). Full citations to relevant Malin works cited appear in note 4.

²⁷ Albro Martin, *James J Hill and the Opening of the Northwest* (New York: Oxford University Press, 1976), p 553; Mary W M Hargreaves, 'The Dry-Farming Movement in Retrospect', *Agricultural History* 51 (January 1977), pp 160–1.

²⁸ R Douglas Hurt, 'Return of the Dust Bowl: The Filthy Fifties', *Journal of the West* 18 (October 1979), pp 85–93.

they faced various decisions and difficulties. These decisions were rendered more difficult as the settler pushed westward through the central plains country because the yearly variations in precipitation there somewhat obscured the fact that wheat was a more reliable crop under subhumid conditions year after year than was corn. In political context Mary E Lease admonished farmers 'to raise less corn and more hell' during the 1890's, but the question 'wheat or corn?' was a long-standing one. Newcomers tried to duplicate the agricultural practices of their places of origin and operator turnover deprived new communities of hard won local experience. Farmers put their major faith in the corn crop in the prairie regions of Illinois and Iowa at a relatively early date, certainly by the 1870's, and combined that major crop with livestock enterprises involving hogs and beef cattle. But farther west, farmer juries remained locked in indecision on the issue of the proper combination of farm enterprises deep into the twentieth century. Studying Sherman County in north-west Kansas, Kollmorgen and Jenks reported, 'dry farming was not introduced in this section *until the late 30's* and farmers still needed to learn that the Corn Belt could not be stretched to western Kansas'.²⁹

Of particular interest is the recent essay of Bradley H Baltensperger, who studied the agricultural adjustments of settlers in the Republican Valley, between the 97th and the 102nd meridians, during the years 1870-1900. The initial agriculture of the settlers, he argued, was shaped primarily by the promotional picture of the region and by their experience in their former homes, mostly located in the corn belt. Using corn-wheat ratios, acreage in the sorghums and in broom corn, and interest in rain-making and irrigation activity as basic evidence, Baltensperger showed that the settlers demonstrated increasing tendencies to adjust their farm

operations as the locale shifted from east to west. Baltensperger's results are important and his research techniques can be used in studies of other areas and later periods of grassland development.³⁰

The adaptation of cropping patterns to the grassland environment also involved the search for better varieties of particular crops. Two agricultural scientists, K S Quisenberry and L P Reitz, have recently reviewed the considerable literature discussing the emergence of Turkey Red as the pre-eminent hard winter wheat variety of the central Kansas plains, and the development of related and descendant strains. In its evaluation of evidence this article is a model of its kind but Quisenberry and Reitz say little of the cultural and social concomitants of adaptation or of its economic implications for the individual farmer.

Crop improvement and adaptation occurred in various ways. Western settlers, both native and foreign-born, brought supplies of seed with them. Local farmers and seedsmen tried to acquire seeds of grain and grass varieties that would yield well in their localities. From almost the day of its beginnings in the US Patent Office, the United States Department of Agriculture was involved in the importation of seeds and plants. Initially, most seed importation was carried out through American consular offices or other governmental agencies abroad, but after the Department acquired cabinet status in the late nineteenth century this activity was enlarged and soon the secretary was dispatching special agents abroad. In 1950 Nelson Klose estimated that some 180,000 species or types of domestic plants had been imported under official aegis. The grassland farmer of today grows wheat, sorghums, alfalfa, broom grass, wheat grass, and other crops that owe much of their character to the 'plant explorers'.

But the domestic plant breeder's work has also been vitally important. At the turn of the

²⁹ Walter M Kollmorgen and George F Jenks, 'A Geographic Study of Population and Settlement Changes in Sherman County, Kansas', *Kansas Academy of Science Transactions* 54 (December 1951), p 459. Italics added by this author.

³⁰ Baltensperger, 'Agricultural Adjustments to Great Plains Drought: The Republican Valley, 1870-1900', pp 43-59.

century plant breeding was, for the most part, essentially plant selection — the development of varietal strains that were segregated and propagated by open pollination. But as the promise and techniques of hybridization became increasingly understood, the plant scientist became a truly creative figure, who could combine the characteristics of parent stocks so as to manipulate protein content, accentuate drought, disease and insect resistance properties, shorten the growing period, and increase yields. Historians have only skimmed the surface of this fascinating story.³¹

To what degree did government activity actually assist in the adjustments of the dry country farmer? One can hardly dispute Malin's notion of folk process, as far as the nineteenth century is concerned. Adjustment in the twentieth century appears to have been a different matter when the contributions of the plant scientists became very important. Government scientists, both state and federal, also performed a valuable service in criticizing the easy fantasies of the promoters and zealots concerning tillage practices and machinery

and in circulating information about developments that had apparently produced beneficial results. We need to know more about the work of farm management specialists in other grassland states but M L Wilson's research in farm organization and management practices in Montana during the 1920's was apparently outstanding. Paul Bonnifield, however, has argued that government scientists developed few if any of the adaptive cultural practices and innovations in agricultural machinery that emerged during the drought of the 1930's. Moreover, New Dealers were in error, maintains Bonnifield, in arguing that much of the plains region should be retired from cropland agriculture.³²

To what degree did foreign-born settlers try to transplant the agriculture of their old homes to the grassland? This region provides us with one of the most striking instances of the transfer of a uniquely appropriate crop to a region by a cultural group — the importation of Turkey Red wheat into central Kansas by the Mennonites. But did immigrants pursue patterns of agriculture over extended periods of time that were substantially different from those of native-born farmers? Terry G Jordan has compared the relative degree to which native-born and foreign-born settlers avoided the prairies in selecting farm sites and Allan G Bogue, Seddie Cogswell, Jr, Donald L Winters, and D Aidan McQuillan have all compared the farming patterns of the

³¹ Thus far historians have devoted most attention to the winter wheat of the central plains: Malin, *Winter Wheat*; Homer E Socolofsky, 'Kansas Wheat History', in *Marketing Kansas Wheat* (Topeka: Kansas State Board of Agriculture, 1959), pp 36–61; K S Quisenberry and L P Reitz, 'Turkey Wheat: The Cornerstone of an Empire', *Agricultural History* 48 (January 1974); pp 98–110; Robert G Dunbar, 'Turkey Wheat: A Comment', *Ibid*, pp 111–14. Of the other midwestern crops, corn development is treated in A R Crabb, *The Hybrid-Corn Makers: Prophets of Plenty* (New Brunswick: Rutgers University Press, 1947), and Henry A Wallace and William L Brown, *Corn and Its Early Fathers* (East Lansing: Michigan State University Press, 1956). For the story from the standpoint of the plant scientist, see Paul C Mangelsdorf, *Corn: Its Origin, Evolution and Improvement* (Cambridge, Mass Harvard University Press, 1974). There are brief treatments of other crop developments in Walter Ebeling, *The Fruited Plain: The Story of American Agriculture* (Berkeley: University of California Press, 1979), *passim*. The story of plant importation is told briefly in Nelson Klose, *America's Crop Heritage: The History of Foreign Plant Introduction by the Federal Government* (Ames: Iowa State College Press, 1950). John T Schlebecker, 'Pliant Prairie', *Montana: The Magazine of Western History* 8 (Winter 1958), pp 30–41 is a study of the adoption of sorghum in western South Dakota which could serve as something of a model in other needed investigations.

³² Karl S Quisenberry, 'The Dry Land Stations: Their Mission and Their Men', *Agricultural History* 51 (January 1977), pp 218–28; Merrill G Burlingame, 'National Contributions of the Montana Extension Service, 1893–1930', *Ibid*, 229–43. The various components of the *Addenda and Postscript* in the 1967 edition of Malin's *Grassland of North America* present his considered views on the relation between history, the environmental complex of the grasslands and public policy. Mathew Paul Bonnifield, *The Dust Bowl: Men, Dirt and Depression* (Albuquerque: University of New Mexico Press, 1979); Harry C. McDean, 'Federal Farm Policy and the Dust Bowl: The Half-Right Solution', *North Dakota History* (Summer 1980), pp 21–31. This review of literature is focused primarily on the central and northern plains and does not emphasize the Dust Bowl story, but see also Donald E Worster, *Dust Bowl: The Southern Plains in the 1930's* (New York: Oxford University Press, 1979).

foreign-born with those of the native-born. John G Rice and Robert Ostergren opened a new dimension in such research when they linked the subregional Scandinavian backgrounds of immigrant farmers in Minnesota to their farming practices in the new land. In this research, still highly exploratory, most authors have concluded that it is difficult to identify long-run contrasts in the major aspects of agriculture that are clearly traceable to residual cultural influences, although some short-run or minor differences between native-born and foreign-born farmers have been identified.³³

VII *Farming as Business*

Recent historical literature reflects a growing understanding that the survival of farmers on the plains has been an exercise in coping with natural risks that are much greater than those encountered in the eastern regions of the United States. One economic historian has used quantitative evidence to show that the amounts of crop land devoted to fallow and non-fallow cropping regimes in Saskatchewan have been proportional to the risk of drought in the immediate area, and this argument can doubtless be made concerning regions of the Great Plains below the 49th parallel as well. The fascinating study of suitcase farming in

western Kansas and eastern Colorado published recently by Leslie Hewes shows that this practice has been highly prevalent in the high risk region of the plains country. Many of the suitcase farmers carried on their wheat farming operations in conjunction with farm operations in more humid areas. If the non-resident enterprise failed in a particular year, these farmers presumably did better at their other base of operations.³⁴ A viable federal programme of crop insurance emerged during the 1930's, and various aspects of the farm price support programmes of that decade and thereafter have provided an institutional answer to the problem of risk.

Historians have been more comfortable in describing the institutional structure of land laws and transportation developments, and the general characteristics of farming operations in the plains country, than in describing farming as a changing business in which the operator's success or failure hinged upon his skill in combining the factors of production in an uncertain economic and climatic environment. Malin emphasized the small scale of the average western farmer's investment and returns during the late nineteenth century. In general, since World War II, the writings on agricultural history dealing with the tall grass country have included more of this kind of analysis than has been true in the discussion of agricultural development in the short grass regions. The writing of the Bogues on agriculture in the prairies of Illinois and Iowa, and of Drache and Murray about farming in the Red River Valley, give a clearer picture of the financial side of farming than is available in general for the western grasslands. Even so these authors have gone less far than is possible or desirable. None of them have made

³³ Terry G Jordan, 'Between the Forest and the Prairie', *Agricultural History* 38 (October 1964), pp 205-16; Bogue, *Prairie to Corn Belt*, pp 211-12, 236-8 (summarizing material from an earlier article); Cogswell, *Tenure, Nativity and Age*, pp 75-8; Winters, *Farmers Without Farms*, pp 77, 88, 135; D Aidan McQuillan, 'Mobility of Immigrants and Americans', p 591; John G Rice, 'The Role of Culture and Community in Frontier Prairie Farming', *Journal of Historical Geography* 3 (April 1977), pp 155-75; Robert Ostergren, 'A Community Transplanted: The Formative Experience of a Swedish Immigrant Community in the Upper Middle West', *Ibid* 5 (April 1979), pp 189-212. The literature is discussed in Robert P Swierenga, 'Ethnicity and American Agriculture', *Ohio History* 89 (Summer 1980), pp 322-44.

³⁴ Leslie Hewes, *The Suitcase Farming Frontier: A Study in the Historical Geography of the Central Great Plains* (Lincoln: University of Nebraska Press, 1973); 'Early Suitcase Farming in the Central Great Plains', *Agricultural History* 51 (January 1977), pp 23-37, see Kenneth Norrie, 'Dry Farming and the Economics of Risk Bearing: The Canadian Prairies, 1870-1930', *Ibid*, pp 134-48, for both a theoretical and substantive exploration of the risk factor in farm decision-making in the Canadian Plains region.

full use of the range of simple tools of quantitative analysis that are available.³⁵

Drache carried his interest in big farming forward in a later study of which the most relevant section described the business operations of Tom Campbell and the Campbell Farming Corporation on the Crow Reservation in Montana during the 1920's and early 1930's. This work is a paean in praise of bigness, mechanization and cost accounting. Critics have suggested, however, that Drache disregarded the subvention that the wheat king obtained when his creditors allowed him to wind up his first years of bonanza operation with a substantial write-off of debts outstanding. Covering a broader range of farm businesses is Robert E Ankli's article, in which he argued that 'no size of farm was adequate' in the drought-stricken wheat regions of the northern Great Plains and Canadian prairies during the 1930's unless long-run average yields could be made.³⁶

We do know a good deal more about one of the more important cost factors in western settlement and farming — land credit — than was true in 1947. Borrowing by note and mortgage on farm land was always an extremely important element of credit to

which historians initially gave little systematic attention, although many noted that foreclosures had been a potent source of agricultural unrest in the history of the United States, and particularly so among plains farmers of the 1880's and 1890's. In 1955 this writer examined the use of land mortgage credit from Illinois to western Kansas and Nebraska during the second half of the nineteenth century in the book, *Money at Interest*. Combining case studies of representative lenders and local borrowing experience, this study described the details of the mortgage business more fully than anyone had done hitherto, noted the recurrent waves of foreclosure that affected farmers during the 1850's, 1870's and 1890's, and charted the behaviour of interest rates. Noting the unsatisfactory aspects of the credit system, including the gouging by local agents, and the suffering entailed in the boom and bust agriculture of the frontier, this writer also pointed out the striking decline of interest rates during the last 30 years of the century and the fact that the relatively short duration of mortgages allowed interest rate adjustments. He noted that money lenders appeared almost as much betrayed by the fickleness of climate and the imperfections of the economic system during the 1880's and 1890's as the settlers themselves.³⁷

Since the publication of this work a number of other authors have published studies of western money lending in this same era. Most of these authors, have not altered the picture drawn in *Money at Interest* appreciably. Although his data conform to the general patterns verified by other authors, Okada, on the other hand, interpreted them more pessimistically, stressing the fact that mortgages might be renewed several times, and emphasizing the higher interest rates specified in secondary instruments. He was perhaps on firmer ground, when he qualified the emphasis on the local sources of western

³⁵ Allan G Bogue, *From Prairie to Corn Belt*; Margaret Beattie Bogue, *Patterns from the Sod: Land Use and Tenure in the Grand Prairie, 1850-1900* (Springfield: Illinois State Historical Library Collections, 34, 1959); James W Whitaker, *Feedlot Empire: Beef Cattle Feeding in Illinois and Iowa, 1840-1900* (Ames, Iowa State University Press, 1975); Hiram M Drache, *The Day of the Bonanza: A History of Bonanza Farming in the Red River Valley of the North* (Fargo: North Dakota Institute for Regional Studies, 1964); Stanley N Murray, *The Valley Comes of Age: A History of Agriculture in the Valley of the Red River of the North, 1812-1920* (Fargo: North Dakota Institute for Regional Studies, 1967). See also relevant sections in Clarence H Danhof, *Change in Agriculture: The Northern United States, 1820-1870* (Cambridge: Harvard University Press, 1969).

³⁶ Hiram M Drache, *Beyond the Furrow: Some Keys to Successful Farming in the Twentieth Century* (Danville, Ill: Interstate Printers and Publishers, Inc, 1976), pp 95-166, and 'Thomas D Campbell — The Plow of the Plains', *Agricultural History* 51 (January 1977), pp 78-91; Terry L Anderson, 'Bonanza Farmers and Subsistence: A Response', *Ibid*, pp 104-8; Robert E Ankli, 'Farm Income on the Great Plains and Canadian Prairies, 1920-1940', *Ibid*, pp 92-103.

³⁷ Allan G Bogue, *Money at Interest: The Farm Mortgage on the Middle Border* (Ithaca: Cornell University Press, 1955).

mortgage funds found in some recent writers. Apparently there will continue to be differences of opinion in this area of research.³⁸

None of the authors of mortgage studies have analysed commission charges intensively; they have discussed interest charges solely in current rather than constant dollar rates and have paid little attention to the changing relations between prices paid and prices received by farmers. Additional case studies and, particularly, examination of the use of chattel credit would be highly desirable.

Our knowledge of farm finance is much clearer than our understanding of agricultural labour. None of the Agricultural History Center bibliographical guides bearing on the grasslands use 'labour' or 'agricultural labour' as a heading or subheading. In an early study

of late nineteenth-century agriculture, Fred A Shannon devoted some 9 pages to the subject of agricultural labour, drawing primarily on two government publications and, in a later survey of agriculture during the Civil War, Paul W Gates devoted the bulk of his chapter on labour and machinery to the latter topic. In a study that touches only upon the eastern part of the grasslands, David E Schob, however, has recently presented a great deal of information concerning the individual labourer in the years 1815-60. But this author also left various important issues unresolved. None has approached the topic from the standpoint of the management of the complete labour pool available to the farmer, including his own contributions, the relation of that pool to the changing seasonal working regimes and the rural family life course. But Robert M Finley has made an interesting beginning in arguing that farming a 160-acre homestead required more inputs than individual settlers possessed. A definitive history of migrant or seasonal labour in this region is lacking. The contributions of farm women are finally receiving attention, however. Although much of the recent activity has involved the publication of diaries or other source materials, the work of Mary W Hargreaves, Julie R Jeffrey and Glenda Riley provides the foundation for an analytical approach to women's work and its place in the larger picture of the farm economy.³⁹

³⁸ Two writers have challenged the adequacy of Bogue's work: O Gene Clanton, *Kansas Populism: Ideas and Men* (Lawrence: University Press of Kansas, 1969), p 259; Lawrence Goodwyn, *Democratic Promise: The Populist Movement in America* (New York: Oxford University Press, 1976), pp 610, 629. Neither writer had done any research in relevant county records or business manuscripts and they seriously misrepresented the depth and scope of the research in *Money at Interest*. Other treatments based on research in primary sources are: Glenn H Miller, Jr, 'The Hawkes Papers: A Case Study of a Kansas Mortgage Brokerage Business, 1871-1888', *Business History Review* 32 (Autumn 1958), pp 293-310; Margaret B Bogue, *Patterns from the Sod*, pp 185-222; Jay Ladin, 'Mortgage Credit in Tipton County, Indiana, 1865-1880', *Agricultural History* 41 (January 1967), pp 37-43; Robert F Severson, Jr, James F Niss and Richard D Winkelman, 'Mortgage Borrowing as a Frontier Developed: A Study of Mortgages in Champaign County, Illinois, 1836-1895', *Journal of Economic History* 26 (June 1965), pp 147-68; W Turrentine Jackson, *The Enterprising Scot: Investors in The American West after 1873* (Edinburgh: Edinburgh University Press, 1968); Larry McFarlane, 'British Investment in Midwestern Farm Mortgages and Land, 1875-1900. A Comparison of Iowa and Kansas', *Agricultural History* 48 (January 1974), pp 179-98; Russell Berry, 'British Investment in Iowa and Kansas, 1875-1900: Comment', *Ibid.* William G Kerr, *Scottish Capital on the American Credit Frontier* (Austin: Texas State Historical Assoc, 1976). Okada, *Public Lands and Pioneer Farmers*, pp 146-59. Real estate taxes as a farming cost remain virtually unstudied, but see Bogue, *Prairie to Corn Belt*, pp 187-92, and Robert P Swierenga, *Acres for Cents: Delinquent Tax Auctions in Frontier Iowa* (Westport: Greenwood Press, 1976), primarily a study in investment but emphasizing the farm finance aspects of tax liens as well.

³⁹ Fred A Shannon, *The Farmer's Last Frontier: Agriculture, 1860-1897* (New York: Farrar & Rinehart, Inc, 1945), particularly pp 140-5; Paul W Gates, *Agriculture and the Civil War* (New York: Alfred A Knopf, 1965), pp 222-47; David E Schob, *Hired Hands and Plowboys: Farm Labor in the Midwest, 1815-60* (Urbana: University of Illinois Press 1975); Mary W M Hargreaves, 'Women in the Agricultural Settlement of the Northern Plains', *Agricultural History* 50 (January 1976), pp 179-89; Glenda Riley, 'Images of the Frontierswoman: Iowa as a Case Study', *Western Historical Quarterly* 8 (April 1977), pp 189-202; Julie R Jeffrey, *Frontier Women: The Trans-Mississippi West, 1840-1880* (New York: Hill and Wang, 1979), particularly pp 51-78; John M Faragher, *Women and Men on the Overland Trail* (New Haven: Yale University Press, 1979), pp 40-65 and *passim*.

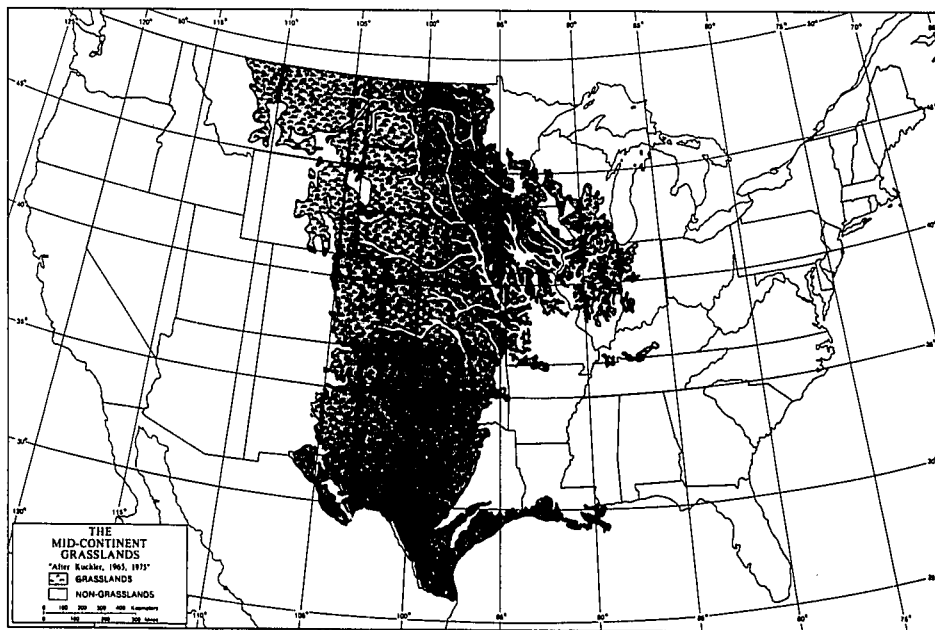
Nor have historians developed the story of farm technology in the grasslands to the degree that is essential. Although Webb emphasized the problem of fencing and the importance of barbed wire our understanding of its importance to the farmer still requires development. Rodney O Davis expertly showed the way in which an institutional solution to the fencing problem, the local herd law, was used for a time in Kansas. Various authors have elaborated on the basic work of Clarence Danhof in the prairie regions but the authors of the most elaborate study of barbed wire are much more concerned with matters of manufacture and design than its significance on the farm. Scholars have discussed the development and implication of farm machinery in the horse-power era more fully than the mechanically-powered equipment of the twentieth-century, though Hurt has provided us with a good description of the dry land farming equipment that came into use during the 1930's.⁴⁰

VIII Conclusion

There has been much wide ranging and highly significant publication about the agricultural history of the region since Malin published the *Grassland of North America*. But historians should be embarrassed by the degree to which geographers have picked up the challenges in that book; Kollmorgen, Bowden, McIntosh, Brandhorst, McQuillan, Baltensperger, Rickard, Jordan, Rice, Ostergren, Hewes, and others listed in the notes to this article come from a discipline that numbers far fewer members than does history. Particularly in matters of environmental perception, it is they who are truly Malin's heirs. Economists also have been well represented in these pages. Historians, however, have not surrendered the field. Nor should they, because even a cursory examination of the achievements since 1947, or better still, that plus a re-reading of Malin's *Grassland* should convince them that there is still a great deal to be done.

⁴⁰ Rodney O Davis, 'Before Barbed Wire: Herd Law Agitations in Early Kansas and Nebraska', *Journal of the West* 6 (January 1967), pp 41-52; Clarence H Danhof 'The Fencing Problem in the Eighteen-Fifties', *Agricultural History* 18 (October 1944), pp 168-86; Henry D and

Frances T McCallum, *The Wire That Fenced the West* (Norman: University of Oklahoma Press, 1965); R Douglas Hurt, 'Agricultural Technology in the Dust Bowl, 1932-40, in *Environment and Culture*, edited by Blouet and Luebke, pp 139-56.



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Annual List and Brief Review of Articles on Agrarian History, 1980¹

By RAINE MORGAN

ARTICLES on climate dominate this year's collection mainly due to an issue of the *Journal of Interdisciplinary History* having been devoted to the subject. This offers 17 contributions by climatologists, demographers, biologists, and historians, demonstrating not only the need for collaboration between disciplines but also the very real potential of a joint approach. Among them, Fischer (79) notes the mass of data that has accumulated and calls for a synthesis of information and its publication in a form which would make it readily accessible to scholars in the different fields. In an historiographical survey, De Vries (62) is critical of traditional concern with the short-term impact of extremes and crises of subsistence, and questions the accepted causal link between climate, harvest size and economic cycles. His preferred approach is to consider human adaptation to long-term weather changes. This is echoed in Appleby's own study (5) of the 'little ice age' between 1500 and 1700. He believes that although weather was crucial for harvests, the impact depended largely on human factors, including welfare programmes and technical change in agriculture; and he concludes that human responses to climate were more important than climate itself, whether causing famine or avoiding it. Post (173), however, argues that climatic fluctuations of the period impinged seriously upon economic activity and mortality, and identifies instances when major health problems in England were traceable to weather conditions and high grain prices. He also points out that the impact on economies less developed than the Dutch and English would have been even more severe. Post further questions the validity of those studies based upon fluctuations spanning only a year or two and suggests that the minimum period for understanding the impact of weather may be a decade. The importance of the time scale is also underlined by Rabb (178), who believes the most useful analysis of data is that which lies in a range between the short-term catastrophe and the 500-year worldwide shift, detectable only by climatologists. He urges a search for an acceptable index of weather data for the fourteenth to nineteenth centuries, with the aim of uncovering

demonstrable links between climate and political, economic, social, and cultural history.

The question of the origin of agriculture is still exercising minds: Rindos (185) denies that the event was either revolutionary or even intended, and instead views agriculture as 'the outgrowth of evolutionary potentials which may develop whenever an animal consistently feeds upon any set of food plants'. Thus domestication was the result of slow man-plant interactions which pre-dated agricultural systems. A number of articles on prehistory emphasize the lack of hard evidence and demonstrate again the value of the cross-disciplinary approach. To detect the process of evolution in prehistoric cropping, Hubbard (106) subjects archaeobotanical data collected in Europe and the near East over the past three decades to a new quantitative method — 'selective analysis'. Findings indicate a continuous but very gradual process of change and suggest a variety of possible relationships between cropping patterns, ecology and culture. Pickering (172) highlights the potential and some limitations of aerial reconnaissance which has revealed a highly organized and developed landscape in England but leaves unanswered many questions of agricultural, social or cultural origins. The limitations of this device are also underlined in Haselgrove's study of crop marks in Co Durham (96). From the air these could be interpreted as field systems but were in fact generated by natural fissures. Similarly, Martin and Hall (136) show that careful field-walking can unearth important evidence of settlement and land use which is not revealed in aerial photographs. Absence of cereal seeds recorded on Grooved Ware sherds has been taken to imply that the culture was based on pastoralism rather than arable farming. But Martin Jones (114) has employed the new water flotation technique and detected carbonized grains which may call for a major re-thinking of the Grooved Ware economy. Where grains are indeed absent, storage methods rather than lack of arable farming may be the cause, and the author believes we should be seeking behavioural rather than land-use explanations of missing grain impressions. Problems of interpretation are also discussed by Mercer and Dimbleby (140) in relation to a Cornish hut circle settlement at Stannon Down, where pollen of arable weeds is absent despite a field system and querns. There are two articles by Whittle: one (228) postulates a two-fold economic division of the British Neolithic which

¹Publications are dated 1980 unless otherwise noted. References to articles or off-prints should be sent to the Bibliographical Unit, Institute of Agricultural History, University of Reading.

ended with a greater intensification in the use and organization of land, rather than the introduction of metallurgy or beakers; the other (227) reports on prehistoric lynchets and boundaries in the Shetland Islands. These he believes indicate early infield-outfield systems and provide a remarkably accurate gauge of the intensity of land use to compare with southern Neolithic sites. In an examination of tool remains and subsoil traces of ards in Orkney and Shetland, Rees (183) concludes that the latter were consistently tilted when in use — presumably to help turn the soil. Ryder (189) has analysed the hair on a recently discovered Neolithic ox skull from Orkney, and found it has the degree of fineness previously associated with the wild *Bos primogenius*. This raises the possibility that earlier samples thought to be of wild cattle in fact originated from domesticated stock.

Landscape and landholding patterns have pre-occupied agrarian historians of the medieval period. Toponomic studies have traditionally focused on lowland regions subject to invasion, tracing settlement patterns from nucleated village and hamlet names. But Thomas (213, 214) demonstrates that in uplands characterized by continuity, a dispersed habitat, and environmental constraints this type of research is inappropriate. Instead he has analysed over 10,000 Welsh field and farm names and plotted their components spatially, sharpening our perspective of the nature and pattern of internal colonization. The wide range of topographical information available in manorial documents for reconstructing historic landscapes is illustrated by Bond (25) and Moorhouse (146); while Faull (73) emphasizes the value of place-names, but also notes the importance of fieldwork and the checking of documentary sources such as early maps to locate and interpret local features. Hedge-dating has become a common-place tool of landscape historians, but Johnson (112) notes the statistical limitations of the Hooper method, while Cameron and Pannett (37) in a study of some Shropshire examples also warn that diversity in hedges is sometimes only weakly related to age. The genesis of common fields is the subject of a leading article by Campbell (38). He provides further support for the Thirsk thesis that population growth where the supply of land was finite could lead to parcellation of land and the gradual emergence of sub-divided fields. Population growth alone however, is considered insufficient explanation in a case study of Martham in Norfolk. Here weak manorial control was crucial in permitting partible inheritance and alienation, which in turn fostered the development of a fragmented and complex landholding structure. The remarkably fluid nature and complexity of medieval landholding is again emphasized in McIntosh's study (133) of the royal manor of Havering in Essex. Here the level of sub-tenancing advanced from 11 per cent of those renting land to 69 per cent between the mid-thirteenth and

mid-fourteenth centuries. Evidence is derived from two manorial extents, a type of documentary source described in a separate article by Lomas (128). In a study of Holderness, Harvey (94) examines seventeenth-century field morphology to determine much earlier developments. Regularity of landholding and simplicity of field layout argue a planned origin, and the suggestion is made that a major eleventh-century estate re-organization accompanied wholesale restructuring of arable fields, based upon the Viking 'solskyfte' method of division and assessment. There is alarm in some quarters at the treatment of medieval history by economists, and McCloskey (130) coins the term 'megaloeiticism' to describe the 'enlargement to excess of the study of origins'. Criticism is focused on Mazur's theory that the ploughing process created the scattering of open field strips, and in reply Mazur (139) counters with a critical view of McCloskey's own theory of risk aversion. On tenure Betsey (22) describes evidence suggesting that the manorial custom of rights of 'free bench' was less rare than once thought. This was a device based on arranged marriage to delay the return of a tenement to the manorial lord.

Management of estates is another prominent theme in articles on medieval agrarian history. Mate (137) estimates that under 10 per cent of Isabella de Forz's revenues were devoted to maintenance and improvement, but argues that a small financial outlay was not inconsistent with high profits. Partly, high returns reflected helpful economic circumstances, but flexible and astute management of resources was also a factor. The royal estate has come under scrutiny. Stafford (204) details information from Domesday Book which describes arrangements for provisioning the Court and provides evidence of dynamic management on royal manors before the Conquest. Medieval Cheshire has been viewed as a backward, pastoral county, but Booth (27) questions this assumption and shows that the Black Prince was prepared to barter power and direct management for the more profitable system of leasing his lands. Also on administration, Britnell (31) confronts Kosminsky's claim that the structure of small estates made them more alert to market opportunities and more likely to be exploited to their full potential. The decisive influence of market forces on the local development of village structure and economy is shown by Moss (150) in a study of late medieval Tottenham. Closeness to London and good communications led to transformation from an arable to a pastoral economy and rise in prosperity, while less well-placed centres nearby stagnated. The academic neglect of livestock husbandry reflects the unhelpful nature of documentary sources but recent examination of organic remains promises to throw fresh light on the subject. Bourdillon (28) has patiently sifted and measured bone fragments at Hamwih to determine

changes in animal size and husbandry. Curious trends to emerge include the decline in sheep size during the medieval period, while cattle became larger. Similarly, the archaeozoological analysis of horn cores has provided Armitage (7) with new evidence on the origin of long-horned cattle. These appeared in England in the fourteenth century and represented not imported stock but were, he argues, the result of selective breeding on a few of the larger estates in the south-east.

Maps dating from the early modern period are described in a number of articles and their value as source material assessed. A D M Phillips (169, 170) draws our attention to the detailed seventeenth-century estate maps of William Fowler, for example, and Shercliff (195) describes those of Martinscrofte, which also portray field systems, landholding and tenure. The land tax returns are discussed by Wilson (238), who concludes that while they provide much insight into factors which could influence a tax, they present too many problems to be used by historians as a worthwhile source in themselves. The other major documentary source described is the probate inventory: Overton (159) shows how they can be exploited to measure agricultural change, and Garrard (85) demonstrates their value for studying the domestic interior.

On the important question of the relationship between agriculture and economic growth, Crafts (53) blames preoccupation with the labour-intensive nature of mixed farming (*pace* Chambers) for the mistaken view that industry obtained its labour from population growth alone. He prefers an alternative interpretation which emphasizes agriculture's achievements, specifically the rise in output per man which allowed it to feed increased numbers with a declining proportion of the nation's labour force. Again the landed estate has received most attention. Aylmer (12) traces developments in the definition of 'property' from the early seventeenth century neo-feudal view to one which emphasized the absolute power of owners to dispose of estates and seek redress in law against those who violated it. Debate continues over the contribution of marriage settlements to the rise of great estates. English and Saville (70) offer further evidence that the contribution was a significant one, but Bonfield (26) re-emphasizes those demographic realities of the time which prevented most families from implementing settlements and ensuring estates remained intact through generations. On a related theme Habakkuk (90) uses evidence of Parliamentary Acts, obtained for discharging debt through property sales, to determine which periods were the most difficult for landed families. Findings suggest that they were under less pressure to sell after 1720 than they had been during the half-century before, owing to lower interest rates, less serious wars, and protective devices favourable to borrowers. Much attention has been focused on insti-

tutional owners. Factors underlying the disposal by Tudor monarchs of Crown property during the middle decades of the sixteenth century are discussed by Wyndham (242). Gentles (86) examines the 'never to be repeated bargain in the history of the English land market' — the sale of bishops' lands during the Revolution of 1646–60, while Clay (50) exposes the lamentably weak position of the Church as landlords during the century thereafter. Denying E P Thompson's claim that ecclesiastical owners were greedy and exploitative he shows how bishops were forced to continue letting land to aristocrats and gentry at a fraction of its value because any change in the beneficial lease system would have involved unacceptable financial sacrifices in their own lifetimes. The view that institutional landlords were invariably less effective as managers finds little support in Trueman's study of Guy's Hospital estate (216). The author claims that overall similarities were more striking than differences, noting that both institutional and private owners were often more concerned with bare maintenance of property and avoidance of waste or damage than improvement. Accumulation of land by Sir Thomas Audley in the last quarter of the eighteenth century is described by Williams (235). The pattern conforms with the general one of wealthy individuals buying out small owners and copyholders, and emphasizes the importance of private as opposed to Parliamentary methods of consolidation and purchase. Traditional conceptions of Parliamentary enclosure are derived largely from the midland experience but Chapman (44) examines Sussex evidence to illustrate why conditions could differ so markedly outside. Not unconnected, Dymond's investigation of a Suffolk village (66) reminds us of the bitter but ineffective opposition that enclosure could arouse. Farm practice is of growing interest. Lane (121) draws upon agricultural science and history to document important changes in pasture management and livestock feeding between 1500 and the end of the seventeenth century. Scrutiny of contemporary records of farming in the midland plain leads Broad (32) to re-evaluate the role of alternate husbandry. Dr Kerridge argued that this was the vital ingredient of an agricultural revolution completed in the eighteenth century. But after 1650 a new and important practice of permanent pasture farming emerged on the heavier clays, with manuring, rotational grazing and drainage giving encouragement to specialist livestock production. On rural society generally Lindert (123), having collected large samples of parish data on occupations from burial registers and lists of inhabitants, casts renewed doubt on Gregory King's classic social table. Findings suggest that King seriously understated the size of the commercial and industrial sectors. In an attempt to reconstruct the socio-economic organization of rural Cumbria after 1660, Marshall (134) uses information from probate

inventories to detect advancing wealth and a slow rise in consumption following expansion of agriculturally based trades and minor local industries. Chaytor's article on Ryton (47) demonstrates the great variety of documentary records that can be exploited to reconstruct in detail the social structure of an early modern rural community.

For the modern period Vamplew (220) assesses whether or not the nineteenth century corn averages were statistically sound and offers an index of production and revised price series for cereals. In another study (221) he focuses upon the working of the Corn Laws and attempts to determine their protective value. Over the short run, time-lags and the bonded warehouse system allowed dealers to anticipate duty changes and hoard or sell accordingly. But over the long term protection may have been significant and the author argues that Repeal encouraged a cut-back in cereal production after 1842. It is commonplace that farmers in England reacted to higher prices during the Napoleonic Wars by radical land use change, specifically converting pasture to arable. However, Macdonald's study of crop returns (131) suggests a very different interpretation for Northumberland, where farmers undertook little reclamation for permanent cropping and instead relied more on convertible husbandry on existing arable land. This system raised yields and allowed cropping adjustments in response to short-term price changes. The dynamic nature of lightland-farming after the wars is well documented, but Wilkes (232) notes that most of the increased grain production up to 1835 derived from expanded wheat acreages on the clays, and he emphasizes the price-sensitivity of clayland farmers despite their technical disabilities. It is the view of Nicholas and Dziegielewski (153) that until 1860 most of Ireland remained within the framework of a peasant subsistence economy. But Ó Gráda denies this (158), and offers further analysis of supply responsiveness to show that Irish farmers were influenced by market forces, even before the Famine. The extent of landed indebtedness thereafter is explored by Curtis (57). He finds that as in England small- and medium-sized estates carried heaviest debt burdens, while those least affected by depression of the late nineteenth century were magnates, Ulster landlords, and those with urban and industrial interests. The impact of this depression is also discussed by Robinson (187), who traces regional adjustments in the farming economy of Herefordshire. In a graphic illustration of the impact of towns on nineteenth-century agriculture A D M Phillips (167, 168) describes the reclamation of Carrington and Chat Moss. In order to solve the sanitary problems of Manchester a network of railways was laid out to deliver night soil and refuse, enabling the creation of valuable agricultural land for market gardening. There has been more than usual attention paid to livestock. The national cattle

herd declined in Britain between 1870 and 1885, despite favourable prices, and Fisher (80) argues that disease was a major factor inhibiting agricultural adaptation at this time. In his separate article on disease control (81) ignorance and concern to safeguard personal interests are quoted as the main reasons for rejection of sound veterinary advice. Only the crises of the 1860's and growth of the dead meat trade persuaded government to adopt measures advocated earlier. The contributions of the railway and steamships towards narrowing regional meat-price differentials are assessed by Edwards and Perren (69). Also on the subject of meat, Capie and Perren (40) study the nature of supply and relative importance of home and foreign sources, while problems surrounding the question of demand are also highlighted. Very little of note was written on the period after 1900. Atkins (10) describes the London retail milk trade up to 1914, and in a separate article Dewey (63) focuses upon government policy during the Great War. It has become almost a truism that the 'ploughing' policy lay behind England's success in maintaining war-time supplies. But the author denies this and argues that food control was the real factor which allowed nutritional levels to be maintained.

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Book Reviews

STUART PIGGOTT (ed), *The Agrarian History of England and Wales, Vol. I, Part I; Prehistory*. xxii + 451 pp. 14 plates, 66 figs, 9 tables. CUP, 1981. £27.50.

As an aspect of the study of our early past, agrarian prehistory is unquestionably fundamental, for the relationship between man and the soil is the quintessence of human affairs. Its development has combined some of the more remarkable elements of archaeological discipline. There is primarily the pioneer field archaeology of O G S Crawford and Eliot and E C Curwen, in Wessex and on the Sussex Downs, that formulated the concept of the 'Celtic' field which became a label for all ancient fields that were not patently mediaeval. To this can be added the ideas of Harold Peake, the prehistoric geography of Sir Cyril Fox, the economic and biological prehistoric archaeology of the Cambridge school, as epitomized by Graham Clark's *Farmers & Forests*, as well as a broad spectrum of work, direct and indirect, of a botanical and zoological nature. For many, its materialistic undertones, and occasional scientific gloss, may not have been without attraction. Nonetheless, it gained characteristics to a point where it has given us insights even into the elusive social dimension of our studies. Much of the impetus of recent years has been brought about by the absolute agriculture of our own age, busily eradicating vast acreages of ancient fields, as well as the farms and settlements integral to them. Two conferences have made a considerable contribution to this subject, their published papers having preceded this volume, for its *accouchement* has been protracted. Notwithstanding, the advent of this virile scion of a prestigious publishing house is to be welcomed for it will impart to agrarian prehistory the substance necessary to its place in our establishment.

The book, soundly bound in green cloth and labelled across its spine, is the work of an accomplished triumvirate: Stuart Piggott, the editor, examines *Early Prehistory*, the *Mesolithic* and earlier *Neolithic* considerations in 59 pages, Peter Fowler, *Later Prehistory*, the pattern of progress from the Boker horizon to AD 43 in 239 pages, and M L Ryder gives 112 pages to *Livestock*, from the presumptive *Neolithic* import of animals to Roman and Saxon times, thus augmenting vol I ii (AD 43–1042), published in 1972. Stuart Piggott's contribution is an elegant prologue, and M L Ryder's an epilogue, to that of Peter Fowler, which is the lion's share. Indeed, that portion could, without much emendation, stand as a book in its own right, for it treats comprehensively all the more immediate aspects of prehistoric agrarian archaeology in a way that will at once endear it to those who grapple with primary evidence in the field. Like the other sections, it has its own integral chapter system. It is a good book to read

(page-footnotes are an almost forgotten luxury). Stuart Piggott's urbane and perceptive prose, Peter Fowler's fresh and fulsome narrative with its undertones of trodden grass and acrid chalky plough-soil, and M L Ryder's acute account of the creatures that still, largely, sustain us, amply compensate for its *in tres partes* character. Odd infelicities occur; Fig 1 is upside-down, a writer's comments have been left on a diagram, there is an incorrect text-figure reference, while 'tracks' appears for 'tracts'. All these are probably a by-product of the prolonged production process which is reflected in Peter Fowler's appendices. Whereas one can see the logic of relating appendices and lists to a specific section, the middle of a volume is an unaccustomed place for them. The plates are in two packages, and, as would be expected, they are of good quality, apart from the mistiness of that depicting men with animals, and without exception they relate only to *Later Prehistory*, heightening the sense of a separate book within the volume. Although the key diagrams (pp 70–71) are cramped, the clear line drawings for the most part adhere to a common convention. *Early Prehistory* has only 2, *Livestock* only 6, but *Later Prehistory* uses 58, proportions which make for an imbalance, as there are aspects of the more modest sections which could have been enhanced by illustration.

Despite the minor discords this book is a notable accession to the literature of our studies, for while, on the one hand, it sets the stage for subsequent agrarian history, on the other it unifies much that is dispersed and often obscure, difficult of access, or not even published. Conjectures have no place here, one is confronted only with sustainable, although often incidental, evidence painstakingly assembled and scrupulously balanced. Its ideas and instances are also applicable to a more recent past. More detailed survey and record is an imperative if the information potential of the English landscape is ever to be exploited as it should be.

This volume's double-elephantine gestation cannot have done other than cause it to lack some of the impact that it would have had, for it is manifest that research has moved on. Those sections by Stuart Piggott and Peter Fowler were written in 1975, although appended afterthoughts advance to 1979, and that by M L Ryder, as he records, was completed in 1970. It is no fault of theirs that considerations and concepts, to the fore in 1981, are not fully developed or have found no place and it is an impracticable (and almost impossible) task even to try an excursus in terms of time past. One must therefore view the many qualities, the manifold strengths, and the few surprising omissions.

The advent of our country's *first farmers* has exercised prehistorians for the past half-century and it embodies the purport of the term *Neolithic*. This field of studies is almost synonymous with Stuart Piggott, for its inception, in modern form and development are largely his own. Following Humphrey Case, we have for long envisaged skin-boats, laden with seed-corn, animals and eager immigrants, making landfalls on our shores. An alternative to this would be the acculturation and change of our land's *Mesolithic* indigenes, yet, apparently, there is little to connect them with the *Neolithic* communities. Nevertheless, earlier usages survived and can be seen in the flint and stone industries, a predilection for venison, etc. Indeed, it could be maintained that the palpable absence of unequivocal houses and the fact that almost all evidence of occupation is no more than scattered hearths, pits, occasional post-structures with pottery, flints, stones and other rubbish, might be more indicative of a *Mesolithic* character than has hitherto been supposed. For, as Stuart Piggott has said, the transition from *Mesolithic* to *Neolithic* was not an inevitability, involving concepts of progress, people did not *have* to change. Yet profound changes did take place and thus there should be reasons for them, for their inception, acceptance, and ultimate ubiquity.

A clue to the nature of the changes may be the long barrows which were integral to the earlier *Neolithic* communities, and cover traces of tillage or stand on field boundaries. They often contained deposits, sometimes of occupation earth, rather than burials in the strict sense, and have been thought of as a panacea for soil deterioration. Another characteristic is their similarity to the long houses of the *Linear Pottery* people of the European mainland (whence our English agriculture would have been derived), a similarity so close that conscious imitation might be suspected. Thus it is conceivable that agriculture, in the first instance, was imitated, for there would have been long periods when there were interchanges across frontiers between *Linear Pottery* farmers and *Mesolithic* indigenes. Imitations of long houses, the long barrows, could have been a part of crop agriculture for they embodied the form rather than the substance. In like manner, our causewayed enclosures could have been conscious imitations of the earthworks surrounding some *Linear Pottery* settlements. For, as Stuart Piggott has said, agriculture was a novel form of subsistence but not necessarily more effective than that which it superseded. However, its potential may have been realized by *Mesolithic* burning which had created a parkland environment that facilitated the first imitative undertakings and ensured their ultimate success and dissemination. Sometime during the later *Neolithic* irrevocable change took place and thereafter men were truly farmers.

Farmers producing a surplus might have stimulated

the emergence of what Peter Fowler rather shyly labels as '*focal community monuments*'. The mighty earthworks and their timber buildings, with the stones of Stonehenge, are the achievements of an explosion of energy such as can only be ascribed to an increased population and a sophisticated social hierarchy. These can, in principle, be compared with the palaces of the Eastern Mediterranean and could have demanded a planned agrarian endeavour to sustain them. As he so rightly remarks, the Wessex floruit of the round barrows marked the zenith of henge-centred society. They were abandoned and, by the latter half of the second millennium BC, even the timber component of Stonehenge may have been dismantled. Thereafter the scene is dominated by small enclosures, with circular timber buildings, overt farms with their attendant fields, worked by men of a new, but modest, status. Large-scale landscape organization seems likely and hill-forts betoken a network of rural centres, many of which are also surrounded by fields which continued to proliferate in the countryside. By the later centuries BC, extensive *oppida*, urban in character, are the centres of power, with a considerable population and a market economy, while the country has a surplus of corn, cattle and other commodities for export. These are broadly Peter Fowler's conclusions based upon the agrarian evidence, which is heartening, for the present writer's own work produced something of the same order. He has given us an explicit prehistory from his sources in a way which shows the overwhelming importance of landscape evidence, particularly the quantity still surviving in the highland zone. Excavation, however large or spectacular, can elucidate no more than a microcosmic proportion of the total.

Perceptive evaluation of field archaeological material is to be expected in Peter Fowler's works and readers will not be disappointed for there is much to reflect upon and pursue. There are also equally acute appraisals of excavated sites and material: a good example is the commentary upon the difficulties inherent in the exposition of an individual farm, for the detailed evidence for the function of particular buildings, byres, stables, sties, etc, is either ambiguous or absent. A notable example is the surface churned by trampling at Hod Hill which should lead the observant to look for fossil pig-wallows and the like. The numerous drains, ostensibly for ground-water, which are a feature of certain chambers of the courtyard-houses in Cornwall and on Scilly, could have served for the housing of livestock, which would have made the interiors dirty and smelly, but warm. Matters of prehistoric demography are treated realistically, although warily, as R. J. C. Atkinson's population estimates for the *Neolithic* and *Bronze Age* assume that barrows were mausolea, a function that the long, and many of the round, may not have had.

M. L. Ryder stresses that much of what he has to say

is of an interim nature and that we are moving towards the notion that the bond linking early human communities to their livestock was a part of the wider pattern of ecological relationships common to living things. Domestication, following F E Zeuner, is a matter of deliberation, although C D Darlington's evolutionary contentions find a place. It is a measure of the material that it has worn so well for, although we contemplate man-animal relationships in *Advanced Palaeolithic* and *Mesolithic* times, it is possible that there may have been gradually intensifying stages leading to domestication and that there was a symbolic moment when certain animals might have been really *domestic*. Animal husbandry, in terms of archaeological periods, is not always easy to follow, and the inclusion of material appropriate to Part II, at the cost of expansive detail in this part, is questionable. The contentions regarding *Mesolithic* clearance were current in 1970, thus the observations regarding cattle, pigs and goats in forests could have been qualified, while the underlying ideas of archaeological diffusion read oddly. The strength and attraction of this section are the discerning details of characteristics, habits and needs that it contains; acorns were for pigs and even they rebelled at horse-chestnuts! Species are discussed, perforce beyond prehistory, and, clearly, many of the comments are going to be cited for years to come. The inclusion of poultry was a happy thought and here one might profitably look back to the fowling of the *Mesolithic* communities and, as in other places, consider the nature of *domestication*. Honey bees find a place and one should think of the survival and recognition of wax, important because of *cire perdue* casting on archaeological sites (some was found at Sutton Hoo) and how else evidence of early apiculture might present itself. As O G S Crawford once observed, the frequent occurrence of *honey-ways* in Anglo-Saxon charters needs explanation!

Agricultural activity has been a human prescription from time out of mind. Fields are probably the best-known features of our landscape and even the most deprived urban dweller no longer insists that milk comes from a clean tin rather than a dirty cow. Its ancient remains are still, despite incalculable damage, a prime source of information regarding our ancient past and it was then that complex processes were set into motion. The editor of this volume once reminded us that '*Custom not Calory is King*', which factor has eventually determined the usages of our own times, not to mention an uncertain feature. Naturally, much remains to be done — more fieldwork before it is too late, the maintenance of apposite biological and ecological studies, the planning of experiment, the appraisal of historical sources and recent farming practice, etc, to name some of the main fields of research. This volume, because it is an assemblage of considerable knowledge and detail, has no peer and can

be assured of a long, active, and efficacious use-life.

Stuart Piggott, as has been observed above, remarks that the new form of subsistence may have been no more efficient than that which it superseded. One is irresistibly reminded of Rudyard Kipling's poem, that sorrowful story told in *The Legends of Evil* (1890), in which the nature of the agrarian yoke is concisely expounded.

PAUL ASHBEE

ANDREW SHERRATT (ed), *The Cambridge Encyclopedia of Archaeology*. CUP, 1980. 495 pp. 120 maps in colour. £18.50.

Fifty-five authors have contributed to this abundantly illustrated book, all of them specialists within their branches and areas of archaeology. It is not a normal encyclopedia in the sense of an alphabetical compendium, but relates facts in a similar way without much speculation about the life they reflect. It covers the history of man from the emergence of the first hominids to the end of the European Middle Age, divided in a broadly chronological and geographical sequence and including all parts of the world.

The first part gives a short outline of the development of modern archaeology including the movement called 'New Archaeology' which spread from USA as an attempt to transform archaeology into a natural science, aiming to reveal the laws which have inevitably determined the development of mankind from the oldest times. Of course, the stressing of man's relationship to his environment is a fertile basis, although it is not so new as enthusiastic young scholars, ignorant of European trends in the 1930's, think it to be.

But what archaeologists — 'new' as well as 'old' — often forget is the danger emphasized by Sir Mortimer Wheeler in an article in *Antiquity*, 1952 (p 180) that 'the archaeologist will find the tub and will completely miss Diogenes'. They are keen on reconstruction of patterns of society and trade, but they do not only miss Diogenes, they even miss the most fundamental matter of life: how to produce food enough for hungry mouths, not only those of hominids but, from the beginning of cattle breeding, also those of their tamed animals. The editor of this book, Dr Andrew Sherratt, who once worked with the Danish palaeobotanist J Troels-Smith, has proved his great interest in this question in a later publication, and a recently growing interest in 'experimental archaeology' and 'ethno-archaeology' promises an advance in this respect in the future. But readers interested in the development of husbandry will not find much to satisfy them in the book under review.

Still, there are many dispersed new observations on early agriculture, especially in the chapters on the Americas and East Asia. Very well written and

informative is the chapter on 'Early agriculture in the Americas' by Dr Warwick Bray, illustrated with pictures and diagrams showing the slow development of maize, common beans and bottle gourds, from about 6000 BC to about 1800 BC; and in the Tehuacan valley the channelling of slope run-off may date to 4000 BC. There is also evidence of modest swamp drainage and the artificial raising of beds from the Maya lowlands of Yucatan. In the classic period of the Aztecs AD 400-700 there was extensive use of floating gardens in the basin of Mexico, formed by dredging rich silt from the lake bottom and piling it up to form raised surfaces in the shallow lake, as mentioned by John O'Shea (p 389). Craig Morris of the American Museum of Natural History discusses terracing, irrigation and raised fields in the warm valleys and the coastal area of Peru (p 393), and Iris Barry has a very informative table of the major phases in Amazonian prehistory (p 400) indicating the use of manioc from the early second millennium BC, much earlier than one would have guessed.

Although it has now become evident that agricultural techniques did not spread from one centre, ie the Middle East, and although Sir Mortimer Wheeler stressed the importance of independent inventions alongside diffusion, Andrew Sherratt is still too restricted in his view on the early agricultural communities in Europe. How can we be sure that the hunter-gatherers of the Mesolithicum suffered more and more from stress because productive lowlands were drowned along the coasts? According to recent palaeobotanical evidence cattle and small corn-plots already existed in what is called the Ertebolle-period. The cattle were fed by twigs and leaf-fodder but not allowed to browse, and the little corn grown — presumably by the women — did not exclude the hunting, fishing and gathering which were still important activities. However, at just the same time another kind of husbandry was introduced by cattle-breeders who made 'swiddens' by slashing and burning in order to open grazing areas for their herds. This proves that in Central Europe as well as in south Scandinavia two kinds of husbandry existed. Probably some kind of ard-plough was used for breaking the soil — traces have been found in Britain as well as on the continent — while other tools of tillage were used in well-cultivated fields for sowing, etc. This picture will probably be even more diversified when more evidence is published. Concepts of stress and population pressure have been in fashion for a while but they are surely an oversimplification of the situation. Moreover, culture-contacts do not necessarily lead to uniformity, because inspiration from other cultures might produce new ideas.

Much new evidence is related by Ian Glover in a chapter on Agricultural Origins in East Asia, an area as independent of Europe as the Americas, and new and

surprising facts are being published every year. The following chapter on India provides a brilliant illustration showing the citadel and town of Kalibangan dated to pre-Harappan time, ie the early third millennium BC. But again a most important feature is missing from the map, namely the irrigated fields just alongside the cemetery, fields which were tilled exactly like fields in the area today. The reviewer missed pictures of pre-historic ploughing implements, and an opportunity has been missed not only to show some nearly 4000-year-old furrows but also to illustrate how they were tilled by presenting us with a modern ploughman and his camel.

The last part of the book is called 'Pattern and Process', in which there is a popular synthesis of modern dating methods, including dendrochronology.

Despite the criticisms which may be made from an agricultural point of view the *Encyclopedia of Archaeology* presents so much, and such beautifully illustrated, evidence on the development of man in prehistoric and early historical times that it will be an excellent companion for everyone interested in the most recent data in this branch of knowledge.

AXEL STEENBERG

J BAKER and D BROTHWELL, *Animal Diseases in Archaeology*. Academic Press, 1980. 235 pp. £12.80.

In certain parts of the world, even today, the agriculturalist concentrates on plants, and the veterinarian, in addition to specializing in disease, becomes an adviser on livestock husbandry. Indeed, in order to become expert on disease he must be very familiar with all aspects of the normal animal. By the same token the incidence of disease, and its treatment, in the past cannot be divorced from agricultural history, and so the agricultural historian and the veterinary historian are expected to be readers of this book as well as the archaeologist interested in animal remains. It is not only bone diseases for which evidence is found, but diseases of other tissues which can leave remains, and each can elucidate not only the history of a disease but the use to which an animal was put and how it was treated.

This book was the result of an almost chance meeting between a veterinary pathologist interested in archaeology (Baker) and an archaeologist interested in bones and their diseases (Brothwell). The evidence covered comes mainly from Britain, but also from the Americas. It starts with the earliest records — of the second millennium BC — a veterinary papyrus from Egypt, and a description of the dehorning of cattle in Babylonia. Next comes an outline of the appreciable veterinary knowledge of Greece and Rome.

The second chapter deals with the interpretation of mortality, which figures prominently in most

discussions of animal remains in relation to husbandry practices. The authors wisely caution against the too ready assumption that a high proportion of young among skeletal remains necessarily means domestication. Next considered is the natural history of disease, under the headings: the causal agent, the host, and the environment. Chapter 4 covers abnormalities of skeletal development, including holes in the posterior face of cattle skulls which the authors have not seen recorded in the literature, and for which they do not appear to have an explanation. Yet I devoted 500 words discussion to such holes in a description of medieval remains in this journal (vol IX, p 110, 1961).

In describing diseases of the immature skeleton they include 'double scalp' in sheep, without reference to the shepherding custom in which the affected skull is broken in a 'cracking' or 'knocking' operation. An answer to my reporting of this in vol IX, p 42 in fact appeared on p 111 after the above-mentioned discussion of holes in cattle skulls. Next follows details of inflammation, infection and necrosis of bone, and chapter 7 deals with traumatic injury, which, along with diseases of joints covered in chapter 9, is one of the more obvious changes seen in bones.

Chapter 8 deals with neoplasia, and chapter 10 oral pathology, of the jaws as well as the teeth. The treatment then moves on to miscellaneous skeletal diseases, before covering non-skeletal evidence of disease — bacteria in mummified tissue, the eggs of internal parasites, and arthropod external parasites. The last chapter forms a discussion with some conclusions.

There is a good list of references, a helpful glossary of technical terms, and a reasonable index. All in all this is an excellent book. Its pioneering approach brings together items published in a wide range of journals, and it covers more than indicated by the title, notably in drawing attention to pitfalls in the interpretation of animal remains. I was, however, disappointed to find no discussion on zoonoses — diseases shared by man and animals — since these could possibly tell us something about the history of the association of animals with man.

M L RYDER

F A ABERG (ed), *Medieval Moated Sites*, Council for British Archaeology. 1978. 93 pp. £6.

In recent years the Moated Sites Research Group, sponsors of this useful volume, has co-ordinated collection of information on what must be one of the commonest types of medieval rural earthwork. Of the

ten contributions, four on specific areas (Bedfordshire, Essex, Worcestershire, and south-east Ireland) and two more general essays (by C C Taylor and C J Bond) use and discuss the traditional methods of field archaeology: they are concerned with the identification, recording, classification, and mapping of moated sites. H E J Le Patourel, writing on 'Documentary Evidence', shows how certain sources lead towards identification of the owners of moats, but she dismisses too briefly the only common type of document which will ever reveal much about their agrarian and other functions, namely those medieval manorial accounts which painstakingly record costs of upkeep of the barns and other buildings which were part of moated complexes. Then, in 'The Significance of Moated Sites', she and B K Roberts provide the best discussion to date of moated sites not simply as fragile relics but as the reflection of a vital if violent society. One hopes that in the future more attention will be given to three aspects of the subject. First, moated sites need to be considered in the wider perspective of their kinship with other defensive structures once common in areas where building stone was easily obtainable: towers, first-floor halls, enclosures with gatehouses, and, that simplest of defences, the courtyard farm where massive blank back walls of barns served to deter the intruder. In this volume S E Rigold suggests in passing that to see moats as variants of the courtyard farm is perhaps more sensible than their usual classification as diminutives and imitations of the Norman *motte*. Second, a deeper chronological perspective should be sought. Given the prevalence of place-names containing a personal element compounded with Old English *burh* (defended place) or *græf* (trench), one wonders why the idea of the defended homestead is still traced no further back than the eleventh century. Third, the time has come for a more formal enquiry into the social context of moats and other minor defensive structures. The oft-repeated view that moats were for display and not for defence ignores the natural convergence of these two motives: ostentatious expenditure needs to be defended, while defended structures are, in their very nature, a form of display. Moats must surely be seen in the context of the endemic thuggery of the Middle Ages; a brigandage which was by no means restricted to woodlands, though its high incidence in well-wooded areas, together with certain features of their social structure, possibly contributed to the large numbers of moated sites in regions such as Arden or Essex; of aspirations and tensions among a class of minor landed gentry to whom a large proportion of moats once belonged. Nor must it be forgotten that, on occasion, lords needed defence against their tenants. It was for this reason that the lord of The Mote in Kent applied in 1382 for a licence to rebuild his house with new defences; the old one was *per communes nuper insurgentes prolatam*.

H S A FOX

DAVID GRIGG, *Population Growth and Agrarian Change. An Historical Perspective*. CUP, 1980. xi + 340 pp. £20.

In this ambitious book Grigg sets out to trace the classical Malthusian interaction between population growth and food supplies in western Europe from the thirteenth to the nineteenth centuries. His argument is fairly conventional, focusing on over-population in the two or three generations before the Black Death, on mounting pressure on food resources in the late sixteenth and seventeenth centuries, and on the relief of that pressure by means of agricultural improvements in the eighteenth and nineteenth centuries. The tragedy of the Irish famine of the 1840s is added to the general survey of the earlier centuries under the heading 'Malthus justified', while a scrutiny of Holland in the sixteenth and seventeenth centuries supplements studies of England, France and Scandinavia in the eighteenth and nineteenth centuries to illustrate the theme of 'Malthus refuted'. A final section, under the general heading 'Malthus returns', examines trends in developing countries in the late twentieth century.

These three sections are unified by a common methodology which is set out in an introductory section. Specific criteria for over-population are enumerated: the sub-division of holdings, rising rents and food prices, a growing proportion of the landless in the rural population, and the intensification of land use. Two areas of response to these evidences of over-population are distinguished. First, various possibilities of raising agricultural output are considered: the expansion of the cultivated area, increased frequency of cropping by the introduction of clover, legumes and root crops and the elimination of fallow, and the adoption of higher yielding crops like maize and potatoes; second, the demographic responses of fertility control, the raising of mortality either by the increasing frequency and severity of mortality crises or by the secular rise of normal levels, and migration. The full analysis of these demographic trends is difficult, given the paucity of data, though there is currently rather more information available in print than Grigg has made use of. Nor is it always possible to be sure that a given demographic trend, even where it can be established with confidence, was necessarily a direct consequence of the pressures of over-population or release from them: there were other influences at work.

The migration that Grigg takes account of is, in the main, a rural exodus to the towns, and in importing this phenomenon into his analysis Grigg seriously mars his Malthusian scheme. He clearly interprets the switch from agricultural to industrial occupations in the countryside and migration from country to town as one widely-adopted solution to the problem of rural over-population. In an occupational sense, of course, this was so, but in a Malthusian sense, which is the sense in which his own analytical framework firmly places it,

this was no solution at all. The industrial and urban populations had still to be fed, but Grigg's scheme seems to disregard their food needs once they left their rural, agrarian origins. In stressing the density of rural populations Grigg overlooks the importance of the relationship between the total food supply and the total population of any economic region. It is true, of course, that urban populations tended to have higher mortality rates than those of rural populations, and so contributed to reducing the overall rate of growth of population; and that urban populations tended to have easier access to imported food, particularly in time of harvest failure: but Grigg has nothing to say about these elements in the Malthusian equation.

Since he returns to this theme many times it must constitute a blemish on an otherwise admirable book. Generally the arguments are comprehensively supported with well-selected statistical tables and diagrams. His clear, if simple, analytical scheme has led him to search for, and mostly to find, statistical evidence of trends in his selected variables for the countries and periods that constitute his case-studies. He has read widely and marshalls a considerable body of material with commendable lucidity. His analytical scheme, scrupulously followed in every section, lends a homogeneity to diverse case-studies that is so often lacking when comparative history of this kind is attempted. In so broad a canvas, of course, some specialists will inevitably find grounds for criticism when the author trespasses on their own hunting-grounds. British agricultural historians, for example, will be disturbed to find the rise in grain prices up to 1813 attributed, apparently, wholly to population pressure, as though the blockade and wartime monetary inflation were of no relevance. The subsequent sharp fall in prices in spite of continuing population growth is not noticed, though it clearly had some bearing on any analysis of the pre-1813 price rise. The value of the book, however, lies not in its detailed observations but in its conceptualization and broad analytical framework. It usefully complements Abel's great study of European agricultural fluctuations, an English translation of which has appeared almost simultaneously. With the one qualification mentioned above, this is a most admirably conceived and executed book.

M W FLINN

I J GENTLES and W J SHEILS, *Confiscation and Restoration: the Archbishopric Estates and the Civil War*. Borthwick Papers, No 59. St Anthony's Hall, Peasholme Green, York, 1981. 53 pp. £1.20.

Research in the last 30 years or so has made us familiar, in general outline, with events surrounding Parliament's confiscation and sale of estates during the Civil War, and their restoration after 1660. But detailed

examples like this one are always welcome. The two authors, each with a different expertise, have collaborated to tell the fortunes of one large ecclesiastical estate — that of the Archbishop of York. Professor Gentles examines the sales mostly from central records, while Dr Sheils uses the unusually detailed evidence from the Archbishop's muniments in the Borthwick Institute to explain the method of the restoration after 1660.

The previous work of Professor Gentles and others has prepared us for most of his conclusions. Considered by value, almost half the Archbishop's estate (mostly lying in Yorkshire and Nottinghamshire) was bought by Londoners, largely because payments could be made by doubling on public faith bills, and Parliament's supporters and creditors could thereby secure land in place of the government's IOU's. Among other purchasers very few were tenants (many fewer than those who bought Crown lands in the 1650's), but rather more were local people of the minor gentry class. Resales were unusual before 1660, and in general Professor Gentles believes that the lands were well stewarded by the new owners. Dr Sheils's contribution is more novel in revealing, in fresh and immediate detail, the way restoration was relatively painlessly and satisfactorily concluded between 1660 and 1664. The architect of the settlement was the new Archbishop Frewen, whom Dr Sheils judges to have been an old man in a hurry. But he was also perhaps a wise old owl who recognized that compromises and concessions were essential in a difficult situation. He encouraged private agreements between old tenants and common-wealth purchasers, and was then content to accept from leaseholders smaller entry fines in consideration of their other expenditure. For new leases tenants rarely paid as much as six years' purchase for a three-life lease and often far less. Former purchasers sometimes established a claim to continue as leaseholders, but those who did not are presumed to have relinquished their claim to a stronger competitor, recognizing that they had already received a good return on their investment. In the final analysis (and appendices set out the details concerning purchasers and post-restoration tenants) Dr Sheils concludes that the confiscations produced changes in tenancies that were only marginally greater than those occurring in the normal course of events. He arrives at this verdict ingeniously by comparing the turnover of tenants that occurred between the 1630's and 1660's with those occurring between the 1660's and 1695. Thus it can be shown that Parliament's sales made considerably less impact than sales of monastic estates in the 1540's and '50's.

JOAN THIRSK

MICHAEL HUNTER, *Science and Society in Restoration England*. CUP, 1981. xii + 233 pp. £18.50.

Since the 1960's the main focus of research in the history of science has moved from the seventeenth century to the nineteenth century. Historians of science no longer concentrate on one supposed 'scientific revolution' which took place in the 1600's but consider the internal development and external consequences of science in many periods. The once flourishing industry of articles on the origins of the Royal Society has all but dried up as scholars have turned to examine other scientific institutions. Nevertheless there is room for a synthetic work to provide for the 1980's a conspectus of scholarship on science and learning in late seventeenth-century England. This book fulfils admirably this function — and more — since the author is able to provide a critical analysis which should be of value to a wide range of historians. Not the least useful part of the book is the concluding bibliographical essay.

Some economic historians and others have assumed that the only possible motive for studying the natural world is a utilitarian one. Certainly readers of this journal will have a legitimate interest in the agricultural projects of the Royal Society. Its so-called 'Georgical Committee', set up in 1664, attempted to compose a History of Agriculture in the Baconian tradition in order to improve agricultural practice. Especially notable was John Evelyn's *Sylva, or a Discourse of Forest-Trees and the Propagation of Timber in His Majesties Dominions*, a useful compendium which went through many editions. At a time when men with avowed interests in the natural world were seeking respectability, the practical consequences of Evelyn's book could have been cited as one of the more obvious national benefits of the work of the Royal Society. Yet Dr Hunter points out that, despite the interests of Restoration 'scientists' in military and naval technology, practical applications of science were quite a minor part of the Society's activity. He points to the wide diversity of its members' concerns and he is particularly interested in the religious, political and social implications of the ideas discussed by men who, he insists, were largely university educated. There were very few merchants among the early members of the Royal Society.

MAURICE CROSLAND

C P ELINGTON (ed), *The Victoria History of Gloucestershire, Volume VII*. OUP for Institute of Historical Research, 1981. xix + 254 pp. illus. £48.

This addition to the Gloucestershire series of the VCH deals with two adjacent hundreds, those of Brightwells Barrow and Rapsgate, lying to the south-east of the

county. The twelve parishes of Brightwells Barrow form a compact body extending from the Cotswolds downland in the north to the flat alluvial meadows of the county boundary along the north bank of the Thames. Rapsgate hundred with ten parishes, comprises an area of the Cotswolds running from the escarpment above Gloucester on the west to the valley of the river Coln on the east. The Foss Way provides part of the hundred's eastern boundary, while Ermin Street, running from Cirencester to Gloucester, crosses the high ground of the western part.

Both hundreds saw extensive sheep farming in the middle ages, with much of the land belonging to the bishop of Worcester, the Knights Hospitallers, and the abbeys of Cirencester, Gloucester, Pershore, and Llanthony, among others. Private owners in Rapsgate hundred included the earls of Warwick and the Giffards, together with families of lesser note; a marked feature of the middle nineteenth century was the purchase of estates in the district by successful cotton manufacturers and financiers.

The predominance of agriculture in both hundreds met with little challenge from industry. The two small market towns of Fairford and Lechlade relied mainly on local trade and the stagecoach traffic, though Lechlade benefited from its position at the head of navigation on the Thames and was a centre for the shipment of cheese down river to London. A cloth-making industry based on Fairford and mills in the Coln valley never became of great significance, and in Rapsford the only local industry to employ many hands, apart from stoneworking, was the potteries established at Cranham in the late eighteenth century and after.

In Brightwells Barrow hundred the open fields were mainly enclosed in the course of the eighteenth century, and the change very generally resulted in a ploughing up of pasture land and a corresponding increase in tillage. Although arable predominated, production was largely based on a sheep and corn style of husbandry, and some large farms, running to several hundred acres each, emerged. Even in Kempsford, which had valuable meadow land alongside the Thames (recorded as being 'drowned' as water meadows every winter from 1707), saw arable predominant after enclosure, though dairying for cheese was an important element in the parish economy.

Much the same type of development occurred also in the parishes of Rapsgate hundred. Much piecemeal private enclosure, mainly in the eighteenth century, was completed by private Act, and after enclosure there was the same tendency towards an expansion of arable, large farms (some as big as 1000 acres), and the supremacy of sheep and corn farming. The depression of the later nineteenth century saw a retreat of arable and an increase in dairying. Most of the villages were small estate-dominated settlements, but Chedworth, with more divided ownership, was a much larger

village with a population of a thousand in 1831 and formed a centre for independent craftsmen and non-conformity.

The volume is produced to the usual high standards of the VCH; as usual, too, it is unfortunate that the hundred and parish framework makes its material difficult for the agricultural historian to utilize.

G E MINGAY

AD VAN DER WOUDE and ANTON SCHUURMEN (eds), *PROBATE INVENTORIES. A new source for the historical study of wealth, material culture and agricultural development*. Papers presented at the Leeuwenborch Conference (Wageningen: 5-7 May 1980), Afdeling Agrarische Geschiedenis. Bijdragen 23. Landbouwhogeschool, Wageningen, 1980.

The title of this publication, for the contents of which there can be nothing but awe and admiration, makes the claim that these references to probate inventories are the birth of a new source of information, but in my humble way, assisted by V G B Atwater, I pointed out the value of this source in a brief essay in *History*, NS 20 (79) (Dec 1935), 'Farmers goods and chattels: 1500-1800'. This is of course miniscule when confronted with the widespread investigations which a galaxy of European scholars of many countries presented at the Leeuwenborch Conference, and are here printed for the information of the world, if that world has the linguistic ability to appreciate them. I do not dare to suppose that one brief and long forgotten essay was the progenitor of this great variety of enterprise and scholarship exercised by research workers living in many countries, indeed most countries in western Europe.

Long gone are the Macaulay and Thomas Carlyle pictures of events: now we are less picturesque but more precise. Possibly the current of investigation as well as social circumstances are so changed that the result is that no-one can ever be original, if that is necessary in historical research. Ideally of course each of these collections of inventories would have been of the same date or dates, and the depositions of the same or almost the same social class, or almost identical, not as the untoward world has it, of many different periods in the several different countries represented, thus being not strictly comparable. From Finland to Italy is a far cry and the differences and divergencies in the documents is emphasized by varied social conditions as well as the spatial locations to which the documents relate.

It would be impossible in the limited space at my disposal to discuss the details of each paper, to my chagrin much as I should like the task; but a few selected at random can perhaps be mentioned. These

studies are an answer to the manifold questions that can be asked about the physical condition of the people who died in this wide geographical area during several centuries, and who left behind them records of their possessions and perhaps physical environment in which they lived. On p 105 are given with Teutonic precision, the assessment of the cattle numbers, the size of holdings and the implements and tools owned by the testators. These details are of the utmost interest, as indeed are those of the domestic furniture and kitchen equipment. This is, of course, a system of information that is restricted to the German contributions. There are many thousands of inventories dealing with the seventeenth and eighteenth centuries, that have been meticulously examined by adepts in France, and naturally many in Holland, eg Delft in the eighteenth century by Thera Wigsen Beek, which is written in English, as is Jan Ruuse's essay about Swedish probate inventories and that of Carl John Gadd.

One thing is very certain. The character of the documents, as Micheline Baulant and her collaborators said, restricts the limits of possibility of what the researchers may do, something that must be understood and respected as a limitation by researchers: but the vast amount of documents to be examined is very greatly emphasized by David I Garrard in dealing more or less with Suffolk inventories made between 1570 and 1700, a collection he only found it possible to deal with by computer.

I could of course place some emphasis upon the value of the work done on English material. I could equally well emphasize that done by German, French or even Swedish scholars. These printed particulars are really quite amazingly valuable to the social historian, perhaps more especially to those engaged upon illuminating the rural scene, what was indeed almost the universal scene when these documents were written for immediate purposes and have now been rescued for the information of curious historians.

Perhaps their researches and the results here printed will provide, if no more, an idea of the physical circumstances in which our ancestors lived and had their being as well as the equipment they had to hand for working in the field, the farm, the farmhouse, and occasionally, in the establishments of the larger landowners and a few of the nobility who owned great possessions and ruled the lives of the lesser landowners.

G E FUSSELL

RICHARD GOUGH, *The History of Myddle*. Introduction by Peter Razzell. Caliban Books, Firle, Sussex. 1979. xxxii + 184 pp. £7.50.

Probably most readers of the *Review* will have heard of this celebrated book, written between 1700 and 1706, and will be familiar with Professor Hoskins' praise of

the first modern edition (Centaur Press, 1968): 'Gough's *History of Myddle* . . . sounds like the narrowest kind of parish-pump history one could possibly imagine, of interest only to devoted local historians in Shropshire. It is in fact a unique book. It gives us a picture of seventeenth-century England in all its wonderful and varied detail such as no other book that I know even remotely approaches . . . a whole countryside, an entire society, comes alive in our minds, in a way that no historian, however skilled, can possibly evoke . . . this remarkable book is . . . one of the most entertaining ever written in English, unique in our literature.' Most readers will probably also be familiar with David Hey's excellent study of Myddle (*An English Rural Community, Myddle, under the Tudors and Stuarts*, 1974), which provides an essential background to Gough's book.

Yet the original edition, for all its virtues, also had some faults. Gough's procedure was to describe the village families in regular order according to which pew they occupied in church, and in parts his style can be confusing and wearisomely genealogical. In the new edition Peter Razzell has cut out a good deal of the original, which he regards as of purely antiquarian interest, and has re-arranged the presentation and modernized the spelling. Undoubtedly the readability has been enhanced, but scholars may regret that a fair amount of Gough's historical background material has been omitted. If so they should consult the 1981 Penguin edition, where the complete text is edited by David Hey.

Richard Gough was a small freehold farmer who lived in the hamlet of Newton-on-the-Hill in the parish of Myddle near Shrewsbury, and was 66 years old when he began writing his book in 1700. He continued adding material until 1706. He could remember the outbreak of the civil war in 1642, and could relate events told to him by his parents and grandparents, which stretched back to the reign of Elizabeth. Gough lived at a time of rapid social and political change, and Dr Razzell in his introduction, written from the point of view of a social historian, highlights some of the social attributes of life in Myddle which might surprise us — the amount of lawless violence, the drunkenness and sexual promiscuity which we perhaps might not have expected to be so flagrant in an age when religion and hierarchical social order are supposed to have been so prominent.

But this was also an age of considerable change and development in farming and it is to this aspect which the agricultural historian naturally turns. It has to be confessed that in this area the book is not as revealing as it is in social matters. Perhaps because Gough had spent his life as a farmer the subject was over-familiar to him and his readers (and hence tended to be taken for granted)? Perhaps Shropshire was too remote from centres of agricultural change around London, in East

Anglia, and in southern England to have been much influenced by them? Perhaps Gough himself was unsympathetic to innovation? One contemptuous reference reveals that he had a low opinion of one of the agents of change — land surveyors. 'Thomas Spendlove of Clive, . . . was a crafty contriving old fellow, a great surveyor and measurer of lands (My old schoolmaster, Mr. William Sugar did usually call him *Longo limite mensor*).'

Yet Gough could also pay tribute to successful farming based on new methods. The Watkins family had improved Shotton farm over three generations. William Watkins, in the early seventeenth century 'was a person well educated, and fit for a greater employment than that of a husbandman. He was once under Shreive of this county: but his chief delight was in good husbandry, which is indeed, a delightful calling. He found this farm much overgrown with thorns, briars, and rubbish. He employed many day labourers (to whom he was a good benefactor), in clearing and ridding his land; and having the benefit of good marl, he much improved his land, built part of the dwelling house, and joined a brewhouse to it, which he built of fine stone. He built most part of the barns, and made beast houses of fine stone.' His son Francis was a captain in the Parliamentary army, who took over the farm after the civil wars. He inherited his father's 'art of good husbandry, in which his care, diligence, and skill, was not exceeded by any in this county. He marled several pieces and got abundance of corn. He purchased lands in Tylley Park, and certainly, if he had lived, he had been an exceeding rich man.' By 1701 his son William was occupying the farm, and had 'such skill, care and industry in good husbandry as his grandfather and father had, for he is not inferior to either of them therein'.

Myddle was in the heart of a livestock region, and other farmers thrived by making small enclosures in its still numerous commons, marshes, and woods, like John Wagge, a carpenter who built himself a house in Myddle Wood and made a small farm by enclosing some pieces round about it. Richard Challoner, a cooper, was another of several who did likewise. Evidence of widening agricultural horizons is also given. 'Ralph Guest . . . was a sober peaceable man; his employment was buying corn in one market town, and selling it in another, which is called badgeing.' In Tudor times there had been statutes against badgers, but by 1700 it had become socially respectable. John Foden and his wife Mary thrived by keeping 'a good stock of cows and a good team of horses with which he carried goods to London'. These few examples illustrate the flavour of Gough's style but it is only by perusal that one can savour the book's full richness. Dr Razzell has aided the reader by providing an especially detailed index.

MICHAEL HAVINDEN

ALEXANDER FENTON and BRUCE WALKER, *The Rural Architecture of Scotland*. Edinburgh, John Donald, 1981. ix + 242 pp. 160 illustrations. £15.

The Rural Architecture of Scotland takes the form of a survey of the development of buildings associated with farming, without apparent limit as to period. No buildings outside the strict realm of farming are considered. A great range of evidence is used — disused ruins, buildings still used or inhabited, and written sources. Indeed the weight of precisely described detail is almost overwhelming and the result is a compendium of the state of knowledge of the subject as defined by the authors; it has behind it personal and institutional resources of information gathering, summarized in chapters 2–4.

The method of interpretation in its severe limitation to factual detail is very personal to the authors. They look very carefully, and with clear and informed vision, at the material structures and interpret for the uninformed the significance of many details of material and constructional technique. They successfully show how building customs were adapted to available materials and to necessary purposes. There is, then, much of interest to the general, as well as to the specialist, reader, answers delivered with unchallengeable authority to the questions that may occur as we view the material relics and buildings around us. Interpretation of the inert remains is also much helped by Bruce Walker's pen and ink drawings, which are always, of course, meticulously accurate but also have aesthetic quality. There are, too, plans and photographs in abundance.

However, the historian whose interests run wider than this confined but clear view of the techniques of building, or who merely wants to ask why it so happened, may find himself in some confusion. The plan of the book is to deal topically in separate chapters with aspects of building — 'Roofing Materials', 'Walling Materials' and so on. Within each chapter there is a form of chronological arrangement but even this is sometimes erratic (as in chapter 5). It is a laborious matter, then, to establish anything like a general view for particular periods. It follows that the influence of social or even agricultural developments is scarcely noticed; nor can the influence of architecture on social life, on comfort, for example, or on farming technique, be adequately traced. There are some exceptions when the view is momentarily widened. Massive agricultural changes assigned somewhat vaguely to the late eighteenth and early nineteenth centuries are allowed a place and serve as a dividing line in the successive phases of farm building. But no other decisive waves of change are mentioned. For example, we hear nothing of the building boom of the third quarter of the nineteenth century which created at least a major part of our stock of farm buildings. There is a chapter on the influence of technology but this turns

out to be little more than a discussion of the housing of threshing machines and their motive power.

Another result of the book's layout is that regional traditions and differences appear only in glimpses, for the most part treated quite unsystematically. There is, it is true, a chapter devoted to the Grampian region but this merely signifies more intensive surveying, without any attempt to establish what were the regional traditions and how they arose.

The volume as a whole, then, gives an authoritative and clear view of how building was carried on, with much realistic detail and fine illustration; but it tells us little of why the traditions arose and of how they changed in response to social needs and opportunities. If some of these criticisms seem severe they arise from a sense of disappointment that so much learning and analytic skill has not been fitted to the general historical picture.

MALCOLM GRAY

DENNIS R. MILLS, *Lord and Peasant in Nineteenth Century Britain*. Croom Helm, 1980. 232 pp. 23 tables, 17 figures. £13.95.

This study in historical geography investigates what Dr Mills plausibly claims was the basic dichotomy which existed in the social distribution of landownership in the nineteenth century, namely, the distinction between the 'estate' and 'peasant' systems. The former commanded large amounts of capital and land while the latter was characterized by small units of production employing little capital. These two systems, he indicates, produced the two well-known types of English village, 'close' and 'open' ones respectively. While contemporaries were keenly aware of the latter alternative categories, particularly in the context of poor law administration, the author contends that their conception of a clear-cut dichotomy as too simplistic. He presents the findings of his own researches and those of others to demonstrate that it is more accurate to think in terms of four types of village, namely, estate villages, absentee landlord townships, divided townships, and peasant villages.

Having established the validity of the model of close and open villages, albeit pointing to the subdivision of the two main types, Dr Mills proceeds to examine 'the origins and basis of village differentiation' and 'how and where the model worked'. The discussion of the latter is particularly useful, drawing together as it does the scattered writings relating to the impact of the social distribution of landownership on many aspects of English village life — on the poor laws and population growth, occupations, housing, religion, social control, and protest and politics. As we would expect, the

author is careful to demonstrate the geographical distribution of close and open villages and a watchful eye is kept in this respect on the division of England into 'champion' and 'hamlet' areas. Dr Mills is also concerned in this section to demonstrate how his model of the estate and peasant systems runs counter to Tönnies' *Gemeinschaft-Gesellschaft* dichotomy, which envisages a major social cleavage between face-to-face rural communities enjoying traditional, harmonious relationships and the impersonal, commercial relationships of urban inhabitants.

The study sets itself two further objectives. In the first place, it seeks to compare the English situation with rural Scotland and Wales. The author claims that, broadly speaking, Scotland possessed most of the features of the estate system while Wales, on the other hand, was a highly developed peasant society akin to the English peasant system in certain crucial respects as the neglect of their properties by the landlords (with the exception of the very large ones), the lack of social control of gentry and clergy, the emphasis upon the family as the unit of production and the prominence of kinship ties. An aspect of the Welsh scene which did not wholly 'fit' the English peasant system, however (one of which Dr Mills is aware but does not sufficiently draw out), was the fact that the peasant in Wales was rather a peasant-tenant than a small freeholder. Secondly, the study aims to explore the implications of the distinction between estate and peasant systems for Britain's industrial and urban development and life in the towns. Here the author demonstrates how the estate system played a role in urban growth because the large landlords controlled extensive areas of building land and so were able to influence the development of socio-spatial patterns. Again, it is shown how estate villages served as a model for the improvement and social control of those new industrial towns arising from the advent of rail communication and (all products of the industrial revolution) of industrial villages of the closed type, factory villages or 'colonies', mining villages, textile villages, and the garden cities. For its part, the peasant system is shown to have favoured the growth of old-established industrial villages, characterized as it was by family holdings whose possessors were frequently engaged in dual occupations.

Lord and Peasant in Nineteenth Century Britain furnishes students of nineteenth-century rural society with a valuable, much-needed overview of the open-close model of social structure. Conclusions are carefully stated after inspection of statistical and contemporary literary sources and a commendably wide range of secondary material. The more orthodox agricultural historian will benefit from Dr Mills' concern with the spatial aspect and from his familiarity with sociological approaches.

DAVID W. HOWELL

J M CURRIE, *The Economic Theory of Agricultural Land Tenure*. CUP, 1981. vii + 194 pp. £15.

We have here a work of theoretical economics rather than one of practical agricultural history. Dr Currie is an economist writing for economists, and readers will find that while every concession is made to those who know very little history, few concessions are made to those with less than a degree level grasp of theoretical economics. Most of the many formulae employed in this work, and many even of the graphs, will be unintelligible to the average reader of this review. Nevertheless, when the last piece of jargon has been spoken, and the last $\sum_{i=1}^n$ has been scribed, the arguments

that they were designed to support emerge as very simple ones, which might well have been clearly stated in words of one syllable without losing any of their plausibility.

Essentially, Dr Currie seeks to present the view that a system of large estates worked by capitalist tenant farmers is a more desirable one, from the point of view of national economic growth, than a system of many small, peasant proprietors. This notion will, of course, hardly come as a new or surprising one to students of agricultural history, but here it receives the closely argued support of a professional economist. Inevitably, the period of the European Industrial Revolution is drawn on for illustrative material, so that in its historical dimension the book concentrates on the late eighteenth and nineteenth centuries. England is the country most frequently referred to, and a consideration of the effects of legal changes on the landlord-tenant relationship here is carried on into the second half of the twentieth century.

Readers of this review will probably find the most valuable part of the book to be chapter 2, in which Dr Currie discusses the views of several eighteenth- and nineteenth-century economic thinkers on the topics of land tenure and the nature of rent. In particular, Dr Currie dispels some old-established misconceptions about Ricardo's view of rent, and manages to do all this without a single Σ in the chapter.

As for the rest of the book, Dr Currie is continually forced to make very great assumptions on which to base his framework of theoretical analysis: indeed, the words 'assume' and 'assumption' must occur more frequently in this work than any others, apart from the definite and indefinite articles. Two minor examples may be cited:

'In this chapter we will assume not only that the farmer owns all the land he cultivates but that he cultivates all the land that he owns. Thus we will not consider the possibilities of his entering into land transactions either in the ownership market or in the rental market.' (pp 40-1)

'The conventional calculation assumes that there is a perfect financial capital market and that the individual

concerned has perfect foresight about the future or, at least, that he thinks he does.' (p 117)

But Dr Currie makes even greater assumptions. One of the most sweeping is the assumption of stable population levels to strengthen his case for the desirability of a tenant farming system. In reality of course, no part of Europe was experiencing stable population levels during the late eighteenth and early nineteenth centuries: on the contrary, rates of population increase had never been more rapid, and in absolute terms far more shiftless, landless, unemployed proletarians were drifting towards French towns in 1800 than towards English ones. Meanwhile, eighteenth-century Holland with its 'peasant' proprietors continued to enjoy a prosperous economy until it was ruined by warfare after 1780. In Ireland, a tenant farming system predominated, but there was no industrialization.

Fitting Dr Currie's theoretical framework over the facts of European economic history presents us with Procrustean difficulties. The case which he argues is an entirely plausible one, but must be adjudged as still not proven. There is much more to it than Dr Currie will allow, and his approach was far too narrow for someone seeking to argue on a macro-economic scale. At some points in his book, Dr Currie does indeed display a fitting humility about the difficulty of his task and the feasibility of dogmatic pronouncements on so complex a subject, admitting that he is greatly oversimplifying for the sake of model building. He has indeed tried to keep everything as simple as possible by his own lights, stating in footnote 4 to chapter 1, 'we will not refer to econometric work in this book'. The result of his speculations, however, must be described as a book which is more likely to be of interest to theoretical economists than of practical value to agricultural historians.

ROSS WORDIE

TADASHI FUKUTAKE, *Rural Society in Japan*. University of Tokyo Press, 1980. xii + 218 pp. ¥ 3000.

The obsessive pursuit of industrial policy objectives by successive post-war Japanese governments has attracted an increasing volume of criticism in recent years from many quarters and this book, the product of an eminent rural sociologist, adds new weight to a very controversial issue. Indeed, few people are better qualified to write about such complex matters as changing sociological relationships in the Japanese countryside since the Meiji period, or understand the many problems facing the farming community today, than Professor Fukutake, and we must all feel indebted

to the University of Tokyo Press for publishing such an excellent translation of this important work.

Professor Fukutake's study, which is set against a background of Japan's post-war economic 'miracle', is primarily concerned with the economic and social impact of widening sectoral imbalances upon agriculture and the rural community. The book is highly critical of government farm policies and is deeply pessimistic of the future of Japanese agriculture. Whilst acknowledging the many substantial gains made by Japanese farmers since the passing of the revolutionary 1946 Land Reform — notably their freedom from the grinding poverty of the Taisho period through the democratization of landownership, farm mechanization, guaranteed prices, subsidies, and protection, plus an unprecedented rise in material standards of living — the author's main emphasis lies with the rapidly diminishing status of the cultivator and agriculture's seemingly inexorable slide towards an 'irretrievable quagmire'. Indeed, the 1946 Land Reform appears to have created as many problems as it solved, as witnessed by the wide productivity and income differentials between agriculture and industry and the fact that Japanese agriculture still labours, as it has done for a long time, under an excessively protected and fragmented structure of high-cost landholdings. The inflation of land values through the encroachment of industrialization, plus the reaching of a 'definite impasse' in rice cultivation, has operated to reduce Japan's ability to compete on international commodity markets and is therefore seen to constitute a major obstacle to future economic development. On the basis of 50 statistical tables Professor Fukutake is able to demonstrate that the dwindling size and rising age composition of the rural labour force (75 per cent are over 40 years of age), plus a marked trend towards part-time farming (60 per cent of farmers derive their chief income from non-farming activities) are not only tantamount to a social disaster, as seen by the decline of *nôhonshugi* and the *ie* system, but also pose a serious threat to the traditional self-sufficiency role of Japanese agriculture.

Although the chapters devoted to the social and political structure of the Japanese village provide a vital insight into the origins and character of Japan's agrarian problem, not all readers will share the author's lament of the waning of a cultural system which once constituted the very heart of the Japanese nation. In view of the atomistic structure of Japanese agriculture, and the growing shortage of certain categories of industrial labour, one might have expected the author to have considered the argument that Japan's agrarian problem is due not to the inter-sectoral movement of manpower resources out of agriculture *per se* but rather to the fact that the movement has not been fast enough. It is also a pity that other important issues, such as the role of new land reform policies and the

liberalization of trade in agricultural imports, currently mooted as possible solutions to Japan's agrarian problem, are largely ignored. The value of this otherwise excellent study is also reduced by two other major omissions: the total lack of any footnote references and the absence of a bibliography.

T L RICHARDSON

JOHN WELLER (ed), *Coleshill Model Farm, Oxfordshire, Past Present Future*, Report of Working Seminar, April 1980. Architects in Agriculture Group: Occasional Paper Number 1. 30 pp. Illus. £3.

The Architects in Agriculture Group, affiliated to RIBA, was founded in 1974 with the promotion of interest in historic rural structures as one of its objectives. For this purpose a working seminar, to which representatives from a number of other rural interest groups were invited, was organized to investigate the Model Farm on the Coleshill Estate. In addition to researching the history of the site itself, the subject under discussion was to suggest acceptable alternative uses for redundant farm buildings of this kind that are of significant historical interest. The report details possible approaches to the problem with recommendations on those which the Group considered to be of most practical value.

The choice of the Model Farm on what was the Earl of Radnor's estate at Coleshill, was ideal. Begun in 1852, the buildings are representative of the mid-nineteenth century quest for maximum efficiency of design and layout within the confines of typical estate architecture. In a purely architectural sense, these buildings are perhaps of less importance than some of their more flamboyant counterparts in the late eighteenth century and this presumably explains the surprising fact that they, and others like them, have not been listed.

With its split-level site, however, its arrangements for housing stock, the use of steam-powered machinery and of an inclined tramway for distributing feed, Coleshill is an outstanding example of the 'industrial' farm building that characterized many estates of the period. Although many, but by no means all, of the internal fittings have gone, externally at least the Model Farm is relatively intact. Both Coleshill and the neighbouring Buscot estate have been in the hands of the National Trust since 1956. A policy of amalgamation of holdings has made the buildings of this farm at Coleshill redundant for agricultural purposes.

Coleshill was examined by the Group as a case history indicative of a problem facing not only the National Trust in other estates around the country but also a great many owners of interesting agricultural buildings which are in need of an alternative use to

ensure their survival. A number of options were analysed. Among these, conversion to modern agricultural use was, with some exceptions, considered self-defeating because of the necessary alterations to existing buildings. Similarly, craft or light industrial usage while potentially sound in an economic sense, would destroy much of the remaining period flavour of the site. The creation of self-catering holiday homes within the complex would strain existing services in the village and provide an element of financial risk on a considerable initial capital outlay.

In a very brief conclusion, the report settles on another alternative of operating Coleshill as a part working Model Farm that would also include a museum, restaurant, crafts and garden centre open to the public. The full implications of this seem to be rather glossed over and the estimated development costs look very conservative. In the light of this it is perhaps significant that there appeared to be no representatives from museums in this country at the seminar.

I am not convinced that the heavy commercialism and conversion this proposal involves is the best answer for preservation of these buildings. Nor can it be a widely applied solution for there must be a ceiling on the number of economically viable museum and interpretative schemes of this nature that the country can absorb. The National Trust's present policy of carefully conserving the existing buildings and using them primarily for storage appears, if the Trust can continue to meet the costs, to be a highly suitable means of preserving the character of the site with the least disruption. The option then remains of allowing limited public access on perhaps two or three weekends each year with the aid of volunteer guides or minimal two-dimensional interpretation.

Recognition of the desirability of preserving intact some buildings for their own sake, when financially feasible, takes a long time to emerge but must surely be of importance in the future. Nevertheless, the Group's *Report*, the first in what hopefully will become a series of occasional papers, is a very stimulating contribution to the debate.

ROY BRIGDEN

THEA THOMPSON, *Edwardian Childhoods*. Routledge & Kegan Paul, 1981. xiii + 232 pp. Illus. £9.75.

Thea Thompson has reproduced the childhood memories of 9 people, each prefaced by a brief survey outlining the family circumstances of the person concerned. The agricultural content of the book is small but three of the reminiscences will be of interest to students of rural life, namely those contributed by the son of an Essex farm worker and by the son and daughter, respectively, of two substantial landed families. All provide fascinating glimpses of a now vanished world, in which the economic and social distinctions between rich and poor were firmly drawn. The continuing preoccupation of many of the gentry with the running of their estates and the pursuit of field sports, even at this late date, is clearly underlined in the recollections of a landowner's son from Yorkshire.

Despite the book's general appeal, this reviewer has three reservations concerning it. Firstly, it includes no accounts of the lives of middle-class children — or even of those whose parents were skilled artisans. This makes for a lack of balance. Secondly, the value of the reminiscences would have been enhanced by a broader introductory analysis of the background of the subjects. Armed with this, it would have been easier to judge how typical each account was of life in the particular community under consideration. Finally, the decision to reproduce, verbatim, interviews with the 9 people leads to the needless repetition of such phrases as 'sort of', or 'you know'.

Overall, this work has a good deal to offer by way of insights into child life in the upper and lower ranks of society in the Edwardian era. For that reason, it will be welcomed by social historians and the general reader.

PAMELA HORN

Shorter Notices

REX C RUSSELL, *The Enclosures of Alkborough 1765–1768, West Halton 1772–1773, Whitton 1773–1775, Scotter and Scotterthorpe, 1808–1820*. Scunthorpe Museum & Art Gallery, 1981. 25 pp. Maps, tables. £1.50 (£1.75 post-free from Scunthorpe Museum Secretary, Oswald Road, Scunthorpe, South Humberside DN15 7BD).

This valuable publication follows closely the pattern set by Rex C Russell's earlier accounts of Lincolnshire enclosures. There are the same admirably clear and informative maps and the same kind of information about the Acts, the commissioners, the new allotments, compensation for tithes, and other cognate matters. The villages concerned are located to the north of Scunthorpe on the south bank of the Humber. Appendices provide information about neighbouring enclosures from which, for example, it can be seen that in this district a little over 16 per cent of the acreage enclosed went to compensate the impropiator and church for tithes. There is, indeed, so much useful material that one wishes it was taken a little further to embrace, where the records are available, such relevant points as the types of soil, changes in the nature of the farming, the farmers themselves, the size of farms, rents, and all the topics which have intrigued students of enclosure over the years.

G E MINGAY

LYNNE DAVIES, *Welsh Ponies and Cobs*. J A Allen, 1980. xi + 506 pp. Illus. £12.95.

This book is a positive mine of information on the ponies of the Welsh stud book, and will undoubtedly be avidly sought by breeders and enthusiasts of the breed. The early history and development of the stud book's constituent sections are briefly described, along with some of the problems encountered when delving into the past of our most diverse indigenous breed; many of the old cob stallions were known not by one but several names, and to increase the confusion successful sires frequently had their offspring named after them. The book is devoted to the description of animals well known for their influence on the breed, each section being preceded by a pedigree of the relevant animal. Details of show successes and progeny are given, combined with the history associated with each individual and its ancestors. The wealth of material contained in this book is immense; however it is perhaps unfortunate that it has not been used to show more clearly the development of the four sections, and the inter-relationship between these.

The author has brought alive what could have been only a list of show successes and progeny by his wide

knowledge of the breed and his personal reminiscences of past breeders and animals. The text is well illustrated by photographs and stud cards from as far back as 1874, many of which have not hitherto been published. These are of great value particularly where the animal in question is long dead, when type, size and quality may be appreciated by present-day readers. *Welsh Ponies and Cobs* is a reference book and a history, which will be the envy of many other societies.

ANNE RUTHERFORD

GLENDA RILEY, *Frontierswomen: the Iowa Experience*. Ames, Iowa, Iowa State University Press, 1981. xv + 211 pp. Illus.

Professor Riley's book was written to counter 'the prevailing idea' among historians 'that dominant (meaning male) realms of activity are the only ones deserving examination'. She has drawn on original material in diaries, letters and memoirs, as well as secondary sources, to illustrate the part played by the women of Iowa in the settlement of this predominantly agrarian state. For certain types of frontierswomen, ethnic and black women, the sources are extremely thin; this applies especially to Indian women, who are therefore omitted from the scope of the discussion. Much of the material, and Professor Riley's discussion of it, relate to everyday life and farming activities, and detail of pioneer homes and schools, and is unsurprising; but the picture is rounded out by chapters on women in wartime and their involvement in education and the women's movement. The best-known figure here was the celebrated Amelia Bloomer, who spent the latter half of her life in Council Bluffs, Iowa. A fellow passenger in the stagecoach which brought the Bloomers to Iowa was Kit Carson, about whom Mrs Bloomer saw nothing remarkable except his clothing; as the author remarks, he might well have said the same of her.

The study is limited to the state of Iowa, which clearly restricts the range of frontierswomen's experiences and the availability of materials for documentation. At the same time it has the merit of providing a focus and giving geographical unity to the study. It would have been pleasant to have more quotations from the original sources, though perhaps the book contains all that are worth having — probably many of the records were disappointingly unrevealing. Professor Riley's championing of frontierswomen strikes a strident note and her style is a little portentous, while

certain words such as 'stereotype' and 'myth' are over-worked. Nevertheless, her book is a readable and well-informed account of what she likes to call the 'female frontier'.

G E MINGAY

VERA C M LONDON (ed), *The Cartulary of Bradenstoke Priory*, Wiltshire Record Soc, vol 35, 1979. 244 pp. Yet another cartulary, with little to distinguish it from many others; and yet it is valuable to have these in print for the ease of users.

Bradenstoke Priory was founded in the middle of the twelfth century as a daughter house from Cirencester Abbey; it became independent after 50 years and survived until the last wave of dissolution in 1539. It was always a small house, under the patronage of the earls of Salisbury, and never very wealthy.

What are printed here are the contents of two overlapping cartularies; the 'few original deeds' which survive are not included. Most of the transactions recorded relate to Wiltshire but there are properties and rents in other countries as well. There is relatively little of agricultural interest in these enrolled deeds and nothing systematic. The introduction points to the few references to sheep grazing, and other matters concern estate boundaries and access ways to land. There is no subject index, so that tithes, mills, meadows, pasture, woodland, and so on, cannot be found easily. The volume adds little to our general knowledge and will be of most value to local historians and to genealogists.

ALAN ROGERS

J CORNWALL (ed), *The County Community Under Henry VIII*, Rutland Record Society, vol 1, Rutland County Museum, Oakham, 1980. 134 pp. *Rutland Record*, No 1, 1980, Journal of the Rutland Record Society. Copies from the Secretary, Colley Hill, Lyddington, Uppingham, by subscription.

The reconstruction of local government units in 1974, which led among other disasters to the down-grading of Rutland to a district within a new Leicestershire, has on occasion provoked new outbursts of local loyalty, either to the older or the newer units. These two volumes, in each case the first in what is hoped to be a

continuing series, are part of the first fruits of this trend, for Rutland had neither a record series nor a major journal in the days when it was a self-contained county.

Julian Cornwall's book prints three main items. The first is the 1522 muster book (or militia survey, more accurately). Not many large areas are covered by surviving muster returns, and to have a whole county (albeit a small one) in print, with a useful introduction, is most welcome. Each town and village is represented here with lists of names of the inhabitants and their status, assessment of wealth, and the arms which they possessed, and in some cases their occupation (many however, like the quarrymen at Clipham, are hidden under the title of 'laborer'). Landlords and tenancies are regularly given, and some persons are indicated as 'retainers' of various lords (they all seem to have possessed armour). A number of 'young' and 'old' persons are recorded, all of them 'pore'. The edition is a bit pedantic (surely a note could have been added to the illegible entry under Cottesmore (p 20) that the missing name there is *very likely* to be 'Edward [Digby]'), and some examples of the way the material could be used should perhaps have been given in the introduction. Nevertheless to have this record in print for this intensively farmed area of the East Midlands is valuable. The 1524 and 1525 lay subsidy assessments, in comparison, are seen to be less complete and of less significance, and the way in which they are printed here does not make it easy to use. It is regrettable that, in the first volume of a Record Series, the index is very partial.

The new journal, handsome in modern format rather than traditional, includes a number of useful articles. Charles Phythian-Adams summarizes and extends his earlier discussion of the origins of Rutland: it does not become simple in retelling but the hypothesis must be seen as likely. A paper on the medieval parks of the area lays a solid base for future work (it ranges over the forest as well, under the title of 'The Medieval Hunting Grounds of Rutland'); John Field writes a general study on Field Names, and articles on a fourteenth-century manor house and on illiteracy in the nineteenth century add to the total. Notes on archives, newspapers, museums, and recent publications are included. We wish it well for the future.

ALAN ROGERS

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THE BRITISH AGRICULTURAL HISTORY SOCIETY

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EDITOR: G E MINGAY
RUTHERFORD COLLEGE, UNIVERSITY OF KENT
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The AGRICULTURAL HISTORY REVIEW



VOLUME 30 1982
PART II

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The Decline of the Small Landowner in Eighteenth- and Nineteenth-Century England:
Some Regional Considerations

J V BECKETT

The Financing of Parliamentary Waste Land Enclosure:
Some Evidence from North Somerset, 1770-1830

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The Decline of the Small Landowner in Eighteenth- and Nineteenth-Century England: Some Regional Considerations¹

By J V BECKETT

TOWARDS the end of the nineteenth century considerable concern was expressed about the future of agriculture and the structure of English land-ownership. It was widely believed that the greater magnates had been steadily accumulating property at the expense of the small owner, and evidence derived from the 1861 census appeared to confirm a trend towards concentration of land holdings. The survey of landowners carried out in 1873, commonly known as the 'new domesday', was partly inspired by the desire of several territorial aristocrats to explode what they considered to be the myth of monopoly control. They hoped thereby to deflate the land reform movement, which had been quick to exploit the propaganda value of the 1861 figures. In fact, the census actually served to strengthen the radicals' case since it was shown that 80 per cent of the land was in the hands of fewer than 7000 proprietors.² Clearly small owners had been displaced in large numbers, and, perhaps not surprisingly, historians began to ask when this had happened. Equally unsurprisingly common agreement was not to be found; indeed, since the 1880's different schools of thought have placed the blame for decline on the post-1815 agricultural depression, the parliamentary enclosure movement, and the economic

conditions of the century or so to 1760. Attempts have been made to synthesize these views and to decide between their relative merits, but only recently have historians begun to recognize that the timing of decline might have varied regionally according to local agricultural characteristics.³ In this paper evidence drawn from Cumbria will be tested against existing theories of small owner displacement. By looking at a region well away from the Midland counties, where the most detailed research has been concentrated, it is hoped to develop this theme of regional variation, and to draw some general conclusions relevant to the overall debate about decline.⁴

I

One of the earliest hypotheses concerning small owner decline was put forward by John Rae in the 1880's. Using the Board of Agriculture reports prepared in the 1790's he reached the conclusion that 'up till the close of the eighteenth century no really serious breach had as yet been made in the ranks of the yeomanry, if indeed their ranks had not positively risen'. In his opinion the blame for decline could be placed on the agricultural depression which

¹ An earlier version of this paper was read to the staff research seminar of the Nottingham University History Department. I should like to express my gratitude to members of that seminar for helpful criticisms. For reading and commenting upon the paper at various stages of preparation I should like to thank Dr Joan Thirsk, Dr Michael Turner and Mr Alan Cameron.

² J Bateman, *The Great Landowners of Great Britain and Ireland*, new edn, Leicester, 1971, pp 8-13.

³ See especially the work of Joan Thirsk, 'Seventeenth Century Agriculture and Social Change', in *Land, Church and People*, supplement to the *Ag Hist Rev*, XVIII, 1970, pp 148-77. Dr Thirsk has developed the theme in an unpublished paper, 'The Disappearance of the English Peasantry', which was read to the University of London Centre of International and Area Studies Peasant Seminar, March 1974.

⁴ By 'small owner' is meant a copy or freeholder with a small holding worked in the main as a family farm. In this paper I do not intend to look at the question of definition, and shall therefore avoid debatable terms such as 'peasant'.

followed the Napoleonic wars: 'when the war ceased the whole fabric they had built for themselves fell in . . . they may be said to have fallen at Waterloo'. Some survived, and Rae cites the example of the Isle of Axholme in Lincolnshire; but, in general, economic conditions in the wake of the war acted against the small owner. Any doubts about this could be dispelled by looking at the reports produced during the 1830's by the Agricultural Distress committees.⁵ Although Rae's argument has been largely ignored in the twentieth century it is by no means an unreasonable one. Quite recently Thompson has restated it along the lines that a stability thesis for the eighteenth-century small owner is just as plausible as one of decline, given the similarity of Gregory King's and Patrick Colquhoun's figures, for 1688 and 1803 respectively.⁶

In the early years of the twentieth century a number of writers argued that parliamentary enclosure was the chief cause of small owner decline. An agricultural revolution combined with enclosure seemed to them to provide reasons for positing a corresponding increase in farm sizes and a diminution of occupiers (small owners and tenant farmers). According to Gonner, 'there is little room for wonder at the steady and widespread disappearance of the small farmer, and especially of the small owner cultivating his own little farm'.⁷ Such a view was particularly attractive to radical historians anxious to picture aggressive capitalist landowners trampling over the rights of small owners in order to establish large tenant farms. For the Hammonds, enclosure was fatal to the small owner, the cottager and the squatter. In their opinion the costs involved severely undermined the small owner, and even if

he could meet these he seldom survived the loss of fallow and stubble pasture. The cottagers' position was equally bad if not worse: 'before enclosure the cottager was a labourer with land, after enclosure he was a labourer without land'.⁸ Lord Ernle shared this view: 'hundreds of cottagers, deprived of the commons, experienced that lack of rural employment which drove them into the towns in search of work'.⁹ Such opinions assumed that enclosure was a massive swindle which permanently undermined the small man in favour of the capitalist landowner, and judging from the literature many contemporaries also thought in this way. It would be short-sighted to argue that no one left the land as a result of enclosure, but recent research has played down the importance of the movement for depopulation. Chambers suggested that

the enclosure acts had the effect of further reducing, but not of destroying, the remaining English peasantry . . . since the rural population was unmistakably on the increase during this time, the contribution which the dispossessed made to the labour force came, in the majority of cases from the unabsorbed surplus, not from the main body.¹⁰

Some correlation cannot be denied. Hunt's study of Leicestershire has shown a steady transfer of land into larger units during the period 1780-1831; Turner's work on Buckinghamshire has led him to question the universality of Chambers' argument; Hoskins regarded the enclosure award of 1766 as being ultimately responsible for the end of the old peasant community in Wigston Magna; and Martin has shown that in parts of Warwickshire considerable disruption followed enclosure.¹¹ Econometric models

⁵ J L Hammond and Barbara Hammond, *The Village Labourer*, new edn, 1978, pp 58-9.

⁶ Lord Ernle, *English Farming Past and Present*, 6th edn 1961, p 301. Other books taking a similar line were Gilbert Slater, *The English Peasantry and the Enclosure of Common Fields*, 1907; W Hasbach, *History of the English Agricultural Labourer*, 1908, and H Levy, *Large and Small Holdings*, Cambridge, 1911.

⁷ J D Chambers, 'Enclosure and Labour Supply in the Industrial Revolution', *Econ Hist Rev*, 2nd ser, V, 1952-53, p 335.

⁸ H G Hunt, 'Landownership and Enclosure, 1750-1830', *Econ Hist Rev*, 2nd ser, XI, 1958-59, pp 497-505; M E Turner, 'Parliamentary Enclosure and Landownership Change in Buckinghamshire', *Econ Hist Rev*, 2nd ser, XXVIII, 1975, pp 565-81; W G Hoskins,

⁵ John Rae, 'Why Have the Yeomanry Perished', *Contemporary Review*, XLIV, 1883, pp 551-3.

⁶ F M L Thompson, 'Landownership and Economic Growth in England in the Eighteenth Century', in E L Jones and S. J Woolf (eds), *Agrarian Change and Economic Development*, 1969, pp 42-9.

⁷ E C K Gonner, *Common Land and Inclosure*, 1912, p 369.

have added weight to this argument. Crafts, for example, has suggested that 'at a county level there was a small but perceptible positive association between Parliamentary enclosure of common fields and outmigration'.¹² Finally, several writers have suggested that whatever the position of the cottager, small owner-occupiers were not in general severely affected by enclosure. There may even have been an increase in both numbers and acreage during the 1780-1832 period.¹³

Decline as a phenomenon pre-dating the parliamentary enclosure movement has been supported by a line of commentators stretching back to Marx. It was his opinion that

As late as the last decade of the seventeenth century the yeomanry, as an independent peasantry, formed a more numerous class than did the farmers. . . . By about 1750 the yeoman had disappeared, and, in the closing decades of the eighteenth century the last traces of communal ownership of land followed in their train.¹⁴

Substantial backing for this thesis can be found in the work of A H Johnson, based on the land tax records, and published two years before the Hammonds' study. Although they consulted Johnson's work, the Hammonds ignored his conclusion that decline preceded Parliamentary enclosure: '... by far the most serious period for the small owner was at the close of the seven-

teenth and during the first half of the eighteenth century'.¹⁵ Nor were H L Gray's findings about Oxfordshire, published in 1910, taken seriously, even though they supported Johnson's findings, again using land tax returns. This data suggested that during the war years small owners enjoyed something of a renaissance, because agricultural prices were high enough to make small holdings profitable. Yet such arguments had little impact, and the interpretation remained out of favour even after Davies published similar findings in 1927 for a group of Midland counties. Substantive backing eventually came from Habakkuk's work on landownership. He argued that falling agricultural prices through the seventeenth and early eighteenth centuries, coupled with heavy government taxation from the 1690's, combined to squeeze the small man. His property became attractive to *nouveaux riches* anxious to invest part of their fortune in property, and he himself deserted the land.¹⁶ Mingay has taken the argument further, suggesting that in the century or so prior to 1780 'small farmers who owned their land did decline drastically . . . small owner occupiers were not very severely affected by enclosure'. At the same time he has been careful to point out that this was not a wholesale changeover because even though during the eighteenth century 'small farms between 21 and 100 acres were halved in number, while farms of over 100 acres were correspondingly increased', as late as 1878 70 per cent of tenant farms were of less than 100 acres.¹⁷

On the face of things these three hypotheses cannot be reconciled. All three, however, are general arguments, though often largely based on local evidence, and recent

The Midland Peasant, 1957, p 267; J M Martin, 'The Small Landowner and Parliamentary Enclosure in Warwickshire', *Econ Hist Rev*, 2nd ser, XXXII, 1979, pp 328-43.

¹² N F R Crafts, 'Enclosure and Labour Supply Revisited', *Expl Econ Hist*, XV, 1978, p 182. See also B D Baack and R P Thomas, 'The Enclosure Movement and the Supply of Labour during the Industrial Revolution', *Jour European Econ Hist*, III, 1974, pp 401-23; Jon S Cohen and Martin L Weitzman, 'Enclosures and Depopulation: A Marxian Analysis', in W N Parker and E L Jones (eds), *European Peasants and their Markets*, Princeton, 1975, pp 175-6.

¹³ A H Johnson, *The Disappearance of the Small Landowner*, 2nd edn, Oxford, 1963. H L Gray, 'Yeoman Farming in Oxfordshire from the Sixteenth Century to the Nineteenth', *Quart Jour Economics*, XXIV, 1910, pp 293-326. E Davies, 'The Small Landowner 1780-1832 in the light of the Land Tax Assessments', *Econ Hist Rev*, I, 1927, pp 87-113.

¹⁴ Karl Marx, *Capital*, II, Everyman edn, London, 1930, pp 800-1, 803, 829-30. On Marx's view of peasants see also Michael Duggett, 'Marx on Peasants', *Jour Peasant Studies*, II, 1975, pp 167-8.

¹⁵ Johnson, op cit, p 147.

¹⁶ Gray, loc cit; Davies, loc cit; H J Habakkuk, 'La disparition du paysan anglais', *Annales ESC*, XX, 1965, pp 649-63.

¹⁷ G E Mingay, *Enclosure and the Small Farmer in the Age of the Industrial Revolution*, 1968, pp 16, 24, 30; 'The Size of Farms in the Eighteenth Century', *Econ Hist Rev*, 2nd ser, XIV, 1961-62, pp 480-4.

studies have suggested that regional characteristics may have produced very different responses and results. The seventeenth-century price fall, which is integral to the argument for pre-1780 decline, was mainly a grain growers' problem: as Joan Thirsk has pointed out, 'the economics of smallholdings in pastoral regions were not such as to drive the peasant worker from the land'.¹⁸ Those who suffered most difficulty were farmers in less well-favoured situations, particularly on the heavy Midland clays, where the possibilities for intensifying and diversifying output to offset the effects of low prices were restricted. Their solution to the crisis was to convert common field arable to permanent pasture.¹⁹ Such evidence suggests that regional disparities may have been considerable, yet most of the work undertaken on land tax data has been concentrated in the Midland counties. By looking at a region well away from the Midland clays and reputedly with little unenclosed open field by the eighteenth century it may be possible to obtain a clearer picture of how the small owner was faring.

II

The Cumbrian small owner was the 'yeoman': a title accepted by the community as being applicable to anyone holding an estate of inheritance, either freehold or customary tenure. In addition, a number of tenant farmers also used the style. The key feature of customary tenure, and the one which made it 'very different from the copyholds of the south',²⁰ was in the method of land conveyancing. The purchase, sale or mortgage of customary prop-

erty was transacted by title deed. Although enrolment in the manor court usually followed, the use of title deeds established that the tenants were virtually freeholders. Hence the term yeoman, used to describe more or less anyone to whom a gentry style was not applicable.

Estimation of numbers is almost impossible. According to a correspondent of the *Gentleman's Magazine* in 1766, there were then about 10,000 customary tenants in Cumberland, but this can have been little more than a guess. Bailey and Culley, the Cumberland agricultural reporters of the 1790's, suggested that two-thirds of the county's land was occupied by customary tenants: 'there are probably few counties where property in land is divided into such small parcels as in Cumberland and the small properties so universally occupied by the owners'. A correspondent of Lord Lowther in 1805 claimed that 'property in the counties of Cumberland and Westmorland is very much divided, perhaps more so than any other county in England'. As late as 1833 a witness before the Parliamentary Select Committee on Agriculture could report that 'property is more divided here I suppose than in any other part of the kingdom'.²¹

These commentators were unwilling to give figures, but the size of holdings, and consequently of incomes, must generally have been small. At Witherslack, in the south of the region, 42.9 per cent of the tenants in 1736 held less than 10 acres, the same proportion held between 10 and 35 acres, and only 14.3 per cent held more than 50 acres. The third group comprised 5 men, who between them held 41 per cent of the customary property. The average size of holding was 15.7 acres, and the largest 104.25. In Lupton, one of the Kirkby Lonsdale townships, 'almost all the

¹⁸ Thirsk, 'Seventeenth Century Agriculture', p 177. See also E L Jones, 'Agricultural Origins of Industry', *Past and Present*, 40, 1968, pp 58-71.

¹⁹ John Broad, 'Alternate Husbandry and Permanent Pasture in the Midlands, 1650-1800', *Ag Hist Rev*, XXVIII, 2, 1980, pp 77-89. M Turner, *English Parliamentary Enclosure*, Folkestone, 1980, pp 135-51.

²⁰ Carlisle Record Office (CRO) D/Lons/W, James Lowther to John Spedding, 12 June 1725.

²¹ *Gentleman's Magazine*, XXXVI, 1766, p 582; J Bailey and G Culley, *General View of the Agriculture of the County of Cumberland*, Newcastle, 1797, p 178; CRO D/Bs, Tax Commissioners Letters, ? to Lord Lowther, 27 Feb 1805; *BPP*, 1833 (612) V, p 309.

land was held by customary tenants with holdings of between 15 and 40 acres apiece, and some rights in the common grazing'.²² Size was reflected in incomes. At Wither-slack 28.6 per cent of the tenants held land with an annual value of £5 or less, 17.1 per cent of over £20, and 54.3 per cent of between £5 and £20. These figures make no allowance for additional holdings outside the parish, but other writers imply that such levels were not unusual. The *Gentleman's Magazine* correspondent quoted minimum-maximum income figures for Cumberland of £10 and £100. In the 1790's Bailey and Culley gave figures of between £15 and £30, with only a few above £100, while Andrew Pringle, the Westmorland reporter for the Board of Agriculture, suggested that incomes were between £10 and £50. County historian, William Hutchinson, claimed in 1794 that many of the Cumberland customary tenants had an income of less than £10 a year, but a writer of 1811 suggested that yeomen were then worth between £10 and £200 or even £300 annually. This evidence of rising prosperity is also reflected in a claim made in 1872 that Cumbrian yeomen then averaged around £150, although in part this reflected the disappearance of many of the smallest holdings in the interim.²³

Given the reluctance of contemporaries to enumerate the Cumbrian yeomanry it is hardly surprising that any attempt to measure decline in quantitative terms is impossible. However, general trends can be established, and these suggest that numbers held steady between the sixteenth and

eighteenth centuries, before declining in the nineteenth. In the sixteenth century population growth created impoverished cottagers and sub-tenants who scratched out a living on tiny plots of poor land. Many of these did not survive for long, and numbers began to decline in the seventeenth century. The process was slightly accelerated after 1660 by a change of policy on the part of landowners with regard to customary property. Even so, by 1700 the elimination of small holders was not very far advanced. Gradual erosion continued in the first half of the eighteenth century. A tentative estimate suggests that property to the value of around £15,000 may have passed to the aristocracy between 1680 and 1750, and more would also have passed to the gentry.²⁴

The first evidence that decline was becoming sufficiently obvious to elicit contemporary comment comes only in the second half of the eighteenth century. In about 1770 the vicar of Beetham, Westmorland, noted in the Winster valley that 'I find everywhere the Yeomandry extinct, not an Owner lives on his Estate'. Dorothy Wordsworth, not perhaps the most reliable of witnesses, wrote in 1800 of how 'all those that have small estates are forced to sell and all the land goes into one hand'.²⁵ The Napoleonic war years witnessed a reversal of any trend in the direction of decline since, along with other regions, Cumbria benefited from the high agricultural prices of the period. Evidence to the Agricultural Distress committee of 1833 implies that these were optimistic years for Cumbrian farmers, many of whom invested in their estates in order to improve them.

It was the years following the cessation of hostilities which appear to have been critical for the Cumbrian yeoman. This

²² G P Jones, 'The Wither Slack Survey, 1736', *Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society*, 2nd ser (CW2), LXIX, 1969, p 214; *A Short History of the Manor and Parish of Wither Slack to 1850*, Kendal, 1971, pp 13-14; A Macfarlane, *The Origins of English Individualism*, Oxford, 1978, p 89.

²³ Jones, loc cit, p 215. C M L Bouch and G P Jones, *A Short Economic and Social History of the Lake Counties 1500-1830*, Manchester, 1961, p 228; Bailey and Culley, op cit, p 178; A Pringle, *General View of the Agriculture of the County of Westmorland*, Newcastle, 1797, p 262; W Hutchinson, *History of Cumberland*, 1794, I, p 39; [Rev Mr Hodgson], *Westmorland*, 1811, p 8; H Lonsdale, *The Worthies of Cumberland The Howards*, 1872, p 202; *Gent's Mag*, XXXVI, 1766, p 582.

²⁴ A Appleby, *Famine in Tudor and Stuart England*, Liverpool, 1978, pp 66, 158-9, 182-9; J V Beckett, 'Landownership in Cumbria 1680-1750', unpubl Univ Lancaster PhD thesis, 1975, p 358.

²⁵ J R Ford, ed, *The Beetham Repository*, 1770, Kendal, 1906, pp 135-6; W Knight, ed, *Journals of Dorothy Wordsworth*, 1897, I, p 33.

was the message conveyed to the 1833 Select Committee on Agriculture by William Blamire, MP for East Cumberland and nephew of the famous agricultural improver, John Christian Curwen. Since 1815 he had noted a considerable diminution in the number of small owners, 'and the situation of those who are still in existence is considerably worse than it was; there are very few of them whose properties are altogether unencumbered . . . their number is constantly diminishing'. In his opinion the changes since Waterloo were greater than in any preceding period. Blamire repeated his allegations to a similar committee which reported 4 years later: the condition of the yeomanry, he claimed, 'at the present moment is truly lamentable; a vast number of those properties has passed from the possession of the yeoman, and there are others that must ere long pass away'.²⁶ Other evidence tells a similar tale. The yeoman farming 15-40 acres in the village of Dalston, a few miles south of Carlisle, disappeared in the post-war years. The number of Westmorland yeomen fell dramatically in the two decades between the compilation of Parson and White's *Directory* (1829), and that of Mannex (1849). *Chambers's Journal of Popular Literature* claimed in 1838 that the whole race was 'dwindling away'. Rae, writing in 1883, emphasized the general evidence for post-1815 decline. Significantly, when Dickinson wrote his prize essay on Cumberland agriculture in 1852 he took the small owner to be the man with 40-100 acres, thereby suggesting that there was no longer a viable group below that level.²⁷

The evidence of decline is reasonably conclusive, but the timing raises several interesting questions. Why, for example,

were the Cumbrian yeomen able to ride out the 1660-1780 period? What, if any responsibility for decline attaches to the Parliamentary enclosure movement? Finally, what significance does the timing have for general arguments relating to the disappearance of the small owner? Some attempt to find answers will be made in the following sections.

III

Perhaps the major reason why the 1660-1780 period was relatively unimportant in the decline process was that Habakkuk's arguments do not stand up when applied to Cumbria. Falling grain prices had a beneficial effect in pastoral regions, since any surplus income accruing as a result of cheap bread was likely to be spent on meat and dairy products. As a result their prices remained steady. Although the evidence is scanty the Cumbrian cattle trade appears to have been buoyant in the early years of the eighteenth century, at least until the cattle plague interrupted business in the 1740's. The primacy of cattle rather than sheep in the regional economy, and the rising value of stock recorded in inventories, suggests that agricultural conditions were favourable.

Heavy taxation, the bugbear of small owners further south, hardly touched the north-west. Generations of MPs had ensured that Cumberland and Westmorland enjoyed a reputation for poverty. Whatever the truth of this assertion, it enabled the two counties to secure relatively favourable assessments when the land tax was introduced in the 1690's. Rather than the 4 shillings in the pound which ought to have been paid their assessment worked out nearer to 9d. From 1705 customary tenants were expected to pay land tax only if the rent on any particular property was less than 20 shillings, and properties could not be grouped together in order to exceed the limit. Although this provision ensured

²⁶ BPP, 1833 (612) V, pp 309-11, 1837 (464) V, pp 315-17.

²⁷ J G Waddington, 'Dalston 1720-1880', Univ Lancaster MA thesis, 1972, pp 80-2; G P Jones, 'The Decline of the Yeomanry in the Lake Counties', *CW2*, LXII, 1962, p 218; 'The Cumberland Statesman', *Chambers's Journal of Popular Literature*, 28 Aug 1858, p 139; Rae, loc cit, p 553; W Dickinson, 'On the Farming of Cumberland', *JRASE*, XIII, 1852, p 220.

that most customary tenants should have been rated the practice varied. At Holme Cultram in Cumberland in 1731 full land tax was allowed on rents both above and below 20 shillings. By contrast, in 1706 Benjamin Browne, a prosperous yeoman in the Westmorland village of Troutbeck, was paying tax even though his rent exceeded 20 shillings.²⁸ On a 4 shilling rate he paid £1 3s, hardly a crippling burden for one of the region's more substantial customary estate owners.

The nature of this prosperity is interesting. Marshall has demonstrated from inventory evidence a considerable increase in wealth,²⁹ but the fact that nearly one-third of testators were worth under £40 in the early eighteenth century indicates the continuing presence of a large body of poor yeomen. Although this is hardly surprising given the size of estates, the figures suggest an air of prosperity, and other evidence confirms this view. The post-1660 period saw a great rebuilding of statesmen houses in Cumbria with stone replacing the common clay daubing. Travellers' comments reflect the change. When Celia Fiennes passed through the region in the 1690's she commented on the poor state of the housing. Near Penrith she noted 'little huts and hovells the poor live in like barns', and in Westmorland 'villages of sad little huts . . . for the most part I took them at first sight for the sort of houses or barns to fodder cattle in not thinking them to be dwelling houses'. By contrast, Bailey and Culley noted that except in the north-east of Cumberland all the houses were of stone, while Pringle pointed out that in Westmorland customary tenants generally had their houses slated. Dickinson, in the mid-

nineteenth century, also commented on the solidity of yeoman housing.³⁰

TABLE I

	Proportion of inventories (%) (Sample 775 in each time period)			Gross value (£s)
	Under £40	£40-£100	£100+	
1661-90	44	37	19	71.23
1721-50	31	30	39	124.72

What accounts for this prosperity? The possible effect of declining grain prices has already been mentioned, and the rise in average value of farm and household goods recorded in inventories, from £44.33 in the later seventeenth century to £72.93 in the early eighteenth century, may well reflect this situation.³¹ Little evidence survives to suggest that improved agriculture was practised on yeoman estates. Sir James Lowther of Whitehaven complained in 1752 that 'one thing that keeps our country so backward in improvements is the vast number of customary estates that are in it', and in his attack on customary tenure at the end of the century William Hutchinson claimed that 'these base tenures greatly retard cultivation'. Bailey and Culley reported that the yeomanry 'seem to inherit with the estates of their ancestors their notions of cultivating them'.³² Of course, exceptions can be found. Benjamin Browne limed his arable ground in the 1730's, and grew cabbages, mustard and turnips in his garden. Furthermore, even on the smallest estates, the Napoleonic war years seem to have been a time of improvement. In 1810 William Fleming of Rowhead noted that 'throughout Furness [agriculture] has become so improved within the last 25 years that I may within bounds

²⁸ J V Beckett, 'Local Custom and the "New Taxation" of the Seventeenth and Eighteenth Centuries: the Example of Cumberland', *Northern History*, XII, 1976, pp 116-17; Kendal Record Office (KRO) D/TE, IX, fos 49-50.

²⁹ J D Marshall, 'Agrarian Wealth and Social Structure in Pre-Industrial Cumbria', *Econ Hist Rev*, 2nd ser, XXXIII, 1980, p 509.

³⁰ J Thirsk, ed, *The Agrarian History of England and Wales*, vol IV, 1500-1640, Cambridge, 1967, p 757; C Morris, ed, *Journeys of Celia Fiennes*, 1949, pp 196, 202; Bailey and Culley, op cit, p 179; Pringle, op cit, p 263; Dickinson, loc cit, pp 276-7.

³¹ Marshall, loc cit, p 509.

³² CRO D/Lons/W Sir James Lowther to John Spedding, 7 May 1752; Hutchinson, op cit, I, pp 39, 133; Bailey and Culley, op cit, p 181.

venture to affirm that the produce was 5 times so much as it was at that period'. William Blamire's evidence to the Agricultural Distress committees also suggested that the yeomen had made considerable efforts to improve their farms in order to benefit from the high prices of the war years.³³

Such change, if it came at all, came late; but the situation on yeoman farms needs to be carefully distinguished from that on larger estates in the region. As early as the 1690's Celia Fiennes had noted 'very good rich land enclosed' in the Kendal basin, and Colonel James Grahme, whose property lay in the same area, leased five of his predominantly arable farms for rents in excess of £100.³⁴ He did little to encourage improved agricultural practices through lease clauses, but new husbandry techniques were employed on his home farm during the 1690's. In 1731 Sir John Clerk passed through the Eden valley, noting on the Musgraves' estate 'enclosures . . . where I saw plenty of rich pasturage and fine corns just a reaping'. At roughly the same time engrossing was taking place on the somewhat less hospitable territory of the earl of Carlisle between Carlisle and the Northumberland border. Askerton was let to two yeomen in 1741 for a rent of £265, the largest known rent for a single farm in the region at that time. Turnips were also cultivated on the estate. Admittedly the *Gentleman's Magazine* correspondent claimed in 1766 that 'there are not 40 farms in the county [Cumberland] of 100^l a year each, mostly from 10^l to 50^l a year', but in the 1770's Arthur Young noted that clover had been unsuccessfully tried in the Keswick area, and that liming was widely practised. By the 1790's, according to

Pringle, cultivated land east of the Eden in Westmorland was all enclosed.³⁵ Such evidence indicates that landowners were not slow to grasp the possibilities open to them for improving arable land, even if they were unable, and perhaps unwilling, to do very much about the upland pastoral areas.

The absence of improvement on small estates before the later years of the eighteenth century suggests that the yeomanry experienced little need for change. If so, then two other factors contributing to their continued prosperity may well have been the level of fines and the availability of by-employment. Two types of fine were payable on customary estates: a dropping fine in order to obtain admittance, either by descent, devise or purchase, and a general fine, payable by all tenants on the death of the lord. A fine was also due when a customary estate was mortgaged, although it could be avoided on some estates. Fines represented the landowners' major compensation for the small size of annual rents. At Kirkclinton in Cumberland the annual average rent per head per acre was 15 7¼d, while in Greystoke it was 9s 4d. In Westmorland it was 3s 9d in Grasmere, and 17s 1¼d in Helbeck. Such disparities reflected the timing of the introduction of tenant right into the various manors, but as annual rents these were derisory. Lady Elizabeth Otway paid £4 14s 7d customary rent for her Ambleside estate, but she leased it to a tenant farmer at the economic rent of £89. Consequently, the size of fines was important to landowners. According to Hutchinson fines could leave tenants 'perpetually impoverished',³⁶ and should a descent and general fine occur within a

³³ KRO D/TE, IV, 21, Benjamin Browne's books; William Fleming's 'Journal and Commonplace Books', XVII, fos 2180-1, 2184 (microfilm in the University of Lancaster library).

³⁴ Acreage-equivalents for these rents do not exist, but in the 1790's Bailey and Culley reckoned that rents averaged 15s an acre. Farms attracting a rent of £100 or more must therefore have been considerably over 100 acres in the first half of the eighteenth century.

³⁵ Morris ed, op cit, p 190. Levens Hall MSS, T Banks to J Grahme, 21 Jan 1703, Box 6/3, Box 2/18, Box 14/29, plus an unlisted bundle in Box 14; W A J Prevost, 'A Journie to Carlyle and Penrith in 1731', CW2, LXI, 1961, p 218; Durham University, Howard of Naworth MSS, C/170/53; A Young, *A Six Month Tour Through the North of England*, 1770, III, pp 127, 135; Pringle, op cit, p 269.

³⁶ Jones, 'Decline of the Yeomanry', pp 202-3; KRO D/TE, VII, 236, Benjamin Browne's books, 1737, p 6; Hutchinson, op cit, I, p 39.

short space of time the results could be disastrous. It was in the owners' interest to push up the level of fines. In some manors, they were fixed at a certain multiple of the rent, but trouble occurred when the owner was entitled to assess arbitrary fines, in effect to extract as much as he could squeeze from his tenants. This was happening in the sixteenth and seventeenth centuries, but in the early eighteenth the tenants were enjoying a measure of success in resisting it. In theory, the owner was financially better able to fight the legal cases which ensued over disputed fines, but in practice the tenants seem to have organized themselves well. Robert Lowther of Maulds Meaburn in Westmorland discovered in the 1730's that the tenants were 'so numerous they look on their expense as nothing'. After a dispute between the Duke of Somerset and his tenants in the 1720's the tenants, having lost, were able to pay the fine without apparent difficulty, in spite of their legal costs, and with only a few being caught short for resources.³⁷ The Earls of Carlisle and Thanet, together with several gentlemen, all had to face expensive contests in the first half of the eighteenth century.

The availability of by-employment was of considerable significance. With its populous community of small farmers, many of them customary tenants, pursuing a pastoral economy, Cumbria enjoyed the conditions in which rural handicraft industries were likely to flourish.³⁸ The Kendal area was particularly blessed with domestic textile manufacture, but throughout the region yeomen were to be found in different occupations. Some earned a living by labouring on the estates of other landowners as well as cultivating their own holding. Others doubled as blacksmiths, carpenters

and tanners, whilst along the west coast yeomen developed interests in salt panning, coal mining and shipping. At Harrington, south of Workington, yeomen worked part-time in the mines, and reared cattle in their spare hours.³⁹ Some of the wealthier yeomen acted as stewards to local landowners. Benjamin Browne was steward of Lady Otway's Ambleside estate between 1703 and 1718, and bailiff of Lord Lonsdale's property in Kendal barony from 1729 until 1737, positions for which he received annual salaries of £8 and £6 13s 4d respectively. He also acted as executor to many local yeomen, receiving as his reward a small legacy. Alan Wilson of Levens was steward to Colonel James Grahme from 1707 until 1730 on a salary £24. Such was his total income that he was able to buy his customary tenement into freehold in 1724 for £200.⁴⁰

According to Habakkuk's argument the corollary to economic pressures forcing the small owners to consider selling was to be found in the favourable market for small properties. Large landowners extending and enclosing their property, and newcomers anxious to establish themselves with land, snapped up any small estates which came on to the market. In Cumbria, however, neither played much of a role, for the most part disdaining to purchase customary property. Established landowners faced the problem that estate improvement necessitated their buying out customary tenants so as to consolidate farms. Only one or two owners followed such a policy with any enthusiasm. Fifty-three of the first Viscount Lonsdale's 79 known property purchases in the last two decades of the seventeenth century cost under £100, and the vendors were almost invariably

³⁷ CRO D/Lons/W Sir James Lowther to John Spedding, 31 Dec 1734, D/Lec/170, John Christian to Thomas Elder, 31 Jan, 12 Feb 1726.

³⁸ Joan Thirsk, 'Industries in the Countryside', in F J Fisher ed, *Studies in the Economic and Social History of Tudor and Stuart England*, 1961, p 86.

³⁹ Jones, 'Decline of the Yeomanry', p 214; J D Marshall, 'The Domestic Economy of the Lakeland Yeoman, 1660-1749', *CW2* LXXIII, 1973, pp 196, 208-10; Bailey and Culley, *op cit*, p 182.

⁴⁰ KRO D/TE, VII, 37; CRO D/Lons/L Cash account books of William Armitage for Lord Viscount Lonsdale, no 70, f 42; Levens Hall MSS, box C (3rd series), 'A copy of Mr Alan Wilson's accounts', Box E (correspondence), A Wilson to J Grahme, 7 Mar 1712, box 14/4.

styled yeoman. His aim was to turn the land into a park. The Wilson family of Dallam Tower purchased 47 properties between 1660 and 1750, the majority for consolidation purposes. Seventeen were in Haverbrack, of which the largest was 4½ acres, 6 in Milnthorpe, 6 in Beetham and 5 in Preston Richard. A similar policy was followed by the Carletons, a family of Appleby lawyers, who acquired a series of properties from yeomen, mainly in the vicinity of the town.⁴¹ Mostly, however, owners seem to have been content to allow customary property to fall into their hands as families became extinct, and until about the middle of the seventeenth century to re-grant it in the same tenure. The policy changed at about the time feudal tenures were abolished in 1660. This legislation is often blamed for the expropriation of English copyholders, and in Cumbria landowners began to extinguish the tenant right, enabling them to let the land for terms of years at economic rents.⁴²

Nor were the local *nouveaux riches* interested in customary property. Several merchants grew wealthy on the profits of west Cumberland's expanding trade links with America, the Baltic and the West Indies, and established themselves as landowners by purchasing small estates not too far from their commercial interests. They preferred freehold land, as is clear from the acquisitions of one of the most substantial of their number, Peter How. By the time of his bankruptcy in 1763 How had bought a number of properties. Details survive concerning 7 of the 11 which were sold in order to pay his debts. Only 1 of these was a customary estate, the other 6, including

property in Egremont and St Bees let at £165 10s a year, were all freehold.⁴³

Under the circumstances it is hardly surprising that the erosion of customary properties was a slow process. Admittedly property was gradually passing into the hands of greater landowners, but the process was not only one way. Lady Elizabeth Otway sold her Ambleside estate to 11 different yeomen, and something like £7000 was paid by yeomen to members of the aristocracy between 1680 and 1750 for the freeholds of their property. Money must also have been paid to the gentry, amongst whom Colonel James Grahme was a pioneer: he enfranchized 139 tenants around the turn of the seventeenth century, while his successor, the earl of Berkshire, added a further 118 between 1741 and 1744.⁴⁴ Despite such examples, contemporaries complained that the process was not pushed far or fast enough. Sir James Lowther claimed that 'one of the principal things that makes our country so miserable is the great number of little tenancy estates', and 'if the gentlemen would set their tenants free it would in time oblige the lords to do the same'. However, he was reluctant to set a good example and in the 1790's William Hutchinson complained that most owners had still to enfranchise.⁴⁵ The cost deterred many tenants from responding to overtures from landowners. In 1737 the third Earl of Carlisle ordered his steward to draw up a scheme for enfranchizing his tenants. It was estimated that if they all bought the freehold £25,430 would be raised, but only 10 responded. One of them, Robert Scott of Brampton, paid £110 for the freehold of a property on which his annual rent had been 4s 6¾d.⁴⁶ As it transpired, the lack of enthusiasm

⁴¹ CRO D/Lons/L, Box Acc/5, Sir John Lowther to Lord Lonsdale, 3 July 1699, Lonsdale's acquisitions are recounted in detail in Beckett, *op cit*, p 199. KRO D/D (deeds scattered through archives). J V Beckett, 'English Landownership in the Later Seventeenth and Eighteenth Centuries: the debate and the problems', *Econ Hist Rev*, 2nd ser, XXX, 1977, p 572.

⁴² Point made to the author in private discussion by Dr C B Phillips. Feudal tenure was abolished by 12 Car II, c 24.

⁴³ PRO, B/1/43.

⁴⁴ KRO D/Ry, Temp Box 65, 'A Copy of the Sale Bill, 9 Feb 1727'. Levens Hall MSS, box 14, nos 10, 25, also 'Mr Craven's contracts for Enfranchisements, 1741-2'.

⁴⁵ CRO D/Lons/W Sir James Lowther to John Spedding, 1 Jan 1751, 19 May 1752. Hutchinson, *op cit*, I, p 35.

⁴⁶ Durham University, Howard of Naworth MSS, C/115/77, C/170/60, C/181a/21.

shown by the landowners was in the tenants' interest.

IV

Early twentieth-century writers blamed the decline of the small owner on the process of parliamentary enclosure, and Cumbria experienced its fair share of legislation. Opinions vary, but according to one modern account 281,000 acres of common waste in Cumberland, and 124,000 acres in Westmorland, were enclosed by Act of Parliament between 1760 and 1900, respectively some 29 per cent and 24 per cent of each county. In both the peak period was between 1800 and 1830.⁴⁷ However, such activity did not necessarily affect the small owner, since it was the enclosure of common arable fields which was regarded as depopulating. In Cumbria these were largely untouched by parliamentary activity, which accounted for only 1.2 per cent of Cumberland's acreage and 0.06 per cent of Westmorland's.⁴⁸ Piecemeal enclosure had taken place since the sixteenth century, but only in the second half of the eighteenth were the common fields tackled systematically. In Cumberland, apart from Arlecdon in 1697 and Bothel in 1726, the other eight known enclosures by private agreement all date from between 1753 and 1797. Such a procedure was found to be cheaper and quicker than the formal approach to parliament, but the overall effect was to fossilize the common field strip within the enclosed landscape, small holdings continuing to exist into the twentieth century.⁴⁹

Most commentators clearly did not regard enclosure as having a depopulating effect in Cumbria. Admittedly Hutchinson claimed that the enclosure of Skelton,

which was the earliest award (1768) and one of the three parliamentary agreements of the eighteenth century, 'occasioned many cottagers to quit the country', but other evidence does not support his opinion. Bailey and Culley believed that the increased demand for labour following enclosure ensured that few people were likely to be forced to leave the land permanently.⁵⁰ Deane and Cole's figures, however defective, fail to support the view that enclosure led to an increase in emigration. From their figures (see Table 2), it can be seen that movement out of the region was a characteristic of the whole period from 1701 until 1831, but that in absolute terms the region increased its stock of labour. Migration, as a proportion of natural increase, declined in each of these three periods; indeed, in Cumberland it even fell in absolute terms, although the third period is shorter than the others. Presumably this trend reflected the growing opportunities in the expanding towns. Most questionable are the 1701-51 figures, showing a net decrease at a time when parts of the region were undergoing rapid industrialization, particularly the port towns on the west coast. It seems probable that Deane and Cole began from too low a base figure but, if the trend shown by their calculations is generally correct, in the period of greatest enclosure the level of emigration was actually declining.

V

When decline came in the nineteenth century it resulted from a series of inter-related causes rather than a single one. Agricultural prices were clearly significant. Rising grain prices in the second half of the eighteenth century coincided with the earliest evidence of decline, but the effect was cushioned by demand for meat, which continued to outrun supply and therefore held up the price. Agricultural production was generally profitable during the war

⁴⁷G Elliott, 'Field Systems of North-West England', in A R H Baker and R A Butlin, eds, *Studies of Field Systems in the British Isles*, Cambridge, 1973, p 71.

⁴⁸These figures are derived from the recalculations of W E Tate's figures given in Turner, *op cit*, pp 180-1. See also W E Tate, 'A Hand List of English Enclosure Acts and Awards', *CW2*, XLIII, 1943, pp 175-98.

⁴⁹Elliott, *loc cit*, pp 76-84.

⁵⁰Hutchinson, *op cit*, I, p 514n; Bailey and Culley, *op cit*, p 187.

TABLE 2
Migration and Natural Increase, 1701-1831

	Estimated population increase	1701-1751 Estimated natural increase	Gain/Loss +/- migration	Estimated population increase	1751-1801 Estimated natural increase	Gain/Loss +/- migration	Estimated population increase	1801-1831 Estimated natural increase	Gain/Loss +/- migration
Cumberland	-9,122	33,504	-42,626	39,912	61,944	-22,032	50,599	70,644	-20,045
Westmorland	-4,183	10,172	-14,355	6,994	26,875	-19,881	12,709	25,200	-12,491

Source: P Deane and W A Cole, *British Economic Growth, 1688-1959* (Cambridge, 1962), pp 108-9.

years, a fact which helps to explain the continuing hold of the Cumbrian yeoman as much as it does the resurgence of the southern small owner. Extensive enclosure of wastes and commons in the early decades of the nineteenth century is a further indication of the expectations of these years. After the war, however, prices tumbled. For example, with the return to the gold standard in 1821, the price of wool fell rapidly: within a few years it was fetching only just over half the 1819 price. In the scramble for survival small estates were over-cropped. Falling prices were regarded by William Blamire in the 1830's as having contributed to the decline of the yeoman.⁵¹

A second factor was the loss of by-employment. The significance of domestic industrial employment for the survival of the French peasant has been emphasized by Johnson,⁵² and as late as 1800 this still provided a vital supplementary source of income for Cumbrian yeomen. According to Housman,

The Cumbrians are almost all manufacturers in miniature, there being few families in the country who do not spin their own linen and woollen cloth; and also spin and knit their own stockings. Every village is supplied with a weaver or two, who weave their home made cloth.⁵³

The loss of this employment to factory

production was a considerable setback. Wordsworth was of the opinion that the machine undercut the Cumbrian yeoman, who, deprived of this essential additional income, could not survive as an independent producer. By the mid-1830's it could be claimed that 'no domestic manufactures are now carried on',⁵⁴ and whatever the truth of such an assertion there can be little doubt that this important supplementary income had considerably declined. The growing textile towns of Carlisle, Cockermouth, Penrith, and Kendal had creamed off much of the employment for full-time workshop production.

Enfranchisement was a further cause of decline. Once a man owned the freehold of his property, in adverse economic circumstances the temptation increased to sell up and seek more profitable employment. He thereby became attractive prey to the engrossing landlord. An early twentieth-century commentator on Westmorland agriculture argued that many of the Westmorland yeomen disappeared in the early nineteenth century, simultaneously with mass enfranchisement.⁵⁵

Finally, some commentators believed that the yeomanry were their own worst enemies in that they copied habits from the south of England which their slender incomes could not stand. During his tour of the Lake Counties in 1772 William Gilpin expressed the fear that the contact local people were

⁵¹ P Deane and W A Cole, *British Economic Growth, 1688-1959*, Cambridge, 1962, pp 70-74, 91; Jones, 'Decline of the Yeomanry', pp 219, 223. *BPP*, 1833 (612), V, p 310.

⁵² Johnson, *op cit*, p 156.

⁵³ J Housman, *A Topographical Description of Cumberland, Westmorland, Lancashire and a part of the West Riding of Yorkshire*, Carlisle, 1800, p 56.

⁵⁴ W Wordsworth, *A Guide to the District of the Lakes*, 5th edn, Kendal, 1835, pp 86-7; Jones, 'Decline of the Yeomanry', p 220.

⁵⁵ F W Garnett, *Westmorland Agriculture*, Kendal, 1912, p 12.

beginning to enjoy with outsiders was likely to make them dissatisfied with their lot. He was concerned that whereas 'the sons and daughters of simplicity enjoy health, peace and contentment, in the midst of what city-luxury would call the extreme of human necessity', appreciation of the material goods available elsewhere might provoke jealousy and imitation. By the middle of the nineteenth century John Gough was convinced that Gilpin's fears had been well founded; in his opinion the yeomanry had adjusted to the standards of national fashion during the eighteenth century, acquiring the customs of the capital because travel had become easier once major roads had been turnpiked.⁵⁶ The practice of giving portions to younger children certainly seems to have brought considerable difficulty. According to William Blamire many yeomen:

from a miscalculation of their real situation [have] been induced to leave to their children larger fortunes than they ought to have done, and to saddle the oldest son with the payment of a sum of money which it was impossible he could provide for. This has been the case to a very great degree, particularly where the lands so devised were lands of inferior quality. I know some remarkable instances where parents have left a provision for younger children out of estates which have not been sold during the continuance of high prices, and which have fallen so much within their calculations as to leave the eldest son hardly anything.⁵⁷

VI

The Cumbrian evidence suggests that the region's small owners suffered their greatest period of decline neither before 1760, nor as a result of parliamentary enclosure, but rather in the years after 1815. By way of conclusion these findings can be juxtaposed with those of other studies to develop the theme of regional disparities in the decline of the small owner, and to reassess the general chronology.

⁵⁶ William Gilpin, *Observations Relative Chiefly to Picturesque Beauty made in 1772, on several parts of England*, 1786, p. 197; John Gough, *The Manners and Customs of Westmorland and the adjoining parts of Cumberland, Lancashire and Yorkshire in the former part of the Eighteenth Century*, 2nd edn, Kendal, 1847, pp. 5-6.

⁵⁷ BPP, 1833 (612), V, p. 309.

Plenty of evidence can now be marshalled to show that adverse economic conditions were widespread in the corn counties during the seventeenth and eighteenth centuries. On the best corn growing land the price fall was offset by rationalization of holdings, and already by the end of the seventeenth century England was developing a sizeable group of landless tenant farmers and labourers. If Gregory King's admittedly inaccurate figures are to be believed only 13 per cent of English families were owner-occupiers as against 11 per cent tenant farmers and 26 per cent labourers.⁵⁸ On soils less suitable to corn, specialized, labour-intensive cropping, and market gardening, might prove economic;⁵⁹ but on the Midland claylands the real answer was to convert from arable to pastoral farming. Efforts were made to introduce new husbandry practices on the open fields,⁶⁰ but most landowners saw the means of salvation to be in engrossing and enclosing. Once they had turned the wastes into grass lands attention switched to the common arable fields. Thus, throughout the seventeenth and eighteenth centuries the Midlands, in particular, were subject to rationalization, and it is no coincidence that the major area of common field parliamentary enclosure lay in a belt stretching south from the east and west ridings of Yorkshire to a line drawn through Wiltshire, Berkshire, Oxfordshire, and Buckinghamshire. Countryside industrial projects held some communities together as, for example, was the case in Wigston Magna, but there is little doubt that the prevailing economic conditions *did* tend to reduce the number of people owning and working the land. Perhaps they also help to explain why the majority of closed parishes were to be found in arable areas, the barriers having been erected in order to exclude small, and possible

⁵⁸ Gregory King, *Two Tracts*, ed C Barnett, Baltimore, 1936, p. 31.

⁵⁹ Thirsk, 'Seventeenth Century Agriculture', p. 166.

⁶⁰ M A Havinden, 'Agricultural Progress in Open-Field Oxfordshire', in W E Minchinton, ed, *Essays in Agrarian History*, Newton Abbot, 1968, I, pp. 147-59.

inefficient, landowners.⁶¹ Small holdings again became viable during the Napoleonic war years under the stimulus of high prices, but this was a short-lived renaissance even if it led John Rae to believe that the yeomanry were as much the losers at Waterloo as Bonaparte.

When attention is turned to the pastoral areas the contrast could hardly be more striking. Just about all the cards seemed to have been stacked in favour of these regions: they were not subject to the full impact of falling prices; they were often in the lightly taxed extremities of the country; they generally had the benefits of by-employment; and they were not greatly affected by parliamentary enclosure. For one reason or another Cumberland, Westmorland, county Durham, Lancashire, Cheshire, Kent, Shropshire, Monmouthshire, Devon, and Cornwall, had less than 2 per cent of common arable field enclosed by legislation.⁶² Under the circumstances late decline was not surprising. As long ago as 1909 Johnson recognized that 'the small owner has survived where the circumstances were favourable'. He named Lincolnshire (the Isle of Axholme), Norfolk, Kent, Essex, Cumberland, Westmorland, the Vale of Evesham Gloucestershire, and Worcestershire, the New Forest Hampshire, and Devonshire, as the survival areas.⁶³ He might also have added Wales. The predominance of small farms in pastoral Wales may be thought to render illustrations drawn from that country of dubious value, yet several examples demonstrate a similar pattern to that found in north-west England. According to Howell 'the lesser gentry and occupying owners were by no means a disappearing class in eighteenth century Pembrokeshire'. Neither were they on the decline in

Merioneth or Glamorgan.⁶⁴ Nonetheless it would be misleading to omit evidence which does not fully accord with this picture, and it must be pointed out that Hoskins found a process of decline among the Devon small owners between 1650 and 1800 similar to that in the corn counties.⁶⁵

Generally, historians have failed to give full weight to these regional disparities, largely because they have concentrated on areas of England where conditions were most likely to favour decline. Gray looked specifically at Oxfordshire (the county with the highest proportion of common arable parliamentary enclosure), and Davies at midland counties. Admittedly Davies also used evidence from Cheshire, which he claimed gave similar results, but a recent study of the county has revealed disparities between the highland and lowland areas.⁶⁶ Chambers based his argument on the evidence of Nottinghamshire, Hunt on Leicestershire, and Turner on Buckinghamshire. Nonetheless a few historians have recognized the importance of regional characteristics. Mingay has hinted in that direction: 'present evidence suggests that on the heavy clays of the Midlands the small farmers were particularly vulnerable, their costs of cultivation and of transport made high by the nature of the soil, which also had the effect of restricting the possibilities of intensifying and diversifying the output'.⁶⁷ Local studies add considerable weight to Mingay's tentative suggestion. Spufford found a striking

⁶¹ B A Holderness, '"Open" and "Close" Parishes in England in the Eighteenth and Nineteenth Centuries', *Ag Hist Rev*, XX, 2, 1972, pp 126-39.

⁶² Turner, *op cit*, pp 180-1.

⁶³ Johnson, *op cit*, p 149.

⁶⁴ D W Howell, 'The Landed Gentry in Pembrokeshire in the 18th Century', Univ Wales, MA thesis, 1965, p 23; P R Roberts, 'The Landed Gentry in Merioneth, c.1660-1832', Univ Wales MA thesis, 1963; Joanna Martin, 'The Landed Estate in Glamorgan, 1660-1760', Univ Cambridge PhD thesis, 1978; Small owners did not decline in sixteenth- and seventeenth-century Myddle, also a pastoral area; see David Hey, *Myddle under the Tudors and Stuarts*, Leicester, 1974. Other examples are given by Joan Thirsk, 'The Disappearance of the English Peasantry'.

⁶⁵ W G Hoskins, 'The Ownership and Occupation of the Land in Devonshire, 1650-1800', Univ London PhD thesis, 1938, pp 79ff.

⁶⁶ Davies, *loc cit*, p 110. C Stella Davies, *The Agricultural History of Cheshire 1750-1850*, Chetham Soc, Manchester, 1960, pp 25, 27, 30-1.

⁶⁷ J D Chambers and G E Mingay, *The Agricultural Revolution 1750-1880*, London, 1966, p 41; Mingay, *Enclosure and the Small Farmer*, p 30.

example in Cambridgeshire, where the small owner in the fenland village of Willingham continued to make a living, and was able to resist the incursions of large farms, whereas at Chippenham (corn-sheep) holdings of 15 to 40 or 45 acres disappeared in the period 1560-1636. Thus the small owner survived in one village, but disappeared early in the seventeenth century in the other. In the eighteenth century Wiltshire small owners declined rapidly in the chalk areas (corn-sheep), but they continued to dominate the cheese areas, which concentrated on dairy farming. Similarly in Lincolnshire small owners survived, and indeed still survive on the fens and marsh lands, while they disappeared on the wolds, heath and cliff, much of which was enclosed by legislation.⁶⁸ Taken together with the Cumbrian phe-

nomenon of large farms existing alongside the small holdings of customary tenants, this evidence reveals the importance of making local distinctions. Furthermore, such regional disparities remain apparent in the twentieth century. By the middle of the last century large farms (defined by then as over 500 acres) were found mainly in the south Midlands, East Anglia and the southern counties, while small farms (100-150 acres or less) predominated in the north-west, the north Midlands, Wales, the south-west, and the Lincolnshire fenlands. This cannot be explained entirely by the seventeenth- and eighteenth-century economic difficulties, or by parliamentary enclosure, although regional differences in the latter movement may help to account for the situation of large farms. The pattern of larger farms in the eastern and southern arable areas, and smaller in the pastoral lands, remains largely unchanged in the mid-twentieth century.⁶⁹ It suggests a complicated and diverse picture of small owner decline stretching from the sixteenth century and not finally complete today.

⁶⁸Margaret Spufford, 'Peasant Inheritance Customs and Land Distribution in Cambridgeshire from the sixteenth to the eighteenth centuries', in J Goody, J Thirsk and E P Thompson, eds, *Family and Inheritance*, Cambridge, 1976, pp 160-1. The theme is developed in her book *Contrasting Communities*, Cambridge, 1974. E Kerridge, 'Agriculture, 1500-1793', V C H Wiltshire, IV, pp 49-50, 59-60; D B Grigg, 'Small and Large Farms in England and Wales', *Geography*, XLVIII, 1963, p 270; Joan Thirsk, *English Peasant Farming*, 1957, p 2; W O Massingberd's review of Johnson, op cit, in *Lincolnshire Notes and Queries*, XI, 1910-11, pp 26-32.

⁶⁹Grigg, loc cit, pp 268-79.

NOTES ON CONTRIBUTORS

DR J V BECKETT, Lecturer in History in the University of Nottingham, is currently preparing a study of English landowners since the seventeenth century, and also has ongoing research interests in the history of English local taxation and the regional history of the East Midlands.

BRENDA BUCHANAN is a Bath-based historian with a special interest in the financing of economic development in the eighteenth and early nineteenth centuries. She has undertaken research on regional aspects of this subject at the University of Bristol, and is currently pursuing this study at the University of London.

MARK CLEARY, Lecturer in Geography at the University of Exeter, has research interests in the history of agricultural unionism in France since the end of the nineteenth century, and in the nature of peasant protest in twentieth-century Europe.

DR GEORGE FUSSELL is a past President of the British Agricultural History Society and doyen of agricultural historians. He has published well over 500 contributions to the subject, and now past 90 he still maintains his lifelong interest, producing yet further important articles and reviews.

The Financing of Parliamentary Waste Land Enclosure: Some Evidence from North Somerset, 1770-1830¹

By BJ BUCHANAN

I
HISTORICAL studies of enclosure, the process by which the system of cultivation was transformed from the traditional and corporate method of farming in common to the modern and individualistic one of farming in severalty, have tended to focus upon the arable open fields rather than upon the commons and waste lands.² Indeed, the changes in farming organization outside open-field England have been most informatively explored in recent years by those approaching the subject as geographers, although attention has then necessarily been concentrated on the physical rather than the economic aspects of change over time.³ There is therefore a need for the subject of the waste lands to be reclaimed by historians, to ensure that the generalizations which are made about the financing of enclosures are not unduly weighted by the research bias towards the open fields.

This paper is concerned with the subject of waste-land enclosure costs. It will be

demonstrated that, contrary to the assumption amongst modern agricultural historians that land sales were of little significance as a way of financing enclosures until the nineteenth century, in North Somerset at least the method was well established by the 1770's. Ample evidence of this claim can be extracted from the enclosure awards which reveal details of both the financial and economic costs imposed by this method. The paper examines, first, the financing of the North Somerset enclosures, and second, the relationship between this evidence and that which is generally available on the subject. By emphasizing the economic aspects of the enclosure of the waste lands it is intended that this study should offer a corrective to both the traditional concern of historians with the arable open fields, and that of geographers with physical change.

II

Our initial concern is with the parliamentary enclosure of some 42,000 acres of waste land in the northern third of the historic county of Somerset, stretching from the southern slopes of the Mendip Hills northwards to the River Avon. Within this region there were three quite different farming areas. First there were the uplands, chiefly the carboniferous limestone Mendips and its outliers but including also the southerly extensions of the oolitic limestone Cotswolds, for example Dundry Hill south of Bristol. Second, there was the northern extension of the central Somerset

¹This article draws substantially on chapters 2 and 3 of B J Buchanan, 'Capital Formation in North Somerset, 1750-1830', thesis submitted to the University of Bristol, 1979. I would like to thank Professor W Ashworth and Dr C G A Clay for their helpful comments and advice. I am also grateful for the help received from Mr D M M Shorrocks of the Somerset Record Office (SRO) and Miss M E Williams of the Bristol Archive Office (BAO) and their colleagues.

²The case for the inclusion of the waste lands was made by E K C Gonner, *Common Land and Inclosure*, 1912, pp 192-4, but they have been excluded by more recent scholars, for example D N McCloskey, 'The Enclosure of Open Fields . . .', *Jnl Econ Hist*, XXXII, 1972, pp 15-35.

³For example Michael Williams, 'The Enclosure of Waste Land in Somerset, 1700-1900', *Trans Inst Brit Geogs*, LVII, 1972, pp 99-123, and John Chapman, 'Parliamentary Enclosure in the Uplands: the Case of the North York Moors', *Ag Hist Rev*, XXIV, 1976, pp 1-17.

Levels, low-lying and frequently flooded peat bogs and alluvial lands that skirted much of the coast from the mouths of the Rivers Axe to Avon and lay inland by the river valleys. Third, there was the rest of North Somerset, undulating lands between the northern slopes of the Mendips and the River Avon, made up largely of fertile red marls and sandstones. By the mid-eighteenth century this last area was already long enclosed and attuned to the market economy provided by the growing city and port of Bristol and the seasonal influx of visitors to Bath.⁴ It was therefore the under-utilized potential of the uplands and low moorlands, offering common sheep pasture and cattle grazing respectively, that excited interest in the second half of the eighteenth century.

The impulse to enclose, of course, was felt widely at this time, but whereas in many counties the wastes remained common grazing ground until pressures were further intensified in the French Wars,⁵ in North Somerset these were with some small exceptions the only areas still to be enclosed. It was to them, therefore, that attention was turned, first to the Mendips from the 1770's and then to the Levels, with interest in the latter increasing from the 1790's. The reasons for these differences in timing can be suggested only briefly, but it seems likely that the enclosure of the uplands began early in response to wheat prices which fluctuated upwards from the 1750's because these lighter soils could be more easily adapted to tillage than the richer but heavier soils of the wet grasslands. The incentive to enclose the latter came with the significant rise in meat prices during the war years.⁶ These stimulated a change in the organization of landholding in the Levels, if not in land use.

Evidence of the financing of North Somerset enclosures did not at first seem promising. Commissioners' accounts are rare, thus ruling out the possibility of a study of costs like that conducted so comprehensively for Warwickshire, and very little extra-award material has been found, unlike that discovered for Buckinghamshire.⁷ However, a close study of the surviving awards for the period housed in the Somerset Record Office has revealed that, in the absence of financial details of a more orthodox nature, there is nevertheless an alternative source of information which can be used to the same end. This indirect evidence is to be found amongst the profusion of organizational details in the awards, for these frequently record both the amount of land sold to finance the enclosure and the capital sum thus raised. It may seem a kind of legerdemain to transmute this land transaction into the total public cost of the enclosure in question, but the commissioners were instructed by the relevant Acts of Parliament to sell such proportion of the land to be enclosed as they judged would enable them to cover the cost of the undertaking, and the details in the awards indicate that they did so. Corroborative evidence comes from the only award accompanied by a set of commissioners' accounts, for the sum realized by the sale of land as recorded in the former tallies exactly with the total cost of the enclosure as accounted for in the latter.⁸

It is this practice of land sale which makes the North Somerset evidence on financing markedly different from that of other areas studied intensively, though this is probably only a reflection of the former concentration on the open-field counties

⁴W E Tate, *Somerset Enclosure Acts and Awards*, 1948, pp 13-25; Peter Mathias, *The First Industrial Nation*, 1969, pp 92-3.

⁵Michael Turner, *English Parliamentary Enclosure, its Historical Geography and Economic History*, Folkestone, 1980, pp 86-93.

⁶J D Chambers and G E Mingay, *The Agricultural Revolution 1750-1880*, 1966, pp 83, 110.

⁷J M Martin, 'The Cost of Parliamentary Enclosure in Warwickshire' in E L Jones (ed), *Agriculture and Economic Growth in England, 1650-1815*, 1967, pp 128-51. M E Turner, 'Some Social and Economic Considerations of Parliamentary Enclosure in Buckinghamshire, 1738-1865', PhD thesis, University of Sheffield, 1973, and 'The Cost of Parliamentary Enclosure in Buckinghamshire', *Ag Hist Rev*, XXI, 1973, pp 35-46.

⁸SRO, Shipham and Winscombe Enclosure Award, Q/RDe 13, 1797-99.

already observed. Indeed, the method was frequently remarked upon by earlier writers who had a wide if generalized familiarity with enclosure practices,⁹ although it has been questioned on the basis of more recent scholarship. Thus M E Turner has written that the belief that enclosures were ever widely financed by land sales '... was an erroneous view but one which has been repeated often. It was only during the nineteenth century that land deductions and sales became prevalent. Formerly it was strictly applied to certain charity lands and then only in specific cases.'¹⁰ However, of the 41 parliamentary enclosures in North Somerset between 1770 and 1830 for which awards survive, 37 were financed by the sale of land and only four by the levying of a rate. This difference would be of a positive but limited interest were it not for the possibly different effect of each method on enclosure costs. It has hitherto been assumed that the costs of waste land enclosure were high because of the physical problems associated with the difficult terrain, but a consideration of the practice of raising capital sums by land sale does prompt the suggestion that procedural or administrative factors in these areas may have been as important as the topographical ones.

In North Somerset the land was sold at public auction after due notice in the parish church and in local newspapers. The auctions took place after the commissioners had had time to perambulate the land, assessing its quality and situation on the advice of a surveyor, and they were held at some convenient inn. Meanwhile, a mortgage was arranged, thus allowing work to begin.¹¹ Decisions about the amount to be

auctioned were matters for fine judgement, complicated by two sets of problems.

First, the commissioners had to estimate the internal costs, and here there was an element of uncertainty because of the need for construction works such as drainage channels. However, unexpected and escalating costs could be met by further land sales, of which there is evidence in both the awards and the limited supplementary evidence.¹² As an insurance against such delays the experienced commissioners may have over-estimated the initial acreage to be sold, especially as the legal clause directing the expenditure of any surplus monies on lasting improvements relieved them of the task of dividing this amongst the proprietors. Second, the commissioners had to assess the external factors affecting the value of land, and again they sometimes misjudged the situation, the unexpectedly high prices realized at some auctions providing them with more abundant funds than anticipated. When this happened at the Weston-super-Mare enclosure the proprietors requested that the surplus be spent on further improvements to walls, banks and roads.¹³

The possible significance of these administrative factors will now be seen. Balanced as they were on the twin uncertainties of internal costs and external values, land sales could tend to result in larger sums of capital being raised with greater ease and, therefore, lead to more costly enclosures, than the method of financing by the imposition of a rate, often grudgingly paid under threat of distraint, which could therefore tend to result in cheaper enclosures.

commons to be enclosed was executed to the Rev Henry Harris and £800 was '... paid into the hands of Mr Robert Wright [a commissioner] who is hereby appointed Treasurer'.

¹²For example, SRO, DD/FS, Box 67, FL 'Bleadon Inclosure 1788'. Two sales were held in 1788, but when in June 1789 it was found '... necessary to raise more money for finishing the several works made and to be made in the Inclosure...', a third auction was ordered.

¹³SRO, DD/BK, Correspondence and Papers; Weston-super-Mare Public Ref Lib, LOO/53, S/W17/43, 'Commissioner's Proceedings', 'Commissioner's Accounts' and Sales Bills.

⁹Lord Ernle, *English Farming Past and Present*, 6th edn, 1961, p 251; Gonner, *op cit*, p 90; W H R Curtler, *The Enclosure and Redistribution of our Land*, Oxford, 1920, p 166.

¹⁰Turner, thesis, p 326.

¹¹For example, SRO, Wookey Enclosure Award Q/RDe 134, 1782-86 and SRO, DD/S/CX, 'Proceedings of the Commissioners' 1782-87. In September 1782 a mortgage of the moors and

Evidence on the financing of enclosures in this region has been assembled in Table 1, where columns I to IV display information established from the awards. Although of interest because of their bearing on costs, additional details relating for example to the allotments made are omitted on this occasion because attention is here directed to the acreage sold (column III) and the capital sum thus raised (column IV). The figures in column IV are taken in this study to constitute the total public costs of the enclosures listed. Historic prices are given throughout.

The contents of the last three columns of Table 1 are derived from the information in the first four. Financial costs per acre are shown in column V. The three enclosures of the 1770's for which figures are available support the suggestion that the levying of a rate tended to keep down costs (Doulting and Stoke St Michael, 1775-76, 23.0s per acre) whilst land sales led to higher costs (Compton Bishop, 1777-79, 61.5s per acre, and Brislington, 1778-80, 58.5s per acre), for each case involved the physical problems associated with the waste lands, although these varied for individual enclosures, as did other factors such as acreage. In the only other rate-financed enclosure for which costs are available (Portishead and Weston-in-Gordano, 1807-09), severe administrative problems arose from the need to sort out two inter-mixed parishes, and it may have been this complication which over-ruled the contrast with contemporary cases financed by land sale.

Although land sales meant that proprietors had to meet no direct financial obligations, they did have to face a very real cost in terms of the reduction in the amount of land allotted, and the loss of the future stream of income they would otherwise have received.¹⁴ I propose to call this

the economic cost and to measure it by the percentage of land sold. It is shown in column VII. These financial and economic costs rarely bore with equal severity on the same parish. For example, at Locking (1800-01) the financial cost averaged nearly £10 per acre but the real economic cost in terms of land and income foregone was less than 20 per cent, whilst at Shiphham and Winscombe (1797-99) the financial cost was less than £3 per acre but each proprietor lost over half the land to which he was otherwise entitled.

An intriguing aspect of this relationship was the selling price of land, for this influenced both the financial and economic costs. It is shown in column VI. Although a high selling price did not necessarily lead to a reduction in the financial cost of enclosure, it was generally associated with a reduction in the economic cost. This inverse relationship between the auction price of land and the percentage sold is shown in Table 2 where the enclosures for which this evidence is available are ranked according to the former. With some exceptions (such as early enclosures where favourable circumstances led to a high selling price for land), there was a decline over time in the economic cost, which may indicate that in general land values rose faster than the financial costs of enclosure. However, it must be observed that there was here no simple chronological escalation of financial costs in the manner which is usually accounted for elsewhere in terms of war-time inflation and the leaving till last of the more complicated and so more costly cases.

The complexity of the chronological problem may be summarized thus: 2 enclosures with Acts as widely separate as 1775 and 1795 cost below £2 per acre; 8 with Acts from 1778 to 1801 came in the £2 to £3 bracket; 9 with Acts between 1777 and 1809 cost between £3 and £4; 12 with Acts spreading from 1788 to the end of the period cost more than £4 per acre. Some

¹⁴BAO, 01097(5)g, letter of December 1809. The Portbury commoners were aware of this cost and complained that the commissioners had sold 102 acres of the best land, '... leaving only 156 to be divided'.

clues to these widespread variations over time are provided by the various factors which exerted a probable influence on the selling price of land and so indirectly on financial costs. As shown in Table 2 these influences ranged from the possibility of extra-agricultural use (eg as building land) to the changing value of land in relation to its own agricultural possibilities and the prices of arable and animal husbandry products mentioned earlier.

The summarizing of these factors promotes the suggestion that there was at this time not one but several land markets, each with its prevailing values. The force of this point is somewhat obscured in Table 2 because the evidence there relates to the average price at which land was sold, that being for many enclosures the best information which is available. However, the position is clarified in Table 3, which is based on the further analysis of those awards which are sufficiently detailed to allow selling prices to be attributed to different types of land, and those in which only one category of land was offered for sale in any case. This evidence shows that within each land market selling prices moved in distinct but separate patterns, so that whilst, for example, the price of the low moorland acres rose steadily until the early 1790's, when a plateau was reached which continued until the last of the lowlands for which this information is available had been enclosed, the much more modest selling prices of the Mendip uplands moved generally though erratically upwards until the second half of the 1790's, before falling away thereafter.

Conclusions on such a subject are hazardous, but within the context of enclosures made costly by the land sale method of raising capital and by the technical and topographical problems of the waste lands, it was perhaps the operation of these separate land markets which stimulated the puzzling variations in financial costs per acre. Lastly, it may have been because

some of the earlier enclosures for these reasons were made more costly than would otherwise have been the case, and some of the later ones rendered less costly, that the general inflation associated with the years of the French Revolutionary and Napoleonic Wars did not in this region (from the evidence based on the awards) result in the large increases in costs relative to earlier years that were more generally the case.

The pursuit of this line of enquiry invests the purchasers of land with a special importance, for their judgement was crucial to the determination of prices within the different markets. From the awards it is possible to make three generalizations. Firstly, most of the land auctioned was bought by those already living in the region, though not necessarily involved in the enclosure in question, nor even living in the same parish. The exceptions to this generalization were mostly from Bristol,¹⁵ but on the whole there was a lack of involvement by its citizens which is surprising in view of the speculations in canal and house building.¹⁶ However, it is probably an indication that the Bristol merchant interest in North Somerset of the earlier decades of the eighteenth century had been exhausted.¹⁷

Secondly, a classification of the purchasers of land has shown that although the gentry predominated there was considerable buying by yeomen farmers, as well as by other country dwellers who had a less personal link with farming.¹⁸ These included local clergymen, doctors, lawyers, and rural tradesmen, who all bought land at the sales. Thirdly, the purchasers occasionally included the enclosure commissioners themselves, for until the turn of the century (41 Geo III c 101) an involvement

¹⁵For example, SRO, Clevedon Enclosure Award, Q/RDe 78, 1799-1801. Land was bought for £918 by a Bristol butcher, with a grazier as trustee.

¹⁶J R Ward, *The Finance of Canal Building in Eighteenth-Century England*, Oxford, 1974, pp 138-40, and 'Speculative Building at Bristol and Clifton, 1783-1793', *Bus Hist*, xx, 1978, pp 3-18.

¹⁷Buchanan, thesis, pp 258-366.

¹⁸*Ibid*, pp 53-7, Table 2(s).

with the executive aspects of the undertaking was not a barrier to the purchase of land, even within the enclosure concerned.¹⁹

The rural base of most purchasers, their status as gentry and farmers, and in several cases their experience of the business of enclosure, together with the general absence of urban speculators, all imply a considerable degree of familiarity with the practice of farming in the region. It is likely, therefore, that the prospective buyers made their bids in the light of an awareness of the agricultural possibilities of the land on offer. This suggests that, despite a current value influenced by the pressing demand for food and the high commodity prices and therefore high rents resulting from this, the land was marginal only in the sense of being the next unit available for cultivation should the cost of bringing it into production be balanced by the revenue it could then produce, and not in the sense of being inherently poor agricultural land. Indeed, in the case of Mendip it was possibly an earlier pre-emption for the production of wool for the local textile industry and for the mining of lead and calamine, all in decline by the mid-eighteenth century, which had restricted it to an agricultural use below its potential.²⁰

III

The enclosure costs for North Somerset will now be compared with the general evidence compiled by B A Holderness, about which this author has concluded that although his tables are provisional '... it is unlikely that further research will modify the trends they reveal very significantly'.²¹

¹⁹See the following awards: SRO, West Hartytree, Q/RDe 18, 1787-90; Wells (East Horrington and Chilcot), Q/RDe 73, 1792-94; Wells (St Cuthbert), Q/RDe 81, 1793-95; Shipham and Winscombe, Q/RDe 13, 1797-99.

²⁰J D Hanwell, 'Agriculture on Mendip' in W G Hall (ed), *Man and the Mendips*, Mendip Society, Frome, 1971, pp 78-9.

²¹B A Holderness, 'Capital Formation in Agriculture' in J P P Higgins and Sidney Pollard (eds), *Aspects of Capital Investment in Great Britain 1750-1850*, 1971, pp 162-70.

It may be seen from Table 4 that average costs in North Somerset, as anticipated, were considerably greater than for the rate-financed parliamentary enclosures (column 1). They were however unexpectedly less than for the waste lands in general (column 4), especially in the significant period 1793 to 1815, and when grouped by the year of the act. It is the reason for this anomaly which will now be pursued, but first a comment must be made about the difference between the North Somerset waste land costs and those for the open fields.

This observation is that the contrast in costs persisted despite certain heavy expenditures which were more likely to be encountered in the open fields than the waste lands. Firstly, the fencing of the tithe owner's allotment could be a very important item in open-field enclosures, amounting in some cases to one-third of the total, but this charge is almost entirely absent from the North Somerset awards.²² Secondly, a cost of open-field enclosure which has no parallel in the North Somerset wastes was the spending on grass seeds, which could be more than 20 per cent of public costs in the earlier decades, though falling away thereafter.²³ Thirdly, expenditure on road making in open-field enclosure was considerable from the 1790's and could amount to between 20 and 30 per cent of costs.²⁴ Again, there is little comparable evidence in the North Somerset awards, some of which even declared no public roads to be necessary (contrary to the general assumption that they would be most needed where waste land was reclaimed). This was the case with seven enclosure awards between 1791 and 1809 when such costs were particularly high in open-field enclosure.²⁵

²²Martin, op cit, pp 148-51, Appendix B.

²³Turner, thesis, pp 322-4, Appendix IX(b).

²⁴Ibid, pp 322-4. Also, Martin, op cit, p 137.

²⁵Public roads were declared unnecessary at Westbury, 1788-91; Bleadon 1788-91; Banwell, 1795-97; Locking, 1800-01; Tick-enham, 1801-03; Worle, 1801-03; Portishead and Weston-in-Gordano, 1807-09.

This difficulty in classifying costs suggests that the polarization between open field and waste land is misleading, and that enclosures may be more instructively viewed as a re-organization of land holding within a wide range of topographical, economic and social conditions. Such an approach may provide a clue to the anomaly mentioned previously, namely the unexpected difference between the average costs of North Somerset enclosures and those of the waste lands in general. If it is assumed that all waste land costs were likely to be similar for topographical and administrative reasons, then this is difficult to explain. But if these were part of a range of conditions and expenditures then it may be that the general waste land costs were heavier than those for North Somerset because of some special difference of circumstance. In particular it may be that whilst the former were increased by the inclusion of reclamation schemes, such as that undertaken in the East, West and Wildmore Fens by John Rennie in the early nineteenth century at a cost of £10 per acre,²⁶ the latter were primarily for the purpose of enclosure, the task of major reclamation being undertaken separately.

This suggestion will now be tested in two stages. First, the expenditure on capital improvements in North Somerset enclosures (ie surveying and construction costs) will be compared with the general evidence, in order to check that the lower overall costs of the former did not mask an investment in capital works as great as that in the waste lands generally. Second, the three comprehensive drainage schemes in the region will be examined to determine their relation to the enclosure schemes upon which they followed.

The rarity of commissioners' accounts in North Somerset means that there is unfortunately little information on the first

matter, but what is available on the distribution of costs within enclosure has been analysed, and that which relates to capital improvements has been set out in Table 5. It must be admitted that this evidence is both too limited (the three enclosures) and too general (that based on John Billingsley), but it does relate to the critical years 1793 to 1815, and it has a certain internal consistency. Thus, in both the upland enclosure at Shipham and Winscombe and the lowland one at Congresbury the construction costs represent about 44 per cent of the public expenditure, and although the proportion was more nearly 59 per cent at Weston-super-Mare, where investment in terms of shillings per acre was also higher, it may be recalled that extra works were undertaken here because unexpectedly high capital sums had been raised. In the general evidence from Billingsley the improvement costs were of a similar order to those in the three specific cases in financial terms, though representing a higher proportion of total costs. But this may simply indicate that, with his first-hand experience of enclosures, Billingsley was able to prevent the escape of certain improvement costs to other categories.²⁷ Unfortunately, in the Shipham and Winscombe enclosure the surveyor's attendance at meetings, though not his field work, was irretrievably accounted for amongst the administrative costs.

A comparison of this evidence with that compiled by Holderness²⁸ suggests that in waste land enclosures generally the investment in capital improvements was twice as great as in North Somerset. Between 1793 and 1801 when the improvement costs for the waste lands in general averaged 66.0s

²⁷John Billingsley (1747-1811) served as commissioner in the following enclosures: West Harptree, 1787-90; Rode and Wingfield, 1790-92; Rodney Stoke, 1791-93; Croscombe and Dinder, 1792-93; Wells (East Horrington and Chilcot), 1792-94; Wells (St Cuthbert), 1793-95; East Harptree, 1794-96; Cheddar, 1795-1801; Cheddar, Priddy and Rodney Stoke, 1811 until his death. He was the author of the *General View of the Agriculture of the County of Somerset, drawn up in the year 1795*, Bath, 1797.

²⁸Holderness, op cit, p 169, Table 3B.

²⁶Holderness, op cit, pp 167-8.

per acre, the North Somerset evidence suggests costs of about 33.0s per acre. For the years 1802 to 1815 the figures were respectively 100.1s per acre and 57.3s per acre, and for the succeeding years they were 76.0s per acre and 32.0s per acre. Despite the very considerable limitations of this comparative evidence, the gap between this investment in the waste lands in general and those in North Somerset is here shown to be so great as to make it unlikely that the large-scale reclamations of the former could have been undertaken within the much lower improvement costs of the latter.

Before considering the role of the drainage schemes it is of interest to refer briefly to those construction works which were undertaken within enclosures. In Table 5 these are arranged under such heads as roads, fences and drainage ditches, but this neat classification belies the great range of provisions revealed by the descriptive evidence in the awards. The setting out of public roads was always a first task, but as already noted these were sometimes found unnecessary. The provision of fencing also varied greatly. Its importance was lessened in the lowlands because the essential drainage ditches could there function as boundaries, thus constituting a reduction in cost. And just as most drainage works were financed from within the undertakings, so until the turn of the century and particularly within the Mendip enclosures it was not uncommon for the fencing of individual allotments to be covered by public costs, though not the subdivisions within farms. After the turn of the century this was less likely, but the outer boundaries (subject to negotiation with adjoining parishes), the public roads, and the land to be sold, were all still likely to be fenced. The allotments relating to special rights, for example those made frequently in lieu of the lord's right of soil, or occasionally in respect of common rights attached to glebe land, or very rarely in lieu of tithes, were

all awarded after the sale of land. Even when fenced as a public cost, therefore, they still bore the economic cost of enclosure. But the fact that in all cases these varied and important construction works were limited to the individual enclosures, suggests that the primary purpose was land reorganization and not comprehensive reclamation. The function of the large drainage undertakings in the lowlands must therefore now be considered.

The general powers of the Commissions of Sewers to seek the control of floodwaters in the Levels were long established.²⁹ But from the later decades of the eighteenth century they were being urged by the agricultural interest to embark upon ambitious new schemes for whole catchment areas, and this they were unwilling to do. Their caution arose essentially from the fear of jeopardizing their personal finances by initiating works towards which those benefiting had no obligations established by traditions of tenure.³⁰ The proprietors were therefore obliged to obtain parliamentary authorization for the improvements they sought, a step which led to the appointment of a body of commissioners with the power to execute certain capital works, financed by the levying of a rate. As with the drainage aspects of enclosure, the administration of the completed works reverted to the Commissioners of Sewers.

The financial aspects of the drainage schemes have been analysed in detail elsewhere, and for present purposes it is only possible to state briefly that in the Axe Drainage (1802-10) the average cost was 80.5s per acre, of which capital improve-

²⁹Sidney and Beatrice Webb, *Statutory Authorities for Special Purposes*, 1922, reprinted 1963, pp 39-45. Their warning that 'this is the most obscure corner in the whole of English Local Government' is still relevant despite the work of Michael Williams, *The Draining of the Somerset Levels*, Cambridge, 1970, for in this the focus of attention is the landscape and not administration and finance.

³⁰SRO, D/RA SW11, 'Proceedings of the Commissioners of Sewers in the business of the Congresbury Drainage' 1811-12, and the 'Case for the opinion of Consr Moore' 30 June 1812, and 18 November 1812.

ments accounted for 65.4s per acre, whilst in the Weston Drainage (1810-15) the figures were respectively 113.3s and 61.5s per acre. In the Congresbury Drainage (1819-26) they were 93.7s and 69.9s per acre.³¹

It cannot be claimed that the same lowland acres were necessarily subject to both parliamentary enclosure and parliamentary drainage schemes, but the overlap was sufficiently great to bestow significance upon an exercise whereby the costs sustained in those parishes which were previously the subject of an enclosure award are related to the costs of the subsequent drainage scheme. For example, in the six parishes enclosed between 1777 and 1801 which later formed part of the Axe Drainage scheme of 1802-10, the combined cost of enclosure (averaging 69.7s per acre) and drainage (80.5s per acre) was 150.2s per acre. This figure for the separate but related processes is comparable to that for the waste lands in general where such works were undertaken jointly at an average cost of 110.0s per acre in the years 1793 to 1801, and 150.0s per acre in the years 1802 to 1815 (Table 4).

The complementary relationship between lowland enclosure and drainage in North Somerset can be examined in greater detail and in terms of capital improvements in one instance, and then only because of the rare survival of the extra-award documents of the Congresbury, Week St Lawrence and Puxton enclosure of 1809-16 which preceded the Congresbury Drainage scheme of 1819-26. The overlap applied to about one-third of the acreage drained; to the personnel, for Young Sturge acted as commissioner for the enclo-

sure and surveyor to both undertakings;³² and to the basic engineering concept, for when John Rennie drew up his drainage plans the proposed new cut from the sea back into the moors linked up with channels dug during the recently completed enclosure.³³

This close constructional relationship was reflected in the financial aspects of the schemes, which provide specific evidence of the general case being made. Thus, in terms of the investment in capital improvements the Congresbury enclosure (32.0s per acre, Table 5) and drainage (69.9s per acre, see above) costs at 101.9s per acre were very close to the putative capital costs of 100.1s per acre for the years 1802-15 for the waste lands generally (see above) though greater than the 76.0s per acre for the years from 1816 when the large reclamations may have been completed.

The conclusion to this analysis is that whilst the average costs of North Somerset enclosures were significantly greater than those for open-field enclosure, they were less than for the waste lands generally because the extensive drainage provisions which commonly featured as an enclosure cost in the latter were to be found in North Somerset as a post-enclosure cost. The Congresbury Enclosure and Drainage schemes offer the most detailed evidence of the close relationship between the two.

Viewed in this perspective the North Somerset enclosures were an organizational preliminary to that further investment in drainage, soil reclamation and farm creation which was essential if the upland and lowland wastes were to be converted into productive farms. But contemporary evidence on rents suggests that because this subsequent and cumulative investment was needed to consolidate the initial capital input through enclosure, the

³¹Buchanan, thesis, pp 98-132 and Tables 3(3) to 3(10). Capital improvement costs here cover those expenditures crucial to the new works: surveying, construction, land purchases, and damages. The last two items were relatively unimportant in the Axe and Congresbury schemes (averaging 9.0s per acre), but more important in the Weston scheme (40.0s per acre) because of the complication presented by a tide mill.

³²Young Sturge was a commissioner in the following enclosures: Portishead, 1807-09; Congresbury, 1809-16; Wraxall, 1813-19; Long Ashton, 1813-20; Uphill, 1813-18; and in the Weston Drainage scheme, 1810-15.

³³SRO, Congresbury Drainage Award, Q/RDe 139.

rates of return in the waste lands were not as high as in the already established agricultural areas where they were less likely to be eroded by such heavy post-enclosure costs.

IV

It is possible the close attention to documentary evidence may place this study amongst those referred to pejoratively as 'antiquarian' and 'source-orientated', but these regional roots provide an informed base from which to probe the accepted notions on the subject, identifying certain problems which the generalizations obscure.

First, there is the question of the way in which enclosures were financed. It has been demonstrated that, contrary to the current view, capital sums were raised by land sale from at least the 1770's. The lack of evidence for the use of this method in other waste land regions may indicate only that this information has not previously been thought relevant, rather than that it does not exist. For example, although land sales were authorized in each of the enclosure acts of the eighteenth century described in detail by the Hammonds in *The Village Labourer*,³⁴ no subsequent study has remarked on this fact, even though that for Holland Fen (1767, 22,000 acres) was in an area which has since inspired much research.³⁵ But the question of how widely this method was employed is an important one, both in the context of the individual enclosures, for it freed the commissioners from the constraints of rate finance, and in that of the subject as a whole, for about one-third of all enclosure was of the com-

mons and wastes.³⁶ Clearly more evidence is needed, and if a distinction could be made between land sales as a valid alternative to rate finance, and land deductions as only one of several ways of meeting the rate, then the subject could be placed upon a much firmer analytical foundation.³⁷

Second, there is the matter of the influences upon the cost of enclosure. These are usually discussed in terms of the physical problems and the claims to land, but the recognition of the importance of certain administrative procedures and of the land sales to which they gave rise, places the subject in a new perspective by shifting the focus from the endogenously determined demand for capital to the question of its supply. Not only did this resort to the land market affect the magnitude of the capital sum available, it also introduced an element of personal judgement into the business of enclosure (whether through the commissioners' decisions about the amount of land to be sold or the purchasers' decisions about the price of land to be bought) and so allowed a note of unpredictability to enter into the financial and economic costs and their variations over time.

Third, there is the problem of classification. Ambiguities arise at several levels, and in so far as such evidence is used as a basis for generalization or aggregation they are a serious matter. It is probable that much construction work financed by surplus funds within the North Somerset enclosures, or as part of large-scale reclamation within the waste lands generally, should be more properly regarded as an investment consequent upon enclosure than a cost of enclosure itself. Such distinctions are difficult to establish within the

³⁴J L and Barbara Hammond, *The Village Labourer 1760-1832*, 1920, pp 309-30. John Chapman has recently drawn attention to the re-distributive aspect of land sales, 'Land purchasers at enclosure: evidence from West Sussex', *Local Historien*, XII, 1977, pp 337-41, but without reference to the capital sums raised or the dates of the enclosures.

³⁵H C Darby, *The Draining of the Fens*, Cambridge, 1940, revised 1969; D B Grigg, *The Agricultural Revolution in South Lincolnshire*, Cambridge, 1966; Dorothy Summers, *The Great Level*, Newton Abbot, 1976.

³⁶Turner, op cit, 1980, pp 69-71, Table 11. 27.7 per cent of all parliamentary enclosure before 1793 was of commons and waste and 31.3 per cent of all that between 1793 and 1815.

³⁷Since completing this article I have been able to read Dr Turner's forthcoming study, 'Cost, Finance and Parliamentary Enclosure', to be published in the *Econ Hist Rev*. I am most grateful to him for this opportunity.

overall sum recorded as that raised to finance the undertaking, but the identification of this problem, and of others raised here, shows the importance of regional evidence. It is thus as both a significant part of the general subject in its

own right and as a corrective to the traditional emphasis on the open fields, that waste land enclosures in their financial aspects constitute an important but neglected area of research.

TABLE I
Parliamentary Enclosure in North Somerset, 1770-1830

SRO Q/RDe	Parish	I Act Award	II Acreage enclosed	Common Land			III Land Sold Acres	IV Cost of Enclosure £	V Financial Cost per Acre shillings	VI Selling Price of Land Per Acre shillings	VII Economic Cost. Per- centage Sold
				Lowland Waste	Upland Waste	Open Fields					
—	Cranmore	1770	(400) ¹		Mendip						
62	Ubley	1771-73	902		Mendip		164				18.2
58	Doultling and Stoke St Michael	1775-76	1,200		Mendip		Rate Levied	1,382	23.0		
117	Compton Bishop	1777-79	275	Moors			28	845	61.5	603.6	10.2
130	Brislington	1778-80	400		Brislington Common		20	1,170	58.5	1,170.0	5.0
27	Shepton Mallet	1782-85	724		Mendip		Rate Levied				
134	Wookey	1782-86	1,193	Moors	Mendip		411	4,338	72.7	211.1	34.5
132	Blagdon	1784-87	967		Mendip		283	2,061	42.6	145.7	29.3
18	West Harptree	1787-90	857		Mendip		438	2,703	63.1	123.4	51.1
22	Bleadon	1788-91	1,194	Moors	Mendip		243	5,955	99.7	490.1	20.4
71	Compton Martin	1788-91	[664]		Mendip		372	[2,232]	67.2	120.0	56.0
21	Westbury	1788-91	841	Moors	Mendip		166	3,091	73.5	372.4	19.7
55	Rode and Wingfield	1790-92	489		Rode Common		53				10.8
74	Rodney Stoke	1791-93	754	Moors			56 Rate Levied	2,788	73.9	995.7	7.4
72	Croscombe and Dinder	1792-93	603		Mendip						
73	Wells (East Horrington and Chilcot)	1792-94	701		Mendip		126	[1,449]	41.3	230.0	18.0
47	Kewstoke	1793-94	160	Moors			16	903	112.9	1,128.8	10.0
81	Wells (Out Parish of St Cuthbert)	1793-95	4,343	Moors	Mendip		773	11,319	52.1	292.9	17.8
65	East Harptree	1794-96	1,033		Mendip		255	2,580	49.9	202.3	24.7
41	Pilton and North Wotton	1794-96	961	Moors 882 acres	Mendip 79 acres		62	3,199 ²	72.5	1,031.9	7.0
42	Banwell	1795-97	1,001	Moors	Mendip		138	4,060	81.1	588.4	13.8
38	Cheddar	1795-1801	(4,400)	Moors	Mendip		587	8,119	36.9	276.6	13.3

← 4,000 acres →

400
acres
Open
Fields

SRO
Q/RDe

23 C

13 S

76 I

78 C

70 I

46

53

6

60

133

123

124

135

33

119

24

129

4

88

113

Source:
Notes:

WASTE LAND ENCLOSURE

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TABLE I (continued)

SRO Q/RDe	Parish	Act — Award	I Acreage enclosed	II Common Land			III Land Sold Acres	IV Cost of Enclosure £	V Financial Cost per Acre shillings	VI Selling Price of Land Per Acre shillings	VII Economic Cost, Per- centage Sold
				Lowland Waste	Upland Waste	Open Fields					
23	Chewton	1797-1800	2,266		Mendip		345	5,567	49.1	322.7	15.2
13	Shipham and Winscombe	1797-99	1,072		Mendip		550	3,129	58.4	113.8	51.3
76	Portbury	1798-1806	962	Moors	Mendip Outlier		244	5,393	112.1	442.0	25.4
78	Clevedon	1799-1801	488	Moors	Mendip Outlier		52	1,762	72.2	677.7	10.7
70	Locking	1800-01	(161)	Moors			31	1,605	199.4	1,035.5	19.2
46	Tickenham	1801-03	561	Moors	Mendip Outlier		57	1,658	59.1	581.7	10.2
53	Worle	1801-03	211	Moors	Mendip		120	1,232	116.8	205.3	56.9
6	Backwell	1807-12	(885)		Mendip Outlier		277				31.3
60	Portishead and Weston- in-Gordano	1807-09	(800)	Moors	Mendip Outlier		Two Rates Levied	3,430	85.8		
133	Congresbury, Week St Lawrence and Puxton	1809 and 1814-16	(820)	Moors	Mendip Outlier	Open Fields	92	3,257	79.4	708.0	11.2
123	Weston- super-Marc	1810-15	993	437 acres Moors	417 acres Mendip	139 acres Open Fields	72	4,972	100.1	1,381.1	7.2
124	Wroughton and	1810-13	(3,650)	Moors	Mendip Outlier		210 + 345	555			15.2
135	Yatton and Kenn	1810-15									
33	Cheddar, Priddy and Rodney Stoke	1811 and 1816-21	(1,100)		Mendip		644	7,570	137.6	235.1	58.5
119	Long Ashton	1813-20	(690)		Mendip Outlier	Open Fields	65				9.4
24	Uphill	1813-18	388	Moors ← 348 acres →	Mendip	40 acres Open Fields	57				14.7
129	Wraxall, Nailsca and Flax Bourton	1813-19	(1,617)	Moors	Mendip Outlier	Open Fields	96	(21 acres sold for £1,279 = 1,218.1 per acre)			5.9
4	Berkley and Standerwick	1814-18	(300)		Commons	Open Fields	49	1,794	119.6	732.2	16.3
88	Portishead	1814-23	703		403 acres Mendip Outlier	300 acres Open Fields	41	2,150 ¹	106.7	1,048.8	10.2
113	Dundry	1815-19	(236)		Cotswold Outlier		46	[1,821]	154.3	791.7	19.5

Source: Enclosure awards as indicated.

Notes: 1 Parentheses indicate an estimated figure, usually derived from the Act of Parliament. Square brackets indicate a figure arrived at by calculation, usually from information within the award.

2 Costs do not refer to the upland acres, as the Mendip proprietors asked that they should pay their own charges.

3 Costs do not refer to the open fields, whose proprietors bore a separate charge. This discretionary power was authorized in four of the later acts covering both waste lands and open fields, but it appears to have been exercised only in this case.

TABLE 2
North Somerset Enclosures Ranked According to Average Selling Price of Land Per Acre

<i>Act</i>	<i>Parish</i>	<i>Average Selling Price Per Acre Shillings</i>	<i>Percentage of Land Sold</i>	<i>Cost of Enclosure Per Acre Shillings</i>	<i>Factors Influencing Price of Land</i>
1810	Weston-super-Mare	1,381.1	7.2	100.1	Extra- agricultural value
1813	Wraxall, Nailsea, etc	1,218.1	5.9	No Evidence	
1778	Brislington	1,170.0	5.0	58.5	
1793	Kewstoke	1,128.8	10.0	112.9	
1814	Portishead	1,048.8	10.2	106.7	Grazing land
1800	Locking	1,035.5	19.2	199.4	
1794	Pilton and North Wotton	1,031.9	7.0	72.5	
1791	Rodney Stoke	995.7	7.4	73.9	
1815	Dundry	791.7	19.5	154.3	Proximity to markets
1814	Berkley and Standerwick	732.2	16.3	119.6	
1809	Congresbury	708.0	11.2	79.4	
1799	Clevedon	677.7	10.7	72.2	
1777	Compton Bishop	603.6	10.2	61.5	Grazing land but with value lowered by lesser quality moorland (salt wharves) or inclusion of uplands
1795	Banwell	588.4	13.8	81.1	
1801	Tickenham	581.7	10.2	59.1	
1788	Bleadon	490.1	20.4	99.7	
1798	Portbury	442.0	25.4	112.1	
1788	Westbury	372.4	19.7	73.5	
1797	Chewton Mendip	322.7	15.2	49.1	(moors) (moors) Mendip Commons with values raised in two cases by inclusion of moorlands
1793	Wells	292.9	17.8	52.1	
1795	Cheddar	276.6	13.3	36.9	
1811	Cheddar	235.1	58.5	137.6	
1792	Wells	230.0	18.0	41.3	
1782	Wookey	211.1	34.5	72.7	
1801	Worle	205.3	56.9	116.8	
1794	East Harptree	202.3	24.7	49.9	
1784	Blagdon	145.7	29.3	42.6	
1787	West Harptree	123.4	51.1	63.1	
1788	Compton Martin	120.0	56.0	67.2	
1797	Shipham and Winscombe	113.8	51.3	58.4	

Source: See Table 1.

TABLE 3
Variations in Land Value Within North Somerset Enclosures

		<i>Selling Price in Shillings Per Acre</i>				
<i>Act</i>	<i>Parish</i>	<i>Moors</i>	<i>Mendips</i>	<i>Other Lowlands</i>	<i>Other Uplands</i>	<i>Non-agricultural Use</i>
1777	Compton Bishop	603.6				
1778	Brislington					1,170.0
1782	Wookey	671.6	89.2			
1784	Blagdon		145.7			
1787	West Harptree		123.4			
1788	Bleadon	807.8	266.0			
1788	Compton Martin		120.0			
1788	Westbury	904.9	197.8			
1791	Rodney Stoke	995.7				
1792	Wells		230.0			
1793	Kewstoke	1,128.8				
1793	Wells	1,240.0	225.3			
1794	East Harptree		202.3			
1794	Pilton and N Wotton	1,031.9				
1795	Banwell	1,075.0	366.7			
1795	Cheddar	1,129.8	129.2			
1797	Chewton Mendip		322.7			
1797	Shipham and Winscombe		113.8			
1798	Portbury			667.7	244.8	
1799	Clevedon			677.7		
1800	Locking	1,035.5				
1801	Tickenham			581.7		
1801	Worle		205.3			
1809	Congresbury	2,800.0			347.2	
1810	Weston-super-Mare	1,329.5				1,667.2
1811	Cheddar		235.1			
1813	Wraxall, Nailsea, etc					1,218.1
1814	Berkley and Standerwick				732.2	
1814	Portishead				765.9	3,624.6
1815	Dundry				791.7	

Source: From additional evidence in the enclosure awards this Table develops the findings of Table I, column VI.

TABLE 4
Average Cost per Acre of Parliamentary Enclosure (in shillings)

Period	1	2		3		4	Period
	Parliamentary Enclosure	Act	North Somerset Award	Act	North Somerset Award	Parliamentary Waste Land Enclosure	
1740-59	10.5 (30)						Before 1760
1760-69	12.7 (76)					40.0	
1770-79	19.3 (88)	47.7 (3)	42.2 (2)				
1780-89	19.2 (34)	69.8 (6)	57.9 (3)	61.5 (11)	62.4 (9)	65.0	1761-92
1790-99	31.0 (73)	67.7 (12)	70.5 (12)	82.5 (13)	75.0 (12)	110.0	1793-1801
1800-15	42.8 (17)	115.9 (10)	92.4 (9)	111.9 (7)	94.8 (5)	150.0	1802-15
1816-	67.3 (8)		119.5 (5)		119.5 (5)	120.0	1816-

Parentheses indicate number of awards consulted

Sources:

Cols 1 and 4 Holderness, op cit, pp 162-9. From the table on which col 1 is based administrative costs were excluded.
Cols 2 and 3 Table 1. In the absence of any general convention as to the grouping of enclosure costs by the year of the act (Turner, thesis, pp 286-7) or the award (Martin, op cit, pp 145-7), both are shown here. In col 2 this evidence is timed to fit with col 1. That in col 3 fits with col 4.

TABLE 5
Analysis of Capital Improvement Costs in North Somerset Enclosures

	Surveyor's Fees £	Roads £	Fences and Walls £	Drainage Ditches £	Gates and Bridges £	Total Cost of Construction £	Improvement Costs Per Acre Shillings
1 Mendip Enclosures mid-1790's	80	350	850		56	1,336	33.4
2 Lowland Enclosures mid-1790's	140	450		850	140	1,580	39.5
3 Shipham and Winscombe Enclosure 1797-99	106	46	1,262		Included in Roads	1,414	26.4
4 Weston-super-Mare Enclosure 1810-15	399	2,448 including sea wall				2,847	57.3
5 Congresbury, Week St Lawrence and Puxton Enclosure 1809-16	916	including road making costs of £102			398 Bridges	1,314	32.0

Sources: 1 and 2 Billingsley, op cit, pp 55-62.
3 SRO Q/RDe 13.
4 SRO Q/RDe 123; WSM Pub Ref Lib LOO/53, S/W17/43.
5 SRO Q/RDe 133; BAO 32395(21), 25642.

The Plough and the Cross: Peasant Unions in South-Western France

By M C CLEARY

RURAL society in late nineteenth- and early twentieth-century France was faced with the consequences of a fundamental shift in the demographic and economic balance of the nation. The dominant rural and agricultural civilization was giving way to one based on the factory and the town. Between 1882 and 1931 the proportion of the population earning its living from agriculture fell from 48 to 30 per cent.¹ Paris, accommodating some 2 per cent of the French populace in 1851, had by the end of the century increased this proportion to 10 per cent.² The implications of such a decline were to prove particularly disquieting for those who saw in the 'eternal order of the fields' the key to the social, moral and political stability of the nation.

Recent studies of peasant protest in nineteenth- and twentieth-century Europe have emphasized the important role of social groups external to the peasantry in the development of protest movements.³ Faced with the declining importance of rural society in the rapidly industrializing nation, it has been argued that it was largely those social groups whose power base lay in the countryside — the rural bourgeoisie, the *notables*, and the Church — who were the driving forces behind movements aimed at redressing the balance between town and country. In France, the agricultural union or *syndicat*, legalized at the end of the nineteenth century, was created with such objectives in mind. It is the intention of this paper to examine the early history of the agricultural

union in a rural *département* of south-western France, the Aveyron, and to seek to outline the importance of the Catholic Church in the development of that movement.

I

If the roots of co-operation and mutual aid in French agriculture stretch back well into the past, the legal institution of the agricultural union dates from only 1884, when the Chamber of Deputies approved the passage of a law permitting the formation of unions for the defence of industrial, commercial and agricultural interests.⁴ National patronage of agricultural unions was quickly taken up both by Republicans, anxious to win over the supposedly conservative peasantry to the Third Republic, and by *notables* of the right for whom the agricultural union was to unite landowner, peasant and labourer in order to stem the tide of socialism flowing from the towns, and preserve *la paix sociale* in the countryside. By the end of the nineteenth century some 500,000 peasants were enrolled in such unions, a membership which, just prior to the Great War increased to over 1,000,000.⁵

The activity of these unions was wide-ranging. According to one theorist, they were to be the 'co-ordinating body for all those institutions of mutual aid which are vital to the economic and social well being of the village community', a veritable school of moral and social education to

¹M Faure, *Les Paysans dans la Société Française*, Paris, 1956, p 40.

²G. Dupeux, *French Society 1789-1970*, 1976, p 4.

³P Barral, 'Les mouvements agrariens de l'ère industrielle', *Revue Historique*, 3, 1964, pp 299-330; 'Les Mouvements Paysans dans le monde contemporain', *Cahiers Internationaux d'Histoire Economique et Sociale*, Geneva, 1973.

⁴On the *syndicat* see: M Augé-Laribé, *Syndicats et Coopératives agricoles*, Paris, 1926; P Barral, *Les Agrariens Français de Méline à Pisani*, Paris, 1968; G Wright, *Rural Revolution in France*, Stanford, 1964.

⁵Faure, *op cit*, p 52.

help the peasant face up to the problems of his *milieu*. The provision of fertilizers and seeds, the pooling of resources to buy machinery, the diffusion of technical knowledge, and the creation of mutual insurance and credit groups were among the practical benefits of membership.⁶

The attitude of the Catholic Church in France to these unions would seem to be of particular interest. The Catholic Church was an especially powerful force in many parts of the French countryside, and in a society increasingly demoralized by the rural exodus, its role was to become increasingly important.⁷ One might anticipate two attitudes on the part of the Church hierarchy. On the one hand they may have been opposed to any involvement in temporal organizations, such as agricultural unions, because of their desire to avoid overt political involvement at a particularly delicate time for the Church.⁸ On the other hand, the encyclical of Pope Leo XIII (*Rerum Novarum* 1891), had encouraged the development of 'social Catholicism' in France. The creation of agricultural unions might be considered an important aspect of the role of the Church in the countryside.⁹ Studies from Ireland, Belgium and Germany would seem to lend support to the second hypothesis.¹⁰

The desire for a more 'active' and 'social' form of Catholicism, better adapted to a particular *milieu*, was to prove a powerful influence in the early history of the agricultural union, not only within the *département* of Aveyron but in many other parts of France as well.¹¹ It was a desire that embraced not only many priests and Bishops

but also many Catholic intellectuals (for example de Mun, le Play, de la Tour du Pin) and *notables*. The merging of these diverse interests, the spiritual, intellectual and political, was to prove particularly fertile in the expansion of peasant unionism.

II

'Can there be', asked one traveller at the beginning of the nineteenth century, 'a wilder and rougher country than this Aveyron?'¹² The *département* is a large one, the fifth largest in France, and covers some 4000 square miles. It is located on the south-western flanks of the *Massif Central* approximately midway between Montpellier and Clermont-Ferrand. The *département* is mountainous in character. The hills of the *Aubrac* in the north form a high pasture area, between 3000 and 4000 feet in height. To the south and east of Rodez, the capital of the *département*, is the *Ségala*, a plateau country of between 1000 and 1500 feet, while to the south of the *département*, the limestone plateaux of the *Grandes Causses*, deeply cut by the Tarn and Jonte rivers, dominate the landscape.¹³

At the end of the nineteenth century the economy of the region was overwhelmingly agricultural; 65 per cent of the active population depended on agriculture for a living in 1896.¹⁴ According to the Agricultural Census of 1892, farms under 10 hectares accounted for over 70 per cent of all farms in the *département*.¹⁵ However, large farms were far from absent. In the same year, 44 per cent of the land surface was held in units of over 40 hectares, so

⁶Cte de Rocquigny, *Les syndicats agricoles et leur oeuvre*, Paris, 1900.

⁷H Rollet, *L'Action Sociale des Catholiques en France, 1871-1901*, Paris, 1958, pp 145-90.

⁸J-M Mayeur, *La Séparation de l'Eglise et de l'Etat*, Paris, 1966.

⁹B Hervieu and J Vial, 'L'Eglise Catholique et les paysans', in M Gervais, C Servolin, Y Tavernier, *L'Univers Politique des Paysans dans la France contemporaine*, Paris, 1972.

¹⁰Barral, 1964, op cit. L Kennedy, 'The early response of the Irish Catholic clergy to the co-operative movement', *Irish Historical Studies*, March 1978, pp 55-74.

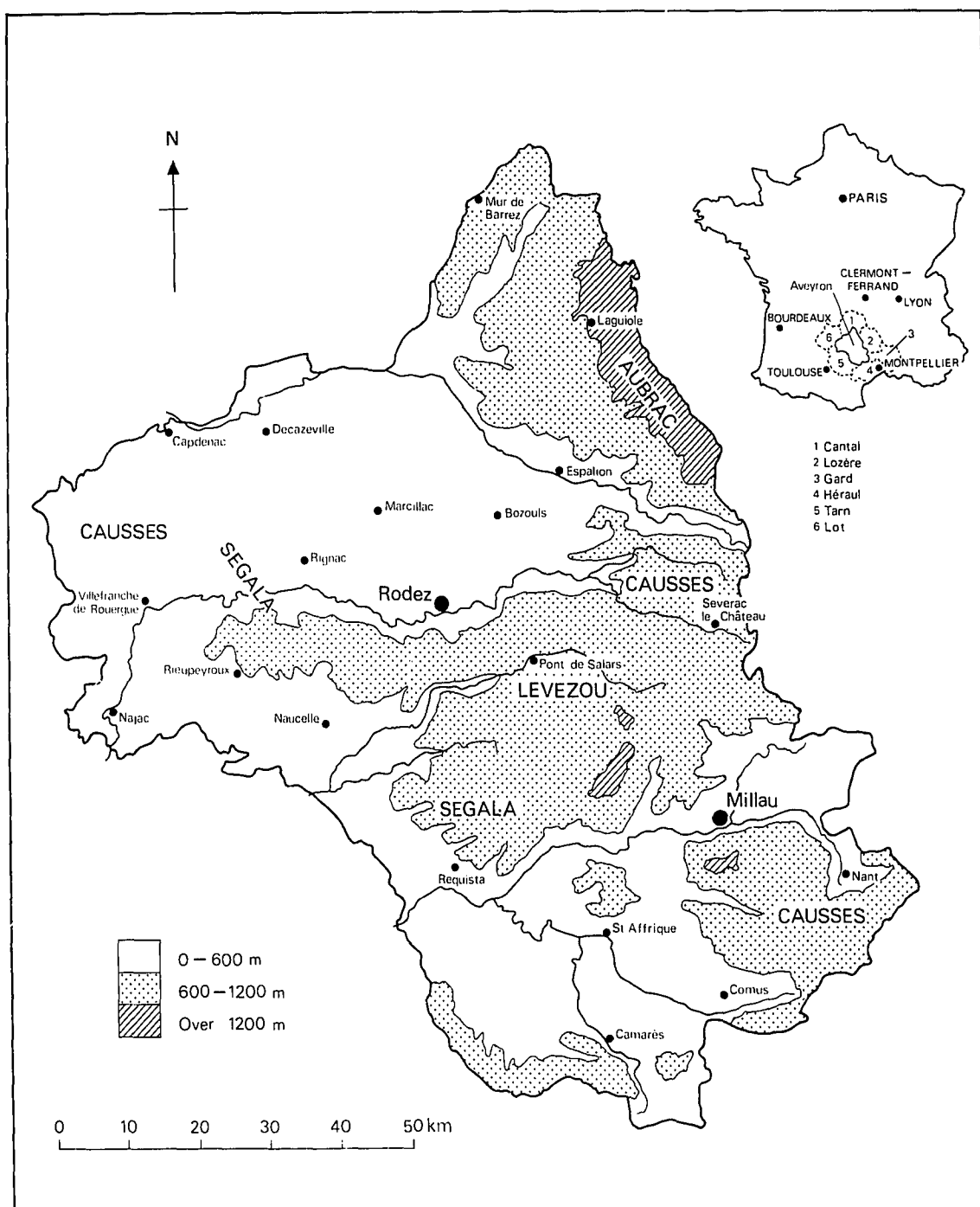
¹¹Association Catholique de la Jeunesse Française, *Le Problème de la Terre*, Paris, 1908.

¹²A Montéil, *Description de département de l'Aveyron*, Rodez, 1802.

¹³Centre National de la Recherche Scientifique, *L'Aubrac — Etude ethnologique, linguistique, agronomique, et économique d'un établissement humain*, Paris, 1971-79; A Ginisty, *L'Aveyron — le sol, les travaux, les hommes*, Rodez, 1957; P Marres, *Les Grandes Causses*, Tours, 1935; A Meynier, *Ségala, Lézou, Châtagneraie*, Aurillac, 1931.

¹⁴*Aveyron d'Aujourd'hui*, Rodez, 1964, p 12.

¹⁵Ministère de l'Agriculture, *Statistique Agricole de la France; résultats généraux de l'enquête décennale de 1892*, Paris, 1897.



The Département of the Aveyron

that land distribution, while permitting a large proportion of the agricultural population to live a relatively independent existence, was nonetheless far from equal.¹⁶

The character of farming reflected, first and foremost, natural constraints. Polyculture generally predominated in this difficult region, with agricultural specialization slow to develop given the difficulty of transporting and marketing produce.¹⁷ Only on the *Grandes Causses* were large, capitalistic farms in evidence, producing wheat in large quantities and employing a considerable labouring population.¹⁸ On the *Aubrac* some pastoral specialization was evident at the end of the nineteenth century although polyculture, especially on the smaller farms, remained important until well into the 1950s.¹⁹ The *Ségala*, the most densely populated of the natural regions of Aveyron at the turn of the century, was characterized by chronic overcrowding, excessive farm fragmentation, and a heavy reliance on rye and chestnuts for its food supply. The transformation of the agriculture of the region through the widespread application of chalk and fertilizers was as yet in its infancy.²⁰

The population of the *département* reached its highest point in 1882. From a total of 415,000 in that year, it declined to 389,000 at the turn of the century, and to 360,000 in 1911.²¹ Between those two dates then, the *département* was to lose some 2000 to 3000 persons every year, mostly to Paris and the towns of the Midi, but also to the United States, North Africa and Argentina.²² This alarming population decline took place despite a natural increase in the population of

some 15,000, for birth-rates in the *département* remained high.

A conservative social structure centred on the family was combined with a strong Catholic tradition and a politically conservative ethos. Socialist ideas were given short shrift in this 'Vendée of the South'.²³ Except for a few Protestant communities in the south of the *département* bordering the Cevennes, Catholicism dominated throughout. A diocesan survey carried out in 1892, indicated that 90 per cent of all women and 73 per cent of all men made their Easter devotions. The *département* was a veritable pepperpot of priests and nuns. In 1902 there was an average of 145 ordinations per 10,000 people in Aveyron, compared with a national average of only 52. A deep respect for Church and clergy was reinforced by a dense network of priests, *écoles libres* and Christian lay fraternities.²⁴

III

In Aveyron the rural exodus was soon to alarm Church leaders and laymen alike. The local Society of Agriculture was quick to point out the growing costs of hired labour, local politicians were alarmed by the steady desertion of villages, and Church leaders highlighted the moral and social dangers faced by migrants to the towns. It was to be through the collaboration of Church leaders and the conservative notables of the *département* that the first major efforts at unionization of the peasantry were to be made.²⁵ It was through a Catholic fraternity, the *Association Catholi-*

¹⁶Ibid.

¹⁷R Bêteille, *La vie quotidienne en Rouergue avant 1914*, Paris, 1973.

¹⁸Marres, op cit, pp 230-70.

¹⁹R Bousquet, *Enquête Socio-Economique — L'Aubrac*, Rodez, 1962.

²⁰Meynier, op cit; H Enjalbert, *A travers le Ségala*, Rodez, 1950.

²¹R Bêteille, *Manuel des Statistiques Aveyronnaises*, Rodez, 1970.

²²R Bêteille, *Les Aveyronnais*, Poitiers 1974; R. Bêteille, *Rouergue — Terre d'Exode*, Paris, 1978.

²³H Assier, R Boyer, A Bulcholz, *L'implantation du socialisme et du communisme dans l'Aveyron 1870-1958*, Mémoire de l'Université de Toulouse-le-Mirail, 1973.

²⁴G Cholvy, 'Le Catholicisme en Rouergue au XIX et XXème siècles: première approche', *Etudes sur le Rouergue*, Rodez, 1974; G Cholvy, 'Cetle Bretagne du Midi' in H Enjalbert, *Histoire du Rouergue*, Toulouse, 1979, pp 393-424.

²⁵The major sources for the history of social catholicism and the union movement in Aveyron are: *Archives of the Bishopric of Rodez*. (AB): Fonds Bonnafé; Fonds Touzery; Diocesan Visits (1908-1914). *Departmental Archives*. (AD): 7 m 37-45 (Mutuelles Agricoles); 35 M 3, 1-6 (Syndicats Agricoles).

que de la Jeunesse Française, that these efforts were co-ordinated.

The *Association Catholique de la Jeunesse Française* (ACJF) was founded by Albert de Mun and Robert de Roquefeuil in 1886 under the inspiration of social Catholic doctrines. A national movement, designed to encourage the application of Christian principles to the concrete problems of everyday life, it had achieved a certain amount of success in the industrial milieu of northern France through the creation of *Cercles Ouvriers*.²⁶ From the early years of the twentieth century, the ACJF became increasingly concerned at the amplification of the rural exodus in France.²⁷ Its argument that the agricultural union might prove especially effective in curbing the exodus was to be particularly well received in Aveyron.

Early in 1904, the Diocesan authorities in Aveyron created the *Conférence St Louis*, a body of priests and lay activists, with the intention of publicizing the work of the ACJF.²⁸ Its first President was a local lawyer, Henri Bonnafé, and he together with his collaborators, Philip de las Cases, son of the conservative Senator of the neighbouring *département* of Lozère, and Maurice Anglade, an Inspector for the *Société Générale*, gave a series of conferences throughout the *département* in 1904 aimed at encouraging the creation of local ACJF groups. These groups, the speakers argued, were to provide a base for the creation of agricultural unions and mutual aid groups among the peasantry. The origins of the union movement in Aveyron are to be found in these Catholic lay fraternities.²⁹

The Catholic Congress, held at Rodez in 1904, and attended by over 2000 delegates from all over France, included a series of discussions on the means of founding

unions, agricultural co-operatives and mutual insurance groups. The union and co-operative of Laguiole in the *Aubrac* was cited as an important example of the practical value of the 'social Catholic' ethos in improving the lot of the peasantry and thereby slowing down the rural exodus. Founded under the influence of a local priest, Canon Touzery, and a local *notable*, the Count of Armagnac, its co-operative caves for stocking cheese, the provision of technical and marketing advice, and the annual competitions, the report to the Congress concluded, had rendered sterling service to the cause of peasant and Church alike. The notes that the Prefect of the *département*, a staunch Republican and anti-clerical, collected on the Congress displayed his disquiet at the growing interest of the Church in agricultural unions. A Police Report sent to him a little later alluded to the dangers of the 'Christian socialism' that the clergy and certain *notables* were spreading through the nascent union movement.³⁰

By the start of 1906, a new impetus was given to Church involvement in lay organizations such as agricultural unions. The separation of Church and State, and the inventories which had to be made of all Church property in France were fiercely resented in the most Catholic parts of France. In many parishes in Aveyron the churches were barricaded and, in at least one case, the local teacher and the Justice of the Peace were beaten off with bricks and cow dung when they tried to carry out the inventory. The Justice of the Peace was fortunate enough to escape. The hapless teacher was not so lucky. He was unceremoniously debagged, kicked, and paraded round the village on the back of a donkey.³¹ The arrival in the same year of a new Bishop at Rodez, Mgr Ligonnes, gave

²⁶Rollet. *op cit*.

²⁷Association Catholique. *op cit*.

²⁸A B Fonds Bonnafé.

²⁹*Ibid*.

³⁰A D 35 M 3. (Rapport sur le Syndicat Agricole et Fromager de Laguiole); A D 3 V 10. (Congrès Catholique, 1904).

³¹P L'Habitant, *La Séparation de l'Eglise et de l'Etat dans l'Aveyron*, Diplôme d'Etudes Supérieures, Paris, 1971-72.

further strength to the policy of active involvement in lay organizations. Appointed directly by the Pope, he was to prove implacably hostile to the Republic and its policy of laicization, and was an enthusiastic supporter of the ACJF.³²

It is from the beginning of 1907 that the Church Archives and the Catholic Press begin to reveal the activity of the ACJF in agricultural circles. At St Côme, for example, the press revealed that 'the local group is working tirelessly to found an agricultural union and further anticipates the creation of a number of mutual aid groups', and at Luc in the summer of 1907, the local ACJF was to devote four discussions to the question of founding a mutual insurance group for the peasants of the commune. In February of the next year their efforts bore fruit and a fire-insurance association on mutualist lines was formed. Four of the seven administrators were activists in the ACJF. In February 1908 an agricultural union was formed at St Jean d'Elnous, thanks to the efforts of the local Catholic youth, and at later meetings we are told 'the practical question of founding a mutual insurance association was discussed'.³³ At la Salvétat-Péyrales the ACJF in co-operation with the local *curé* convened a meeting of local landowners to discuss the creation of an agricultural union and a number of mutual aid groups. When a union was created in March 1908 the *curé* was chosen as President. At Bournazel in June 1908, at Naucelle in the same month, and at Rignac a month later, a similar pattern recurred. The local Catholic youth and the *curé* would provide the initial interest in founding a union and, on its creation, help with administrative matters. It was a pattern repeated in many other parishes in the *département*.³⁴

These efforts at establishing a network of

'social Catholic' unions were not confined to the local level; from an early stage they were co-ordinated from the Bishopric at Rodez. The creation of a Committee of Social Works in July 1907, 'to be concerned specifically with the creation and functioning of agricultural unions, mutual aid groups of all kinds and rural credit banks', ensured that a close watch was kept on the growth of the union movement, and that no opportunities were missed to extend the influence of the Church in the agricultural milieu.³⁵

It was to be through the work of an activist in social Catholic circles, Maurice Anglade, that the major agricultural union in the *Massif Central* in the first three decades of the twentieth century, the *Union des Associations Agricoles du Plateau Central* was created. This organization, founded in 1909, was to be a major force in the agricultural life of Aveyron for almost 30 years. It was also to make its influence felt in a number of neighbouring *départements*, most notably, Lozère, Cantal and the Puy de Dôme.³⁶ Its ideology drew heavily upon the conservative ethos of social Catholicism. One of the collaborators of the movement in its early years argued that the *Plateau Central* was a 'grouping of the greatest value in ensuring the religious and social fidelity of our peasants, in helping the peasant to improve his lot through his own efforts, and in keeping them cleansed from the corrupting filth and decay of socialism'. 'Under the benevolent eye of the Lord', the report continued, 'let us continue to create these agricultural associations . . . our future and the future of the *pays* depends on them.'³⁷

Anglade, the founder of the *Plateau Central*, and a native of Aveyron, had spent much of his early years working in Paris. There, as President of a society of influen-

³²P Nègre, *Charles de Ligonnes*, Paray le Menial, nd.

³³Bulletin de l'Union Catholique Aveyronnais, 2, 1908; Circulaire Trimestrielle de l'Union de la Jeunesse Catholique de l'Aveyron, 2, 1908.

³⁴Ibid, 6, 1908; ibid, 8, 1908.

³⁵AB Fonds Bonnafé.

³⁶AD 35 M 3 (3). P Jouve. *Un mouvement professionnel agricole: le 'Plateau Central'*, Aurillac, 1921. *Livre d'Or de la Société d'Encouragement aux Institutions Rurales du Plateau Central*, Rodez, 1914.

³⁷Bulletin de l'Union Catholique Aveyronnaise, 35, 1910.

tial natives of the *département*, he had become alarmed at the rapidity of the exodus and its serious effects in the countryside. Returning from Paris, he quickly seized on the agricultural union as a means of improving conditions in the country and of persuading the peasantry that migration was not the panacea for all ills. With the help of influential members of the clergy, and of the Society of which he had been President, the *Solidarité Aveyronnaise*,³⁸ Anglade embarked on the creation of a network of local unions to foster peasant solidarity.

He had founded an agricultural union in his native Gabriac in 1905, and this union was to prove the model type for the *département*. The union was the centre for a whole range of associations. Mutual Insurance groups against fire, accident and animal sickness were set up, as well as a co-operative to supply seeds and fertilizers at special prices to union members.³⁹ As the *Cultivateur du Sud-Centre* noted, 'the union at Gabriac, founded by M. Anglade, has proved eminently successful and has served as a splendid example to many other communal unions'.⁴⁰ In 1909, Anglade, with the support of the administrators of the ACJF created the first of the *Plateau Central* groups, an association uniting all the mutual insurance groups in the *département*. The *Plateau Central* soon expanded. By 1914 the organization embraced local agricultural unions, co-operatives and various insurance groups. At that date the *Plateau Central* had over 10,000 members in its various constituent groups in Aveyron as well as a considerable membership in Lozère, Cantal, and the Puy de Dôme. It was in the words of one admirer, 'the nerve-centre for a whole range of groups of benefit to the peasants

of the region . . . a marvellous school of social and moral education'.⁴¹

As noted above, ardent Catholics were at the heart of the *Plateau Central*. Not only was the organization fully supported by the Catholic lay organizations of the *département*, but noted social Catholics formed the bulk of the organization's administrators. An examination of the founder members list of the organization in 1914 reveals the importance of the link. Out of 88 members 24 were members of the departmental *Union de la Défense Catholique*, a body of influential Catholics in Paris and Aveyron. A further 5 were priests. The aristocratic flavour of the organization is revealed in the titles of some of its administrators. They included Maurice Fenaille at the Château of Montrozier, Charles de Rodat at the Château of Druelle, and Philip de las Cases at the Château of Labaume in Lozère. Lawyers, doctors and politicians filled most of the remaining places. Such a membership structure seems to bear out the importance of the link between the Catholic Church and conservative *notables* in the formulation of reactions to the rural exodus.⁴²

At the local level, many unions and mutual aid groups were dominated by single large landowners, often a lawyer, merchant or notable, with the rest of the membership consisting of much smaller landowners. The mutual insurance grouping at Ste Radegonde, near Rodez, was dominated by two merchants, Lucien Mignonac and Marcellin Blancher, both holding over 150 hectares of land and both activists in social Catholic circles. The union at Salmiech, in the heart of the *Ségala* was run by a staunch Catholic, Emile Vernhes, with the help of a local teacher at the *école libre*. Both held over 60 hectares of prime land. Three other members of the union held between 20 and 30 hectares, the remaining members holding

³⁸Béteille, 1974, op cit, pp 505-29.

³⁹*La Fête Paysanne: les Associations Agricoles de Gabriac, Rodez, 1931. Le Syndicat Agricole de Gabriac et ses filiales, Rodez, 1941.*

⁴⁰*Cultivateur du Sud-Centre*, Feb 1908.

⁴¹*Livre d'Or*, op cit.

⁴²*Ibid*; AB Fonds Bonnafé.

less than 5 hectares. A similar pattern occurred in at least 20 other groups.⁴³

IV

It is perhaps not surprising, in view of the tension between Church and State in France at this period, that the administration should seek to set up rival organizations, both locally and on a departmental scale, to prevent the Church exercising a monopoly in the creation and control of agricultural unions and their associated mutual aid groups. When Anglade created the *Plateau Central* in October 1909 his initiative was quickly copied by the Republicans of the *département* who set up a State funded organization, the *Régional-Aveyron* to compete for members.⁴⁴ The *Régional-Aveyron* received the full support of the Prefect and the Professor of Agriculture in the *département*. The guiding lights of the movement were two staunch Republicans, M. Andrieu and Dr Cannac.

In the years leading up to the Great War the *Plateau Central* and the *Régional-Aveyron* were engaged in a continuous battle for members. By and large the former was the more successful, chiefly because it could rely on the support of the local clergy, extending in one case to a homily preached on behalf of the unions of the *Plateau Central*. Certainly in terms of agricultural unions the *Plateau Central* was far more successful. The Republicans were unable to create a regional grouping to rival the *Plateau Central* until well into the 1930s.⁴⁵

In terms of mutual aid groups, the position was less one-sided. In 1914, out of the 307 *communes* in the *département*, 120 had groups affiliated to the *Plateau Central*, 69 had groups affiliated to the *Régional-Aveyron*, and 23 had duplicate groups affiliated to both. According to a Prefectural Report in the same year, there were

3741 members in the mutual-aid groups of the *Plateau Central*, and 1185 in the *Régional-Aveyron*.⁴⁶

It is evident from the Prefectural correspondence on the functioning of the various unions and mutual aid groups of the *département*, that the role of the clergy was a crucial one. Perhaps one should be wary of attaching too much credence to the comments of local administrators, but the sheer volume of references to the clergy is impressive. At Cruejols the Prefect was informed that 'the members of the clergy play an active role in the functioning of the mutual aid group and play an important part in their reunions'.⁴⁷ The group at St Sever, we are informed, was founded on the initiative of the local priest in conjunction with the 'reactionary mayor' of the *commune*.⁴⁸ At Rignac the President of the local union, Emile Acquier, came in for special attention from the Prefect. As well as being an activist in the ACJF, and founding a number of mutual aid groups in his *commune*, he had given a series of conferences which had led to the creation of 13 unions and mutual aid groups in other *communes*. For the Prefect, worse was to come. The Good Shepherd, the Catholic Press keenly reported, was intent on further enlarging his flock, for he was continuing a campaign to 'found other groups — unions, credit banks and co-operatives — which are more than ever necessary in the countryside'.⁴⁹

The political beliefs of the Prefect naturally led him to make favourable comments on those groups free from clerical influence. A large grant from the Ministry of Agriculture was recommended for the mutual aid group at Colombies, on the grounds that the 'members of the clergy play no part in the running of the society'.⁵⁰ An application for aid from a similar group

⁴³AD 7 m 37-41. (Mutuelles Agricoles); *Matrices Cadastreales*.

⁴⁴*Cultivateur du Sud-Centre*, 4, 1909.

⁴⁵*Annuaire de l'Aveyron*, Rodez, 1914; AD 7 M 43.

⁴⁶AD 7 M 43.

⁴⁷AD 7 M 44.

⁴⁸AD 7 M 44.

⁴⁹*Le Jeune Rouergue*, Feb 1913.

⁵⁰AD 7 M 45.

at Balaguier was likewise welcomed for 'it is administered by a council composed almost entirely of fervent Republicans'.⁵¹

V

It is apparent then, that the Catholic Church in Aveyron gave wholehearted support to the creation and development of agricultural unions. The ideology and policy of many of these unions, underpinned as they were by the conservative *notables* of the Catholic right, responded to a desire on the part of the Church to promote an active, practical form of Christianity at a time when their established position appeared threatened. The mixed, patronal agricultural union was an ideal means of fostering the spirit of co-operation in the village, and of preserving the integrity of *la profession agricole* and the continuity of *la paix sociale*.

A number of general conclusions may be advanced from this albeit limited study. Firstly, it would seem that the development of the agricultural union in Aveyron, in particular their socially conservative ethos, supports the general conclusions of Barral.⁵² Protest movements, he has argued, whether agricultural unions in France, the *Boerenbond* in Belgium, or the *Bund der Landwirte* in Germany, sought above all else to preserve the unity of the peasantry, however mythical that unity in fact was. The notion of class struggle was anathema to the bourgeois and *notable* leaders of these movements. The unity of all country-dwellers in the face of the supposed threat from the towns had to be preserved at all costs.

A second characteristic of rural protest at this period, according to Barral, was a general opposition to the spread of capitalism into the countryside. In particular the rural *élite* feared the open class struggle which might result from a polarization of

capital and labour in the countryside. The stress on co-operation and mutual aid in the ideology of the union movement can be seen as an attempt to ensure the survival of an artisanal, rather than openly capitalistic, form of agriculture. Such an objective was of particular appeal in a *département* such as Aveyron where a large population depended on essentially small-scale agriculture. Conflicts in Languedoc, among the woodcutters of Central France, and among the sharecroppers of the Allier provided the rural *élite* in Aveyron with timely reminders of the growing threat of open class relations emerging in the countryside.⁵³ The patronal agricultural *syndicat* sought to eliminate this threat.

Thirdly, in common with the conclusions of Barral, most of the unions were led not by the peasants themselves but by their representatives. Doctors, lawyers and large landowners provided the inspiration for a majority of agricultural unions in France at this time. A similar pattern, argues Barral, characterized rural protest movements in other countries in Western Europe at this time.

Such characteristics help to explain some of the contradictions of the agricultural union movement in France, contradictions which have lingered obstinately through to the present day. It is apparent, for example, that in their obsessive fear of the rural exodus, both the Church and the *notables* were ignoring the beneficial effects which the exodus could have in overpopulated regions. Furthermore, the concern of the leaders of the union movements to stress the unity of the countryside should not blind one to an awareness of the existence of class conflict in all rural communities. As Gratton and Judt have stressed, authentic movements of peasants and agricultural labourers in France did develop, based not on the supposed unity of the rural world, but on the class differences within the community.⁵⁴

⁵¹AD 7 M 44.

⁵²Barral, 1964, op. cit.

⁵³P Gratton. *Les luttes de classes dans les campagnes 1870-1921*, Paris, 1971; P Gratton. *Les Paysans contre l'agrarisme*, Paris, 1973.

⁵⁴Ibid. T Judt. *Socialism in Provence 1871-1914*, Cambridge, 1979.

An examination of the agricultural union in Aveyron it is hoped, has provided some insight into the way in which different social groups in the rural community interacted in the creation of a movement characterized then, as now, with the desire for

survival in the modern world. Such an examination can be no more than a preliminary to a wider evaluation of the nature of peasant protest in the recent history of Western Europe.

Notes and Comments

ANNUAL CONFERENCE AND AGM, 1982

The thirty-first Conference of the Society was held at David Russell Hall, the University of St Andrews, 5-7 April 1982. Papers were presented by Mr Bruce Walker, 'The Development of the Agricultural Buildings of the Tay Estuary'; Dr Michael L Ryder, 'Medieval Sheep and Wool Types'; Dr Ian Whyte, 'Geographical and Social Mobility among Tenant Farmers in early modern Scotland'; Ms Sarah Banks, 'A mid-Victorian scandal: the Open and Close Parish System in nineteenth-century England'; Ms Lisa Bud-Frierman, 'The Agricultural Statistics Movement in mid-nineteenth-century Scotland'; and Dr Ronald Weir, 'Distilling and Agriculture, 1870-1939'. An excursion into north Fife was led by Dr Graeme Whittington.

The thirty-first AGM was held on 6 April 1982. Professor Chaloner, Professor Mingay, Dr Collins, and Dr Chartres were re-elected as the officers of the Society. Four vacancies on the Executive Committee were filled by the re-election of Mr Byford, Professor Minchinton, Dr Thirsk, and Dr Turner.

In presenting the report of the Executive Committee the Chairman, Professor Thompson, commented on the satisfactory level of membership, which had fallen only marginally during the year. The year had seen the publication of a bibliography, compiled by Dr Raine Morgan, *Dissertations on British Agrarian History*, as a joint venture with the Institute of Agricultural History, the University of Reading. Sales had been excellent, with over 300 copies sold in the first year. The Winter Conference had again been successful, having been held again in conjunction with the Institute of British Geographers on the theme 'Government Policy and Agriculture'. The Society was again indebted to Drs Baker and Phillips for all their work in making the conference a success. A student occupation had forced a change of venue for the Winter Conference, and after the success of meeting in the Institute of Historical Research, the

next Winter Conference, on Saturday 4 December 1982, would also be held there. The Spring Conference was to be held at Christ Church College, Canterbury, 11-13 April 1983.

The Treasurer reported on another satisfactory year in which, despite a slight fall in membership, from 828 to 823, balances of funds remained substantial, and were earning a significant income for the Society. The Society had now the chance to consider new publication ventures, and a project was now under consideration. He reported that ill-health sadly meant that Mr Harold Casey, for seventeen years the Society's Honorary Auditor, would no longer be able to act for the Society, and that in recognition of his services the Executive Committee had agreed to make a small presentation. The Treasurer was authorized to appoint a new auditor. Thanks were also expressed to Miss Gillian Beazley for all her work in handling membership enquiries and subscriptions.

The Editor's report drew attention to an exceptional rate of refusal for articles submitted during the year. This had considerably reduced the backlog of articles awaiting publication, and, after the appearance of Part II of volume 30, no article older than March 1981 will be left. Book reviews were up to date, and were being published within six months of receipt. The current issue of the *Review* contained an innovation in the form of Professor Allan Bogue's article 'Farming in the North American Grasslands', the first of a series of survey articles on farming in the USA. It was hoped to include a supplement to Dr Morgan's bibliography of theses in Part II of volume 30. The Chairman drew particular attention to the need for an increased flow of articles of good quality, and urged members to write for a good harvest in the following year.

Members expressed thanks to the staff of the Hall, and particularly to Dr Christopher Schmitz for all his local work to make the conference a success.

(continued on p 149)

The Tariff Commission Report

By G E FUSSELL

TOWARDS the end of the nineteenth century there were difficulties, hardships and suffering, because the progress of mechanical invention had already begun to reduce the world to a neighbourhood. The difficulties of the rural population, from landlord to labourer, became so marked that there was a certain political sympathy with Joseph Chamberlain's policy of a tariff on imported goods, grain, cattle, and other products. Therefore the 1908 Tariff Commission was appointed, and this dealt with many things besides the rural interests, but volume 3 of its report was the *Report of the Agricultural Committee*, of which the second edition appeared in 1906.

The members of the Agricultural Committee of the Tariff Commission of 1905 were either landowners or men who farmed large acreages. This particular report was intended to support a specific political purpose, and was undeniably a rather prejudiced production: nevertheless, allowing for prejudice, the descriptions by farmers, mostly on the larger scale, of their proceedings are a more or less complete description of the situation of the 'agricultural interest' at that time.

The *Report* opened with a discourse on agricultural policy before 1846! It barely accepted the situation that the world was in a state of change from the social organization where the landowners, the farmers, and the labourers were the supports of society to a time when the hammering of the machine was to rule the world. As Gilbert Cannan put it in 1917, 'The state is to be a machine. It used to be a kind of dining and debating society, but this is at an end. The factory system is to be extended to the general affairs of the community. The code for national affairs is no longer the country estate, the manor, but the factory'.

When this Commission sat and cogitated so profoundly the technique of farming had not changed very materially from earlier times. The system of landholding, the coming of the steam tractor, which was used in a relatively minor way, the reaper-binder and other innovations, such as the Ivel tractor, presaged a new age that was in its birth throes. The farmers who gave evidence to Joseph Chamberlain's Tariff Commission of 1905 had few inhibitions. They underlined their difficulties in a rather emphatic way. Their descriptions of their situation, economic and technical, create a feeling of surprise that they should continue to farm and did not take up some more remunerative occupation. Some, indeed, did supplement their farming by becoming land agents, valuers, hay and straw merchants, or following other possibly more remunerative occupations.

The footnotes to the historical section of the *Report* refer to a great many works that are today infrequently consulted, and this part of the *Report* is well worth reading, and is possibly instructive, as is section (B) 'Agriculture in the nineteenth century', although this is satisfied that no better measure of the rate of improvement can be found than the growth of enclosures 'because this meant the destruction of the old method of husbandry and the introduction of the rotation of crops and scientific husbandry', which may be regarded in the light of twentieth-century research as something of a simplification and exaggeration. There is, however, a good deal of useful information in the tables and graphs by which the subject is illumined and expanded.

Section (C) examines international conditions and the experience of foreign countries, but all this would need a book-length

exegesis to explore. However, a comment upon the numerous tables of one kind and another is necessary. They are not perhaps original but very comprehensive. The part that is of direct importance here is Part (F), 'Experiences of farmers' which professes to be without prejudice or criticism of the evidence given by practical farmers, and declares that it uses the actual words of the witnesses themselves — a council of perfection, but not impossible. How can I summarize them other than in the words of the *Report* itself?

The witnesses were very numerous: some 2250 farmers and agriculturists (a distinction that is not clear to me!), holding or owning farms of a gross acreage of some 1,900,000 acres, an impressive total. But was it a class enquiry? Few, if any, smallholders were called upon to give evidence, and perhaps their testimony would have been of little value for the purposes of the enquiry. At all events, few of these people were approached to give evidence, which, perhaps in the social structure of the time, is comprehensible.

The *Report* goes on to discuss crops, a term which was then apparently all-embracing including, as the current Agricultural Statistics did, wheat, barley, oats, peas, beans, maize, and rice, though of the last two there could have been no more than a minimal acreage.

But it is Section F, 'Experiences of farmers', that is of importance to historians, as it was to the politicians of that time. These experiences were uniformly adverse; this was the general context of the oral or written statements made to the Commissioners. Their pleas were printed verbatim in Sections III and V of the *Report*. Section F is arranged under headings entitled Corn Crops, which in turn is split up into wheat, barley, oats, beans and peas, and finally green crops, and pasture, but this seems to me to be making divisions in farming procedure that could not at that time be made. The rotations which

every farmer was then obliged to follow in the cropping of his land made his activities inextricably intermixed: crop succession and animal maintenance were tied up together in a way that modern farmers of the present could hardly appreciate, conditions having so materially changed. There is today no necessary contingent nexus between animal and crop husbandry. They can be, if they are not always, quite separate undertakings. This was not so in 1900! But the different headings by crop in this *Report* were not justified even in those days, for all cropping, and indeed animal husbandry, was a necessary sequence of crops, and a consequent supply of animal feed.

So the division of the *Report* into remarks upon the various crops seems to me to be arbitrary, but we are obliged to accept that is its form. First of all it is perhaps necessary to outline the usual system of farming pursued at that time. It was mixed farming: growing crops for human consumption and crops for animal consumption to make them in turn fit for human consumption, not forgetting the by-products, hides, hoofs, bones, wool, then an economic factor of great importance, and some minor crops like flax, hemp and hops.

The economic circumstances were not completely disastrous. Some few farmers were able to oppose them with profitable results though these were few enough, or at least few enough who would or could acknowledge that things were not so bad as they were represented to be: it was, it might be assumed, that the far-seeing and successful farmer was able to keep his head above water. Even so, and with all their complaints, the *Report* supplies a more or less unprejudiced sketch of farming as it was practised at the beginning of this century.

Farmers from all over the country, including Ireland, gave evidence to the Agricultural Committee, and their evidence

was pretty well uniform, though a caveat must be entered because nearly all the men who gave evidence were in a substantial way of business and, it would appear, were managing to survive. Nevertheless, they did not fail to underline their difficulties, although landlords who feared financial losses, if not bankruptcy, were rather more than willing to make reductions in rents and to make other allowances. (A quite disproportionate number of Irish farmers gave evidence, not considered here, but it can be supposed that Chamberlain was trying to attract the Irish vote in the House of Commons.)

The majority of the witnesses whose evidence is summarized, and somewhat arbitrarily selected, said that wheat could no longer be grown profitably since the bad seasons of some 20 years before. They declared, with some unanimity, that they grew it less for the grain than for the straw, which seems a trifle specious, but may not then have been so.

Oats, on the contrary, were profitable, and this, in the transport conditions of that time, is readily understood. The world of internal transport was heavily dependent upon animal traction, and animals must be fed. Oats were needed, therefore, not only on the farms but in local urban and metropolitan markets. Several farmers declared that they were growing more oats than they did 20 years ago; but already a formidable change was under way for the farm tractor had been invented, though it was after this time, and only under the pressure of war conditions, that it began to be used with some frequency.

Of course, different rotations were practised on the light land and the heavy clays. The great improvements of a century or more before this time had been on light soils; the heavy clays formed what was called wheat and bean land. There is a suggestion that there was a widespread decrease in the cultivation of peas and beans. Where there had been an increase it

had apparently been a substitution of other corn crops, chiefly wheat, but one corn merchant spoke of sainfoin and other seeds taking the place of beans.

Some rather surprising arguments were advanced by some of the farmers. One of the least surprising is that it paid to grow wheat, which might be described as the *primum mobile*. In fact it is almost impossible to distinguish between the arguments advanced at that time in support of the impossible economic conditions in which the farmers 'starved', and those which have always existed. Potato growing was a spreading and apparently remunerative crop. Forward looking men spoke of the cultivation of sugar beet, but the crop was handicapped by the necessity for capital to be invested in the 'erection of sugar factories in suitable localities', something that took nearly half a century to accomplish. There is no doubt that some kind of grass (not cultivated pasture) was encroaching on some of what had been productive arable land. Such grass was of very little value as grazing since it was deficient in all the virtues of cultivated pasture which was a part of a well considered and carefully planned system, but there is no doubt, though there is no measure of it, that a great deal of former arable land was then allowed to deteriorate into a semi-wild pasture, quite a large proportion of which must have been innutritious weeds. The rotation grasses that had been useful in keeping up the fertility of the land in mixed farming areas were rather denigrated by some of the witnesses. The sainfoin of the Oxfordshire and Berkshire Downs, which is now recognized as a major factor in maintaining the fertility (for corn crops) of these down lands, was a commonplace of that time, and possibly not fully appreciated. There was no optimism in the minds of the farmers who supplied evidence to the Tariff Commission. It can perhaps be agreed that there was a marked diminution in the arable acreage, but to confirm this

the *Agricultural Returns: Statistics* must be consulted (see Table 1). The vague and emotional statements of farmers who were feeling the pinch of changing circumstances can only be accepted at their own assessment. They recognized the disease, but in the absence of any protective duties, the generality of the witnesses could do little more than register their current difficulties, and hope for what may have seemed to them to be the universal panacea, import duties on imported corn and beef: so it went on from witness to witness.

Their evidence, however, had a virtue that they could not foresee! It was that they told the Commissioners precisely how they farmed. Naturally most of the men who gave evidence deplored the diminution of their arable farming, and were not impressed by the consequence of letting land fall down to grass. Some farmers had laid land down to lucerne 'in Hampshire, Kent, and the Home Counties generally, Dorset, Gloucestershire, Hereford, Monmouth and other counties', a sufficiently vague statement. Buying cake as a substitute for wheat was one remedy but could be carried too far. Straw sold at a profit could be compensated by the use of malt coombs and pig food, which meant that the loss in straw was put back by the resulting excreta from the pigs, etc, a process that some farmers in Hertfordshire, Essex and Cambridgeshire found advantageous. There was some competition from imported hay, competition that had not existed 25 years before, but now was measured at some 6000 or 7000 tons a week, presumably imported into London to feed the horses which were the motive power of passenger and materials transport. The market for home-produced hay and straw was diminished by government purchases from continental sources of the greater part of the forage used by the Army horses. The farmers consulted were in favour of an import duty.

Besides the cultivation of grain and legumes or roots and clover, which has so far been discussed, and may perhaps be nominated the norm of farming of that day, combined as it was with cattle breeding and keeping, the dairy, and sheep herding, there were in some districts specialist crops. Foremost amongst these were the flax cultivation for the linen industry of Northern Ireland. Even so there were complaints that the competition of imported flax, from Russia and Belgium in particular, was so severe that there had been some reduction, one not confined to any particular place but that was more or less general in Antrim, Fermanagh, Down, Londonderry, and other counties — a real tale of woe. This was unfortunate, because the flax was processed into linen as well as being a crop on the ground.

I do not think the abortive attempt to grow tobacco in Ireland need be discussed here. The cultivation of hops in the south-eastern counties is quite another matter. The crop was formerly grown on some 57,000 acres but, like other produce requiring skilled and continuous attention, the acreage had dropped to about 48,000 acres in 1904. The *Report* said, 'After the abnormally high price of hops in 1882 the general adoption of hop washing and a higher standard of farming led to the growing of heavier and more regular crops'. But at the same time there were increased imports from the Continent and the United States, causing a drop in prices and a reduction of the acreage under the crop. The consequence was a marked diminution of the labour employed. In 1878 about 8000 more men were employed in growing the crop, and so it is said the number of casual pickers employed for a few weeks in the summer had decreased by no less than 29,000 men, women and children.

Some consideration must also be given to market gardening and the production of soft fruit, coupled with that of orchards,

but it would be possible here to be too expansive though these subjects were discussed at length by some witnesses. These crops were important, or rather more than important: the life blood of the districts where they were the major saleable crops, such as the immediate environment of large towns, the Metropolis, and the new or comparatively new industrial aggregations. But there were difficult technical processes then in the matter of processing and packing the product for transport and subsequent display to the buyer. There was some criticism of the casual methods of growers: 'they let it grow'.

These things, hops, flax and fruit, were important in the national economy, but the most important productions were those of the systems of animal and crop husbandry, which were so closely interlocked in the major part of the country, although there was some emphasis upon sheep farming in the hills and more elevated land. The livestock, an integral part of the system of farming most generally practised in the country at that time, were famous in a worldwide sense. There were competitors for prize animals from a wide variety of overseas buyers in the USA, South Africa and Australia. An outstanding bull could be the foundation, not only of distinguished herds in foreign countries, but the fortune of the its breeder and owner. The breeders were not the most complaining of the farming fraternity — possibly they had no need to be! There was another element in the more stable condition of the cattle men — the increasing demand for liquid milk from the towns, although some of the farmers who gave evidence complained of the competition of dried and processed milk from overseas, South America in particular. But even the liquid milk trade came in for abuse. 'Milking instead of sheep farming', said one witness, 'will soon tell its own tale.' Pastures were nothing like so good as formerly, and the system of laying down was all wrong,

though a Somersetshire witness declared that the breeding of stock and the management of a good dairy were better than the fattening of cattle. Doubtless he was thinking of financial gains. Nevertheless, they all complained of low prices and minimal profits. Stores imported from Canada were finished in Scotland, but the farmers argued that their profits were too small, and that the milk trade was damaged by the introduction of separated milk from Ireland into the big cities like Glasgow.

Sheep were an important integer in the arable lands, and in the hills of southern England, those of Wales and the western counties and of the north, where they were the financial nexus upon which the sheep farmers lived and had their being. In 1905 there had been increases in the number of the flocks of some counties; decreases in others. In the arable counties the flock not only provided a saleable crop of wool, but an increase in the fertility in the land where they were folded. In the hills other considerations were taken into account: there was then, according to some witnesses, a taste for home-produced mutton on the tables of the well-to-do, and I have myself seen half a sheep being cooked upon a turnspit before an open fire; but the sheep had a trinity of value. In the arable lands it helped to keep the land friable and fertilized where the flock was folded, though apparently the value of the wool was, as with other things, rather depressed. The hill flocks were foundation stock in some sort, in addition to producing wool and mutton, but there was at this time an outcry that the flocks were reduced in numbers, and with the value of the fleece also falling the shepherds were hard put to it to maintain their standard of living, and indeed that of their flocks. There is no doubt, as the *Report* emphasizes, perhaps too heavily, that the farmers were facing new conditions to which they were not yet adapted.

This is virtually an analysis of a hard luck story, but new conditions were confronting the farmers, and new conditions always

provoke antagonism, possibly complaint from those who hate change. Some part of the complaints of the farmers who gave evidence may have sprung from a dislike of change with the adaptations it demands, but a good part may have been justified. The remedy for all distresses was put in a nutshell. It was an import duty of not less than 5 per cent coupled with a

reduction in the transport charges made by the railways, and some relief of taxation, both national and local. When have such things not been asked for by the generality of the population, let alone farmers? But it can be said that this *Report* supplies a conspectus of farming as it was in the United Kingdom of the early years of this century.

Table compiled from *Agricultural Statistics 1900-1904*

Acreage under crops	1900		1901		1902		1903		1904	
	England	Wales	England	Wales	England	Wales	England	Wales	England	Wales
	acres	acres	acres	acres	acres	acres	acres	acres	acres	acres
Wheat	1,744,556	51,654	1,617,721	47,019	1,630,892	48,328	1,497,254	43,197	1,302,404	35,144
Barley or Beet	1,645,022	105,048	1,635,426	101,907	1,578,977	101,326	1,545,354	99,080	1,543,579	96,341
Oats	1,860,513	216,447	1,831,740	208,773	1,892,717	210,153	1,953,866	213,266	2,959,983	212,240
Rye	46,102	43,951	49,649	1,460	61,241	1,341	52,460	1,380	49,453	1,228
Beans	248,828	1,288	237,361	1,215	228,548	1,285	226,750	1,292	249,245	1,235
Peas	154,295	1,542	152,185	1,596	176,827	1,426	179,458	1,059	173,793	917
Areas of green crops, potatoes and roots are supplied	2,442,377	112,490	2,401,265	110,479	2,423,784	110,118	2,338,099	108,272	2,310,018	107,421
<i>Animals</i>										
Horses total	1,152,321	153,284	1,161,914	154,624	1,155,361	154,114	1,179,360	157,264	1,195,942	169,262
Cows, heifers and other cattle Total	4,848,698	758,380	4,791,535	743,078	4,611,937	721,874	4,746,308	711,064	4,917,212	728,425
Ewes										
Total Sheep	15,844,743	3,432,516	15,548,057	3,427,734	15,034,479	3,462,698	14,900,978	3,511,424	14,748,962	3,489,685
Pigs Total	2,921,422	228,097	1,842,433	212,974	1,956,158	215,283	2,305,807	243,983	2,476,355	241,104

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Compiled by Margaret C Smyth

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NOTES AND COMMENTS (continued from p 136)

WINTER CONFERENCE, 1982

The Winter Conference will be held on Saturday 4 December 1982 at the Institute of Historical Research, Senate House, London, on the theme 'Capitalism in Agriculture'. A booking form with full details of the programme is inserted into this issue of the *Review*. Enquiries should be addressed to Dr Dennis Baker, Christ Church College, Canterbury, Kent.

SPRING CONFERENCE, 1983

The Spring Conference will be held at Christ Church College, Canterbury, 11-13 April 1983. The programme and booking forms will appear in the next issue of the *Review*, but enquiries and suggestions for the programme should be addressed to the Secretary.

ECONOMIC HISTORY SOCIETY CONFERENCE, 1983

The Economic History Society is to devote a morning of its 1983 conference to agricultural history, and has asked the Society to arrange a programme for this morning. At the time of writing, the programme is not yet finalized, but it is hoped to include a discussion of 'Agricultural Revolution' between Drs Overton and Collins, and a session on 'Open Fields and enclosure' involving Dr Michael Turner and Professor Donald McCloskey. The conference will be held at the University of Kent, Canterbury, 8-10 April 1983. A preliminary enquiry form for this conference is normally inserted into the November issue of the *Economic History Review*, but members interested can address their enquiries to Dr Whymah, Secretary, Economic History Society Conference, Rutherford College, The University of Kent, Canterbury, Kent CT2 7NF.

THE BRITISH ASSOCIATION FOR LOCAL HISTORY

The new British Association for Local History was formed in April 1982, replacing the old Standing Conference for Local History. The Society has

decided to affiliate to this new organization, and Dr J H Bettey will be acting as its representative. Membership is open to individuals at £4 *per annum*, and applications should be sent to the British Association for Local History, 43 Bedford Square, London WC1B 3DP.

WORK IN PROGRESS

The last survey of research in progress was conducted in the autumn of 1977, and the list was published as 'Work in Progress' in the *Review* in 1978. Mr D Byford has agreed to conduct a further survey in the near future, and it is hoped that members will help to ensure a comprehensive coverage of the work of themselves, colleagues and students.

SUPPLEMENT SERIES

In view of the substantial balances currently enjoyed by the Society, the Executive Committee has decided to consider publishing an occasional supplement to the *Review*. This would offer the opportunity for the publication of major pieces of research which fall between the article and the book in length. It was envisaged that such manuscripts would be of the order of 30,000 words in length. The Society makes no commitment to publish but it would welcome proposals for supplements, preferably consisting of a clear synopsis stating length inclusive of footnotes and the extent of graphic material. Proposals and/or enquiries should be addressed to the Secretary.

THE ARCHITECTURE OF THE AGRICULTURAL REVOLUTION

A four-day residential conference is being held on the architecture of the agricultural revolution at the Institute for Industrial Archaeology, Ironbridge Gorge Museum, Ironbridge, Telford, Shropshire TF8 7AW, 8-11 October 1982. Enquiries should be sent to Mr Michael Stratton at the above address.

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Book Reviews

JULIET CLUTTON-BROCK, *Domesticated Animals — from early times*. Heinemann and British Museum (Natural History), 1981. 208 pp. Illus. £9.95.

I must admit at the outset that I find this a disappointing book. For a start the sub-title 'from early times' is misleading since the treatment in fact concentrates on domestication and pre-history, ending with most species at the Roman period, so the book will be of greater interest to biologists and archaeologists than to agricultural historians.

The book invites comparison with Zeuner's 560-page *History of Domesticated Animals* (1963), and indeed was spoken of before publication as a successor to that book. And just as Zeuner's treatment with its emphasis on pictorial evidence was already out of date at the time of publication, so the present account makes inadequate use of bone measurements and other more recent techniques such as those which study coat and skin remains. On the other hand one cannot expect considerable detail in only 200 pages, and the book is clearly aimed at an even wider readership than that which Zeuner addressed. In addition, the subject is now so vast that it is unlikely ever again to be covered at the level attempted by Zeuner in one book by a single author. Unlike that of Zeuner, the book of Dr Clutton-Brock is restricted to mammals, which is another way in which the title is misleading.

It is divided into sections, and the first one entitled 'Man-made animals', starts with two very good chapters: domestication as a biological process, followed by selective breeding and the definition of a breed, in which she rightly cautions against the use of Latin specific and sub-specific names with livestock. But it is unwise to place too much reliance on the blood types of modern livestock as a method of indicating breed origins since the blood type frequencies are likely to have changed in recent times owing to the over-riding influence of a few males.

Each domestic species is then covered in the order of domestication starting with the dog on which the author has specialized. The next chapter asks the question: 'Why bother to farm?' and comes up with the answer that agriculture, which is actually harder work than hunting, was forced on many by an expanding population which put increasing pressure on food supplies.

In dealing with sheep Dr Clutton-Brock is in error stating that the underwool grows only in winter, and it is misleading to say that the fleece of domestic sheep consists entirely of underwool, and that only the underwool moults. The outer coat is replaced by wool similar to that of the under coat, and of course where moulting occurs the entire fleece sheds.

Cattle come next, and she jumps on an anthropologist's 'band wagon' in giving credence to the idea that

lactose intolerance in non-pastoral peoples has a genetic basis, when there are several arguments favouring an environmental origin: (1) one does not have to be lactose-tolerant to consume milk products since cheese manufacture, fermentation and even boiling all destroy lactose, and pastoralists actually utilize such products as food rather than fresh milk; (2) the high proportion of lactose-tolerant individuals in modern dairying countries could result from the continued drinking of milk from infancy into adult life, and in countries such as China with few cows, there is little opportunity to acquire a taste for milk; (3) the lactose tolerance of peoples in northern Europe is not always associated with the milking of livestock, but helps to relieve vitamin D deficiency to which northern races are susceptible through lack of sunshine; and (4) finally, not only could these ideas be tested on nomadic pastoralists today, but a lactose-intolerant person has to drink an appreciable amount of fresh milk before an upset develops, and there is frequently little milk available.

In dealing with the pig Dr Clutton-Brock dismisses the taboos against the eating of pork as whims of human taste or religious scruples without considering recent ecological explanations, which point out that pigs do not adapt well to hot areas and that they compete with man for food to such an extent that they threaten the subsistence agriculture of an arid environment. Next comes the horse, the last of the five most common livestock animals to be domesticated, which has been changed least, not only because it is inherently less variable, but also because it (now) has only one use to man, for transport; the section ends with a chapter on asses, mules and hinnies.

Section II covers exploited captives, starting with the cat, which is placed in this section because, although fully domesticated, its breeding is rarely controlled by man. The remaining animals are elephants, camels, Asiatic cattle other than the Zebu breed (Yak and water buffalo) and the reindeer, which was one of the first animals to be semi-domesticated by man in Europe. Section III covers small mammals — the rabbit and ferret, rodents and carnivores. Section IV deals with the pre-Neolithic exploitation of ungulates for food, which would appear to be either out of the scope of a treatment of domestic animals, or better dealt with at the beginning.

The author, however, is more at home here than with farm animals, and the same applies to Section V covering experimental domestication and game ranching past and present. The conclusions are entitled 'The geography of domestication', and there are very useful appendices on nomenclature and climatic changes during the archaeological periods.

The five-page bibliography tends to be selective and omits such important items as *The Domestication and Exploitation of Plants and Animals* edited by P J Ucko and G W Dimbleby (1969).

Final verdict: excellent on the domestication process; rather thin on livestock history. Very well illustrated and good value for the price.

M L RYDER

C DELANO SMITH and M PARRY (eds), *Consequences of Climatic Change*. Department of Geography, Univ of Nottingham, Nottingham, 1981. 143 pp. 45 figs. 5 tables. £3.50.

This collection of papers is the outcome of a meeting of the Historical Geography Research Group of the Institute of British Geographers held at the University of Nottingham in July 1980.

In their introduction the editors point out that the papers attempt 'to seek to comprehend more fully the role of climatic change before proceeding to evaluate it in the context of the more orthodox factors of historical change', yet they seem to question the whole rationale of such investigations with an odd disclaimer in which they state: 'Nor should the title of this collection *Consequences of Climatic Change* be taken to imply an assumption on our part either that climates have changed significantly or that their consequences exist . . .'. Perhaps this reflects the divergence of opinion in this field; or it may be an attempt to be supremely impartial in a subject which remains very controversial. Fortunately this rather schizophrenic attitude does not seem to be shared by the other contributors.

Nine of the 13 papers are based on the study of primary historical sources, with the remainder being short statements of research in progress or more personal comments on wider issues. Geographically, northern and north-western European examples predominate with only 2 papers concerned with the Mediterranean area (C Delano Smith, 'Climate or Man? The evidence of sediments and early maps for the agents of environmental change in the post-medieval period'; W C Brice, 'Climatic Change and ethnic movements in the Early Iron Age') and one with North America (M P Lawson and C Stockton, 'The desert myth evaluated in the context of climatic change') disrupting the pattern. Temporally the papers range from the twelfth and eleventh centuries BC to the early nineteenth century with some concentration on medieval times and the seventeenth and eighteenth centuries.

Recurring themes in the study of the climate change/human activity relationship such as the importance of different time scales of climate change (I Whyte, 'Human response to short- and long-term climatic fluctuations: the example of early Scotland'), the sensitivity of marginal land (A H Cowell,

'Marginal land and climate: a comment') and the abandonment of agricultural land and desertion of villages, ('M L Parry, Evaluating the impact of climatic change'; G Beresford, 'Climatic change and its effect upon the settlement and the desertion of medieval villages in Britain') are all aired again here, confirming, if nothing else, the complexity of such problems and the continued understandably slow progress towards their solution. One encouraging feature of the papers is the variety of approaches being followed in the research. These range from traditional concerns with documentary evidence such as weather diaries, tax records and a variety of private and official correspondence (A E J Ogilvie, 'Climate and economy in eighteenth-century Iceland'; J M Grove and A Battagel, 'Tax records as an index of Little Ice Age, environmental and economic deterioration from Sunnfjord Fogderi, Norway'; N Huckstep, 'Historical source materials and the reconstruction of past climates') to the more exotic, including step-functional analysis of tree-ring series (G H Dury, 'Climate and settlement in Late-medieval central England'), and the examination of raised peat bogs (K Barber, 'The stratigraphy and palynology of recent ombrotrophic peat: a source for the reconstruction of agricultural and climatic change').

Together these papers illustrate very well the diversity of opinions held by historians and historical geographers on the role of climatic change in human activity. The exact nature of that role has been evaluated in a variety of ways, but the consensus among the contributors seems to be that there is a place for climatic change alongside social or economic factors in the study of historical geography (B Proudfoot, 'Comments'). Providing, as it does, an indication of current progress in that field, this collection is a useful contribution to a debate which is clearly far from over.

DAVID KEMP

P SALWAY, *Roman Britain*. Vol IA of The Oxford History of England. Clarendon Press, 1981. 824 pp. 11 maps. £19.50.

The author of this very extensive work, when asked by the Oxford Press to write a successor to Collingwood and Myres' *Roman Britain and the English Settlements* (2nd edition, 1937), rightly replied that he could not write a successor to both; he has therefore produced an up-to-date review of Roman Britain only; as he himself says, Collingwood's contribution was, and is, a classic, and as such it remains, with Myres, on the list. The test of any book of this kind is — does it set us thinking? C E Stevens once said to me: 'Almost everything Collingwood said has

proved wrong, but it is a great book.' Salway's work is an important book; and it also sets us thinking. It is perhaps less a synthesis than a compilation, but its merit is its critical approach to every question. It is new not only in that it summarizes research carried out since 1937, and is thus an index of the enormous amount of new archaeological work achieved since then, but in that it endeavours to set Britain within the framework of the Roman Empire as a whole, relating many of the political and social events in the province to the broader movements over the Channel, so strengthening our grasp of their significance for Britain and adding a new dimension to our view. Some will consider excessive the space devoted to explaining the workings of the Empire and its political development over 4 centuries; but if that was necessary, it was because we are increasingly producing a generation of students whose preoccupation with techniques and ancillary scientific methods is turning them into archaeological technicians whose knowledge of the cultural background of the periods concerned is far too restricted.

The new methods and approaches to the problems of Roman Britain are much to the fore here; studies of pottery distribution and marketing, pollen analysis, the examination of hitherto unrecognized late strata by new digging skills, the study of the physical condition of the population by the medium of skeletal examination, the awareness of climatic change, archaeological air reconnaissance, and much more. As examples of the advantage of a broader view that applies knowledge of the Empire to British problems, we may cite the light thrown on Julius Classicianus by prosopography, and on the actions of the *primicerius notariorum* Paul, sent to Britain by Constantius II, when we become aware of his functions in the imperial bureaucracy. Claudius' decision to annex Britain is viewed by Salway in the light of the new emperor's political situation and the calculations which it evoked. On many of these problems, historical or archaeological, the author sets forth several points of view, nor does he always pronounce a decision; in fact his processes sometimes remind us of the careful skating among fresh eggs common to the new generation that fears to take a stand or of Mr Meredith's wise young man. But the amount of new material that Salway has had to collect, digest and select, is enormous. A more relevant criticism might be that his text ignores too easily the views of a former generation; a reaction against various older assessments does not mean that they were always wrong. But here Salway redeems himself by his cautious attitude to 'models', statistical studies and the like.

It would be easy to point out some errors and not a few interpretations with which I personally disagree, but it is the agrarian historical aspect of the work that must engage us here, and to this I turn. Salway's

sketch of the prehistoric Iron Age, which formed the setting against which Roman Britain developed, is brief and vague. He has paid too little attention to the social and economic advances of the middle and late periods leading to the Roman conquest, and is too little sensible of the emergence of a new class nurtured by the introduction of coinage, the development of trade and new agricultural techniques. These are important because he later states his belief that 'over all, the farming techniques required for large-scale production were probably already here in Britain before the conquest'. Finds of grain show that the Early Iron Age was moving from exclusively summer crops to summer and winter crops, also towards an arable animal husbandry. But the central question is: did the Roman occupation introduce new factors into British agriculture? Salway cites J G Evans: 'the Romans brought with them no innovations in agricultural technology'. This is a serious charge which requires examination.

On the one hand we hear that the Butser Hill experiments have shown that between 1 and 2 acres were needed in the Early Iron Age to fill a storage pit; we do not hear what was the pit's capacity, but if its maximum was 10 bushels, we must suppose a yield of 5-10 bushels per acre, not counting wastage and fallow. We are further told that this requires a 'total domination of the landscape' — a supposition confirmed by air reconnaissance — which implies a proportionately large population of 4 to 6 million. (It is not clear from Salway's text, however, if fallow has been reckoned or how much open pasture was available.) Salway believes in a moderate increase of the population figure under Roman rule. His Fensland studies, however, indicate that fields were very small and the total arable area low, the emphasis being on livestock. From this he concludes that native Romano-British fields may not represent arable on any considerable scale. He is therefore faced with the question: what was the element which produced the grain surplus required for the upkeep of the Roman army and non-cultivators, a surplus whose existence is known from the fourth-century sources? Before discussing his solution, it were well to remark that it is easy to underestimate the productivity of ancient fields; recent work in western Samaria has shown numerous ancient holdings (3rd century BC — 2nd century AD) averaging 6 acres and many of lesser area. The acreage of the fields of fifth-century villages in north-west Germany did not exceed those of the Early Iron Age plots known in Britain. The cultivators of Samaria certainly incorporated wine and oil production into their branches, but the essential diet of cereals and legumes had somehow to be obtained. In Britain, indeed, there is evidence for the adoption of larger fields in some localities (Ditchley, Northborough near Deeping, Grimston Down, Dorset). If the results of landscape

analysis in Essex are to be accepted, (see *AHR* 29, pp 421 sq), many pre-Roman fields still surviving in Essex were considerably larger than those of the characteristic 'native' downland complexes. Reynolds at Butser Hill has found that the simple *ard*, if equipped with a metal tip, could plough heavy soils, which would mean higher yields. Mann has decided that the Piercebridge plough was fitted with coulter and earth-boards.

As factors making for higher production in Roman times Rivet has cited more intensive working, peaceful conditions, improved communications, and the requirements of the government, the army and the new towns. Salway adds that the civilian consumer paid better prices, and that the imperial estates were among the factors making for extended cultivation. (I would observe however, that imperial estates sometimes comprehended precisely the least developed parts of the country.) Other factors were better storage, conscious estate management and Roman professional literature. To these I would add several factors which Salway omits (and these are technological): improved corn-dryers, a number of new or improved agricultural implements (which now could reach the common farmer — I estimate at least 10 such), water mills and a number of new cultivated plants which the curious will find listed in Sir Harry Godwin's *History of the British Flora* (1956). In my contribution to the *Agrarian History of England and Wales*, I, ii, I have tried to demonstrate that certain grains, eg oats, were specific Roman developments. Much of the improvement of cultivation would have consisted of new combinations and rotations, probably the spread of nitrogenous crops and of roots (turnips, rape). Further, the development of well-digging meant the ability to winter cattle in the farmyard and hence increase the supply of organic manure. I have further drawn attention to certain features in Roman villas in Britain which correspond to the dictates of the Roman *Scriptores Rustici*. Salway cites my tentative estimate of 20 bushels per acre at Bignor villa on an especially fertile soil; in *Shakenoak* V I was able to quote 3 villas where accommodation for ox-teams could be interlocked with granary capacities; these suggested average yields of 22 bushels (Stroud), 13.8 bushels (North Warnborough), 13 bushels (Winter-ton), 10 bushels (Iwerne II) and 8 bushels (minimum — Pitney).

Salway rejects any sharp cleavage between town and country in Roman Britain, and sees the smaller towns as mainly agricultural and dependent on their rural environment. He believes in the presence of landed proprietors from other provinces (especially Gaul) in Britain, and suggests their investment of capital in agriculture may have been important, especially in the fourth century, which he describes as a period of 'spectacular prosperity'. It was cer-

tainly a time of large villas, dense population, and the export of grain surpluses and wool products. Salway, indeed, disproves satisfactorily the impossibility of bulk transport on land in this period, as claimed by some economic historians. He points to the probability that Christian landlords may have profited from the confiscated property of obstinate pagans. Urban decline may have been accelerated by the emperors' seizure of city revenues for the treasury, and many big landed proprietors may have been alienated by the vengefulness of Constantius II after the defeat of Magnentius. But of the state and predicament of the peasants, now forced into the colonate, he has less to say. After the expulsion of the official Roman government in 409, the villa magnates were probably reluctant to bear the cost of a residual military force, hence the employment of barbarian federates became inevitable (but these also needed to be paid). Coinage ceased to be used after about 420 and large-scale trade began to break down. On the other hand the earlier Saxons often settled on or near Roman sites; mutual assimilation took place in Wessex, and Salway inclines, with Hoskins, to see agricultural units as more permanent than has been supposed hitherto. (Here one might have mentioned the Essex research and its evidence for the continuity of field-systems.)

I must conclude with one or two strictures; (1) Salway suggests that the Romans persecuted Christians 'because they were long confused with some of the extreme Jewish terrorist groups'. There is no evidence of such terrorists in Rome or Asia Minor, where the first persecutions took place, and Asia was remarkable for the mutual interpenetration of Greek and Jewish cultures and for the non-participation of its Jewish communities in Jewish revolutionary activity.

(2) There is grave typographic confusion on p 113 (for which the author cannot be blamed), and I find evidence of hasty writing and style on pp 424-9. As this admirable book will almost certainly need a second impression in the near future, there is every hope that these blemishes will be removed.

(3) In his bibliography Salway devotes a not negligible section to works on the Romano-British countryside, but volume I, ii of the *Agrarian History of England and Wales* does not appear there. It is referred to in footnotes on pp 468, 619 and 626; the author cites me (anonymously) twice in reference to the Ditchley villa as cited by Professor Hoskins (who doubtless acknowledged his source). Evidently Mr Salway preferred *damnatio memoriae* to criticism, although he was so kind as to approve my enquiry into the economy of the villa of Bignor, printed in *Britannia*.

SHIMON APPLEBAUM

GLORIA AVELLA-WIDHALM, LISELOTTE LUTZ, ROSWITHA AND ULRICH MATTEJET (eds), *Lexikon des Mittelalters. Band 1, Lieferung 1-10*. Aachen, Bettelordens-

kirchen, 1977-80, lxii + 2108 cols, *Band 2, Lieferung 1-4*, Bettelwesen, Bordeaux, 1981. 448 cols. Artemis Verlag: München and Zürich.

This major lexicon, devoted to the Middle Ages (roughly AD 300-1500), will consist of 5 volumes and an index volume, each of 10 fascicules of 112 sides (current price DM35—per fascicule). It is of handy size (26 × 18 cm). Each volume contains about a million words. There are 92 editors and advisers, 7 from Britain and Ireland. Volume 1 has nearly a thousand contributors, and further scholars write in volume 2. It would be difficult to assemble a more complete set of experts, though the reviewer, knowing the renown of our medievalists, would have expected rather more from the British Isles. The print is very clear, and not too small, while the proofreading is all but immaculate. The area dealt with is the whole of Europe, including Russia and that part of the Arab world which imposed its influence upon Europe.

An early model for this publication was Pauly's *Real-Encyclopädie der classischen Altertums-wissenschaft* (49 vols); but, wisely, as such a production would advance slowly and be immensely expensive, this has been kept within bounds. This was a wise decision, though, perhaps, here and there, a little more detail would have been welcome. On the scale chosen, however, the reviewer does not see how it could have been better produced.

The expert editors responsible for 'agriculture and rural settlement' are Professors Werner Rösener (Göttingen) and Adriaan Verhulst (Ghent).

The reviewer, while glancing with growing appreciation at the whole work, has studied intensively all the articles on agriculture, and those impinging on agriculture. These include the article on 'Bauer' (farmer) and further articles on subjects where 'Bauer' is part of the key word. From cross-references in these articles, and from other searches he has been able to glean the names of articles yet to appear. The editors, in the introduction, say that material culture is given an important emphasis. Agriculture is the most important side of medieval life, but, up to now, the lexicon does not give it space enough, even though the article on 'farmer', for instance, takes up 42 columns. This long article, informative and well-balanced as it is, is harmed by the multiplicity of its writers, none of whom has quite enough space to awaken further interest. On the other hand, the article on the rural house (13 cols), revealing the gaps in knowledge, is very stimulating, while Professor J C Russell's short article on rural population, with its strong reference to female infanticide, is quite exciting. A work of this sort demands maps and diagrams, but this volume has 17 only, one illustrating plough types. Agriculture, in particular, calls for abundant illustrations.

Cross-references show that there will be several hundred articles on agriculture and allied subjects. Excellent short articles deal with bees and bee-

keeping, beer and brewing, falconry, and plants and rural animals figuring in medieval life and art, eg pears, berries, eagles, aniseed, arnica, apples. Articles will follow on the manor, slavery, field systems, colonization, the rural commune, rural revolts, deserted settlements, irrigation, the horse, forestry, cottagers, mills, village types, Domesday Book, wine, fruit, food, dykes, mezzadria, to mention but a few. As one turns from article to article seeking to detect omissions, new cross-references pop up indicating that agricultural history is comprehensively covered. An article in this volume on the Beauchamps would be very helpful to seekers after information on the great landed nobility, and there are many such articles on distinguished families and persons. On the other hand, short articles on places, some rather oddly chosen, often say too little. In the article on the Anglo-Saxons, D M Wilson, unfortunately, dismisses agriculture in a few lines.

Readers with a modest knowledge of German will find the lexicon easy to read, though a few abbreviations need a little thought. The bibliographies are up to date and sufficient, but not overwhelming, though here and there omit books the reviewer still believed were standard.

This lexicon will be completed while libraries and specialists can still afford it. Owners, and those who can consult it will not only have all their queries answered, but, like the reviewer, will turn pages at random, always finding new jewels on the beach. While every reader will have his fads, the reader living on the western margins of Europe may, perhaps, feel that his area is a little too briefly treated, but will derive some compensation from finding the eastern margins so well covered.

D J DAVIS

JOHN S MOORE (ed), *Clifton and Westbury Probate Inventories 1609-1761*, Univ Bristol Dept Extra-Mural Studies, 1981. xlix + 247 pp. £6.50, £1 p & p (paperback, stapled), available from The Librarian, Extra-Mural Department, University of Bristol, 32 Tyndall's Park Road, Bristol BS8 1HR.

The main part of this duplicated work consists of 247 probate inventories from the parishes of Clifton and Westbury covering the years 1609-1761. These places are now populous suburbs of Bristol, but until the end of the seventeenth century they were rural villages, mainly dependent upon farming; Westbury remained predominantly rural and agricultural throughout the eighteenth century, while Clifton grew rapidly, largely as a result of the immense, though comparatively short-lived popularity of the Hotwells Spa. Clifton also shared in the commercial prosperity of Bristol and the inventories reproduced in this volume provide interesting evidence for

expanding trades such as glass-making, lime-burning, cloth-working, and for all the occupations associated with the growing Spa such as innkeepers, vintners, butchers, tailors, shoemakers and even a fiddler and a looking-glass maker.

Mr Moore's introduction provides valuable information about the development of the two parishes, their agriculture and trades, the field systems, enclosures, conversion to pasture and consolidation of farms. Those unfamiliar with the area would have found a map or maps of great help in understanding this section, as well as a slightly longer description of the situation and topography of both parishes. The introduction includes useful analyses of the content of the inventories, the occupations represented and the houses which are listed, as well as excellent material on land-use and on population figures for the whole area, highlighting the spectacular growth of Clifton from less than 100 persons in 1608 to 320 in 1672, 1365 in 1770 and 4455 by 1801. There is also a very full glossary of terms found in the inventories and index of persons and places.

This is an interesting and unusually varied collection of inventories, ranging from those of the gentry of Clifton and attendants upon the Hotwells Spa through the farmers of Westbury to the fishermen, mariners and pilots along the river Avon at Shirehampton, where, during the eighteenth century, there was an abortive attempt to develop a port to challenge the monopoly of Bristol.

J H BETTEY

A KUSSMAUL, *Servants in Husbandry in Early Modern England*. CUP, 1981. xii + 231 pp. 27 tables. 28 figures. £19.50.

Although no intensive investigation of the subject has ever before been published, the role of English farm service has long been understood, at least in general terms. Few historians will be unaware that farm service was a transitional stage between childhood and married status; that it was contractual with engagements frequently arranged at statute fairs; that farm servants were particularly suited to tasks requiring continuous attention through the farming year; that from about the time of the Napoleonic Wars, so far as it was synonymous with living in, the system was in headlong decline; and that it survived and continued to flourish in the north-west and in Wales, in the relatively sparsely populated areas to which it was especially well adapted. The value of this study, which is based upon a Toronto doctoral thesis, lies firstly in its clarification of these issues; secondly in subjecting them, wherever possible, to measurement; and thirdly in knitting farm service into the fabric of the new social history based upon demography and the evolution of the family, by seeking answers to questions which, until recently,

could scarcely even have been framed. In this respect Dr Kusssmaul has profited immensely from her contacts with the Cambridge Group for the History of Population and Social Structure, and freely acknowledges her debt to the Group for access to data and their active encouragement.

Between one-third and one-half of hired labour in early modern agriculture was supplied by servants in husbandry, and a majority of youths were so employed. Farm service, it is shown, was suited to a social environment of nuclear families, comparatively high mortality, and a high age at marriage. Indeed it may be seen in one aspect as 'a form of *ex post facto* family planning', in that families were simply redefined by the transfer of adolescents (including females) so as to balance the interests of cottagers and small farmers with those of employers requiring labour on a larger scale. During the sixteenth and early seventeenth centuries, when population growth was considerable, farmers showed reluctance to commit themselves to maintaining servants in husbandry, though during the later seventeenth and much of the eighteenth centuries, as labour surpluses disappeared, servants became regarded as indispensable. As Timothy Nourse put it (in 1700) 'tis better to have Work wanting for our Servants than Servants for our Work'. Focusing chiefly on this period, Dr Kusssmaul uses an impressive range of records to illuminate rates of turnover, age at entry and exit and the extent of farm servants' mobility. These include settlement examinations, parish listings and militia lists, whilst she has also discovered some continuous farm records relating to labour turnover on farms at Tetney (Lincs) and Radley (Berks). She deploys the exceptional records of the Spalding Statute Sessions (which give names and addresses of previous and new employers) to calculate the length of journeys travelled by would-be employers and employees and distances between engagements; also to trace signs of non-randomness of movement which point to efforts to maintain contact with parents and kin. Farm servants were not usually capable of recording their individual experiences, but the journal, extremely rare of its kind, compiled by Joseph Mayett (Bucks Record Office) is used to great effect.

Dr Kusssmaul makes out a powerful case that the essential form of farm service was virtually static, even down to 1900 and beyond. What did change was its incidence, the decline being traced in detail from the censuses of 1831 and 1851. Long-run considerations underlying the farmers' increasing disenchantment with farm-servants are considered to have included, from the later eighteenth century, farm consolidation (larger farmers required fewer servants); loss of commons (promoting a more reliable supply of day-labour); changing practices (many of the new tasks were discontinuous); mount-

ing Poor Law expenditures; and the shift towards grain production encouraged by price movements prior to and the during the French Wars. Above all, rural population growth was conducive to the abandonment of farm service in the south and east. Dr Kussmaul contends that war-time labour shortages temporarily thwarted the wish of farmers to dispense with their servants though they often resorted to putting men on board-wages and other expedients likely to engender resentment. It was only after 1815 that a 'pent-up desire' to rid themselves of indoor servants was fully released as farm incomes became seriously threatened and a positive glut of labour developed. Thereafter, in the south, only a minority of 'constant men' enjoyed the security associated with farm service and the social distance between masters and men increased considerably. Although she does not labour the point, Dr Kussmaul's able analysis is highly pertinent to the emergence of contrasting patterns of rural social relationships in 'north' and 'south', so much remarked upon by later generations.

W A ARMSTRONG

P B MUNSCHÉ, *Gentlemen and Poachers: The English Game Laws, 1671-1831*. CUP, 1981. x + 255 pp. £18.50.

The Webbs and the Hammonds, the parents of conflicting approaches to history and to socialism, the icy intellectual and the warm-hearted emotional, could at least agree on one thing: a denunciation of the game laws as an instrument of blatant class selfishness which protected the pleasures of the rich at the expense of cruel and tyrannical oppression of the poor and propertyless. More recently poaching has become a happy hunting ground for nineteenth-century social historians, who are finding there evidence for the realities of rural social relationships and for the hollowness of gentry pretensions to have been protecting local communities from the depredations of the wicked outside commercial world. No one, however, has hitherto presented a scholarly, methodical, and factual account of the actual provisions of the game laws, and of their operation and enforcement over a long period of time. This Professor Munsche succeeds in doing in an admirable monograph that is a highly welcome contribution of hard evidence and hard-headed thinking to a topic over-supplied with emotion and over-reliant on the reiteration of a few well-worn and possibly untypical dramatic incidents and court cases. The cold douche, however, will not wash away the conviction that the pursuit and preservation of wild animals were a blot on the landscape, an instance of landowner privilege which was widely resented, generally unpopular, and never accepted by the bulk of society.

In one sense anti-game law and anti-gentry prejudices will rightly survive Munsche's book, if only for the reason that he interprets his subject in a narrow, if understandable, legalistic way. The game laws properly so-called provided that only those who owned land worth at least £100 a year, or long leaseholds worth £150 a year, were permitted to hunt and kill a specified list of wild animals, which included hares, partridges, pheasants, and moor fowl, but excluded wild duck, deer and rabbits. That did not mean, however, that every Englishman had the right to take any of the latter three if he could catch them. Far from it; these animals were not regarded as game by the law, but were given the higher legal status of ranking as the private property of the owner of the land upon which they might be found, with the consequence that their unpermitted capture counted as theft and attracted the punishments thought to be appropriate to stealing, on the particularly harsh scale eighteenth-century landowners applied to the protection of their own peculiar sporting property — imprisonment, transportation, or death for some variants of the methods or times of taking deer or rabbits. Before 1831, therefore, those who snared rabbits were thieves, not poachers, and prosecutions against them were not made under the game laws. The Game Reform Act of 1831 brought rabbits under the same law as hares, and winged game. Thereafter all these were in effect a form of property and their unlawful pursuit was a special kind of trespass incurring a fine of £2 or, in default, 2 months' imprisonment. The 1831 Act provides a logical terminus for Munsche's study; but it also means that he holds, under the strict letter of the law, that only post-1831 poachers might be rabbit-catchers and eaters. Since it is a fair presumption that before 1831, as well as after, the bulk of illicit hunting for the pot was for rabbits, their exclusion from a discussion of eighteenth-century poaching out of respect for a legal nicety will strike readers as an emasculation of the subject which, moreover, renders the attack on the sentimentalist school of historians a trifle hollow.

Within its terms of reference, however, this book makes a most convincing case for saying that social historians have been aiming at the wrong target in their denunciations of the game laws. The Act of 1671, which made the pursuit of game the exclusive privilege of the landed gentry, was admittedly a clear case of class legislation. Munsche argues that the motive for instituting this property qualification was the desire of the landed gentry for a symbolic and practical demonstration of their superiority over the moneyed interest of merchants, lawyers, and bankers whom they regarded as the core Commonwealth men who ought to be put in their place by being denied access to country sports. This is unconvincing. Even if it had been true that the moneyed

interest in the Restoration period were the political and social enemies of the landed interest, there was nothing to prevent the richest of them acquiring the necessary landed qualification, and the continual movement of money into land is well attested. Indeed, it could equally well be argued that the 1671 Act was designed to stimulate the purchase of land by sporting bankers, and thus to keep up the value of the land. In any case, those who would have smarted most directly from the disqualification would have been country residents close to the hares and birds, rather than townsmen, and there seems no good reason to doubt that the main object of the Act was to keep the lesser freeholders, copyholders and tenant farmers out of the way of gentlemen's sport; landless labourers, naturally enough, never had been permitted to take wild animals, which, equally naturally, had never stopped them. The attempt to explain the game laws as a key element in a gentry-bourgeois conflict should, therefore, be allowed to lapse along with other instances of over-subtle Marxist analysis.

The game laws remain as class legislation in the rural context. Once having established their superiority in law, Munsche makes it clear that the landed classes were not very serious about maintaining it in practice, since landowners frequently invited or encouraged non-qualified countryfolk — yeomen, tenant farmers, substantial local tradesmen and the like — to shoot game. This, of course, could be resented as a form of condescension; but the main resentment undoubtedly came from the landless and propertyless. It is nevertheless clear from this book that the actual enforcement of the game laws was neither particularly harsh nor particularly biased, in the context of general law enforcement in the eighteenth century. Daytime poachers were liable to a fine of £5, and to 3 months in prison if they could not pay; an impressive amount of evidence is produced to show that the majority of those prosecuted for poaching did in fact manage to pay their fines. Night-time poachers were more harshly treated from 1770 onwards, as elaborate and expensive game-preserving increased, making the hand-reared birds a more valuable form of property, and from 1816 armed poaching at night carried the penalty of transportation. The protection of game preserves by private armies of armed gamekeepers and the weapons of man-traps and spring guns did become more efficiently brutal from the late eighteenth century, but that was a matter of the private protection of private property, not of the law (although the fiendish devices were made illegal in 1827). Munsche explains poaching, its increase from about the 1770s, and the growing severity both of private measures against it and of the law on night poaching, almost entirely in terms of commercial poaching and especially of the activities of organized

poaching gangs supplying the black market in game in the large towns. This does very well for the supply of the London poulterers, whose selling of game was illegal until the Reform of 1831, and for satisfying the demand of the urban bourgeoisie for pheasants and partridges. But it does bring us back to the rabbits. They were blissfully unaware that they were not 'game', and those who took them for the pot were as likely to encounter gamekeepers, spring guns, and indeed the law (but not the game laws), as your genuine poacher. Until more work is done on the part which rabbits — or other wild animals — played in the diets of the poor and the labourers of the countryside it is unlikely that social historians will accept Professor Munsche's wholly commercial deflation of the game laws and poaching as the final word on the subject.

F M L THOMPSON

SAMUEL PYEATT MENEFFEE, *Wives for Sale: an ethnographic study of British popular divorce*. Oxford, Basil Blackwell, 1981. ix + 336 pp. Maps. Illus. £15.

When in 1886 Hardy made the plot of *The Mayor of Casterbridge* hang on the consequences of a wife sale there were readers then, as since, who were outraged and found the story far-fetched. In fact, as Mr Menefee assures us, the practice of wife sale was widespread and, if not very common, was certainly still in use at the date at which Hardy set his story. Indeed, an appendix in his book lists as many as 386 cases of wife sale which he has been able to discover, stretching from 1553 right down to this century. The decline, in fact, apparently began only about 1850, and prior to that period the practice was geographically well scattered, though with a certain concentration in the years 1800–49 in London, the north Midlands and Yorkshire.

Wife sales were frequently connected with inns and markets, and particularly with Smithfield market, where the proceedings — the halter round the neck, the renting of a pen, employment of an auctioneer — bore some resemblances to the sales of livestock. The reasons for selling a wife were various, but seem to have been most commonly associated with adultery, often by the wife. But there were other reasons for the husband's decision to part with the wife — a liking for strong drink on her part, a tendency to bodily grossness, or being 'damned hard mouthed and headstrong'. The occupations of the purchasers were until the nineteenth century also various, though there are indications that they were often superior to those of the sellers, so that for the wife the sale meant a rise in social status — perhaps one reason for her accepting it. In the nineteenth century, however, the purchasers were very largely labourers or men of similar low status. The sums involved could rise to 50 gns and a fine horse, or

even 100 gns, but were usually much less, and might fall as low as a leg of mutton or a shilling and a pot of beer.

Magistrates generally preferred to ignore incidents that came to their knowledge as 'a custom preserved by the people' which it might prove dangerous to suppress, though the occasional riots to which they gave rise might call for the intervention of the constable in order to maintain the peace. Wife sales, evidently, were sufficiently rare and scandalous to attract the notice of the press, and yet were familiar enough to find a place in folklore, verse, drama, and literature.

Wives for Sale is intended primarily as an anthropological contribution to our knowledge of unofficial quasi-legal practices in an era before legal divorce was practicable or cheap, but it makes also an intriguing chapter in social history. Mr Menefee has extracted from somewhat limited documentary resources a surprising amount of valuable detail, and discusses it with knowledge and imagination.

G E MINGAY

PAMELA HORN, *A Georgian Parson and his Village: The story of David Davies (1742-1819)*. Beacon Publications, 11 Harwell Road, Sutton Courtenay, Abingdon, Oxon OX14 4BN, 1981. ii + 90 pp. Illus. £2.80 (pre-paid copies post free).

The name of David Davies is familiar to historians of farm workers and the Poor Law, even though many, perhaps, have never opened his short volume, *The Case of Labourers in Husbandry Stated and Considered*, published in 1795. Those who have studied his text and the details of the family budgets which he collected may well have wondered what kind of man he was, and how a village parson came to produce this 'simple, faithful and sincere picture of the facts', as the Hammonds described it. Pamela Horn's brief account of Davies answers these questions and, indeed, she has succeeded in discovering a great deal of his character and career.

His career was in fact quite unusual, for he spent some early years in the West Indies, first as a scholar, then a schoolmaster, and subsequently a plantation manager, before returning home at the end of the 1760s. There followed a period of service as a private tutor and secretary in landed families, after which he took Holy Orders and was presented to the living of Barkham in Berkshire. This was in 1782, in a period when there was growing concern with rural poverty and the poor law, a concern which led to Gilbert's Act, Speenhamland, Whitbread's minimum wages Bill, and Eden's great *State of the Poor*. Davies was caught up in this concern, not least perhaps because William Morton Pitt, the son of his patron, was an active supporter of the abolition of the slave trade (and had encouraged Davies to give evidence before

a Select Committee on the subject) and was also a keen advocate of Sunday Schools, Poor Law Reform, and schemes to create employment among the poor.

Davies began to collect the material for his book in 1787, obtaining additional data from friends such as Morton Pitt and the Revd Mr Romaine of Pangbourne. *The Case of Labourers in Husbandry* attracted considerable notice, receiving a 4-page review in the *Gentleman's Magazine*, and encomiums from another clerical authority, the Revd John Howlett, and even the censorious William Marshall. Davies did not accept the argument that wages had to be kept low in order to force the poor to be industrious: this doctrine led men 'to despair; and despair drives them into all sorts of wickedness'. When a critic pointed out that, despite the hardships Davies described, the families managed to 'live on', he replied 'Yes, they *do* live on, to be sure; but *how* do they live?—By aids out of the poor rates; by Charity; by begging; by poaching; by pilfering; by wearing Rags instead of Clothes; by running in debt with petty Shopkeepers, &c. &c. To these admirable means they are forced to have recourse on account of the *policy* of keeping wages as low as possible.'

Pamela Horn's valuable study of Davies is supplemented by excerpts from his private papers showing details of his income and expenditure, and an account of the parish of Barkham itself. These are followed by some passages from his book, including family budgets, where Dr Horn has indicated the likely identity of the families themselves. In all, an interesting study and one made the more valuable by the great scarcity of Davies' original work. As a private venture in publishing it deserves to do well.

G E MINGAY

I G JONES, *Explorations and Explanations: Essays in the Social History of Victorian Wales*. Gomer Press, Llandysul, 1981. 338 pp. £9.75.

This important book assembles a number of essays written at different times by the author which concern themselves with the common theme of the character of social and political change in Wales between 1850 and 1870. Professor Jones claims that contemporaries were right in thinking that for all their relative quietness these were the two most creative decades of the century in terms of the political awakening of the Welsh people. It was during these years that the vital change in the mentality of the people was effected whereby the old deferential attitudes to landlord political hegemony were broken down, and the author's concern is to identify and explain the main agencies of this change whereby 'a people came to be politicised'.

Nonconformity played a crucial role in this political metamorphosis, and in Part 1 on 'Religion', which contains 2 essays of an empirical kind dealing respectively with the nature of denominationalism in a rural

setting (Caernarfonshire) and in an industrial one (Swansea and District), we are shown the overall pattern of denominationalism within Wales. It is stressed that the explanation for such a pattern is to be found in the nature of society itself.

Part 2 on 'Politics' comprises 3 essays which deal, again in an empirical fashion, with the social forces shaping political behaviour within the contrasting constituencies of Merioneth, Cardiganshire, and Merthyr Tydfil. The essay on Merioneth examines at the outset the socio-economic conditions of the area and the author claims that 'relations on a formal level were good' between landlord and tenant. Although no politics were present in that relationship at mid-century, tenants were nevertheless well-served in 'the politics of religion'. This is not to imply, Professor Jones contends, that tenants, even those of the more radical Independent congregations, were politically aware by the time of the election of 1859. Rather, 'the politics of religion' were confined to 'the local implications of the Catholicising tendencies of the Church of England'. The fear and suspicion surrounding this issue led to the first real challenge to the old political order and the author reveals the vital role played by the middle-class intellectual, religious and professional group within Bala in the late 1850s in arousing the electorate. With religion as its principal motivating force, this middle-class organization naturally linked up with the rural chapels, whose own *élite* comprised precisely that of the surrounding agricultural neighbourhoods. The author also points to economic grievances which heightened the tension, although in so doing he is not wholly consistent with previous assertions about 'good' landlords. The effective, if unsuccessful, Liberal challenge in 1859 led to evictions of tenants, and landlord coercion scotched Liberal chances in 1865. A number of factors are presented by the author to account for victory in 1868, one such being the entry into county politics of the Liberation Society. The Bala group played its part but now the real drive came from the new slate quarry community of Blaenau Ffestiniog.

The essay on Cardiganshire similarly analyses the socio-economic background and Professor Jones again sees relations between landlords and tenants as harmonious. Organized religion played little part in the 1865 election, he contends, for 'nonconformity in Cardiganshire was not at that stage a political movement'. In his view there was a need for people to be taught the political implications of their religion and, even more pressing, that they should be freed from the fear of gentry economic sanctions. Such landlord coercion appeared in 1868 when the Irish Church Question inevitably stirred tenants to follow their consciences and defy their landlords, heroism which may indeed have secured the Liberal candidate his victory. In his essay on Merthyr the

author argues that the election there in 1868 demonstrated not only the importance of nonconformity but also the strength of working-class industrial grievances in weaning the electorate away from the old allegiance to Henry Austin Bruce.

In Part 3, entitled 'Explanations', Professor Jones, taking a broader sweep, seeks to explain the tremendous strength of religious denominations in Wales and, in essays on 'The Liberation Society' and 'The Dynamics of Welsh Politics', how it was that in these middle decades nonconformity became the most vigorous force in Welsh political life.

These are all stimulating, pioneering essays founded upon a remarkable breadth of scholarship. There are, however a few points on which the reviewer would take issue with the author. First, he is to some extent uncritical of the role of nonconformity in society in so far as he neglects to consider its alleged lack of concern for the social problems bedeviling the industrial communities. Second, there was possibly more interference by the preachers in Cardiganshire at an earlier date (perhaps by the early 1850's) than Professor Jones allows in the way their congregations voted at elections. Finally, evictions in 1868 should not, perhaps, be viewed as a one-way process of Tory landlord intimidation. For it is feasible that such interfering conduct was matched by the 'systematic intimidation of the Dissenting Preachers', as Lord Cawdor's agent put it in 1869. These criticisms, however, in no way detract from one's admiration for this book.

DAVID W HOWELL

VIRGINIA BERRIDGE and GRIFFITH EDWARDS, *Opium and the People: Opiate Use in Nineteenth-Century England*. Allen Lane/St Martin's Press, 1981. xxx + 370 pp. 13 plates. 7 figures. £20.

To a great extent, opium was the aspirin of the nineteenth century. Cheap, readily available before 1868 from grocers' shops, it was widely used for a great variety of complaints. As Godfrey's Cordial or Dalby's Carminative it was used for quietening children, particularly when mothers took their babies with them to the workplace; as Dover's Powder it was for long prescribed for gout; and as Dr Collis Browne's Chlorodyne for diarrhoea and dysentery. There were many home-made preparations, too, including 'poppy-head tea' and 'sleepy beer', and in the English Fenlands the inhabitants commonly bought their opium pills as they did their groceries at the markets in such towns as Ely, March, King's Lynn, and Cambridge. The pill habit was concentrated in the Fenlands and died away as one moved out of the district, and it was no doubt related to the high incidence there of agues and rheumatic pains. Laudanum was sold in Holbeach at fourpence an oz, and a pennyworth, 30 grains, was the average daily

dose of addicts: a druggist in Ely sold an enormous 3 hundredweight of opium in a year. Men regularly dropped the pills in their beer, and opiates were also used for treating livestock — 1 Cambridgeshire child died from an accidental draught of opium intended for a calf.

Opium and the People, however, has a much wider remit than that of opium consumption in the Fens-lands. The book ranges over the import of opium and its cultivation — some was produced in Britain, and since it was a labour-intensive process it was recommended for Ireland, where labour cost less. There are chapters on the use of opium in literary circles and middle-class society; the growth of restrictions on its sale, and on the use made of other narcotics such as cannabis and cocaine. There is also a discussion of the extent to which among the working classes opium was an alternative, rather than a supplement, to alcohol; and some contemporaries wondered whether the success of the temperance movement would lead to greater consumption of opium. The authors' conclusion is that working people generally used the drug in self-medication for its pain-relieving and quietening effects rather than as a stimulant. Per capita consumption of opium, in fact, rose and fell in line with that of beer and spirits. The book comes up to date with a brief consideration of the recent growth and control of opium use; it is, however, its elaboration of the historical background and social context of opium which will fascinate historians of the nineteenth century.

G E MINGAY

AVNER OFFER, *Property and Politics 1870-1914: Land-ownership, Law, Ideology and Urban Development in England*. CUP, 1981. xviii + 445 pp. £27.50.

This is an ambitious and impressive book. Avner Offer begins by discussing the various interests involved in real property, not just the freehold landowners but also the entrepreneurs, the residential occupiers, the mortgagees, the lawyers and the State itself. In an analysis of the death duty returns for the period 1894-1914 he shows that only 30 per cent of all property was concentrated in the hands of the 'upper' class. By focusing on value rather than acreage he is able to bring out the importance of urban, and especially London, property, and the extent of middle-class propertied interests. 'About one third of all middle-class property was sunk in tenure', he writes, 'and a third of all tenure was mortgaged to a set of middle-class mortgagee rentiers.' Even in the most apparently squirearchical of rural counties the historian neglects the middle classes at his peril. By developing this theme in a national context Dr Offer sheds new light on the realities (or in some cases the political unrealities) of the Victorian and Edwardian land campaigns.

But there is a price to pay. Landlord-tenant relations and the role of aristocratic landowners are two subjects that Dr Offer excludes from his study. He concentrates instead on the urban land question, demonstrating the link between the financial difficulties of the cities and the demand for the taxation of land values. The climax of the book is a lively and perceptive account of the campaigns centred on Lloyd George's budgets of 1909 and 1914. When one is given so much it seems churlish to complain at what is left out. Yet it must be said that Dr Offer's relative unfamiliarity with the politics of the traditional landed interest occasionally results in distortions of perspective. He exaggerates the rural rating concessions of the Salisbury government, for instance, and does more than justice to Disraelian finance. From the agricultural point of view both these political initiatives can be seen as no more than half-hearted, and in Disraeli's case half-baked, responses to acute economic problems. In general Dr Offer is weakest when he looks back before 1870. He is often most stimulating when he looks forward beyond 1914, for the Lloyd George years opened a period of tenurial politics that has continued to the present day.

R J OLNEY

R H HUBSCHER, *L'Agriculture et la Société rurale dans le Pas-de-Calais du milieu du XIX^e siècle à 1914*. Mémoires de la Commission Départementale des Monuments Historiques du Pas-de-Calais, vol 1 1979 and vol 2 1980. 964 pp. Illus.

One consequence of the traditionally close links in France between the study of history and geography has been the considerable attention devoted to the development of agriculture within regional monographs written by geographers. Demangeon's classical study of Picardy, published in 1905, has been the progenitor of a long line of retrospective historical geographies which have focused upon the transformation of rural landscapes, economies and societies: those by Dion on the Loire valley, by Juillard on Alsace and by Livet on Provence were particularly good examples. Only relatively recently have French historians begun to cultivate more intensively the field of nineteenth-century regional history, yielding such bumper harvests as Garrier's study of the peasantry of Beaujolais and now Hubscher's of the farmers of Pas-de-Calais.

This latest monumental work, the product of 15 years' research, examines microscopically some 60 years of agricultural and social change in the northern *département* of Pas-de-Calais before 1914. Part 1 identifies the basic structures of rural life in the area of the middle of the nineteenth century: description of its physical geography lays the foundation for an account of its farming systems, property profiles,

and social classes which emphasizes their local diversity and their generally retarded development in 1850. Hubscher argues that the second half of the nineteenth century saw the transformation of these structures, a period of progress brought about by the spread of scientism and by the penetration of capitalism. Part 2 examines the catalytic roles played by groups (the agricultural societies) and by individuals (referred to by Hubscher as the 'captains of agriculture') in the diffusion of agricultural improvements of all kinds. Particular importance is attached to the agricultural competitions, field-trials and demonstrations organized by the societies and by the public authorities in providing private individuals with directly observable testimony of improvements which might be emulated. With knowledge about agricultural innovations diffusing more rapidly, their adoption became more probable when they were also seen to more profitable than traditional practices. Part 3 traces the progressive insertion of agriculture into the capitalist economy: it examines the changing patterns of prices of agricultural products, of the ways of transporting and of the means of marketing. Much of the stimulus to change is shown to have come from improved access to expanding demands — locally, nationally and internationally. Of particular interest, too, is Hubscher's attempt to identify both the places and the people within Pas-de-Calais which gained most from the transformation of its agriculture, for the benefits derived from the commercialization of agriculture were not evenly distributed either spatially or socially. Part 4 investigates the social adjustments which accompanied — to some extent either permitted or were necessitated by — economic developments: the geographical, occupational and social mobility of the rural population is examined together with changing family and household structures, daily and seasonal working patterns, living standards and the distribution of wealth.

This is an admirable work which illuminates one of the most advanced districts of French agriculture during the late-nineteenth century. Hubscher draws upon an astonishingly wide range of unpublished sources, benefiting from the fact that because significant agricultural improvement came later to France than to England it was better documented there than it would seem to have been here, judging by the absence of studies of agriculture in an English county comparable in breadth and depth to this scholarly examination of agriculture in a French *département*. Hubscher demonstrates that the economy of Pas-de-Calais was transformed more rapidly than its society was adjusted; and one imagines that its landscape was modified even more slowly. One of the strengths of Hubscher's analysis of agricultural change and progress is his awareness of the need simultaneously to identify inertia and even

retrenchment. But one of the weaknesses of his study is that he tends to play down the crisis in agriculture at the end of the century and to neglect the cloak of protection thrown by the government around the farmers of Pas-de-Calais (and elsewhere in France); another is that his reconstruction of rural society ignores the battle waged in villages, hamlets and farmsteads between Church and State, between Right and Left, for the minds of its populace. Weber's 'peasants into Frenchmen' thesis is acknowledged by Hubscher, but not interrogated in Pas-de-Calais. Even after such a magnificent harvest as Hubscher has brought home, gleaners would not go unrewarded.

ALAN R H BAKER

GILBERT C FITE, *American Farmers: the new minority*. Bloomington, Indiana, Indiana UP, 1981. ix + 265 pp. £11.70.

Professor Fite's South Dakota farming background makes him especially sympathetic to farmers, for many of whom 'life was frightfully hard', especially before the Second World War. Though in the late nineteenth century and early years of this century farmers had already lost their primacy in the American economy, nevertheless it was only in the 1940s that the modern industrialization of agriculture developed so rapidly as, within a single generation, to transform farmers into a tiny minority of society. In 1940 some 30.5 million people lived on some 6 million farms, not many fewer people than in 1920, when they represented 30 per cent of the population. Today farmers make up less than 3 per cent of the population — 'one of the most fundamental changes in all of American history . . . A farmer with modern equipment in 1980 could farm 5 to 8 times as much land as his father had farmed, and do it easier and better.' The book traces the course of this change since the 1920s, and the political, social and economic factors involved in it, discussing the revolution in technology, the role of agriculture during the Second World War and the Korean conflict, and the effect of government policies and agribusiness on the family farm. Despite the huge sums spent on farm support programmes, average farm incomes have continued to fall substantially below those of the non-farm population. The voices of the farmers, reported in detail in one of the chapters, complain about this and much more, while still seeing themselves as a 'respected minority', 'one of the most important minority groups in the world'.

It is uncertain, remarks Professor Fite in conclusion, whether the decline in farmers will make America a worse or better place: it is only certain that it will be different. Many Americans feel that with the passing of the old rural community something basic and meaningful is being lost: they struggle to

reconcile modern agriculture with emotions and traditions that go back to the preindustrial farming of the past.

G E MINGAY

L GAÁL and P GUNST, *Animal Husbandry in Hungary in the nineteenth and twentieth centuries*. Akadémiai Kiadó, Budapest, 1977. 411 pp. \$25.

To deal with the subject adequately, the authors had to discuss the social, economic, and political aspects of life in Hungary over a very long period. This gives the book wide interest, catering for economic and social historians as well as agricultural specialists.

It has been developed from a detailed examination of statistics and reads as if it had been based upon a thesis. It completely lacks the more romantic approach of popular accounts of social history. Many points are diligently developed from relevant data, and the literature review must have involved a great deal of work. However, the book is rather long in relation to its content, is somewhat repetitive of specific detail, and unfortunately the translation is not completely fluent. It is not, therefore, easy fireside reading. It will, however, be of undoubted interest to some students in several disciplines.

The first chapter deals with sweeping social, economic and political changes covering the 400 years to the First World War.

Changes in Hungary were similar to those in other countries, including Britain, even if the timing was different; the break-up of the manorial system, a 'golden hoof' period, the development of grain growing, industrialization, the development of internal transport and greater foreign trade. The authors illustrate the effect of political control, both national and international, on trade, the stimulating effect which lucrative, or necessary, export markets have on agricultural development and the essential role of government and other co-operative or representative organizations in such development. The break-up of the Austro-Hungarian monarchy and the comparative disadvantage of the 'new' Hungary after 1920 posed greater difficulties than those faced in many Western European Countries. All this is discussed in detail in chapters 5, 6 and 7.

The authors then deal with the separate species of livestock, and show how breeds of cattle, sheep and pigs changed in type and number. Hungarian red spotted cattle clearly owe much to the Swiss Simmenthal while European, and particularly British, type pigs have materially replaced the Mangalica breed.

The story illustrates the important participation of the state in development through animal health control and also through legislation governing pricing. It is interesting to note the reference to price

control of milk in the early 1930s — a time when the Milk Marketing Board was being established in Britain.

It is not until the chapter on forage production and feeding that one feels that animal production practice is really being discussed. This begins with a brief description of winter feeding of livestock in manorial times. Despite the backward nature of livestock production reference is made to fermentation storage of fodder in the last century and to ensilage in the 1920s. It is interesting to note that in Britain, where scientists can produce grass silage of predicted digestibility and protein content to order, farmers still conserve half their winter fodder from grass as hay and not silage. There are many factors affecting the uptake of new ideas.

Some of the author's criticisms of the large farms for not speedily seeing the advantage of the new breeds may be justified but at the time the same conservatism was evident in Britain, where established ideals of excellence based upon appearance instead of performance were common. It was not until after the Second World War that population genetics theory was applied to animal breeding. Much of this theory was developed in North America and Britain. Its application, particularly in pig breeding, has been very dramatic in the UK following work in poultry in the USA, but perhaps the postgraduate schools in the USA have done most to spread the technology world wide.

Because there is less commercial return to individuals from cattle and sheep breeding (genetic improvement as distinct from reproduction) there has been less progress with these two species.

In general it seems that economic forces are most likely to cause change. The authors concentrate on price, but it is not clear how demand related to price. Obviously, political control over, and stimulation of, exports was very important. However, the early export from Hungary of poultry products was entirely the work of private enterprise.

The situation in Hungary prior to the Second World War was drastic and there was some recuperation first during, then after the War, when the large estates were abolished and self interest stimulated the increased number of land holders to produce more. The final chapter, however, gives a rather sad account of inept political measures, and collective farms and state farms replaced the large estates. Reading between the lines indicates that only when government control became less restrictive did the co-operative farms begin to function. Although the book ends at 1970 it is clear that progress has continued to take place. Given that co-operative farm members were guided with tact, the large farms in Hungary were well placed to exploit modern technology. That life in Hungary is now thought to be as relaxed as in any East European

country indicates that progress along these lines has indeed been made.

JOHN DUCKWORTH

T A CROWLEY (ed), *Proceedings, Annual Agricultural History of Ontario Seminar*. 1st meeting 1976, iii + 76 pp, \$4; 2nd, 1977, iii + 123 pp, illus, \$4; 3rd, 1978, ii + 92 pp, illus, no price stated. Published by and available from: Office of Continuing Education, University of Guelph, Guelph, Ontario, N1G 2W1, Canada.

In 1976 the University of Guelph hosted the first of what has become an annual series of one-day seminars on the agricultural history of Ontario. The papers presented at the first three of these seminars have been published: all three 8½ × 11 inch in size; the first two in typescript, held with a plastic ring binder; the third is printed on folio, stapled through the spine.

The seven papers in 1976 include a detailed study of mid-nineteenth-century rural demography (D Gagan), a highly-generalized summary of the principal field-crops grown in the province from first settlement to the present day (B E Twamley), and a rather dry assessment of changes in nineteenth-century agricultural education (F A Partridge). In 1977 there were six papers (this is considerably the shortest volume, using a much larger and widely-spaced type than in 1976). There are two applications of basic geographical theory: C F J Whebell studying the effect of transport changes on the countryside, and F Dahms looking at the change from local rural service-centre to what he calls a modern 'dispersed city'. Also included is a basic study of archival materials (A Ross), and an entertaining account of the reading habits of the Ontario farmer in 1917 (J J Talman). Maps appear in the 1977 Proceedings. By 1978 there are also photographs (not always as clear as could be desired). In this volume are a study of library resources (J Moldenhauer); two examinations of the rural landscape (O Scott, mainly roads, and C O'Neal, barns), and an examination of the growth and decline of the Ontario cheese industry (E Haslett); in all, six papers.

The 19 contributions cover a wide range of topics, with no unifying theme other than agricultural history and Ontario — and the former is pretty widely interpreted, to allow a paper on the development of the telephone system. There is also a wide range of backgrounds among the contributors; academics from history, geography, engineering, plant and animal science, and landscape architecture; librarians and archivists; government employees from Agriculture and Food, Natural Resources and other ministries.

There is naturally variation in the quality, usefulness and readability of the papers presented; though the small scale of the seminar leads to less dress than is usual in most conferences. These Proceedings are a worthwhile investment for anyone interested in the agricultural history of this part of Canada.

ROBERT S DILLEY

G W COOKE (ed), *Agricultural Research 1931-1981 — A history of the Agricultural Research Council and a review of developments in agricultural science during the last 50 years*. Agricultural Research Council, London, 1981. ix + 367 pp. Illus. £23.

This book is a reminder that the recent past is also history, and that agricultural science is developing a history of its own. Agricultural science is one of those branches of science that has only recently been applied to a long-standing craft, so that modern agriculture has been described as a marriage of practice and science. This causes difficulties in following the stages of integration, such as those that I encountered when asked to give a university course covering the history of agriculture and the history of biology.

In the preface to the present volume Lord Portchester, Chairman of the ARC, outlines the immense increase in agricultural production since the nineteen-thirties when two-thirds of Britain's food requirements were imported, whereas today only half our requirements, and two-thirds of the temperate foodstuffs are produced on less land. The tacit aim of the book is to indicate the contribution to this change of the Agricultural Research Council which was founded by Government in 1931.

It is written by a group of scientists who are therefore not historians, but not all are members of the Agricultural Research Service. Specialists cover different topics in separate chapters, but the first five chapters occupying nearly one-third of the volume take the form of 'A personal historical account' of British agricultural research, and the Agricultural Research Council by Sir William Henderson, a former secretary to the Council. Although his first chapter covers the period from 1700 to 1931, most of it is taken up with the establishment of research institutes towards the end of this period, only two being set up before 1900. One was Rothamsted Experimental Station, which was founded in 1843, and the book jacket has a recent colour photograph of wheat that has been grown continually on one field there since that date. The other institute is the Ministry of Agriculture Veterinary Laboratory at Weybridge, Surrey, which was established in 1894. Topics covered in his subsequent chapters include the establishment of the ARC, post-war expansion, and the changes resulting from the Rothschild Report. It is a pity that no sources are given for the

considerable amount of information in this section since they could have provided useful leads for the agricultural historian.

All other chapters have a limited number of key references to give further reading on the subjects covered, which are as follows: plant breeding, crop production, horticulture, soils and fertilizers, agricultural engineering (in which it is recorded that 667,000 horses have been replaced by 344,000 tractors since 1931), statistics and computing, animal nutrition, diseases of farm animals, animal breeding, animal husbandry, grassland research, milk and milk products (in which the reader is reminded that the market for liquid milk is largely a product of the twentieth century).

Such a division of subjects means that other topics are likely to have been omitted, and a perusal of the moderately good index plus a search of the text shows that this has happened. These chapters are reviews of scientific advances and do not claim to be historical accounts. As such, they tend to concentrate on recent rather than earlier research, but each one highlights one or more major discovery in biology which led to research in the agricultural field.

The last 20 pages comprise a series of appendices starting with a facsimile of the Charter of the Agricultural Research Council dated 1931 and continuing with lists of Council Members, Officers, Assessors, Scientific advisers, and Directors of Institutes since the ARC was established.

This book will be useful not only to agricultural historians who may lack the sources for an excursion into the history of agricultural science, but also to scientists who frequently regard the past as irrelevant. It indicates how little has been written on the subject which is identified as a research field also for historians of science, suggesting (if one does not already exist) a new sub-division — the history of agricultural science.

M L RYDER

declares the intention that the new periodical should have a style of its own with the printing of material from the Orkney archives and of important articles from local newspapers.

The current issue fully bears out the editor's novel approach: the articles are written to scrupulous scholarly standards and are of wide range both in time and in topic; indeed it contains an article on the burning contemporary issue of uranium prospecting — a contribution which fills out its polemical theme with a balanced analysis of the play of vested and political interests over a wider scene. Agricultural historians may reasonably expect much that is of interest to them. For was not Orkney the scene of an agricultural transformation as dramatic as any in the United Kingdom? In this case, we have an account of the process of dividing the commons. Of relatively recent occurrence, this change seems to stand out clearly in the records. The peculiarities of Orcadian law and custom as well as obvious relevance to the wider processes of agricultural change give the article importance; it is, in any case, clear, readable and solidly based and is accompanied by particularly attractive illustrations drawn from eighteenth-century maps. The scholarly modern account of the division is strengthened by an eye-witness description — depending it is true on a memory running back some 70 years — which adds some vivid detail. It is a good example, perhaps, of the new style claimed by the editor.

All the articles are distinguished by the way in which local events and changes are related to, and compared with, developments and influences in the outer world; the periodical certainly escapes any taint of parochialism. Altogether, it is to be welcomed as a magazine which attends to readability and fine illustration as well as to scholarly respectability and which sweeps over horizons well beyond the islands on which its interest focuses.

MALCOLM GRAY

WILLIAM P L THOMPSON (ed), *Orkney Heritage*. Vol 1. Orkney Heritage Society, Kirkwall, 1981. 130 pp. 12 illus. £2.90.

Orkney well deserves a historical magazine of her own. For all the highly distinctive history of the islands and for all the distinguished efforts of local scholars, they remain, it is safe to say, *terra incognita* for the majority of Scottish historians. Yet, as we might expect of an area with an educated population of high local pride, accounts of local provenance have not been lacking and there have been predecessors of this first, and highly promising, issue of a new periodical, starting what is hoped will be an annual series; the Orkney antiquarian societies have published their proceedings over fairly extended periods since 1922, but the editor of *Orkney Heritage*

Landscape History. *Journal of the Society for Landscape Studies*. Volume 1, 1979. iii + 89 pp. £7 with membership of the Society (Membership Secretary: P R Hough, 41 Alexandra Road, Penn, Wolverhampton WB4 5VA).

The Society for Landscape Studies was formed to encourage an interdisciplinary approach to the subject; it hopes to attract archaeologists, botanists, economists, geographers, geologists, local historians, and toponymists. The Society's areas of interest are stated to be boundaries, field systems, settlement patterns, and industrial development, with emphasis on field work and documentary research. *Landscape History* is the first of what is intended to be an annual series of volumes. The copy is in typescript; but although the right-hand margins are not justified the

use of high quality paper makes for easy readability. The volume is generously illustrated with maps, diagrams and some photographs.

In keeping with the aims of the Society, the 9 papers are wide-ranging in interest; none is very long. Three deal in a general way with some basic data-source for British landscape studies. James Pickering shows how aerial photography can aid the archaeologist; Richard Smith looks at the use of environmental data, mostly through palynology; Oliver Rackham examines the kinds of documentary evidence useful to the historical ecologist. There is nothing here not done more thoroughly elsewhere, but these papers may serve as introductions for those unfamiliar with the data-sources of other disciplines. Four papers look at specific cases of landscape reconstruction. Three of these focus on mediaeval West Yorkshire: D J H Michelmore tracing tenurial and territorial divisions; Margaret L Faull using place-names, and Stephen A Moorhouse employing a range of familiar documentary sources — court rolls, charters and the like. C J Bond carries out a similar study for the Oxford-Berkshire area, using monastic records.

The final two papers fit rather uneasily with the rest. Sölve Göransson adopts a metrological approach to regular settlements in Sweden; while J C Nwafor offers some brief and broad generalizations

on landscape studies in West Africa, with specific examples from Nigeria. Future volumes might find it preferable to concentrate on the British landscape. An inter-disciplinary journal has enough difficulty in maintaining a sense of unity of purpose, without becoming international as well. Moreover, since contributors are coming from different disciplines, *Landscape History* would do well to follow the example of the *AHR* and provide brief introductions to the authors.

New journals can always expect to have problems. It is difficult for them to attract top-quality papers, their authors preferring outlets with established reputations. This is especially so with interdisciplinary journals, which may not circulate widely in any one traditional discipline. The papers assembled here range from the superficial to the interesting; enough to satisfy most students of the British landscape. It is a pity that the cost is so high: more than membership in the BAHS, with two journals a year; much more than the also-new *Canadian Papers in Rural History* (*AHR* 28, 1980, pp 137–8), which has more pages, is set in print, and is bound in hard covers. The idea behind the Society and *Landscape History* is one to be encouraged. It is to be hoped that they will not price themselves out of an audience.

ROBERT S DILLEY

Shorter Notices

NIGEL HARVEY, *Trees, Woods and Forests*. Shire Publications, Princes Risborough, 1981. 32 pp. 95p.

This is a valuable addition to a series of booklets that are useful in preparing lectures or filling gaps in knowledge left by more general agrarian histories. It is also a further title in the series contributed by Nigel Harvey — following booklets on *Old Farm Buildings*, *Farms and Farming* and *Fields, Hedges and Ditches*. In the short space of 32 pages are packed 42 photographs of woodland scenes, illustrations from medieval manuscripts and transcripts of maps, all concisely and lucidly captioned, together with a highly informative summary of the history of British woodlands from the wildwood, through medieval clearing for agriculture and building, through early modern exploitation for industry and shipbuilding towards an era of planting when new species were introduced and forests began to be scientifically managed to the most recent period dominated by increasing demand for softwood and contraction in the market for hardwoods. The account is a marvel of compression. It can be read in half an hour and the reader is tempted to pursue more detailed studies by an up-to-date and comprehensive guide to further readings. The author follows closely in the footsteps of Oliver Rackham and revisits woods in eastern England made familiar by Rackham's studies. On the other hand, large and ancient woods in the west of England and in the north country are somewhat neglected. Significantly, the booklet contains no map showing the extent of woodland in Britain at present or at any time in the past. The account directs the attention of local historians to a wealth of sources that will throw light on woodland history.

HUGH PRINCE

CHRISTOPHER DYER, *Warwickshire Farming 1349–c.1520: Preparations for Agricultural Revolution*. Dugdale Society Occasional Papers, no 27, 1981. iv + 41 pp. No price given.

This erudite, elegant and lucid work is amongst the best of its kind. Agricultural historians will find it indispensable. Dr Dyer's treatment of such matters as arable cultivation and pastoral husbandry is generally excellent and what he has to say on a wide variety of topics, including sub-tenancies, field systems and the regulation of wages, is of great interest. He deals well with the changes in the sizes of holdings, but misunderstands yardlands and acres (p 5). All yardlands varied in size, not only Warwickshire ones, but little purpose is served by calculating their maximum, minimum and median dimensions in

acres, for these themselves were just as variable. Yardlands and acres were not units of superficial measure at all. Unfortunately, too, Dr Dyer falls into the trap of taking all leys to be temporary ones (p 12), and without any show of evidence that they were. He is on much firmer ground, however, when he points to convertible husbandry at Baddesley Clinton in 1465 (p 29), and his discovery of up-and-down husbandry in Hampton Lucy as early as 1375–86 (pp 13–14) puts us all greatly in his debt. We hope Dr Dyer will cast his net again, and the wider the better. Meanwhile we remain grateful for this paper and heartily recommend it to all and sundry.

ERIC KERRIDGE

LIONEL M MUNBY (ed), *Life and Death in Kings Langley, Wills and Inventories 1498–1659*, Kings Langley Local History and Museum Society, 1981. xxxiv + 166 pp. £9 + £1 postage from Kings Langley Library, The Nap, Kings Langley, Herts WD4 8ET.

This well-produced book is the second to emerge from a long-established Extra-Mural course on local history at Kings Langley conducted by Lionel Munby. The first was a general history of Kings Langley published in 1963; this second volume consists of 124 wills and 54 inventories covering the years 1498 to 1659, all that survive for Kings Langley during the period. Both the tutor and the members of the group are to be congratulated on the results of their work and on the enterprising way in which they have published it. Lionel Munby's introduction provides a useful discussion and analysis of the contents of the wills and inventories, including the changing religious attitudes which the wills reveal, interesting material on the web of kinship and inheritance, and on crafts, farming, houses, furnishings, and wealth. This section could well have been longer and provided even more background material about the place and the people, although some additional information about testators from the parish registers has been included as a footnote to some of the wills, and there is a useful glossary of terms. Unfortunately the number of surviving inventories is too small for any firm conclusions about farming, although there is some evidence concerning crops and livestock, and of money-lending by farmers.

This is a good example of local initiative in publishing and of the sort of work which can be done by a local history society or an Extra-Mural group under the guidance of an enthusiastic tutor.

J H BETTEY

J B HARLEY, *The Ordnance Survey and Land-Use Mapping*. Historical Geography Research Series 2, 1979. v + 58 pp. Illus. No price stated. (Copies from Geo Abstracts Ltd, University of East Anglia, Norwich NR4 7TJ.)

This little booklet provides a critical examination of what the author believes to be an under-used source for studies of the later nineteenth-century farmscape: namely the 1:2500 maps of the Ordnance Survey and the associated Books of Reference. Attention is concentrated on those published parish maps which were accompanied by books tabulating each parcel with its acreage and state of cultivation. The limitations of the data are freely admitted. Only about one-quarter of the country was covered, the individual surveys were spread over a quarter of a century (1850s and 1880s), the criteria for land-use varied and were often rather vague, and the accuracy with which the data were recorded is unknown. However, Harley argues that the Books of Reference do provide useful supplementary information which can be cross-checked with other sources (such as Tithe surveys), and that they act as a guide to the data recorded on the maps. Changes in the contents of the Books of Reference are illustrated. The methods used to collect land-use and cadastral data are examined. An attempt is made to assess the accuracy of the land-use information and to give the precise meaning of the terms used. Altogether this is a handy introduction to, and guide through, a series of documents which may provide useful information to anyone interested in the mid-Victorian countryside.

ROBERT S DILLEY

RAYMOND CROTTY, *Cattle, Economics and Development*. Commonwealth Agricultural Bureaux, Slough, 1980. 253 pp. £15.

This book aims to identify and explain the principles of pastoral resource exploitation and is intended for a broad readership both in interests and disciplines.

In an attempt to simplify a complex subject, pastoralism is used in a limited sense, applying only to cattle and buffaloes, and explicitly excludes other grazing species. The historical aspects of pastoralism are dealt with fairly summarily in some 18 pages and deal *inter alia* with what the author describes as Capitalist Crop Production and Capitalist Pastoralism. The historical content is therefore slight, individual in tone and eclectic.

The major part of the book consists of a mathematical model, purporting to represent the decision-making processes of cattle owners, which in turn suggests a typology of 6 cattle production systems based on 2 types of grazing tenure and 3 end products; milk, milk and calves, and calves. The author then devotes a chapter to each of these 6

types, the form of each chapter being a case study based on type and country. The final chapter discusses man's misuse of pastoral resources and advances suggestions for a more rational exploitation of them.

The author set out with the intention of writing a work that was 'speculative in thrust' and pastoralism has not been the subject of such treatment in the past. Whether it is a subject able to stand on its own, as it were, removed from agricultural and other problems, is debatable.

PETER NEWBOUND

W B STEPHENS, *Sources for English Local History*. CUP, 2nd edn, 1981. xv + 342 pp. £25 (hardback); £8.95 (paperback).

The first edition of this book appeared in 1973 and it has become established as a standard work of reference for historians in general as well as for those for whom it is immediately intended, the teachers and students of local history, archivists and librarians. It does not set out to be a comprehensive guide to record offices and libraries but it does provide a great many references to catalogues of manuscripts and printed sources as well as details of numerous secondary works. Eight of the 9 chapters deal with particular fields of interest, population and social structures, local government, poor relief, industry, trade and communications, agriculture, education, religion, and houses, housing and health. The author has used the new edition to incorporate recent writing on source materials, to provide new material on such topics as family history and oral history, and to add the new chapter on houses, housing and health. The information on the location of records, libraries and depositories has been brought up to date. The book is an invaluable guide for all those beginning work in local history or seeking to widen the range of their studies.

G E MINGAY

CLARENCE GOHDES, *Scuppernong: North Carolina's Grape and its Wines*. Durham, North Carolina, Duke UP, 1982. xi + 115 pp. Illus. \$14.95.

The Scuppernong, named after a river in North Carolina where it was first grown, is the oldest native wine grape of importance in North America. Because of it, North Carolina was in 1840 the leading wine producer in the nation, though destined not to hold this title for long. In 1904 a sparkling Scuppernong won the blue ribbon for champagnes in the international competition held at St Louis. The winning producer was Paul Garrett, who began his career as America's leading vintner in the state. Professor Gohdes' book traces the development of the wine industry based on the grape and its place in American wine production as a whole. There are

interesting side glances — at rival beverages produced in the region ('Old Nick' rye whiskey, said to be valuable for saving doctors' bills for coughs, chills, malaria, and weak lungs, and such alcoholic pick-me-ups as Lydia Pinkham's Vegetable Compound, Baker's Stomach Bitters and Hooker's Wigwam Tonic), at the growth of the Anti-Saloon movement, the Prohibition era itself, and since. This attractive little study has something in it for historians of agriculture, of business, of American society — and for wine buffs, of course.

G E MINGAY

GARY E HANSEN (ed), *Agricultural and Rural Development in Indonesia*. Westview Press, Boulder, Colorado, 1981. xiv + 312 pp. Copies obtainable from Bowker Publ Co, Erasmus House, Epping, Essex CM16 4BU. £11.

This volume consists of an introductory survey and 15 other essays on a variety of aspects of agricultural development in Indonesia. Among the topics covered by specialist writers are agricultural taxation, the green revolution, employment and income distribution, migration, the household economy, and resource management. There is some specifically

historical material in the chapter on 'Agricultural Evolution in Java' by William L Collier, but the bulk of the discussions concern very recent developments and the latest research findings. Some of the latter, however, possess a special relevance for historians interested in peasant life under conditions of land shortage and rural underemployment. This state of affairs gives rise to a multiplicity of occupations in which the cultivation of rice — the staple food crop — plays only a minor part: the remainder of the rural worker's time is spent in producing other foods but also in various forms of non-agricultural work — common labouring, tile making, factory work, and acting as local market official, bicycle repairer, barber, clerk, telephone operator, school teacher, hospital orderly. In one village investigated the adult males spent only 78 out of the 180 available working days doing work of any kind. But another enquiry found rural workers spending an average of 6¼ hours in productive activities, though again with a relatively small proportion of the time spent in cultivating the staple crops. Although this book is essentially for the development specialist, there are many insights of this kind for the historically orientated eye.

G E MINGAY

Books Received

- ANGELO MASSAFRA (ed), *Problemi di storia delle campagne meridionali nell'età moderna e contemporanea*. Dedalo libri. Bari, Italy.
- BARRY COWARD, *The Stuart Age*, Longmans, 1980. 493 pp, inc index and bibliography. £7.50 paperback.
- J E C PETERS, *Discovering Traditional Farm Buildings*. Princes Risborough, Shire Publ, 1981. 80 pp. Illus. £1.50.
- H H COLLINS, *The Village of Ratcliffe on Soar: An account of times past in a small Nottinghamshire Village*. H H Collins, Vikings, Ratcliffe on Soar, Nottingham, 1979. 108 pp. Illus. £1.50 (postage 30p).
- E ESTYN EVANS, *The Personality of Ireland, Habitat: Heritage and History*. Blackstaff Press, 1981. 144 pp. Figs. Plates. £3.95 paperback.
- Thirteenth Report of the Keeper of the Manuscripts*, October 1978 — September 1980. University of Nottingham, Manuscripts Department. 31 pp.
- Pinner Local History Society, *A Pinner Miscellany*. 36 pp. 9 maps. 3 diagrams. £1.20 (postage 35p).
- Pinner Local History Society, *Map of Tudor Pinner*. Folded 95p post free, or in tube £1.25 including post and packing.
- DAVID HEY, *Buildings of Britain 1550-1750, Yorkshire*. Moorland Publishing Company, Derbyshire, 1981. 165 pp. Illus. £8.95.
- A L MORTON, *When the People Arose*, a pamphlet commissioned by the Communist Party to mark the 600th anniversary of the Peasants' Revolt of 1381. Central Books Ltd, 37 Grays Inn Road, London WC1. 36 pp. Illus. 50p.
- R A PREECE, *Patterns of Development Control in the Cotswolds Area of Outstanding Beauty*, Research Paper 27, 1981. University of Oxford, School of Geography. 36 pp. 7 tables. 10 figs.
- CAROL M TRAVAGLINI, *Il dibattito sull'agricoltura romana nel secolo XIX (1815-1870)*. Università Degli Studi, Rome 1981. 268 pp.
- RENATO ZANGHERI, *La Proprietà Fondiaria in Emilia-Romagna*, Zanichelli, Bologna, 1981. 222 pp. Tables.
- Estudis D'Historia Agraria, 3. Centre d'Estudis Historics Internacionals*. Curial Edicions Catalanes, carrer del Bruc 144, Barcelona 37.

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