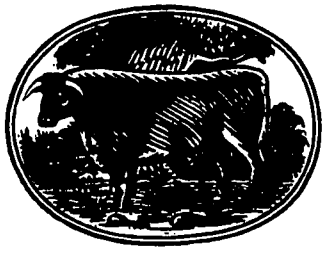
THE AGRICULTURAL HISTORY REVIEW



a journal of agricultural and rural history

Volume 45, Part I
1997

BRITISH AGRICULTURAL HISTORY SOCIETY
AUTUMN CONFERENCE

TRINITY AND ALL SAINTS UNIVERSITY COLLEGE, LEEDS

SATURDAY, 20TH SEPTEMBER 1997

THE RURAL WORKFORCE
(with particular reference to Northern England)

9.30 a m	**Registration**
10.00 - 11.00 a m	Professor John Chartres (Leeds University) *Rural Craft and Industrial Workers in Northern England in the 19th Century*
11.00 - 11.15 a m	**Coffee**
1.15 - 1.00 p m	Dr Steve Caunce (Leeds University) *Farm Servants in Yorkshire c1880 - 1950* Dr Mike Winstanly (Lancaster University) *Families, Farm Servants and Labourers in Lancashire c1850-1939*
1.00 - 2.00 p m	**Lunch**
2.00 - 3.00 p m	Perspectives: Paul Brassley (Seale-Hayne Faculty, Plymouth University) *Workers in the Countryside: a long-term view*
3.00 - 3.15 p m	**Tea**
3.15 - 4.45 p m	Andrew Gritt (Central Lancashire University) *Rural Workforce in South West Lancshire 1790 - 1851* Nicola Verdan (Nene College, Northampton) *Changing Patterns of Women's Employment in Rural England c 1790 - 1890: Case Studies.*
4.45 p m	**Conference ends**

I wish to book for the British Agricultural History Society Autumn Conference on Saturday 20 September 1997 and enclose a fee of £17.00 (including refreshments).

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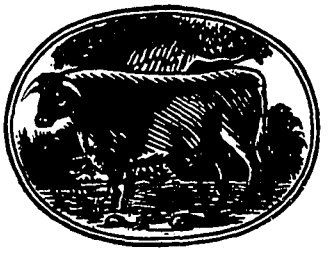
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THE AGRICULTURAL HISTORY REVIEW

edited by

A D M PHILLIPS and D G HEY

Volume 45
1997



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CONTENTS

Volume 45

Dearth, Debt and the Local Land Market in a Late Thirteenth-Century Village Community	*Phillipp R Schofield*	1
Landowners and their Estates in the Forest of Arden in the Fifteenth Century	*Andrew Watkins*	18
Mr William Cobbett, Captain Swing, and King William IV	*Roger Wells*	34
Farm Servants and the Development of Capitalism in English Agriculture	*Stephen Caunce*	49
'The Last Survivor of an Ancient Race': The Changing Face of Essex Gleaning	*Stephen Hussey*	61
The Contribution to Agricultural Research of an Australian Woman Scientist	*Nessy Allen*	73
Annual List of Articles on Agrarian History, 1995	*Janet Collett*	86
Book Reviews:		
The Origins and the Ancient History of Wine, edited by P E McGovern, S J Fleming, and S H Katz	*Yannis Hamilakis*	98
The Open Fields of Northamptonshire, by David Hall	*J V Beckett*	98
Seasonal Settlement. Papers presented to a meeting of the Medieval Settlement Research Group, edited by H S A Fox	*Alan Everitt*	99
The Victoria History of the Countries of England: A History of the County of Gloucester, V, edited by N M Herbert	*J H Bettey*	100
Household Accounts from Medieval England, edited by C M Woolgar	*Harold Fox*	101
Estate Maps in the Old and New Worlds, edited by David Buisseret	*David Crossley*	102
Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850, by Mark Overton	*J V Beckett*	103
The Economy of Kent 1640–1914, edited by Alan Armstrong	*Nicholas Goddard*	104
The Crisis of Community: Montgomeryshire, 1680–1815, by Melvyn Humphreys	*R J Moore-Colyer*	105
The Rise and Fall of the Grenvilles, Dukes of Buckingham and Chandos, 1710–1921, by John Beckett	*Ross Wordie*	107
Progress and Poverty: An Economic and Social History of Britain 1700–1850, by M J Daunton	*J V Beckett*	108
Polite Landscapes: Gardens and Society in Eighteenth-Century England, by Tom Williamson	*J T Brighton*	109
Innocent Espionage: The la Rochefoucauld Brothers' Tour of England in 1785, by Norman Scarfe	*J T Brighton*	109
Berkshire to Botany Bay; The 1830 Labourers' Revolt in Berkshire, by Norman Fox	*Roger Wells*	110

An Anglican Aristocracy; The Moral Economy of the Landed Estate in Carmarthenshire, 1832–1895, by Matthew Cragoe	*R J Moore-Colyer*	110
Population, Economy and Family Structure in Hertfordshire in 1851: The Berkhamsted Region, by Nigel Goose	*W A Armstrong*	112
The History of Stilton Cheese, by Trevor Hickman, and *Forgotten Harvest: The Story of Cheesemaking in Wiltshire*, by Avice R Wilson	*Christine Hallas*	113
Spanisn Agriculture: The Long Siesta, 1765–1965, by James Simpson	*Joseph Harrison*	114
Lanbon, Laden och Lagen, by Janken Myrdal	*W R Mead*	115
The Transformation of European Agriculture in the Nineteenth Century: The Case of the Netherlands, by J L van Zanden	*Michael Turner*	115
Agriculture and Environmental Change: Temporal and Spatial Dimensions, by A M Mannion	*J R Walton*	116
Did Soil Fertility Decline in Medieval English Farms? Evidence from Cuxham, Oxfordshire, 1320–1340	*E I Newman* and *P D A Harvey*	119
Whichwood Forest, Oxfordshire: An Episode in its Recent Environmental History	*Michael Freeman*	137
Land and People in Northamptonshire: Great Oakley, *c* 1750–1850	*Richard Moore-Colyer*	149
Rural Social Relations, 1830–50: Opposition to Allotments for Labourers	*Jeremy Burchardt*	165
Who 'Betrayed' Whom? Power and Politics in the 1920/21 Agricultural Crisis	*Edmund C Penning-Rowsell*	176
List of Books and Pamphlets on Agrarian History, 1996	*V J Morris*	195
Book Reviews:		
The Stations of the Sun. A History of the Ritual Year in Britain, by Ronald Hutton	*Alun Howkins*	201
The Victoria History of the Counties of England. A History of the County of Oxford, XIII, Bampton Hundred, edited by Alan Crossley	*Michael Havinden*	202
The Pipe Roll of the Bishopric of Winchester 1301–2, edited by Mark Page	*Phillipp Schofield*	202
The Great Famine. Northern Europe in the Early Fourteenth Century, by William Chester Jordan	*Christopher Dyer*	203
Progress and Problems in Medieval England: Essays in Honour of Edward Miller, edited by Richard Britnell and John Hatcher	*Jane Whittle*	204
The Nerves of State: Taxation and the Financing of the English State, 1558–1714, by Michael J Braddick	*Steve Hindle*	205
Parliamentary Taxation in Seventeenth-Century England, by M J Braddick	*R W Hoyle*	206

The Village and the Outside World in Golden Age Castile: Mobility and Migration in Everyday Rural Life, by David E Vassberg — *Joseph Harrison* — 207
The Writings of John Evelyn, edited by Guy de la Bedoyere — *Joan Thirsk* — 208
Poverty Portrayed: Gregory King and Eccleshall in Staffordshire in the 1690s, by Margaret Spufford — *John Broad* — 208
Topographical Writers in South-West England, edited by Mark Brayshay — *Michael Havinden* — 209
Road Transport before the Railways: Russell's London Flying Waggons, by Dorian Gerhold — *J A Chartres* — 210
A History of Todmorden, by Malcolm and Freda Heywood and Bernard Jennings — *Christine Hallas* — 211
Land and Society in Britain, 1700–1914: Essays in Honour of F M L Thompson, edited by Negley Harte and Roland Quinault — *J V Beckett* — 212
Farm Animal Portraits, Elspeth Moncrieff with Stephen and Iona Joseph — *Christiana Payne* — 212
The British Brewing Industry, 1830–1980, by T R Gourvish and R G Wilson — *J A Chartres* — 214
The Tenant League of Prince Edward Island 1864–1867: Leasehold Tenure in the New World, by Ian Ross Robertson — *G E Mingay* — 214
After the Famine: Irish Agriculture, 1850–1914, by Michael Turner — *F M L Thompson* — 215
Seeds of Change: 100 Years Contribution to Rural Economy, Society and the Environment, by Andrew Humphries — *Paul Brassley* — 217
Rural Politics: Policies for Agriculture, Forestry and the Environment, by Michael Winter — *Paul Brassley* — 218
Dartmoor Forest Farms: A Social History from Enclosure to Abandonment, by Elizabeth Stanbrook — *John Weir* — 219
Conference Reports:
'Farming in Adversity: Patterns of Response' Winter Conference 1996 — *Peter Dewey* — 96
Spring Conference 1997 — *Richard Perren* — 199
Notes on Contributors — 117, 220
Comment — 164

THE AGRICULTURAL HISTORY REVIEW

VOLUME 45 PART I 1997

CONTENTS

Dearth, Debt and the Local Land Market in a Late Thirteenth-Century Village Community	PHILLIPP R SCHOFIELD	1
Landowners and their Estates in the Forest of Arden in the Fifteenth Century	ANDREW WATKINS	18
Mr William Cobbett, Captain Swing, and King William IV	ROGER WELLS	34
Farm Servants and the Development of Capitalism in English Agriculture	STEPHEN CAUNCE	49
'The Last Survivor of an Ancient Race': The Changing Face of Essex Gleaning	STEPHEN HUSSEY	61
The Contribution to Agricultural Research of an Australian Woman Scientist	NESSY ALLEN	73
Annual List of Articles on Agrarian History, 1995	JANET COLLETT	86
Conference Report: 'Farming in Adversity: Patterns of Response' Winter Conference 1996	PETER DEWEY	96
Book Reviews:		
The Origins and the Ancient History of Wine, edited by P E McGovern, S J Fleming, and S H Katz	YANNIS HAMILAKIS	98
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The Economy of Kent 1640–1914, edited by Alan Armstrong	NICHOLAS GODDARD	104
The Crisis of Community: Montgomeryshire, 1680–1815, by Melvyn Humphreys	R J MOORE-COLYER	105

The Rise and Fall of the Grenvilles, Dukes of Buckingham and Chandos, 1710–1921, by John Beckett	ROSS WORDIE	107
Progress and Poverty: An Economic and Social History of Britain 1700–1850, by M J Daunton	J V BECKETT	108
Polite Landscapes: Gardens and Society in Eighteenth-Century England, by Tom Williamson	J T BRIGHTON	109
Innocent Espionage: The la Rochefoucauld Brothers' Tour of England in 1785, by Norman Scarfe	J T BRIGHTON	109
Berkshire to Botany Bay; The 1830 Labourers' Revolt in Berkshire, by Norman Fox	ROGER WELLS	110
An Anglican Aristocracy; The Moral Economy of the Landed Estate in Carmarthenshire, 1832–1895, by Matthew Cragoe	R J MOORE-COLYER	110
Population, Economy and Family Structure in Hertfordshire in 1851: The Berkhamsted Region, by Nigel Goose	W A ARMSTRONG	112
The History of Stilton Cheese, by Trevor Hickman, and *Forgotten Harvest: The Story of Cheesemaking in Wiltshire*, by Avice R Wilson	CHRISTINE HALLAS	113
Spanisn Agriculture: The Long Siesta, 1765–1965, by James Simpson	JOSEPH HARRISON	114
Lanbon, Laden och Lagen, by Janken Myrdal	W R MEAD	115
The Transformation of European Agriculture in the Nineteenth Century: The Case of the Netherlands, by J L van Zanden	MICHAEL TURNER	115
Agriculture and Environmental Change: Temporal and Spatial Dimensions, by A M Mannion	J R WALTON	116
Notes on Contributors		117

Dearth, Debt and the Local Land Market in a Late Thirteenth-Century Village Community*

By PHILLIPP R SCHOFIELD

Abstract

The main focus of this paper is the response of the peasantry to harvest failure in the Suffolk manor of Hinderclay in the late thirteenth century. Using manorial court rolls and ministers' account rolls, as well as the 1283 lay subsidy assessment, annual fluctuations in the transfer of land are compared with local, regional, and national grain price movements. The working assumption that land transfers increased as grain prices rose and that this reflected a rush to the market by sellers, desperate to exchange land for cash and goods, has been tested by searching the court rolls for possible 'motive'. As a result, the crisis sales have been set within the context of the withdrawal of credit in years of bad harvest; in particular, the possibility that excessive taxation in the 1290s caused creditors to withdraw their loans and invest in land is mooted. Withdrawal of credit from poorer villagers, especially in the last decade of the thirteenth century, meant that an added effect of taxation was to remove the support of credit at a time when it may have been most needed.

STUDIES of the land market in eastern England in the late thirteenth and early fourteenth centuries have stressed the relationship between harvest failure, high grain prices and increased land market activity.[1] The underlying assumption has generally been that harvests fail, grain prices rise and individuals sell land in order to raise cash to buy food.[2] Although the data presented strongly suggest that this is indeed the case there has been less attempt to look closely at the mechanisms involved. Although both Smith and Razi discuss in some detail the buyers and sellers of land in this period, they give less attention to discussion of the factors which brought peasants to the market. The main determinants are taken to have been straightforward opportunism on the side of buyers and a struggle for cash on the part of the sellers.[3] It was, above all, a buyer's market.

Research by historians of early modern England has given more attention to the

*I am grateful to Dr R M Smith and Professor Z Razi for their encouragement in the writing of this paper; they, along with Dr J R Maddicott and anonymous referees, offered valuable comments on earlier drafts. I would also like to thank the members of seminars at All Souls College, Oxford, the Centre for East Anglian Studies, University of East Anglia, and the University of Birmingham Medieval History Seminar for their responses to earlier versions.

[1] B M S Campbell, 'Inheritance and the land market in a fourteenth century peasant community', in R M Smith, ed, *Land, Kinship and Life-cycle*, 1984, pp 87–134; R M Smith, 'Families and their land in an area of partible inheritance: Redgrave, Suffolk 1260–1320', in Smith, *Land, Kinship and Life-cycle*, pp 135–95; R M Smith, 'Transactional analysis and the measurement of institutional determinants of fertility: a comparison of communities in present-day Bangladesh and pre-industrial England', in J C Caldwell, A G Hill and V J Hull, eds, *Micro-approaches to Demographic Research*, London and New York, 1988, pp 215–41; C Clarke, 'Peasant society and land transactions in Chesterton, Cambridgeshire, 1277–1325', unpublished D Phil thesis, University of Oxford, 1985, chap 4. See also D G Watts, 'A model for the early fourteenth century'. *Econ Hist Rev*, 2nd ser, 20, 1967, pp 543–7. For similar findings from other regions see Z Razi, *Life, Marriage and Death in a Medieval Parish. Economy, Society and Demography in Halesowen 1270–1400*, 1980, pp 37–40.

[2] For example, Campbell, 'Inheritance and the land market', pp 112–3: 'As a rule...bad harvests and high prices coincided with an increase in the number of land transactions..., whilst good harvests and low prices occasionally, as in 1334–41, gave rise to the same. The inference to be drawn from this would appear to be that consecutive years of harvest failure reduced the peasantry to such a state that they were obliged to sell land in order to buy food, and that only a fortuitous run of good harvests put them in a position to recoup their losses'.

[3] Smith, 'Families and their land', p 152. Cf Razi, *Life, Marriage and Death*, p 37: 'The reason for the rapid quickening of the inter-peasant land market during periods of economic crises is that smallholders and to a lesser extent half yardlanders had to sub-let and to sell land either to remit debts or to pay rents and fines to buy food, seed corn and livestock'.

underlying processes at work during dearth years. In particular, an attempt has been made to describe what Walter has termed the 'social economy' with extensions of credit and labour helping the poor survive harvest failure.[4] By contrast, medievalists have tended to make only passing reference to indebtedness as an index of crisis in this period, and there has been little attempt to examine its relationship to fluctuations in grain prices and land market activity. Where historians have noted increases in debt litigation in manorial courts during crisis years it is not always clear whether the increased incidence of debt cases involved the calling in of debts or the creation of new ones.[5] Dyer has noted this important distinction on the manor of Wakefield at the time of the great famine where 'a flurry of pleas of debt reflected both the need of the poor to borrow to buy food, and the calling in of old debts as creditors began to feel the pinch'.[6] Additionally, work on taxation seems to exist in relative isolation and few historians who have described the land market fluctuation in the decades either side of 1300 have been able, presumably for want of necessary documentation, to consider the possible impact of extraordinarily high levels of lay subsidy collection.[7]

This article aims to consider aspects of the relationship between dearth and the land market in a late thirteenth-century Suffolk community. Firstly, it describes the simple correlation between rising grain prices due to harvest failure and increased land market activity and, secondly, it attempts to examine the nature of sellers and buyers as parties in what are deemed to be 'crisis' sales. Finally, some attempt is made to relate the activities of creditors and debtors to their land market involvement during the 'crisis' years of the 1290s and, in conclusion, the tentative suggestion that taxation may have driven creditors to the land market is also mooted. The study from which these results are drawn is ongoing and the results themselves are preliminary: future work will permit comparison with the response to dearth and famine in the early fourteenth century.

I

Material for this discussion is drawn from the court and ministers' account rolls for the north Suffolk manor of Hinderclay. In the Middle Ages Hinderclay was held by the abbey of Bury St Edmunds, and good series of court rolls and of ministers' accounts are testimony to the careful lordship of the monks of that abbey.[8] The rate of survival of court rolls from Hinderclay can be accurately assessed for at least some of the years of this study by comparing the dates of surviving courts with the record of the receipts of fines and perquisites in the accounts. From the mid-1290s, and intermittently before this date, the accounts list all the courts and leets held in each accounting year. For certain other years, in which the receipts section of the account recorded only the annual total of all fines and perquisites and not the details of each

[4] J Walter, 'The social economy of dearth in early modern England', pp 75–128 in J Walter and R Schofield, eds, *Famine, Disease and the Social Order in Early Modern Society*, 1989, pp 75–128; also B A Holderness, 'Credit in English rural society before the nineteenth century, with special reference to the period 1650–1720', *AHR*, 24, 1976, pp 97–109.

[5] Razi, *Life, Marriage and Death*, p 38.

[6] C Dyer, *Standards of Living in the Later Middle Ages. Social Change in England, c 1200–1520*, 1989, p 266.

[7] Important studies of taxation and its impact in this period include J F Willard, *Parliamentary Taxes on Personal Property, 1290–1334*, Cambridge, Mass, 1934; J R Maddicott, 'The English peasantry and the demands of the crown, 1294–1341', *Past & Pres Supplement*, 1, 1975, reprinted in T H Aston, ed, *Landlords, Peasants and Politics in Medieval England*, 1987, pp 285–359 (subsequent page references are taken from the latter); W M Ormrod, 'The crown and the English economy, 1290–1348', in B M S Campbell, ed, *Before the Black Death, Studies in the 'Crisis' of the early Fourteenth Century*, Manchester, 1991, pp 149–83. For an attempt to incorporate late thirteenth-century incidence of taxation within a general discussion of peasant living standards see Dyer, *Standards of Living*, pp 84, 116, 138–9, 276.

[8] Court rolls for the period 1257–1335: University of Chicago Bacon Mss [hereafter Bacon Mss] 114–122; account rolls exist for the same period: Bacon Mss, 405–462. There is also a late thirteenth-century demesne extent, Bacon Mss, 832 and some evidences survive for the manor, probably compiled in the early fifteenth century, BL Add 31970.

and every court, this total can be compared with an annual total calculated from the actual courts surviving for that year. There is a complete survival of courts for the late 1290s, unlike the earlier years of the series. By the 1290s it appears that between five and seven courts were held annually; although there is some fluctuation in the annual number of courts held, especially between July 1293 and July 1294, when eleven courts were held, there is little to suggest that this reflected a real increase in court business.[9] The insight into the strength of the court roll series which the account rolls offer permits a degree of confidence in the trends displayed by the data extracted from the court rolls.[10]

Hinderclay is no more than two miles south of the Norfolk border and around twenty miles north-east of Bury St Edmunds. The river Waveney runs to the east of the village. Most of the land is given over to arable, as it was in the Middle Ages, although there are substantial areas of pasture and woodland, including the alder groves from which the village took its name. There were also commons in the Middle Ages and a periodic market at Botesdale. Hinderclay is also within a mile or two of Redgrave, another manor of Bury St Edmunds, the muniments of which have been the focus of much of Richard Smith's research, and his findings, as will become clear, have provided comparative data against which to set this present research.[11]

Although the demesne farm was situated at Hinderclay, the lordship of Hinderclay extended into the two neighbouring manors of Rickinghall and Wattisfield. In 1283 when Hinderclay was assessed for a lay subsidy of one-thirtieth, a return describing land tenure was also produced and this provides tenurial information which offers the fullest statement of the manor's extent.[12] From the return on tenure we learn that the demesne at Hinderclay was made up of some 320 acres of arable, 32 acres of meadow, 40 acres of pasture and 120 acres of woodland. An unrecorded number of *villani* held 455 acres of arable as well as lesser extents of woodland, meadow and pasture; there were also sixteen *cottarii* who held messuages and four named freemen holding some 50 acres between them. In addition to the return on tenure, an early fifteenth-century court book contains, amongst other things, a number of undated rentals and excerpts from rentals, at least two of which appear to date from the late thirteenth or early fourteenth centuries.[13] Most importantly, the book contains a list of tallage payments dated 1300–1 which includes the names of eighty villein tenants; against fifty-two of these the size of their holding is also written.[14] The range of recorded holding size is considerable with one tenement 30 acres in extent and others no more than a single acre (Table 1). Where acreages were recorded the average holding size was found to be just over 7 acres but the list includes almost thirty villeins for whom no holding is recorded and, of these, seven paid nothing to the tallage because they were poor.[15] The average holding size may, therefore, have been smaller.[16]

[9] See below, Table 2.

[10] In other studies, which lack the support of account rolls, estimates of the total number of courts held in each year have been made: cf Campbell, 'Inheritance and the land market', pp 108–9, Razi, *Life, Marriage and Death*, pp 45–7, and comments therein.

[11] Smith, 'Families and their land', pp 135–95. On Botesdale see *idem*, 'A periodic market in late thirteenth and early fourteenth century Suffolk' in R M Smith and Z Razi, eds, *Medieval Society and the Manor Court*, 1996, pp. 450–81.

[12] PRO, E 179 242/41. The assessment is published: E Powell, ed, *A Suffolk Hundred in the Year 1283. The Assessment of the Hundred of Blackbourne for a Tax of One Thirtieth, and a Return showing the Land Tenure There*, 1910.

[13] BL, Add 31970, medieval folios 197 (modern 5) – 212 (20).

[14] BL, Add 31970, 212 (20). The list is headed *Talliagium nativorum de Hildercle ad auxilium cape camerarii anno regno regis Edwardi xxix.*

[15] B M S Campbell, 'The complexity of manorial structure in medieval Norfolk: a case study', *Norfolk Archaeology*, 39, 1986, pp 243–4.

[16] In fact the mode and median of the recorded holding sizes, both 6 acres, may come closer to reflecting the reality at Hinderclay. Even a holding of this size might be considerably larger than many of the holdings. A similar situation, albeit on a larger scale, is described by Smith, 'Families and their land', pp 139–40 where he

TABLE 1
Frequency of holding sizes recorded for the tallage list, 1300–1

Acreage	*1*	*1.5*	*2*	*3*	*4*	*4.5*	*5*	*6*	*7*	*9*	*10*	*11*	*12*	*14*	*15*	*16*	*18*	*20*	*30*
No of holdings	2	1	5	5	1	1	3	12	1	2	4	1	5	1	1	1	1	1	1

Source: BL, Add 31970.

Of the numerous 6 acre units, most, if not all, may have been tenements owing labour services, as, perhaps, were those other holdings which were multiples or divisions of three. The ministers' accounts include an account of labour services owed by the unfree tenants who look to correspond to the sixteen *cottarii* of the 1283 tenure return. From the accounts we learn that the number of labour service owing tenements was sixteen, each of 6 acres, each owing two winter and summer works (minor works) per week and a total of twelve autumn works each; there were also six tenements of 3 acres, each owing one minor or winter/summer work per week and six autumn works per tenement. These last six tenements were situated in Wattisfield and Rickinghall, as an inquiry into labour services recorded in the court rolls in 1318 makes clear: hence, they did not find their way into the 1283 return on tenure.[17] Of the average holding size of the *villani*, as described in the 1283 return, who between them held over 400 acres of arable, it is difficult to gain any clear impression. Entries in the court rolls and from the tallage lists and rental extracts show that a distinct minority of tenants held 20 acres or more but most held much less than this, some holdings comprising not much more than an acre, possibly less.[18]

An important question here concerns the 'actual' size of peasant holdings. Clearly, in terms of subsistence agriculture the very small units, detailed above, cannot be conceived of as viable holdings.[19] Further, as Campbell has been able to show, at Hevingham, Norfolk, free tenants often held land in more than one manor in the late thirteenth century.[20] Although there seems less likelihood that customary tenants held land in neighbouring manors, the possibility should perhaps not be altogether rejected. However, if the Hinderclay small-holders were not holding land in other manors, it is inconceivable that they were not involved in small-scale trade and proto-industries. These are important issues which will not receive the detailed attention they deserve here but must await further study. The potential for cross-referring the information on the tenantry of Hinderclay with that from the court rolls of neighbouring manors, such as Redgrave and Rickinghall, exists and may prove illuminating, as indeed may an attempt to search the records of the local periodic market at Botesdale for the appearance of Hinderclay tenants as market traders and vendors.

Whatever the actual size of holdings, most parcels of land transferred in the land market were very small.[21] An examination of 151 land transfers recorded in the manor's court rolls for the periods 1279–1284 and 1289–1299 for which the extent of land is given shows that the average area of land transferred was no more than a single acre. In fact, the median

notes that, at Redgrave, tenement sizes had a lowest level of 1.5 acres and an upper level of 40 acres with a tendency for units to be composed of multiples of 5 acres.

[17] Bacon Mss, 120 m 9/2, court of 16 Dec 1318.

[18] William son of Adam paid tallage of 2*s* 6*d* for 30 acres whilst Thomas Gardener paid 1*d* for a single acre. The form of inheritance at Hinderclay was partibility, a fact which had no doubt contributed to the seemingly small units of land. Defensive measures against partibility of the kind described by Smith for Redgrave (Smith, 'Families and their land', pp 180–5) can also be found at Hinderclay.

[19] See, for example, Dyer, *Standards of Living*, pp 118–27.

[20] Campbell, 'Manorial structure in medieval Norfolk', pp 239–40, 243–5.

[21] Clarke, 'Chesterton', p 92 offers similar results.

and modal holding size of half an acre comes closest to reflecting the reality of the extent of plots of land typically dealt with in the Hinderclay land market. The impression gained is that the acres traded in the land market were often not the customary labour service-owing tenements or even fragmented parcels of the same but instead were scattered acres from within the block of 455 acres described as held by the *villani* in the 1283 return.[22] It was land of such a tenurial quality and size which made an active land market feasible.

II

As noted above, recent study of the land market on manors in southern and eastern England in the late thirteenth and early fourteenth centuries has shown that the behaviour of the land market, that is, whether it was busy or not, changed quite dramatically from year to year, fluctuations which historians have readily associated with harvest failure. Bruce Campbell, through his analysis of the land market on the Norfolk manor of Coltishall, discovered that there was a strong correlation between the number of land transfers in a given year and Norwich grain prices. The correlation was most obvious in years of bad harvest, when the correlation was positive, prices and numbers of transfers both increasing, and, on occasion, in years of good harvest when, with very low grain prices and a larger than average number of transfers, the correlation was negative. Richard Smith has found similar trends at Redgrave, where, in fact, the annual fluctuations in numbers of land transfers resemble the peaks and troughs of the Norwich grain price material even more closely than do the Coltishall transfers. Carolyn Clarke's unpublished examination of the Cambridgeshire manor of Chesterton in the same period has also produced similar findings, although with a slightly modified emphasis on certain bad harvest years. Hinderclay displays similar patterns. In particular, they accord very closely with the Redgrave transfers examined by Smith, which is to be expected since the manors were, as already noted, only a couple of miles apart.[23]

Comparison of fluctuation of land transfers and the local, regional and national grain price data (Figs 1A, 1B and 2) indicates that the Hinderclay land market was harvest sensitive.[24] The graphs suggest that the land market in the 1290s lagged behind the years of high grain prices, particularly in 1293–5. This feature is best explained in terms of a delay between harvest failure and market reaction: families hoped to see the crisis through without having to resort to such drastic action as the sale of land. It was only when shortages began to bite, perhaps late into winter, that the land market was spurred into real activity.[25] That said, it is important to acknowledge that court roll survival for the accounting

[22] For example, of the four references to *terra custumaria*, one is to a twelve acre holding, one to a six, one to a five and one to a half acre holding.

[23] Campbell, 'Inheritance and the land market', pp 107–27; Smith, 'Families and their land', pp 151–2; Clarke, 'Chesterton', pp 127–37. Transfers of land at Hinderclay in this period were, for the most part, recorded as surrenders and admittances, the outgoing tenant surrendering his land to the lord who then granted it to the new tenant, usually to hold 'to himself and heirs', *sibi et heredibus suis*. That said, the earliest transfers were often not made in this form which had become common practice only by the early 1290s by which decade a standard formula of alienation had been established. The situation again parallels that found by Smith for Redgrave: Smith, 'Families and their land', pp 150–1; *idem*, 'Some thoughts on 'hereditary' and 'proprietary' rights in land under customary law in thirteenth and early fourteenth century England', *Law and History Review*, 1, 1983, pp 98–107.

[24] I am grateful to Dr Bruce Campbell for sending me his grain price data for Norwich which is a transcript of the Lord Beveridge material preserved at LSE. Although both wheat and barley prices are given, barley was the main crop at Hinderclay, as it was in much of East Anglia: cf B M S Campbell and M Overton, 'A new perspective on medieval and early modern agriculture: six centuries of Norfolk farming c 1250–c 1850', *Past & Pres*, 141, 1993, pp 54–7.

[25] This may also account for the delay in the land market response in 1283–4. Crop yield data taken from the Hinderclay ministers' accounts would seem to confirm the general trends of the less geographically specific Norwich information: Ministers' accounts, Bacon Mss, 415–433. However, unfortunately, although most of the years of lower yield (for wheat, 1283, 1295 and 1299; for barley, 1283, 1290–1, 1296, 1299) do correspond to years for which grain price data survive, the high price years of 1293 and 1294 do not link with years for which we can calculate crop yields.

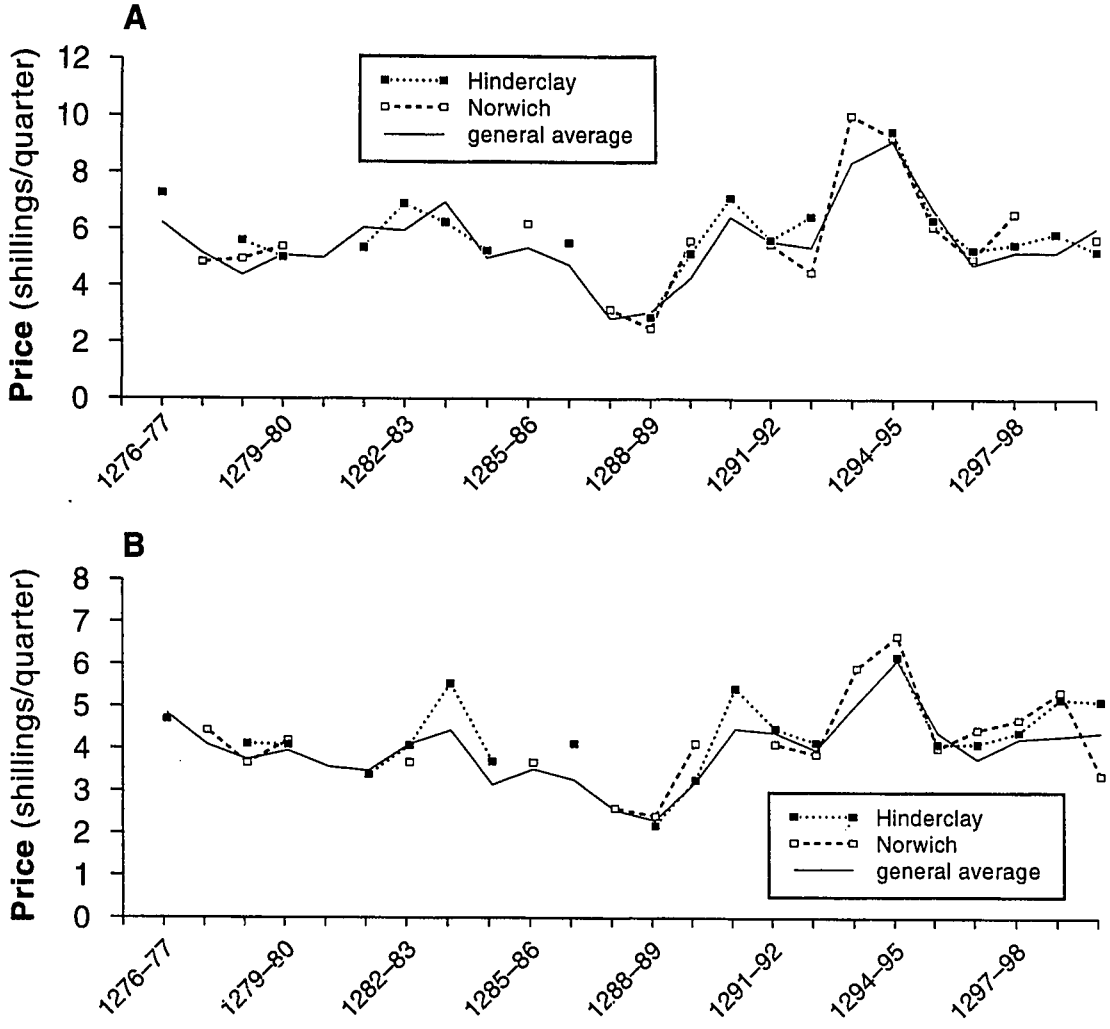


FIGURE 1 A. Wheat prices, 1276–1299; B. Barley prices, 1276–1299 (*Sources*: Hinderclay, Bacon Mss, 414–5, 417–31, 433–4; Norwich, Lord Beveridge Price History Archive, Box G9, London School of Economics, compiled from Norwich Cathedral Priory Obedientary manors (Norwich Record Office, DCN 60); General Average, J E T Rogers, *A History of Agriculture and Prices in England*, 7 vols, 1866–1902, I, pp 226–8).

year 1293–94 seems to have been poor and that a number of transfers may have been lost. Further, the number of observable transfers may be disproportionately low because courts from that accounting year survive mostly from months in which, according to a month-by-month analysis of seasonality of transfers, a lower than average numbers of land transfers occurred.[26] An investigation of seasonality for the quinquennium 1294–99 suggests that spring and autumn were the busiest times for the land market; it is also possible therefore that years for which there is incomplete survival of court rolls but for which spring and autumn courts do survive may loom disproportionately large in terms of numbers of land transfers. This potential for distortion is illustrated in Figure 2 where the average number of transfers per court closely follows the trend described for actual numbers of transfers in the 1290s,

[26] Bacon Mss, 117, m 11; courts survive from 13 Sept 1293, 1 Oct 1293, 9 Nov 1293, 13 Jan 1294.

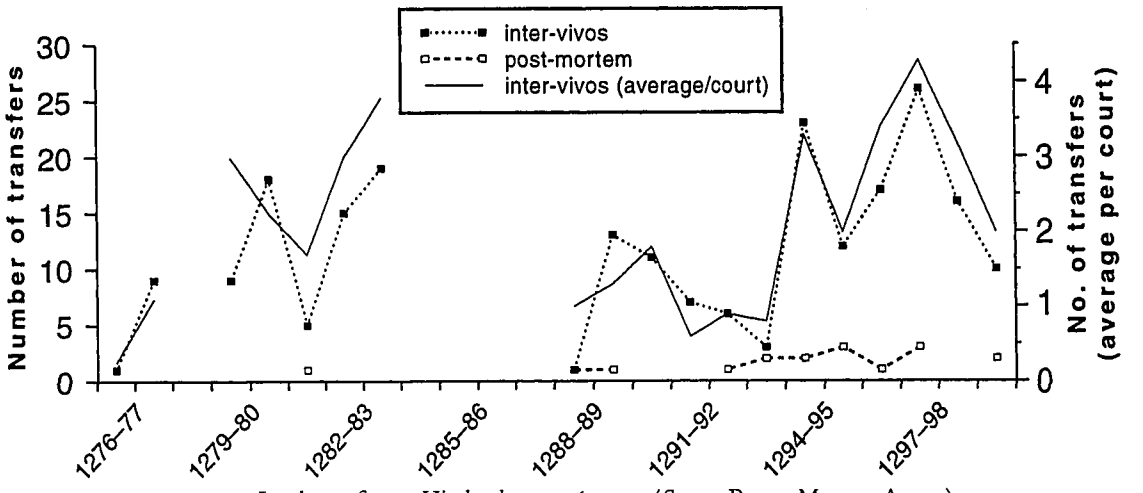


FIGURE 2 Land transfers at Hinderclay, 1276–1299 (*Source*: Bacon Mss, 114A–117).

from which decade courts survive almost intact, whereas the relatively poor survival of the court rolls in the late 1270s and early 1280s is perhaps reflected in the lack of correspondence between the trend of the annual average number of land transfers and that of the number of observed, that is, extant, transfers.

In attempting to gauge the impact of the peaks and troughs of grain prices and local land market activity upon the peasantry, we do not find in the court roll usable demographic data for the traditional defining formula for dearth: very high grain prices, sharp increases in mortality, and decreases in nuptiality and conceptions. Possible indicators of death, nuptiality and fertility in the court rolls, respectively heriot, merchet and childwite payments, appear infrequently (Table 2). The combination of the small sample of entries and the probable vagaries of court practice, custom and seigneurial policy most likely render these types of payment at Hinderclay all but useless as demographic indicators for this period. However, there is a degree of fluctuation, for instance increases in numbers of heriot in 1294 and 1298, which means that, together, the payments may offer valuable pointers to problem years.[27] To begin with heriots, although the very few recorded deaths are grouped in what are, in terms of grain prices and increased land transfers, recognizable problem years, it would be unwise to claim that they show an increase in mortality.[28] The small number of heriots is explained in terms of both a possible tendency to collect heriots only upon the deaths of tenants of larger holdings, especially those owing labour services, and, more importantly, the rela-

[27] For heriots cf M M Postan and J Z Titow, 'Heriots and prices on Winchester manors', *Econ Hist Rev*, 2nd ser, xi, 1959, pp 392–417, reprinted in M M Postan, *Essays on Medieval Agriculture and General Problems of the Medieval Economy*, 1973, pp 150–185 (subsequent page references are taken from the latter); severe fluctuation in heriot numbers is not so typical elsewhere: cf I Kershaw, 'The Great Famine and agrarian crisis in England 1315–1322', *Past & Pres*, LIX, 1973, p 37, reprinted in R H Hilton, ed, *Peasants, Knights and Heretics. Studies in Medieval English Social History*, 1976, p 119; also R M Smith, 'Demographic developments in rural England, 1300–48: a survey', in Campbell, *Before the Black Death*, pp 53–7. Also note Razi's comments on merchet and childwite payments as indices of problem years: Razi, *Life, Marriage and Death*, pp 45–7, 64–71. All three kinds of payments from this period at Hinderclay have been analysed by Thrupp as part of a discussion of replacement rates: S Thrupp, 'The problem of replacement rates in late medieval English population', *Econ Hist Rev*, 2nd ser, 1965, pp 101–119. Note that the figures in Table 2 differ from Thrupp's total figures for merchet, childwite and heriot payments at Hinderclay in the period 1289–1300 perhaps because of some redating of the court rolls: Thrupp, 'Problem of replacement rates', p 106, table I.

[28] Cf Postan and Titow, 'Heriots and prices on Winchester manors', *passim*.

TABLE 2

Inter-vivos land transfers, heriot, merchet and childwite payments at Hinderclay, 1277–1299

Year (Marg-Marg)†	*No of courts surviving*	*No of courts held*	*No of leets surviving*	*No of leets held*	*Court receipts surviving (d)*[1]	*Court receipts as account (d)*[1]	*Inter-vivos transfers*	*Inter-vivos transfers: average per court*	*Post-mortem transfers (heriot)*	*Merchet*	*Childwite*
1276–7	4	–	–	–	476	–	1	0.25	–	2	1
1277–8	8	12	–	1	890	1960.5	9	1.1	–	6	–
1278–9	–	–	–	–	–	–	–	–	–	–	–
1279–0	3	–	1	–	543	693	9	3	–	1	–
1280–1	8	–	1	–	1306	–	18	2.25	–	6	1
1281–2	3	–	1	–	368	1276	5	1.7	1	2	–
1282–3	5	–	–	–	732	876	15	3	–	2	1
1283–4	5	–	1	–	715	1020	19	3.8	–	4	1
1288–9	1	6	1	1	126	966	1	1	1	–	–
1289–0	10	–	1	–	2180	1668[2]	13	1.3	1	1	3
1290–1	6	7	1	1	622	805	11	1.8	–	1	1
1291–2	11	11*	1	–	979	979*	7	0.6	–	6	3
1292–3	7	7*	1	1*	1157	1157*	6	0.9	1	9	–
1293–4	4	–	–	–	551	–	3	0.8	2	4	–
1294–5	7	7	1	1	1015.5	1027.5	23	3.3	2	8	5
1295–6	6	6	1	1	1451	1451	12	2	3	9	4
1296–7	5	5	1	1	736	736	17	3.4	1	4	–
1297–8	6	6	1	1	1518	1518	26	4.3	3	10	5
1298–9	5	5*	1	1*	1022	1019*	16	3.2	–	6	1
1299–0	5	5	1	1	1313	1313	10	2	2	–	3

Source: Bacon Mss, 114A–117; Bacon Mss, 415–434.

† Prior to 1295–6 the accounting year ran from and to the feast of St Margaret (20 July); inconsistencies in form and incomplete survival of accounts meant that it has not been possible to recalculate the numbers of courts and totals of receipts for these years on the basis of an accounting year running from Michaelmas to Michaelmas (30 Sept). However, given the excellent condition and relative consistency of the later accounts, 1295–6 to 1299–1300, it has proved possible to recalculate these accounting years as if they ran from and to the feast of St Margaret; the data for these years are so presented in the table.

*No individual courts listed in receipts of perquisites and fines but total receipts correspond to (within 1*s*) the calculated total recorded in the year's courts.

[1] In most years a fairly small proportion of fines was paid in kind any recorded such: these fines have not been included here.

[2] A leet court held Thurs next after the feast of St Augustine 20EI (Bacon 117 m 5: it is the only court on the membrane), which had receipts of 42*s* (or 504*d*) does not seem to have been recorded in the receipts of the accounts, either in this or the previous year. It is also not clear to which feast of St Augustine the court title refers. The fact that the annual receipts are less than the sums of the year's courts can be explained either in terms of a mistake in dating, either my own or the court's clerk, or a reduction on the account from the sum originally demanded in the court. The condoning of amercements subsequent to the court is evidenced later, 1291–2, Bacon Mss, 426: a note at the foot of the account reads *...substractus inde xxvs. id. quos dominus condonavit de pluribus amerciamentis...* Further, the total of the court receipts entry for this year, 1289–90. has been reduced from that given in the rendering of account. The whole entry reads as follows: *Perquisita. Item reddit compotum de viii li. vis. viiid. receptis de perquisitis curie. Summa vi li. xixs.*

tively large number of *pre-mortem* gifts and sales of land at Hinderclay, particularly with regard to the bulk of 'villein' land over which the lord did not exercise the same degree of care.[29] The payment of merchet is perhaps more useful as an index of crisis. Merchet was, as Table 2 shows, frequently paid during this period and, in the middle years of the 1290s, the number of payments increased markedly. Razi has suggested that in years of higher than average mortality at Halesowen, such as 1293–5, the number of marriages rose as individuals remarried or took the opportunity presented by newly available land to marry and form new households.[30] At Hinderclay there is evidence of similar processes at work; on occasion it appears to be explicit: for instance, in 1293, Thomas le King entered land surrendered by his mother and in the next entry of the same court paid fine to marry.[31] However, although the grouping of merchet payments in certain courts, such as those held in January 1293 and October 1294 in both of which five separate payments were made for merchet,[32] may suggest actual fluctuations in frequency of marriage, it seems as likely that fines were, from time to time, collected *en masse* and thus may offer more of an insight into manorial administration than nuptiality patterns. Finally, in the worst years, as Razi has suggested, when peasants could not even afford to marry, they paid childwite – the amercement for having a child out of wedlock.[33] The grouping of childwite amercements in the middle years of the 1290s may also add weight to the view that their occurrence was symptomatic of a time of uncertainty and illiquidity, or downright poverty. However, as above, the small sample size invalidates any attempt at discussion of relative frequencies.

Despite these reservations, when the figures for heriot, merchet and childwite payments form part of a longer series it may prove possible to gain a greater impression of their relative frequencies. In particular, given the likelihood that the pool of collectable heriots was probably quite small, any increase may have been significant and could be suggestive of a general increase in mortality. For the present, however, it seems safest to return to the most copious of the 'types' of entry, the *inter-vivos* land transfers.

III

In order to place the land transfers squarely within the context of crisis sales in response to harvest failure some attempt needs to be made to examine the stimuli which prompted people to sell their land. Although there is much which points in the direction of a desperate scramble for cash in order to pay rents or to stave off starvation, we need at least to ask whether there is anything more concrete in the records which can add weight to what is, after all, an assumption based on the combination of two pieces of information. Some attempt needs to be made to distinguish between sales made solely for the purpose of raising cash and sales which, although quite possibly precipitated by dearth, did not have the quest for cash as their prime motive. In other words, we need to identify the 'mechanisms' at work.[34]

If the arbitrary distinction is made between those engaged in something akin to a market and those providing for the future of relatives, although, of course, the two are not necessarily mutually exclusive, there is every indication that the land

[29] See above, pp 3–5.
[30] Razi, *Life, Marriage and Death*, pp 47–8.
[31] Bacon Mss, 117 m 8, court of 8 Jan 1293.
[32] Bacon Mss, 117 mm 8, 13, courts of 8 Jan 1293, 5 Oct 1294. At least in two cases it may be that the husband and wife paid separately in the same court, effectively doubling the figure of 'marriages'.
[33] Razi, *Life, Marriage and Death*, pp 64–71.
[34] Giovanni Levi writes '...it is less important to emphasize who sells and who buys than it is to ask what mechanism lay at the heart of the transaction and *how the price came to be set*' [his italics]: Giovanni Levi, *Inheriting Power. The Story of an Exorcist*, Chicago, 1988, p 84.

market at Hinderclay was, for the most part, a 'real' market.[35] It would clearly be unwise to assume that transfers between kin were never 'commercial' transactions but an attempt to distinguish between transfers amongst kin and transfers amongst non-kin is suggestive. It indicates that sales to non-kin were the most typical form of inter-vivos transfer, notwithstanding the inherent problems of identifying kin in manorial court rolls. Between 1278 and 1283 there were 16 transfers between kin and 36 between non-kin; between 1294 and 1299 the number of kin transfers was 27 as against 62 transfers amongst non-kin.

The competitive character of the land market at Hinderclay is further suggested by the fact that certain individuals took their chance in the land market and bought when the majority sold. The number of sellers outstripped buyers in the poor harvest years of this period (Table 3). In 1283–4 and for most of the 1290s, with its low point of 0.6 in 1293–4, the ratio of buyers to sellers was less than 1.00. Smith's analysis of the Redgrave court rolls produced very similar results to these and both he and Campbell interpret a poor ratio of buyers to sellers in terms of forced sales in response to bad harvests.[36] Smith also describes the processes by which a small number of individuals acquired quite large holdings, seemingly at the expense of their fellow villagers and, as before, this is a situation closely mirrored at Hinderclay.[37] Examination of buyers and sellers in the two five-year periods suggests that, in both periods, there were natural buyers and sellers but that, in the second quinquennium, the distinction is more pronounced and the impression is very much that it had become a buyer's market. Between 1278 and 1283 there were 49 recorded transfers of land involving 61 individuals of whom 29 bought but did not sell, 27 sold but did not buy and 5 both bought and sold; in the period 1294 to 1299 there were 99 recorded transfers and of the 102 individuals involved, 39 only bought, 55 only sold and only 18 did both. A feature of the analysis of those who were only sellers or buyers in the land market is that about half of the transfers in the market involved individuals who entered the market more than once to sell or to buy land (Table 4). In particular, a few individuals either bought or sold land on a number of occasions, their behaviour consistent enough to suggest that they were in a position of advantage or disadvantage vis a vis their fellow villagers.

TABLE 3
The ratio of buyers to sellers in the Hinderclay land market, 1277–1299

Year (Marg-Marg)	*Number of buyers*	*Number of sellers*	*Buyer:seller ratio*
1277–8	8	5	1.6
1278–9			
1279–0	7	7	1
1280–1	16	15	1.07
1281–2	5	5	1
1282–3	16	13	1.23
1283–4	16	18	0.89
1288–9	3	3	1
1289–0	10	9	1.11
1290–1	11	11	1
1291–2	4	6	0.66
1292–3	6	8	0.75
1293–4	3	5	0.6
1294–5	20	27	0.74
1295–6	14	17	0.82
1296–7	14	17	0.82
1297–8	19	25	0.76
1298–9	14	18	0.77
1299–0	9	11	0.82

Source: Bacon Mss, 114A–117.

[35] Smith discusses the distinction between non-family and intra-familial transactions at Redgrave: Smith, 'Families and their land', p 160. The relatively small number of intra-familial transfers is a feature of other manors in eastern England: Smith, 'Families and their land', p 157; *idem*. 'Transactional analysis', p 227; Campbell, 'Inheritance and the land market', p 121. On the dominance of intra-familial activity in traditional peasant land transfer cf R Hodges, *Primitive and Peasant Markets*, 1988, pp 8, 62, 74–6, 124, 135.

[36] Smith, 'Families and their land', pp 159–65; Campbell, 'Inheritance and the land market', pp 110–15.

[37] Smith, 'Families and their land', pp 165–72. See also Razi, *Life, Marriage and Death*, pp 94–8.

TABLE 4
The frequency of land market involvement of individual sellers and buyers at Hinderclay, 1294–1299

Number of sales per individual	*Sellers*	*Buyers*
8	1	1
7		
6		1
5	1	
4	2	
3	4	4
2	10	10
1	54	40
Total	72	56

Source: Bacon Mss, 116–117.

William son of Adam was the most active buyer of land in the 1290s. Between 1294 and 1299 he bought land on eight occasions from five different individuals, all of whom would seem to have been non-kin and all appeared as relatively frequent sellers of land in this same period.[38] All these men were also prominent members of the village community at Hinderclay. They appeared very often in the manor court, sometimes in a position of responsibility such as juror or chief pledge. The involvement of individuals such as these in the land market of the 1290s was substantial and had, it is suggested, little or nothing to do with a redistribution of family land.[39] It seems that if we are to look for a 'commercial' sale with sellers raising cash, perhaps to buy food, to settle debts or to pay taxes and buyers simply taking advantage of the situation in order to accumulate, it is here that we should look. In the remainder of this article, an attempt will be made to examine the sales and purchases of some of the more active participants in the land market during the 1290s with a view to assessing the 'mechanisms' at work.

IV

It is clear that the disproportionately wealthy dominated the buying of land in the late thirteenth century. The taxation assessment for the lay subsidy of one-thirtieth undertaken for Blackbourne Hundred in 1283 offers a valuable index to the relative wealth of at least some of the villagers to be found in the Hinderclay court rolls from the late thirteenth century[40] (Appendix). The assessment lists 39 villagers, 34 of whom can be identified in the court rolls. Of these 34, 14 can be found in the land market between 1294 and 1299, 6 as buyers, 7 as sellers and 1 who both bought and sold. The table seems to confirm the impression that the wealthiest individuals purchased land in the late 1290s whilst poorer villagers, in fact the middling peasants since they could still be counted amongst payers of the lay subsidy, sold. Prominent amongst the buyers, as we have already seen, was William son of Adam who was assessed in 1283 on, amongst other cereals and also livestock, 5 quarters of wheat and 8 quarters of barley. His total taxable wealth, in terms of moveables, was calculated as £5 5*s* 6*d* which made him the wealthiest villager in Hinderclay. William's brother, Robert the son of Adam, was the third wealthiest villager with movables valued at £4, the whole sum arising from 20 quarters of barley.[41]

[38] Sellers to William son of Adam and land market involvement, 1294–1299: Ralph Kempe **1294**, 1297 (3); Henry Crane **1295** (2), **1299**; Robert Messor 1295 (2), **1295**, **1296**, 1297, 1298 (2), **1298**; Nicholas Wodeward 1295, 1296, 1297, 1298, **1299**; Adam Bretun **1297**, 1297, 1298. Years in bold indicate sales to William: Bacon Mss, 116–7.

[39] For Redgrave, see Smith, 'Families and their land', p 172.

[40] PRO, E 179 242/41; Powell, *A Suffolk Hundred*. There are no surviving lay subsidy assessments for Blackbourne Hundred for the 1290s: examination of manors with both good series of court rolls and taxation material would undoubtedly be profitable. On the use of lay subsidies to investigate the peasantry see K Biddick, 'Medieval English peasants and market involvement', *Jnl Econ Hist*, xlv, 1985, pp 823–31; J F Hadwin, 'The medieval lay subsidies and economic history', *Econ Hist Rev*, 2nd ser, 36, 1983, pp 200–17.

[41] The lay subsidy assessment figures for the brothers compare very closely with Christopher Dyer's bases of calculations for the domestic economy of a yardlander on the midland's manor of Bishop's Cleeve in the late thirteenth century. Dyer estimates that his tenant there would enjoy an annual surplus of between £1 18*s* 0*d* and £2 11*s* 0*d*: Dyer, *Standards of Living*, pp 110–17.

The court rolls confirm and add to the message of the lay subsidies. Information in the courts suggests that William and Robert, sons of Adam, had access to considerable sums of ready money which were not tied up, at least in the 1280s and early 1290s, in goods or property. When, in 1282, Robert the son of Adam surrendered all of his interests in the whole tenement (*totum tenementum*) which he had inherited from his father, his brother, William, paid 120*s* (£6) as an entry fine – a vast sum in itself – notwithstanding the 8 marks of silver (£5 6*s* 8*d*) he also paid to Robert to seal the agreement on the maintenance contract of food, clothing and lodging for life. Interestingly, in the context of what follows, William and his heirs were also to provide Robert, for so long as he lived, with 2*s* a year *in order that he might make his plea.*[42] Sometime in 1289 or 1290, the brothers came back to court and changed the maintenance agreement, Robert quit – claiming all his rights to board and lodging in return for the considerable sum of 20*s* of silver per annum.[43] Both William and Robert appear in the tallage list compiled *c* 1300.[44] As we have seen, William paid 2*s* 6*d* for 30 acres;[45] Robert paid 2*s* but, not surprisingly, no holding is recorded for him. These two sums were the largest paid. The brothers were clearly men of substance and, importantly for what follows, were certainly capable of acting as creditors. At Hinderclay it was veritable 'kulaks' such as the brothers Robert and William who used the profit from the sale of crop surpluses both to invest in land and to lend to poorer villagers.

It is possible, although difficult to substantiate, that some of the land market transfers in the 1290s involved the surrender of land as settlement of debts or the creation of gages for new debts, although the latter seems less likely, for reasons which will become clear. Debt cases recorded as private pleas in the court rolls help to illustrate the 'commercial' nature of some surrenders of land in this period. For the wealthier section of the peasantry, those likely to feature amongst the payers of lay subsidies, there does seem to have been a relationship between private pleas in the manorial court and land market involvement either as buyers or sellers. In other words, the same individuals who dealt in land can also be found engaged in other transactions, in particular the recording, settlement and recovery of debt. It seems, in such cases, highly probable that the land transfer and the debt were indirectly, and sometimes directly, associated. First some words are required about private pleas at Hinderclay. It has long been recognized that credit had an important role to play in the late medieval rural community. This is best evidenced by the private pleas brought in cases of debt, and it is the detailed court rolls of the late thirteenth and early fourteenth centuries which are most likely to furnish this type of material.[46] Table 5 shows the results of an analysis of debt cases recorded in the Hinderclay court rolls for the years 1277 to 1284 and 1293 to 1299. In the table 'recognizance' refers to those entries of the kind 'X places himself at the mercy of Y' (*ponit se in misericordia*) or 'X recognizes he owes to Y' (*cognovit se tenebatur...*); these

[42] Bacon Mss, 115 m 4, court of 22 Sept 1282: *...preterea [Willelmus et heredes sui] dabint eidem Roberto quamdiu vixerit annuatim ii.s ad placitum suum faciendum.*

[43] Bacon Mss, 117 m 3: a concordance recorded on the dorse of the roll.

[44] BL, Add 31970, 212 (20).

[45] See above, note 18.

[46] For a discussion of rural debt in the thirteenth and fourteenth century, see P R Schofield, 'Endettement et crédit dans la campagnes anglaise au moyen âge', in M Berthe et F Brumont, eds, *Endettement et crédit dans les campagnes de l'Europe au moyen âge et à l'epoque moderne*, Flaran, forthcoming; on the fifteenth century, E Clark, 'Debt litigation in a late medieval English vill', in J A Raftis, ed, *Pathways to Medieval Peasants*, Toronto, 1981, pp 247–79. For a discussion of private pleas in the manor courts of the late thirteenth and early fourteenth centuries, see J Beckerman, 'Procedural innovation and institutional change in medieval English manorial courts', *Law and History Review*, 10, 1992, pp 197–252. On the introduction and development of the private plea in manorial courts see also Z Razi and R Smith, 'The origins of the English manorial court roll as a written record: a puzzle', in Smith and Razi, *Medieval Society*, pp 43–9.

TABLE 5
Private pleas of debt at Hinderclay in the late thirteenth century

1277–1284		*1293–1299*	
Recognizance	*Recovery*	*Recognizance*	*Recovery*
7	9	4	31

Source: Bacon Mss, 114A–117.

have been distinguished from 'recoveries' which have been taken to mean entries indicating that one party, usually, the creditor or the plaintiff, has sought to end the contract or recover goods or damages. Entries of the 'recovery' kind tend to be those where payment was made to settle out of court, *licencia concordandi*, or where an order was made to arrest an individual or distrain his property so that he or she would respond to the plea of another. Since the recognizance was an acknowledgement on the part of the debtor of his obligation to the creditor so that the debt could be acted upon should default occur, the court roll recognizance should be seen as the seal to an agreement.[47] The reduction in the number of such recognizances in the 1290s may, therefore, reflect a withholding of credit as creditors concentrated their efforts on recovery of existing debts, some of which may have been really quite old, rather than the creation of new ones. This is reflected in the number of debt cases appearing for the first time, either as recognizances or recoveries, between 1292 and 1299 (Table 6).

TABLE 6
The first recorded appearances of debt cases at Hinderclay, 1292–1299

Year	*Debt cases appearing*
1292	2
1293	8
1294	3
1295	12
1296	8
1297	2
1298	3
1299	1

Source: Bacon Mss, 116–117.

Normally credit was only extended to those with capital, and the calling in or failure of debts in this period is, itself, indicative of a crisis of confidence.[48] The increase in attempts to recover debt must have impacted upon the land market. Of the 35 debt cases recorded in the court rolls between 1292 and 1299, 9 involved creditors who were also buyers of land; 12 involved debtors who were also sellers. Not one buyer of land in this period appeared as a debtor, but six appeared as creditors, whilst nine of the sellers of land were also debtors. Two peasants who

[47] Clark, 'Debt litigation', pp 255, 273, n 32. Procedure in manorial courts mirrored, to some extent, statute law. The Statute of Acton Burnel, 1283, had formalized the recognizance and, thereafter, it became an important element in the credit arrangements of merchants: cf M M Postan, 'Credit in medieval trade', *Econ Hist Rev*, 1st ser, i, 1928, pp 234–61, reprinted in *idem*, *Essays on Medieval Trade and Finance*, 1973, pp 1–27, and *idem*, 'Private financial instruments in medieval England', *Vierteljahrschrift für Sozial-und Wirtschaftsgeschichte*, XXIII, 1930, pp 26–75, reprinted in *Essays on Medieval Trade and Finance*, pp 28–64, esp pp 35–9. For a discussion of forms of credit transaction amongst the peasantry of late medieval England, see Schofield, 'Endettement et crédit'. See also the comments of N J Mayhew in 'Modelling medieval monetization', in R H Britnell and B M S Campbell, eds, *A Commercialising Economy. England, 1086-c 1300*, Manchester, 1995, pp 67–8. A caveat needs to be applied to my argument here: N J Mayhew, in an unpublished paper based upon the court rolls of Gussage All Saints, Dorset, warns of the need to differentiate between formal recognizances in court rolls, enrolled at the time of the original loan, and undefended pleas of debt which were 'practically indistinguishable'. He argues that most 'recognizances' were, in fact, undefended pleas and that, therefore, firstly, most debt cases recorded in the court rolls were of genuine default, and, secondly, there were far more credit arrangements in the medieval village than those which found their way into the manor court rolls. I am grateful to Mr Mayhew for permission to refer to his unpublished work. At Colchester, most recognizances were the result of litigation: R H Britnell, *Growth and Decline in Colchester, 1300–1525*, 1986, pp 104–5. However, even if most recognizance-type entries at Hinderclay were in fact undefended debt recoveries, the general increase in recoveries still displays a significant trend.

[48] Britnell, *Growth and Decline in Colchester*, p 100; M J McIntosh, *Autonomy and Community. The Royal Manor of Havering, 1200–1500*, 1986, p 169; Dyer, *Standards of Living*, p 185.

appeared in the rolls as sellers also acted as creditors in this period but, in both cases the sales seem to have been to kin in the rather particular circumstance of endowment by relatively wealthy tenants. Just as, it would seem, peasants in Hinderclay tended to be either buyers or sellers of land, so they were also either creditors or debtors. There were, in effect, only winners and losers.

Henry Crane, who, in the late 1290s, seems to have been in a spiral of debt and land sale, was apparently one of the losers. He sold land on two occasions in 1295 to William son of Adam and exchanged 3 rods of land with the same William in 1299. In this same period Henry repaid a debt in 1292, lost in two pleas of debt, in 1293 and 1295, and in a breach of contract claim worth 5*s* 4*d* in 1296. Henry may have been forced into the sale of land in order to settle at least one of these debts. In the court held on 6 June 1295 Henry lost in a plea of debt to Adam Belsent and found pledges that he would repay 15*d* to Adam by the feast of the Eve of the Nativity of St John (23 June). It is probably no coincidence that in the same court Henry surrendered a small plot of land to one of his pledges for the debt, William son of Adam. Henry may have used the money from the sale to pay his debts; alternatively William may have paid the debt for him and taken the opportunity to extend his web of dependency, effectively making the land security for a loan.[49] Henry's court roll career also includes the only explicit example of the impecunious seller of land, forced to lease his land to meet his debts. In February 1297 Henry Crane came to court to grant a lease of half an acre to Nicholas le Reve for a term of eight years. Nicholas was admitted on the condition that he would pay 5*s* 8*d* to a Bartholomew of Coney Weston on behalf of Henry.[50] We should note that Henry's debt had been to the advantage of a third party, Nicholas, who although himself a debtor more than once in this period seems to have managed to meet his obligations.[51]

Examples of creditors taking the land of debtors either as security or as alternative payment for debts are not easy to find in the court rolls; an example of such may be the surrender of an acre by Robert Messor to William son of Adam, again, in 1295. Other than pledging, Robert's next action recorded in the court rolls was the payment of 6*d* for licence to settle a plea of debt with William.[52] Instead of the surrender it seems probable that at least some of the Hinderclay debtors may have leased their land as a gage for their debt. Leases for short terms, probably less than two years, were unlikely to be recorded in the court rolls – in fact Nicholas le Reve, in the above example, had to pay a fine to have the lease recorded or 'enrolled'. Amercements for leasing without licence, of which there are a few in the 1290s tend to state the term for which the lease had been granted and, in each case, this exceeded two years. It is quite possible, therefore, that most of the inter-peasant letting of land at Hinderclay took place outside of the remit of the manor court and, as a result, is hidden from view. It is only through the occasional record of a longer lease, either as a fine for enrollment or as an amercement for letting without licence that we are aware of a lease

[49] Bacon Mss, 116–117, courts of 16 Mar 1295, 6 June 1295 and 16 May 1299: sales of land to William son of Adam: courts of 13 Oct 1292, 8 May 1293, 6 June 1295, 3 Feb 1296: pleas of debt and contract.

[50] Bacon Mss, 117, court of 17 Feb 1297: *...et concessa est...eo quod idem Nicolaus solvit pro eodem Henrico Bartholemeo de Coney Weston vs viiid in quibus dictus Henricus tenebatur dicto Bartholomeo....*

[51] In a court held on 15 Oct 1296 Nicholas paid 3*d* for licence to agree with Margaret of Coney Weston in a debt of 5*s* 6*d*, and Nicholas was allowed to repay the sum in two instalments, the first to be made on the feast of All Souls (1 Nov), the second on the feast of St Thomas Apostle (21 Dec): Bacon Mss, 117, court of 15 Oct 1296. The near coincidence of the size of this debt with that owed by Henry and the fact that the creditors shared the same surname suggests a relationship between the two cases not made explicit in the court rolls.

[52] Bacon Mss, 117, courts of 6 June 1295, 15 Oct 1296.

market.[53] The lease had the obvious advantage of being temporary unlike the surrender, which was effectively a permanent alienation.[54] In addition to the example of Henry Crane and Nicholas, son of the reeve, there is some other evidence to suggest that Hinderclay debtors did lease their land when times were hard. Ralph Faber leased half an acre of land in 1298 at the end of a period of apparent decline which began in June 1295 when he paid 3*d* to settle out of court a debt of 23*d* owed to Robert of Rickinghall. The debt was to be settled by Michaelmas 1295 but he had still not paid by April of 1296, by which date an order was made to retain Ralph's horse and to seize even more of his property until the sum was paid. Ralph does not appear again in the court rolls until February 1297 when an order was made that his tenement should be seized because he had destroyed its buildings, possibly a deliberate act of waste involving the sale of timber. Later in the same year he was amerced for failing to perform suit of court but the amercement of 3*d* was waived by the lord, as were many such at this time, often for the stated reason that the amerced was too poor to pay. Finally, in April 1298 the court ordered that half an acre of Ralph's land should be seized because he had leased it without the lord's licence to a William Osborne for a term of five years.[55] That the lease followed this litany of misfortune is suggestive of a defensive 'sale'.

V

Historians would expect to find examples of forced sales and leases such as these in late thirteenth- and early fourteenth-century court rolls and, as already noted, the close association of indebtedness and surrender of land has been explained in terms of harvest failure.[56] However, in certain years, increased debt litigation and land market activity need not be explained in terms of harvest failure alone. Although the relationship of grain prices to harvest failure seems obvious and, indeed is, it is not necessarily the only factor of importance: against the exogenous, we also have to acknowledge the role of the endogenous. There is one other factor which has to have been of major importance in the late 1290s and this, of course, is taxation. Maddicott writes,

> the years between 1294 and 1297 stand out sharply as the period when taxation was at its heaviest... The total burden imposed by all forms of taxation during the mid-1290s will bear comparison only with that of the opening phase of the Hundred Years' War, when the crown's military and diplomatic commitments were still greater.[57]

From 1294 to 1297 four lay subsidies were collected nationally, all but one yielding more than 90 per cent of the assessment.[58] In Suffolk the tenth and sixth of 1294 were assessed at £4193 16*s* and £237 18*s* 11*d* respectively; in 1295, the eleventh and seventh were assessed at £2504 1*s* 3*d* and £115 16*s* respectively; the respective assessments for the twelfth and eighth of 1296 were £1381 14*s* 10½*d* and £64 13*s*; finally, there was an assessment of £1298 13*s* for the ninth of 1297.[59] Further, from July

[53] See, for example, B F Harvey, *Westminster Abbey and its Estates in the Middle Ages*, 1977, pp 307–11, where it is noted that all except short term leases – possibly no more than a year – needed the lord's consent; on the St Albans Abbey estates all leases, however short their duration, were recorded in the court rolls after 1354 whereas previous to this leases of two years or less were not enrolled: L A Slota, 'Law, land transfer, and lordship on the estates of St Albans Abbey in the thirteenth and fourteenth centuries', *Law and History Review*, 6, 1988, p 132.

[54] Although note the comments of Ian Blanchard, 'Industrial employment and the rural land market, 1380–1520', in Smith, *Land, Kinship and Life-cycle*, pp 227–75, esp pp 241–4, and the comments of Smith on the same: R M Smith, 'Families and their property in rural England, 1250–1800', in Smith, *Land, Kinship and Life-cycle*, p 60.

[55] Bacon Mss, 116–117, courts of 6 June 1295, 5 April 1296, 17 Feb 1297, 19 Nov 1297, 23 April 1298 (the order was repeated in the court of 17 July 1298).

[56] See above, pp 1–2.

[57] Maddicott, 'The English peasantry and the demands of the crown', p 291; for the most recent analysis of late thirteenth- and early fourteenth-century taxation, see Ormrod, 'The crown and the English economy', pp 149–83.

[58] Ormrod, 'The crown and the English economy', p 153.

[59] J F Willard, 'The taxes upon moveables of the reign of Edward I', *Eng Hist Rev*, xxviii, 1913, pp 519–21.

1294 to November 1297, a subsidy of £1 13*s* 4*d*, the 'maltolt', additional to the customs duty of 6*s* 8*d* on every sack of wool exported, increased the national yield on customs from about £11,600 per annum to an annual average of £33,000 and had the effect of reducing the price which the wool producers could demand.[60] In East Anglia this meant, on average, a reduction of more than 1*s* per stone of wool (approximately 25 per cent).[61] Finally, levies in kind, such as the seizure of wool stocks in 1297 and purveyance, were equally onerous in this period.[62] Purveyance, a burden which was borne unevenly,[63] was not escaped by the counties of eastern England at the close of this period; in 1300 and again in 1301 demands were made that 1500 quarters of wheat, 1200 quarters of oats, 100 quarters of malt and 200 quarters of peas and beans be taken from the counties of Norfolk and Suffolk to feed the king's army at Berwick-upon-Tweed.[64] The combined effect of prises, lower wool prices and repeated lay subsidies between 1294 and 1297 may also have spurred the land market and caused creditors to call in debts, a fact that would need to be borne in mind when comparing data from the crisis years of this decade with those of the early fourteenth century.

In addition to the general shortage of cash and, to some extent, kind in circulation which inevitably resulted from increased taxation,[65] attempts at avoidance of taxation by those who were expected to pay may have created further hardship for those dependent on credit. Research on Tudor lay subsidies by Richard Hoyle indicates that a method employed by wealthy merchants in the towns of mid-Tudor England to avoid payment of lay subsidies was to transfer their money from moveables and capital into land against which subsidies were not levied. In particular, he reminds us that money owed to an individual was considered to be available capital for the purposes of assessment.[66] In the late 1290s it is tempting to see the combined processes of, firstly, an apparent drying up of credit and, secondly, an accumulation of land by one-time creditors in terms of a response to taxation. We have seen that the creditor/buyers were amongst the wealthiest villagers at Hinderclay: they would have been the target of the lay subsidies, a fact which the 1283 subsidy assessment confirms. The networks of credit in the medieval village could be extensive, as Clarke has shown: if taxation forced cash out of circulation at the very time when it was most needed, the greatest impact could have been not on those who paid subsidies but on those poorer villagers who relied on loans from them to finance their own purchases.[67]

[60] Ormrod, 'The crown and the English economy', pp 167–75; T H Lloyd, 'The movement of wool prices in medieval England', *Economic History Review Supplement*, vi, 1973, pp 16–7, 39–40, 62.

[61] Lloyd, 'Movement of wool prices', pp 39–40.

[62] On the seizure of wool, see T H Lloyd, *The English Wool Trade in the Middle Ages*, 1977, pp 87–96; on purveyance, see Maddicott, 'The English peasantry and the demands of the crown', pp 299–318.

[63] M Prestwich, *War, Finance and Politics under Edward I*, 1972, pp 133–4; Maddicott, 'The English peasantry and the demands of the crown', pp 301–2; Ormrod, 'The crown and the English economy', p 175.

[64] *Cal Pat R*, 1292–1301, pp 487–8, pp 578–9. However, five-sixths of the oats and only about one-half of the wheat ordered was actually levied: Prestwich, *War, Finance and Politics*, pp 122–3. Military levies were an additional burden in this period; for instance, 8000 men were to be selected from Norfolk, Suffolk, Cambridgeshire and Huntingdonshire for the expedition to Gascony in 1295: *Cal Pat R*, p 151; although the expedition was cancelled, villagers still felt the costs of the levy: cf Prestwich, *War, Finance and Politics*, pp 100–1; also, Maddicott, 'The English peasantry and the demands of the crown', pp 318–29.

[65] On the shortage of currency, see, for example, M Prestwich, 'Currency and the economy of early fourteenth century England', in N J Mayhew, ed, *Edwardian Monetary Affairs (1279–1344)*, British Archaeological Reports, 36, 1977, pp 51–2.

[66] The full range of 'taxables' under the medieval lay subsidies is not made explicit: Willard, 'Taxes upon moveables', p 517, and *Parliamentary Taxes on Personal Property*, pp 81–5. I am grateful to Dr Hoyle for allowing me to refer to his forthcoming work. The argument mentioned above was an important section of a seminar paper given at All Souls College, Oxford, May 1994; outlines of his general position are to be found in: R Hoyle, *Military Survey of Gloucestershire, 1522*, The Bristol and Gloucestershire Archaeological Society, Gloucester Record Series, VI, 1993, pp. ix–xii, xxxi–xliv, and 'War and public finance', in D MacCullouch, ed, *The Reign of Henry VIII*, forthcoming, pp 75–99, esp pp 95–9.

[67] It may in fact be the case that credit would never have been extended to the poorest villagers who had little or no security to offer. The impact of the withdrawal of credit from the wealthiest villagers would, in this case, have been indirect.

The added pressure of taxation during a decade of harvest failure may have prompted extremes of action, particularly on the part of creditor/buyers, which would have been unnecessary had there not been a coincidence of bad harvests and excessive lay subsidy collection. Whether the withholding of credit was a relatively atypical response to the unique conditions of the 1290s will need to be established by further research but, whatever the results of future study, it is evident that the social economy at Hinderclay failed in the worst years of this decade.[68]

[68] Walter, 'The social economy of dearth', pp 96–113, in particular his discussion of the availability of credit in years of harvest deficiency, pp 104–5. For exchange entitlement see A Sen, *Poverty and Famines: An Essay on Entitlement and Deprivation*, 1981.

APPENDIX

Assessed wealth of payors of 1283 lay subsidy and their land market involvement, 1292–1299

Name	*No of purchases*	*No of sales*	*Total moveables*	*Rank*
William son of Adam	8	1	1266	1
Roger Burgeys			1020	2
Robert son of Adam			960	3
William le Reve			837	4
Walter son of Gilbert			810	5
Henry Noble			771	6
Adam Bretun	1	3	696	7
Johanna wife of Reginald son of Gilbert			690	8
Thomas Crane	3		666	9
Robert Reeve			648	10
Nicholas Gentyl			633	11
Ralph Berard			620	12
Reginald son of Walter	3		600	13
Alice Petit			570	14
Adam Smith			540	15
Walter le Neue			540	15
Henry Banastre			492	17
Osbert Smith			486	18
Adam Belsent	6		480	19
Robert Basilie		2	456	20
Robert Bishop			450	21
Ralph Cocus		1	450	21
Agnes Bretun	1		429	23
Ralph Kempe		3	417	24
William Merchant		1	394	25
Nicholas Reeve		2	394	25
Gilbert Shepherd	2		345	27
Walter Carter			300	28
Robert Wysman		2	300	28
Roger Shepherd			294	30
Lily Shepherd		2	276	31
William Hubert			270	32
Walter Shepherd			258	33
William Cunerur			210	34
Alice Swift			210	34
William Wydies			210	34
Juliana Cokewald			186	37
Ralph Smith			186	37
Richard Archer			114	39
Thomas Petit			60	40

Source: Bacon Mss, 116–117; PRO, E 179 242/41.

Landowners and their Estates in the Forest of Arden in the Fifteenth Century*

By ANDREW WATKINS

Abstract

This paper studies the evolution of the seignorial economy in forest of Arden during the fifteenth century. This was a wood pasture area, whose resident landlords were mainly lesser peers, gentry, and smaller religious houses. In contrast to other areas in the later Middle Ages, where direct demesne exploitation by the lord was abandoned in favour of the leasing out, the Arden demesnes and their management were adapted to the particular circumstances of the fifteenth century to create home farms, while other manors were involved in commercial cereal cultivation, livestock raising, and generating cash from the woodland and industrial resources of the estate.

How did English landowners respond to the economic conditions of the fifteenth century? The better documented estates of the higher nobility and greater religious institutions suggest that the seignorial class experienced considerable reduction in revenue from their lands. Very few were able to innovate or modify their estate management to restore lost incomes, and their response was to abandon direct management and put their estates out to farm. However, income from this source declined as the fifteenth century progressed, and many greater lords, both lay and ecclesiastical, encountered hardship through lost revenues.[1] A different perspective on the experiences of the seignorial class is furnished by the study of the fortunes of the gentry and smaller religious institutions from more marginal areas. Postan was among the first to believe that the smaller landowner found the fifteenth century less uncomfortable than his social superior, while from his work on Owston Abbey in Leicestershire Hilton observed that smaller scale religious houses often fared better than their larger, wealthier counterparts. Dyer has described how a small landlord, John Brome, who lived in such a marginal area, the forest of Arden in Warwickshire, was able to thrive in economic conditions of the fifteenth century through astute and rigorous management of his lands. Other work on Warwickshire has shown that although Brome may have been the most dynamic, he was far from being the only member of the fifteenth-century Warwickshire gentry still utilizing their manors, while recently Miller has suggested that many smaller landlords throughout the country maintained some parts of their estates to feed their households.[2]

* I should like to thank Jean Birrell, Christopher Dyer, and Rodney Hilton for their advice and support in the preparation of this paper.

[1] J M W Bean, *The Estates of the Percy Family, 1416–1537*, 1958, pp 17, 26–7; C C Dyer, *Lords and Peasants in a Changing Society*, 1980, pp 164–72; R H Hilton, *The Economic Development of some Leicestershire Estates in the Fourteenth and Fifteenth Centuries*, 1947, pp 85–8; J A Raftis, *Ramsey Abbey*, Toronto, 1957, pp 292–5; E Searle, *Lordship and Community: Battle Abbey and its Banlieu 1066–1538*, Toronto, 1974, pp 324–37; J Hatcher, *Rural Economy and Society in the Duchy of Cornwall 1300–1500*, 1970, pp 148–71; J M W Bean, 'Landlords' in E Miller, ed, *The Agrarian History of England and Wales, III, 1348–1500* [hereafter *Ag Hist III*], 1991, pp 568–74; F R H Du Boulay, 'A rentier economy in the Later Middle Ages: the archbishopric of Canterbury', *Econ Hist Rev*, 2nd ser, XVI, 1963–4, pp 427–38; B J Harris, 'Landlords and tenants in England in the later Middle Ages', *Past and Present*, XLIII, 1969, pp 146–7; C C Dyer, *Standards of Living in the Later Middle Ages*, 1989, pp 27–48; R A L Smith, *Canterbury Cathedral Priory*, 1943, pp 12–3; C Rawcliffe, *The Staffords, Earls of Stafford and Dukes of Buckingham, 1394–1521*, 1978, pp 10, 53, 107, 115, 133; R H Britnell, *The Commercialisation of English Society 1000–1500*, 1993, pp 197–8.

[2] M M Postan, 'Medieval agrarian society in its prime-England,' in M M Postan, ed, *Cambridge Economic History of Europe*, I, 2nd ed, 1966, pp 595–6; Hilton, *Leicestershire Estates*, p 121; C C Dyer, 'A small landowner in the fifteenth century', *Midl Hist*, I, 1972, pp 1–14; A D Watkins, 'Cattle grazing in the forest of Arden in the later Middle Ages', *AHR*, XXXVII, 1989, pp 17–23; A D Watkins, 'Society and economy in the northern part of the forest

This study seeks to contribute to our appreciation of the fifteenth-century seignorial economy by focusing upon the fortunes of the landowners, both peerage and gentry, lay and ecclesiastical, in the forest of Arden in Warwickshire, and their response to the particular circumstances of the fifteenth century. The Arden was a well-defined *pays* during the later Middle Ages. The enclosed landscape of woodland and pasture described by Leland in the early sixteenth century had already been established at the beginning of the previous century. The area did not experience the same degree of economic and social distress as those areas where over dependence on cereal production had often been superseded by the profitable, but socially destructive, grazing of sheep. Instead, the local economy of the Arden was based on cattle grazing and the exploitation of its woodlands, while the nature of its social institutions allowed the opportunity for economic individualism. In the twelfth and thirteenth centuries the Arden had been colonized and substantially cleared through assarting, and such newly claimed land was usually given over to arable cultivation. By the fifteenth century pastoralism had become increasingly significant, while the importance of arable cultivation declined. The landscape which had developed during the dynamic colonization of the area, of small, enclosed fields, whose regulation lay beyond the scope of the village community, proved advantageous in livestock rearing. Cattle were widely kept by both lord and peasant, while many sheep were also pastured within the Arden although not on the same scale as in the Warwickshire Feldon. Both demesne and peasant producers cultivated wheat, barley, oats, drage, and peas and beans, and during the course of the fifteenth century the pastoral economy of the area encouraged an increasing acreage to be given over to fodder crops, such as legumes and hay. The carefully managed woodlands of the area allowed the pursuit of timber by-occupations, the manufacture of wood based fuels and much gathering of underwood, fruits, game, wax, and honey, while within villages and hamlets resources were swelled through brewing, butchery, flax soaking, and the cultivation of hemp.[3]

Although its pastoral and woodland economies may have kept the local economy of the fifteenth-century Arden comparatively buoyant, the area was not isolated from the hardships which afflicted many parts of champion England. Within the Arden land no longer tilled by the plough became *frisc*, that is to say it lapsed from arable land into pasture, holdings were abandoned, buildings became ruined and grassy tofts took their place. Rents plunged in value on many estates, while arrears accumulated on a number of manors during the mid-fifteenth century, and decays and allowances are testimony to the decline and abandonment of holdings. In 1411 Coventry Cathedral Priory had 20 acres in Keresley waste 'which divers men...wont to hold All which now lie unoccupied'. Seignorial buildings, especially mills and barns, were allowed to fall into disrepair, some deteriorating so badly by the mid-fifteenth century that they passed into the lord's hands. However, not all these trends had detrimental effects on the Arden's rural economy. The movement towards pasture was especially beneficial, and by the 1430s demesnes at Middleton,

of Arden, Warwickshire, 1350–1540', unpublished PhD thesis, Birmingham University, 1989, pp 124–68; C Carpenter, *Locality and Polity*, 1992, pp 153–95; C Carpenter, 'The fifteenth-century English gentry and their estates' in M Jones, ed, *Gentry and Lesser Nobility in Later Medieval Europe*, Gloucester, 1986, pp 36–60; *Ag Hist III*, pp 23–4, 575–6.

[3] L Toulmin Smith, ed, *Leland's Itinery in England and Wales*, 1908, p 47. For the fifteenth-century economy of the Arden see: Dyer, 'A small landowner in the fifteenth century', pp 1–14; C C Dyer, *Warwickshire Farming 1349–c 1520*, Dugdale Society Occasional Paper, XXVII, 1981, *passim*; Watkins, 'Cattle grazing in the forest of Arden', pp 17–23; A D Watkins, 'The woodland economy of the forest of Arden in the later Middle Ages', *Midl Hist*, XVIII, 1993, pp 19–32; Watkins, 'Society and economy in the forest of Arden', pp 124–299; A D Watkins, 'Merevale Abbey in the late 1490s', *Warwickshire Hist*, IX, 1994, pp 87–104.

Lea Marston, Maxstoke Castle, and Tanworth-in-Arden were all pasture, and substantial lands at Kingsbury and Sutton Coldfield were also given over to grazing. This is mirrored by the conversion of arable land to pasture on many peasant holdings. The greater fluidity of the land market, coupled with a relaxation of already weak tenurial status, allowed for the rise of peasant entrepreneurs.[4] In the aftermath of the Black Death many demesnes continued to function more or less as before, with the emphasis very much on arable cultivation, until at least the 1380s, if not until the end of the fourteenth century. Those in the Arden at Astley, Kingsbury, Maxstoke Priory, and Nuneaton Priory, continued under direct management until the beginning of the fifteenth century.[5] From then on many estates were put out to farm. In many instances landlords often retained an interest in the lands on their home manors, often initially farming out their more distant estates, such as the Bracebridges, who leased out their manor at Bracebridge in Lincolnshire by 1392, whilst retaining in hand their cluster of estates around Kingsbury. Nuneaton Priory also farmed out its more distant glebes and tithes in the fifteenth century, whilst retaining the manors closer to the nunnery at Horeston and Eton. Often as in the case of the Mountfords and Willoughbys, the home manor was retained while the remaining estates were leased.[6] This paper seeks to determine to what extent the fortunes of the landowners living within the forest of Arden during the fifteenth century correspond to the traditional view of the fortunes of the landlord during this period, which is characterized by adverse economic conditions, and as a consequence reduced incomes. Many lords chose to abandon direct expolitation of their lands, while many resorted to leasing out manors to farmers. In order to do this it will be necessary to examine the nature of the pastoral, arable, and woodland activities which existed on some of the Arden estates, the levels of investment by landlords into the buildings and other productive resources of the lands, and how estate management evolved in response to the particular economic circumstances of the period.

I

One of the most obvious features of the seignorial economy in the fifteenth-century forest of Arden was the development of the home farm on those manors where the lord was resident. These were to provide the household with grain, meat, dairy produce, fruit, and vegetables, and often made use of demesne and pasture land within hunting parks. This frequently involved the rationalization and reorganization of lands through enclosure and investment into the productive resources of the estate. Livestock was grazed and cereals cultivated, with most of the tasks being undertaken by wage labourers. To establish such a farm landlords often had to expand and consolidate their estates by taking up leases of lands in adjacent manors. Often this was characterized, as at Baddesley Clinton in the 1440s, by building up a compact block

[4] Watkins, 'Society and economy in the forest of Arden', pp 127–31, 140–45; Queen's College, Oxford, Warwickshire Mss No 7; Nottingham University Manuscripts Department [hereafter NUMD], MiM 167, MiM 175, MiD 4227; Birmingham Reference Library [hereafter BRL], Norton Mss 53; Staffordshire Record Office [hereafter SRO], D 641/1/2/269; Shakespeare's Birthplace Trust Record Office [hereafter SBT], DR 37/107/1; NUMD, MiL 5; SBT, BRT 1/3/180. For social structure of the Arden see R H Hilton, *Social Structure of Rural Warwickshire in the Middle Ages*, Dugdale Society Occasional Paper, IX, 1950. For rising families see Dyer, *Warwickshire Farming 1349–c 1520*, pp 30–1; Watkins, 'Cattle grazing in the forest of Arden', pp 17–9; Watkins, 'Society and economy in the forest of Arden', pp 265–93.

[5] Warwick County Record Office [hereafter WCRO], CR 136/c150–c153, CR 136/c143; NUMD, MiM 162; Public Record Office [hereafter PRO], SC 6/1040/8–11; British Library [hereafter BL], Add Rolls 49752–4, 49757, 495759, 49764. The Freville estates at Lea Marston had already been put to farm by 1377: NUMD, MiM 165.

[6] NUMD, MiM 162; BL, Add Ch 48034, 48035, 48044/6, 48057, 84874, 84875, 49154; SBT, DR 37/73.

of leased lands of mixed tenurial status. During the same decade the Willoughbys were similarly able to increase the extent of their pastures in Middleton by leasing from the Botillers, while the gentleman, William Lisle of Moxhull, rented considerable lands from the Binghams in Middleton in 1456. Maxstoke Priory was similarly able to expand its resources through the acquisition of Hermitage farm in Little Packington and by leasing pasture for its horses in Kingsbury Park from the Bracebridges, while towards the end of the century Merevale Abbey leased the wood pastures and coppices of Bentley Park from the Lisles.[7]

Maxstoke Priory was a typical example of such a seignorial home farm. The earliest surviving account roll of the priory from 1345 suggests that from its creation in the previous year, the priory had been almost self-sufficient in foodstuffs, and even in the fifteenth century, when considerably reduced in numbers, the canons were still trying to live off their lands. By the mid-fifteenth century the priory was surrounded by hedged and ditched fields of arable, pasture, and meadow land, while above the house on the eastern side of the hills of the Blythe valley were extensive woodlands composed of coppice and great timber. Their lands had been further extended by the acquisition of a large, compact farm, Hermitage, in Little Packington, which lay adjacent to the priory manor in Maxstoke.[8]

Considerable efforts were made to follow good agricultural practices. Investment was made in improving the ground by hedging and ditching. Often such work was quite specific in terms of length of hedging, and occasionally in depth of ditching, as in 1491 when a new ditch dug next to the 'great pool' in the park was specified as being as 'depe as the old dych'. The priory also improved and reclaimed land through stocking, a process of clearing trees and bushes from land which had become overgrown. By the fifteenth century such clearances on Arden estates were common, and were usually of demesne land which had fallen out of cultivation, suggesting landlords were finding it necessary to recover lands which had been allowed to lapse. At Maxstoke Priory in 1433 two mattocks were purchased for stocking, presumably to break and grub up the roots of the undergrowth. In 1443 a new stocking was created, while in 1449 eleven labourers were paid 43*s* 4*d* between them for extending part of the lord's park to create a pasture, to fell trees, and repair the ditch under the park pale.[9]

Some of the courtyards within the priory resembled a modern farmyard, containing barns, animal sheds, stables, an ox house, and stone sties built along the outer wall of the priory. Ubiquitous throughout the site were poultry: for example, in 1449–50 when the kitchener listed some 21 capons, 124 geese, and 271 hens in his care. There were also large numbers of pigs within the walls, with the cellarer reporting in 1442 6 boars, 39 sows, and 81 piglets.[10] The priory also maintained a dairy herd, and in 1442 this consisted of a bull and 19 cows, with 26 calves, which produced 36 stone of cheese, 176 gallons of milk, and 10 gallons of butter.[11] The canons also maintained

[7] For home farms on estates in the fifteenth century see *Ag Hist III*, pp 23–4: Dyer, *Standards of Living*, pp 68–9. For those in Warwickshire see Carpenter, *Locality and Polity*, pp 176–80; Dyer, 'A small landowner in the fifteenth century', pp 4–5; NUMD, MiM 131/33, MiD 4462; Bodleian Library [hereafter Bod Lib], Ms Trinity 84, p 22, 50, 98, 108; Watkins, 'Merevale Abbey', pp 94–7.

[8] PRO, SC 6/1258/7; *Victoria County History of Warwickshire* [hereafter *VCH*], IV, p 184; Watkins, 'Society and economy in the forest of Arden', p 51. The topography of the priory estate in Maxstoke has been reconstructed using evidence drawn from the cartulary: Bod Lib, Ms Trinity 84, pp 2, 20, 33, 39, 50, 52, 83, 99, 100, 102, 107, 109, 134; J R Holliday, 'Maxstoke Priory', *Trans Birmingham Arch Soc*, V, 1878, pp 64–80; SBT, DR 671/30–1 (Survey of Lord Leigh's lands at Maxstoke, 1776).

[9] Bod Lib, Ms Trinity 84, pp 8, 14, 24, 33, 39, 52, 62, 72, 99, 100, 107, 110, 125, 128, 134, 139, 213, 219, 225, 227, 228, 232, 239, 259, 263. For the recovery of overgrown lands on other Arden estates see: Dyer, 'A small landowner in the fifteenth century', p 5; NUMD, 5/167/101 (i–iii); Dyer, *Warwickshire Farming 1349–c 1520*, pp 10–11.

[10] Holliday, 'Maxstoke Priory', pp 64–5; Bod Lib, Ms Trinity 84, pp 15, 24, 33, 99, 244, 113, 143.

[11] Bod Lib, Ms Trinity 84, pp 129, 132, 134; SBT, DR 37/114.

beef animals, having a herd of 46 steers, kine, bullocks and heifers in 1442, which by 1449 had expanded to 69 store beasts. Although some were sent to market, most animals were slaughtered to feed the household, which by the mid-fifteenth century numbered some 30 brethren, servants, guests, and children.[12]

It is well known that members of the gentry were involved in maintaining home farms. The Mountfords of Coleshill kept small herds of cattle and flocks of sheep in their parks at Coleshill, Kingshurst, and Hampton-in-Arden to feed their household. The careful management of demesne pasture and meadows at Middleton in the late 1440s enabled the Willoughbys to reorganize their lands for grazing, while the Ferrers of Tamworth seem to have created a home farm around their castle at Tamworth. Maxstoke Priory was not the only religious house to be involved in cattle grazing. Towards the end of the century Merevale Abbey owned considerable numbers of cattle, with a dairy herd, store beasts, and a beef herd. Incidental references suggested that other families such as the Ardens, Bracebridges, Clintons, Ferrers of Tamworth, and Harewells may also have kept animals on their demesnes during the fifteenth century.[13] Members of the peerage also established home farms. At Astley Castle the Greys maintained a small dairy herd, usually of about a dozen cows, and a small store herd to supply meat. There was another herd of beef animals on their manor of Weddington, near Nuneaton, and beasts were interchanged between the two manors. Grey was not the only member of the peerage to create a home farm with animals grazing amid his parklands. By the mid-fifteenth century on the duke of Buckingham's estate at Maxstoke Castle, the park and parts of the demesne had been converted into grazing for cattle and sheep, and also deer and horses.

In a number of instances a wider estate was integrated into such a system.[14] Beasts were fattened on the earl of Warwick's pastures of Wedgnock Park during the first half of the fifteenth century, a dairy herd maintained on his estate at Claverdon, whilst animals were grazed on other Beauchamp manors at Lighthorne and Moreton Morrell. Elsewhere on the earl's lands grains were cultivated at Budbrooke, while the large manor at Tanworth-in-Arden housed a horse stud and provided the rest of the estate with timber and underwood. Underpinning this whole operation was the profitability of pastoral farming. In 1418 Wedgnock Park supported over 200 cattle and dairy cows and a flock of over 40 sheep. The earl's agents, as well as travelling to buy Welsh animals from the market towns of the Severn valley, often dealt directly with drovers from Wales. A herd of animals accompanied the household of the countess of Warwick on her travels in 1421. Wedgnock was the central manor of this wider estate, and its pastures not only supported many cattle and sheep, but its woodlands yielded faggots and timber. These manors in Warwickshire were in turn only part of a much wider estate economy, which saw the Beauchamp's demesne managers transfer cattle from their lands at Barnard Castle in County Durham, to their Midland residences.[15]

[12] SBT, DR 37/114; Bod Lib, Ms Trinity 84, pp 129.

[13] SBT, DR 37/73; NUMD, 5/167/101 (i–iii); Watkins, 'Merevale Abbey', pp 95–7; Watkins, 'Cattle grazing in the forest of Arden', pp 96–7; Dyer, *Lords and Peasants*, p 215; Carpenter, *Locality and Polity*, p 172.

[14] WCRO, CR 136/c152; Watkins, 'Cattle grazing in the forest of Arden', pp 15–6; SRO, D 641/1/2/269–276; BRL, DV2 168236; PRO, SC 6/1040/15; Maxstoke Castle, Fetherstone-Dilke Mss (I am greatly indebted to Captain C B Fethertsone-Dilke for making this document available to me); Rawcliffe, *The Staffords*, pp 69–70.

[15] Dyer, *Warwickshire Farming 1349–c 1520*, pp 4, 20; WCRO, CR 1886/484–88, DR 895/8/11–20; Watkins, 'The woodland economy of the forest of Arden', p 22; SBT, DR 37/107/1–29, DR 37/108/30–52; Watkins, 'Cattle grazing in the forest of Arden', pp 13–5; C D Ross, 'The household accounts of Elizabeth Berkeley, countess of Warwick, 1420–1', *Trans Bristol and Gloucestershire Arch Soc*, XXXIV, 1951, p 90; K B McFarlane, *The Nobility of Later Medieval England*, 1973, p 194.

It was not only the earls of Warwick who were able to integrate their estate. As we have seen the Mountfords of Coleshill made direct use of their demesnes at Coleshill, Kingshurst, and Hampton-in-Arden. Maxstoke Priory continued to make use of its glebe rectories at Tanworth-in-Arden, Aston Cantlow and Long Itchington, while Merevale Abbey continued to exploit its lands at Pinwall and Seal, growing grains on its Leicestershire estates, and grazing cattle on its woodland Arden manors.[16] Less common was the landlord who was raising livestock for the market. The cattle grazing of John Brome of Baddesley Clinton is well documented, and he often raised herds of seventy or so beef animals for sale to butchers. Other landlords were also selling beasts at market. In 1449–50 Maxstoke Priory sold 16 steers, 6 calves and 15 sheep, while the size of herds at Merevale Abbey clearly suggest that the monks were involved in commercial grazing. At the Beauchamp's estate of Wedgnock, cattle grazing generated a good cash income. Sales of cattle and sheep to butchers from Warwick, Birmingham, Coventry, and occasionally London, were worth £68 12*s* 3*d*, while in 1424 such sales generated £53 2*s* 5*d*, whilst in an exceptional year, 1431, the sale of 162 cattle brought the estate £100 17*s* 4*d*.[17]

II

On a number of home farms cereals and legumes were grown. At Baddesley Clinton only about 30 acres, out of a demesne of some 300 acres, were sown with wheat, along with crops for animal feed. Much of the harvest was consumed by Brome's household, but some was preserved and stored in barns while Brome awaited a better price before sale. Similarly peas, barley and oats were cultivated at Astley, mainly for livestock fodder. Cereal production was also revived at Moxhull and Middleton during the late 1440s, and at the latter location seed grains were purchased, and payments made for ploughing, harrowing, hoeing, reaping, binding, threshing, and winnowing. Interestingly, as at Baddesley Clinton, only somewhere between 10 and 20 acres were cultivated out of a total demesne of around 300 acres. Even so sufficient grains and legumes were gathered at Middleton in 1446–7 to employ Richard of the Lee for four days to cart them from the fields to the manor's barns. Small acreages of wheat and oats were cultivated at Wedgnock, again usually well under 20 acres.[18] Cereals and grains were grown at Maxstoke Priory during the 1440s, with quantities of grain and legumes held back for seed. In 1442 nearly 140 acres were sown with peas, wheat, and barley, but this would appear to be an unusually large acreage, as details from the late 1440s suggest that more often only about 60 acres was sown, with wheat usually composing at least two-thirds. Payments made to labourers indicate that Merevale Abbey was still cultivating its arable lands in the late 1490*s*.[19]

An important supply of crops to both the religious houses and the gentry households came from tithe. Merevale Abbey continued to collect tithes in kind. Local officials were paid as collectors, while the monks invested in maintenance of barns to store tithe produce at Moorbarn, Woodbarn, Witherley, and Twycross,

[16] SBT, DR 37/73; Bod Lib, Ms Trinity 84, pp 11, 105, 127, 136, 137, 142; Watkins, 'Merevale Abbey', pp 94–5.

[17] Dyer, 'A small landowner in the fifteenth century', pp 6–10; SBT, DR 37/114; Watkins, 'Merevale Abbey', pp 94–5; WCRO, CR 1886/484, 486, 488.

[18] Dyer, 'A small landowner in the fifteenth century', p 6; WCRO, CR 136/c150–c152, c154; NUMD, 5/167/101 (i–iii); WCRO, CR 1886/484.

[19] Bod Lib, Ms Trinity 84, pp 98, 109, 133–4; Watkins, 'Merevale Abbey', pp 94–5; WCRO, MR 1. The calculations of acreage sown is based upon information on yields given in J Z Titow, *Winchester Yields*, 1972, p 13; W O Ault, *Open-Field Farming in Medieval England*, 1972, pp 20, 38; B M S Campbell, 'Agricultural progress in medieval England: some evidence from eastern Norfolk', *Econ Hist Rev*, 2nd ser, XXXVI, 1983, p 30; D Oschinsky, *Walter of Henley*, 1971, pp 323–5.

while a tithe barn was constructed by the abbey towards the end of the medieval period at Newhouse. In some years Maxstoke Priory collected grains and legumes from two glebe rectories at Aston Cantlow and Tanworth-in-Arden, which were a mixture of crops harvested from the glebe lands and of tithe from their parishioners. In some years grains and legumes from both estates were sold, such as in 1441 when 51 quarters of wheat, 45 quarters of barley, and one rick of peas, collected at Aston Cantlow were sold, or at Tanworth-in-Arden the following year when 45 quarters of wheat and 3 quarters of peas were sent to market, while in others such as 1442 some 17 quarters of wheat, 47 quarters of barley, and 47 quarters of peas were carted to Maxstoke to be consumed by the household.[20] Members of the gentry also made good use of tithe grains. The Willoughbys leased tithes of parishes that neighboured Middleton and the Mountfords similarly farmed the tithes of Bickenhill and Coleshill. It is interesting to note that when John Brome purchased seed for his estate, he not only patronized the grain merchants of Warwick market, but also went to the rector of Lapworth and vicar of Rowington presumably buying from them tithe grains for seed.[21]

Limitations in surviving documents have meant that the role of the kitchen garden in the seignorial economy is better imagined than recorded. At Maxstoke Priory there were two walled gardens, that of the sacristy, and that of the infirmary. The latter was much the larger, and the wall was regularly maintained and its ditches kept in a good state of repair. It contained an orchard of apple and pear trees, lawns mown to provide herbage for livestock, a fishpond, and many hives. Garlic, leeks, onions, and cabbages were sown, as well as industrial crops, such as hemp and flax, while the infirmarer made a liquor, *acetum* or verjuice, from the apples from his orchard. The true value of the garden lay in providing the household with honey, fresh fruit, and vegetables, and although produce was sold it never amounted to a significant element in the income of the house.[22] In 1458, for example, the sale of one quarter and six bushels of apples and eight gallons of *acetum* only brought in 21*s*, and sales of six bushels of apples, two pipes, and two gallons of *acetum* and garlic, only yielded 18*s* 11*d*. Kitchen gardens provided the countess of Warwick with fresh vegetables in 1420–1, while money was invested in the convent garden wall at Merevale Abbey in 1498. At Middleton investment was made in the gardens and orchard of the manor house. A garden gate was constructed in 1446 and in the same year hedges around the Hall Orchard were repaired, and extended by 14 rods in 1451. In this year John Degan was paid $7\frac{1}{2}d$ for three days work grafting an apple tree. By the time of the more detailed Willoughby household books of the 1510s and 1520s the garden and orchard were a flourishing and integral part of the estate economy. Payments are recorded for seed, while in 1520 the orchard, which presumably contained many of the same fruit trees as in the mid-fifteenth century, yielded crab apples for which payments were made for 'gryndyng of crabbys' to make verjuice.[23]

[20] Watkins, 'Merevale Abbey', pp 94–5; Bod Lib, Ms Trinity 84, pp 11, 127, 137, 134–6, 105.

[21] NUMD, 5/167/101(iii), MiA9 fos 7 ^{v}, 33–33 ^{v}; SBT, DR 37/74, DR 3/805.

[22] For a discussion of seignorial gardens see J Harvey, 'Vegetables in the Middle Ages', *Garden Hist*, XII, 1984, pp 89–99; C C Dyer, 'Jardins et vergers en Angleterre au moyen âge', in *Jardins et vergers au moyen âge*, Centre Culturel de l'Abbaye de Flaran, 9e journées internationales d'histoire, 1987, pp 145–64; Bod Lib, Ms Trinity 84, pp 245–89; T J Hunt and I Keil, 'Two medieval gardens', *Proc Somersetshire Arch and Nat Hist Soc*, CIV, 1959–62, pp 91–101.

[23] Bod Lib, Ms Trinity 84, p 258; Ross, 'Household accounts of Elizabeth Berkeley', p 102; PRO, E 315/283, fos 20–20 ^{v}; NUMD, 5/167/101 (i and iii); *Report on the Manuscripts of Lord Middleton*, Historical Manuscripts Commission, 1911, p 330; NUMD, MiA 9, fo 5 ^{v}, MiA 14, fo 14 ^{v}, MiA 15, fo 1, MiA 18 fo 4.

III

The economy of many Arden demesnes was further stimulated by the exploitation of woodland resources, as trees and underwood took the place of livestock and grains as cash generators on many estates. Woodland pasture and browse wood were also of value and provided fodder for cattle at Maxstoke, Merevale, Middleton, and Wedgnock, while game birds and rabbits supplemented the larders of many Arden manor houses. The value of these resources was clearly realized by the landlord and is demonstrated by the high standard of their management on many estates. These were carefully exploited assets, with new growth carefully preserved until it reached maturity. This is reflected in investment in ditching and enclosing woodlands, and in the zealous way in which they were guarded and protected.[24] Direct exploitation by the landlord in the Arden was not common, with most leasing out whole woods, or contracting for either specific numbers of trees or acreages of underwood. At Coleshill, the Mountfords entered into a number of such agreements. In 1402 they leased 'the whole of the wood of Beltesley' to a collier, or charcoal burner, for £60 13*s* 4*d* over four years, while in 1482 they sold 660 trees in Coleshill Park and in 1487 126 oaks in Kingshurst Park. A number of other estates made specific sales of great timber from their parks, such as at Maxstoke Priory, Nuneaton Priory, and the Beauchamps at Tanworth-in-Arden, where in 1409–10 120 ashes were sold. At Baddesley Clinton such sales brought in over £5 a year, or nearly a sixth of the manor's revenue in the 1440s, while elsewhere demesne woods at Sheldon, Middleton, Maxstoke, and Merevale yielded annual sums ranging from £5 to £15. At Maxstoke Priory money was also raised through tithes on woodlands as in 1431–2 when this yielded £3.[25] On a number of manors, notably Maxstoke Priory, Middleton, and Sutton Coldfield underwood was leased out by the acre. On some occasions larger sums of money could be generated from woodlands. A survey made of Middleton in 1419 revealed that leases of woodland were worth £28 6*s* 8*d* a year, and at Wedgnock sales of faggots generated £19 4*s* in 1417–8 and £17 16*s* 8*d* in 1425–6, while at Fillongley in 1471 sales of woodland brought in £17 16*s* 8*d*, well over a third of the estate's income. Maxstoke Priory received £29 in 1450, while in an exceptional year, on the Beauchamp manor of Tanworth-in-Arden in 1404, wood sales generated £100 out of an estate income of £108.[26]

In areas with mineral resources, landlords were able to contribute to their income by developing industry on their manors. A number of Arden manors were associated with industrial processes during this time. By the mid-sixteenth century the Arden's abundance of wood-based fuels encouraged some lords to establish blast furnaces on their lands, notably at Middleton and Furnace End in Over Whitacre. However, these projects required iron ore to be imported from the Black Country to be smelted by Arden charcoal, for although some medieval woodland areas, such as the forest of Dean and the Sussex Weald, were rich in mineral deposits they do not occur in the Arden, and no such blast furnaces are recorded before the reign of Elizabeth. It is well known that coal seams outcrop along the eastern end of the Arden plateau, and coal had been mined in the Nuneaton area since Roman times. Nuneaton Priory had coal workings on its manors, and

[24] For a general discussion of the woodland economy of the area and its impact on the seignorial economy see Watkins, 'The woodland economy of the forest of Arden', pp 19–25.

[25] BRL, A 433, A 519, A 589, A 629, A 635; Bod Lib, Ms Trinity 84, pp 12, 14, 29, 121; BL, Add Rolls 49755, 49757, 49758, 49760, 49763, 49764; SBT DR 37/107/1–2, 13, 22, 24, DR 37/108/31, 32, 34; Dyer, 'A small landowner in the fifteenth century', p 9; SRO, 26/D53/1/125; NUMD, MiM 139–142; Bod Lib, Ms Trinity 84, pp 14, 20, 29, 102, 115, 118, 121; Watkins, 'Merevale Abbey', pp 97–9.

[26] NUMD, MiM 175, MiM 214; WCRO, CR 1886/484, 487; Coventry Record Office, E 10; SBT, DR 37/107/13.

during the last few years of the fourteenth century these had yielded about 50*s* a year. By the early fifteenth century these were no longer generating cash, probably because the easily-mined, outcropping seams had become exhausted. The priory was not the only landlord to have coal workings on its estates. Towards the end of the fifteenth century an area near to Merevale Abbey was known as 'le Colputt', probably a pit where coal was extracted, although no material has survived to suggest how this was exploited.[27]

There were also some stone workings within the Arden. Within her extensive woodlands the prioress of Nuneaton owned a number of quarries. By the later Middle Ages, these seem to have been leased, generating such sums as just under £2 towards the end of the fourteenth century. The stone quarry at Baddesley Clinton was considered by Brome to be among his most important assets. Over the years he invested some £4 7*s* 2*d* in refurbishment of the quarry and the acquisition of equipment, and in return received £7 8*s* 10*d* through sales of stone, while Maxstoke Priory and Merevale Abbey also had quarries. Tiles were fired on a number of estates. In 1457 John Brome refurbished a tile works on his demesne, enlarging the tile house and furnace, the pit for storing water, and the drying place, while part of the demesne at Coleshill was known as Kilnmeadow towards the end of the fifteenth century. Merevale Abbey had a fully functioning tile kiln at Pinwall, which also fired bricks. This was capable of a large output, firing as in 1499 some 20,000 tiles and 20,000 bricks.[28]

The most common industrial activity on Arden estates by the later Middle Ages was the manufacture of wooden building materials. Great timber for the frames of buildings was felled, and spars, rods, laths, and joists were cut and dressed within many demesne woodlands, such as at Middleton, Nuneaton Priory, Tanworth-in-Arden, Maxstoke Priory, and Merevale Abbey. For example, at Middleton in 1449–50, several men were paid for twenty-seven days work cutting and dressing oaks in the park and in an enclosure called Woodhurst, to produce timber for laths, joists, and spars for building work within the manor. Demesne coppices provided underwood to be used for the infill of buildings, as well as a multitude of other purposes, at Sutton Coldfield, Nuneaton Priory, Tanworth-in-Arden, Middleton, and Maxstoke Priory. It is well known that building materials from the Arden served a wide area, including the Avon valley, Feldon, south Staffordshire, and parts of Leicestershire. In 1434 the Mountfords of Coleshill sent timber to be sold at Henley-in-Arden on the verge of the receding woodlands of the south Arden and the Avon valley, while the Beauchamps similarly sold timber from Tanworth-in-Arden at Warwick, Knowle, and Coventry. Arden timber was also finding its way to Leicester, and wood from Sutton Chase was sold widely around the immediate area.[29]

IV

One of the most obvious features of the fifteenth-century rural economy are the

[27] S M Wright, *The Derbyshire Gentry in the Fifteenth Century*, Derbyshire Record Society, VIII, 1983, pp 21–22; R A Pelham, 'The establishment of the Willoughby ironworks in north Warwickshire in the sixteenth century', *Univ Birmingham Hist Jnl*, IV, 1953–4, pp 18–29; WCRO, DR(B) 38/3/2, p 29; Watkins, 'The woodland economy of the forest of Arden', p 29; *VCH*, II, pp 219–20; Watkins, 'Merevale Abbey', p 98; J Hatcher, *The History of the British Coal Industry. I: Before 1700*, 1993, pp 135–6.

[28] Watkins, 'The woodland economy of the forest of Arden', pp 28–9; Dyer, 'A small landowner in the fifteenth century', p 10; PRO, SC 11/683; Watkins, 'Merevale Abbey', pp 98–9.

[29] Watkins, 'The woodland economy of the forest of Arden', pp 30–31; NUMD, 5/167/101(iii); SBT, DR 37/73; DR 37/108/31; T H Lloyd, *Some Aspects of the Building Industry of Medieval Stratford-upon-Avon*, Dugdale Society Occasional Paper, XIV, 1961, pp 16–22.

reports of the dilapidated and ruinous condition of many buildings, on both demesnes and on peasant holdings. Landlords did little to alleviate this, failing to put capital into their estates. Contemporary treatises on estate management did not expound the virtues of re-investing profits into new building, livestock, or equipment, while many of the aristocracy preferred to spend their profits on ostentatious personal display, and on patronage to retain the support of their retinues. Studying records of the larger religious houses and the peerage, Hilton estimated that frequently they spent less than 10 per cent and often as little as 4–5 per cent of their manorial profits on capital investment. Although the later Middle Ages are usually seen as a period of falling investment, he did notice a trend for a slight increase in expenditure, both in demesne buildings and also on tenants' houses.[30] Between 1437 and 1508 the Buckinghams re-invested only slightly over 4 per cent of their total manorial receipts into the demesne at Maxstoke Castle. The Astleys seem to have spent a comparatively low sum at Astley Castle, while Hilton has estimated that in the 1470s managers of the earl of Warwick's manors spent up to 9 per cent on the estates. The Willoughbys invested well above these figures in buildings, the repair and extension of enclosures, and in the purchase and maintenance of equipment. In 1446–7 some £5, or about 15 per cent of the income of the estate, was spent in these areas, while in 1451–2 almost 28 per cent of the manors' income was spent on maintaining manorial assets, mainly on this occasion in the construction and repair of enclosures.[31] However, most money was spent on buildings of a domestic nature, such as in the castles at Maxstoke, Astley, and Tamworth, the conventual and appropriated churches and glebe buildings on the Maxstoke Priory and Merevale Abbey estates, and the hall and other domestic buildings at Middleton. Most expenditure was put into repairing existing structures rather than creating new ones. The most obvious form of capital investment into the productive resources of their manors for landlords was in demesne buildings such as barns, stockhouses, and mills.[32]

At Merevale Abbey demesne properties such as the Old Storehouse, the Carters barn, the Abbot's stable, the 'hyndehouse', the Abbot's barn, and the storehouse barn were repaired. The abbey also sought to maintain buildings on its properties in good states of repair. Work was undertaken on barns at Moorbarn, Woodbarn, Witherley, and Twycross, and on dovecots at Orton-on-the-Hill and Mancetter. Money was spent on the upkeep of a rabbit warren at Orton-on-the-Hill, while at Pinwall the arches of a tile kiln were repaired. At Maxstoke Priory stables, barns, the subprior's mill, the forge, the ox house, and a woodhouse located within the southern courtyards of the priory all had work carried out upon them. There was also a bakehouse, with its own attached waterwheel which was repaired along with the roof and furnace in 1435.[33] The canons of Maxstoke carefully monitored their expenditure both in these areas and on their conventual buildings. During the 1450s a list was drawn up detailing all the monies that Prior Green had expended on buildings for each year that he was prior. Over a period of some seventeen years the priory invested £314 in its buildings, with the majority of this going into the conventual

[30] R H Hilton, *The English Peasantry in the Later Middle Ages*, 1975, pp 174–214; Dyer, *Standards of Living*, p 80; Dyer, 'A small landowner in the fifteenth century', pp 5, 8–10; Watkins, 'Society and economy in the forest of Arden', pp 147–8; Carpenter, *Locality and Polity*, pp 165–6.

[31] Watkins, 'Society and economy in the Forest of Arden', p 165; Hilton, *The English Peasantry*, pp 174–214; NUMD, 5/167/101 (i and iii).

[32] SRO, D641/1/2/269–279; WCRO, CR 136/c150–c157; BRL, DV 592 437894; NUMD, 5/167/101.

[33] Watkins, 'Merevale Abbey', pp 93–4; Bod Lib, Ms Trinity 84, pp 6, 8, 15, 22, 24, 26, 33, 40, 72, 99, 106, 119–20, 139, 244, 247.

structures. The Willoughbys invested in the demesne buildings at Middleton. A new barn was under construction in 1428–9, and in 1446–7 work, mainly roof repairs, was carried out on the buildings which surrounded the hall, such as the barn, the bakehouse, the stable, the cart stable, the hay barn, the 'ryggyng' barn, and the swinesty. Internal fittings were renewed in the barns and stables, including 'rakkes' to hold animal feed. The motivation for such investment in buildings was twofold. First, on those estates, such as Merevale Abbey, Middleton, Maxstoke Priory, and Baddelsey Clinton, where active agricultural use was still being made by the lord of the demesne, they were clearly integral elements in the estate economy, and investment in them is an obvious indication of continued direct exploitation on these manors. A second motive for landlords to invest in the repair and maintenance of such demesne assets was to increase their value when put out to farm. This is suggested in the correspondence of a female member of the Armeburgh family, a minor gentry family who held the small manor of Brokholes in Mancetter, in which her mother was informed that 'byldyng of newe houses & reparacion of olde houses... yis cost most nedys be doon or we schall have no fermours'.[34]

Among the most seignorial buildings most obviously needing investment were mills. By the 1440s both the mills of Middleton had fallen into such poor condition that they were not put out to farm. Again, landlords were prepared to invest in them both to restore them to full working order, and to make them more attractive to potential lessees. As part of the Willoughby's revival of the estate 55*s* 2½*d* was spent in 1447 on the house attached to Park Mill, including cartloads of clay, underwood for filling the walls, 5000 tiles and 30 crests. Money was also spent on the mill itself, repairing its millstones and the internal mechanism. In addition, four cartloads of stone were required to repair the lord's well. A further 3*s* 6*d* was spent on the mill dam, around the 'myr in le pole'. Similarly, workmen were paid to repair a gutter flowing into the moat. In 1493 the Mountfords entered into agreement with the farmers of the two mills of Coleshill, that while the lessees were to maintain the mills and the floodgates and banks, the Mountfords would undertake to supply loads of timber and clay for repairs. The lessees were also allowed 40*s* from their rent of £9 to pay for this. Similarly at Sutton Coldfield, the countess of Warwick supplied ten trees from the chase for the bay, water and cog wheels of a new mill in the early sixteenth century. The Erdingtons were prepared to invest in repairing a mill on their estate, during the 1450s, and mills and their associated floodgates and dams were attended to by the monks of Merevale on their estates at Altcar on the Mersey estuary, Mancetter on the river Anker, and at Woodbarn, while another new water-mill, 'Kyngsmyll', had been built at Maxstoke in 1473.[35]

Demesne fisheries required investment by landlords. In the Arden they were often associated with mill complexes. The leasing of fisheries within the area did occur, but some households retained them to supply fresh fish. At Baddesley Clinton Brome spent some £4 16*s* in 1445 on his three demesne fishponds, scouring and digging them out, and providing sluices. The canons of Maxstoke had a system of fishponds within the courtyards of the priory site, fed by streams which rose above the priory and ran through the upper courtyards. These required considerable labour in maintaining the flow of water through

[34] Bod Lib, Ms Trinity 84, pp 119–20; Carpenter, *Locality and Polity*, p 164; NUMD, 5/167/101(i); Chetham's Library, Mun E 6 10 4: I am indebted to one of my anonymous referees for furnishing me with this reference.

[35] NUMD, 5/167/101(i); BRL, A 644; NUMD, MiDa 84, 5/169b/15.

channels and pipes. Merevale Abbey had an even more extensive complex of fishponds. In 1546–7 it was recorded that 17 acres of ground were covered with water, divided into seven pools, which modern fieldwork confirms still exist. Much of the work completed at Middleton in the late 1440s on the mill dam and the moat should probably also be seen in this context, while repairs were also carried out to fishponds at Tanworth-in-Arden. Two accounts give some indication of the levels of investment required to re-stock them. In 1445 John Brome spent some £1 16*s* 9*d* on 22 bream, 7 tench and various roach, as well as two barrels each of 16 gallons capacity, a pannier, and their carriage costs. In 1461 the Erdingtons spent a remarkably similar sum, £1 17*s* 10*d*, purchasing from a peasant supplier, John Summerlane of Castle Bromwich, 80 'couplis' of bream at 4*d* a couple, 100 couples of bream at 1½*d*, and 20 couples of tench.[36]

On some estates, such as those of the Beauchamps and Fountains Abbey, landlords not only repaired demesne buildings but also the houses of their tenants. Often this took the form of supplying building materials, and occasionally by making grants of money. Two holdings, which had come into the Willoughbys' hands in Middleton by 1449–50, were extensively repaired. One was re-roofed, while the other had some 10*s* 3*d* spent in enlarging it by the the construction of a new chamber. Merevale Abbey in 1498 commenced work worth 4*d* on 'Mosses' house, while the abbey considered replacing the house of eight bays which had been destroyed by fire at Whittington. Work was undertaken on the house of Thomas Beckett, and payments were made for thatching the house of Elizabeth Milner, and also for carrying clay for daubing its walls, while in the following year the abbey built a large, new house on stone foundations for their shepherd at Pinwall grange.[37]

The landlords of the Arden also invested in the construction and maintenance of hedges, ditches, and fences around meadow land. Enclosure added to the value of the land if it were put out to farm, while the important part which pastoral husbandry played in the economy of the area meant that there was a constant need to invest in the repair and extension of enclosures. The comparatively low cost of employing men to make such enclosures meant the amount invested in this was generally small in terms of overall estate revenue, being only about £1 a year at Maxstoke Castle. On some estates it could be higher, as at Baddesley Clinton where Brome spent £2 9*s* 3*d* in 1442 and £3 5*s* 8½*d* in 1446 on hedging and ditching, while at Wedgnock Park in 1426 some £10 5*s* 8*d* was invested in enclosing. At Middleton in 1446–7 the Willoughbys spent £1 7*s* 6*d*, but in 1451–2 £7 4*s* 8½*d*, nearly 28 per cent of the manor's income, was spent on repairs and new enclosures. Motivated by the needs of their own husbandry and also to increase the value of lands if they were to be put to farm, all Arden landlords, who have left records, invested in the upkeep of hedges and enclosures, and the construction of new ones.[38]

The continued exploitation of many Arden demesnes is also suggested by investment in livestock, grains, and agricultural

[36] B K Roberts, 'Medieval fishponds', *Amat Hist*, VII, 1966, pp 122–23; SBT, DR 3/804; M Aston, ed, *Medieval Fish, Fisheries and Fishponds in England*, BAR, British Series, 182(i), 1988, p 423; Bod Lib, Ms Trinity 84, pp 24, 33, 41, 100, 107, 219. 225; W B Bickley, ed, *Monastic and Other Estates in the County of Warwick*, Dugdale Society, II, 1923, p 87; SBT, DR 37/107/22, DR 37/108/37; BRL, DV 329 347939, 329 347943.

[37] Hilton, *The English Peasantry* p 192; C Dyer, 'English peasant buildings in the later Middle Ages', *Med Arch*, XXX, 1986, p 23; NUMD, 5/167/101(iii); PRO, E 315/283, fos 10, 18, 20–20 ᵛ, 24–24 ᵛ, 25 ᵛ–27 ᵛ.

[38] SRO, D641/1/2/269–279; Dyer, 'A small landowner in the fifteenth century', p 5; WCRO, CR 1886/487; NUMD, 5/167/101 (i–iii); SBT, DR 37/73; Bod Lib, Ms Trinity, pp 2, 8, 15, 20, 24, 62, 72, 99, 100, 107, 110, 125, 128, 134, 213, 219, 227, 228, 232, 239, 259, 263.

equipment. In 1434 the Mountfords, for example, invested £9 5*s* in 23 steers, 20 sheep, and 6 pigs, from Coventry. Merevale Abbey had to buy in outside stock for its large cattle herd, sometimes Welsh beasts from Atherstone market, and sometimes from peasant producers. In 1449 Maxstoke Priory invested £7 3*s* 6*d* in 7 bullocks, and later in the same year bought a further 16 steers, 11 calves, and 13 sheep. The commercial orientation of John Brome and the earl of Warwick meant their investment in beasts was high. In 1447 Brome spent £35 6*s* 2*d* on 65 bullocks, while at Wedgnock even greater sums were disbursed. In 1418 133 cattle were purchased for £64 18*s* 7*d*, while in 1431 the estate spent £74 8*s* on 169 beasts.[39] Investment in equipment and tools was also high. The Mountfords, Brome, the Willoughbys, Maxstoke Priory and the Astleys all paid for repairs to ploughs, wains, carts, and harrows, as well as buying hand tools, such as riddles, mattocks, rakes, spades, and forks, and harness. At Middleton in 1447 a wheelbarrow and a 'berynge' barrow, presumably used to carry heavy loads, were purchased; and at Maxstoke Priory, the infirmarer invested in equipment for the manufacture of *acetum*, axes to prune trees, repairs to barrels, and new pipes or barrels for the brewing process, storing and retail.[40]

V

Although commercial considerations dictated the scale of operations at Baddesley Clinton and Wedgnock, on other manors, which were only producing for subsistence, the size of household obviously determined the scope of the home farm. Thus, the thirty or so inhabitants at both Maxstoke Priory and Merevale Abbey required larger home farms to support them than the smaller households of the gentry. It is extremely difficult to determine the size of gentry households, but in all probability both the Mountford and Willoughby households were smaller than those at Maxstoke Priory and Merevale Abbey. Both these families were near the top of gentry society, and it is likely that the households of less prominent members of the gentry were even more modest affairs. There were several contrasts between the way home farm estates were managed in the fifteenth century and the organization of demesnes in the pre-plague era. A well-known characteristic of the manor owned by a small landowner was the greater control they could exert over the day-to-day running of the estate. John Brome was clearly the driving force behind the profitability of the estate at Baddesley Clinton, while the East Anglian gentleman, John Hopton, also exerted personal management over his small cluster of Suffolk manors.

However, most of the day-to-day running of the estates in the Arden was not conducted by resident landlords, but instead seems to have devolved onto those drawn from the peasantry. For example, at Middleton by the fifteenth century only one or two servants were employed throughout the year, and these were specialist stock keepers. At Merevale Abbey and Maxstoke Priory stockmen were also in annual employment, while Merevale Abbey and Nuneaton Priory also maintained managers for their woodlands. Much of the other work on these home farms, which was seasonal, was carried out by wage labourers, in some instances well-paid specialists, rather like modern agricultural contractors. Ploughmen prepared the ground, while the abundance of stock in well-enclosed fields no doubt helped to

[39] SBT, DR 37/73; Watkins, 'Merevale Abbey', pp 96–7; Bod Lib, Ms Trinity 84, pp 89, 113; SBT, DR 3/801; WCRO, CR 1886/484 and 488.

[40] SBT, DR 37/73; DR 3/801; Dyer, 'A small landowner in the fifteenth century', p 6; NUMD, 5/167/101 (i–iii); PRO, E 315/283, fos 11 v, 14 v, 18, 20–20 v; Bod Lib, Ms Trinity 84, pp 61, 134, 208, 224, 229, 232, 263; SBT, DR 37/114; WCRO, CR 136/c159; SRO, D 641/1/3/4.

supply those labourers paid to spread manure at Merevale and Maxstoke.[41]

As we have seen it was often necessary to clear ground through stocking, and this was recorded at Baddesley Clinton, Maxstoke Priory, and Middleton, but probably occurred on other lands as landlords once again sought to utilize directly their estates. It may be that some form of convertible husbandry was taking place on a number of Arden manors. At the earl of Warwick's fringe Arden manor of Budbrooke it was reported that Grovefield had once been under grass and had become overgrown with bushes. It was cleared in 1424–5 and cultivated during the next year. However, in the year following it had once again reverted to pasture. On a number of other Arden estates, such as Baddesley Clinton, Maxstoke Priory, and Middleton, crops were grown in fields that had been previously used as pasture or meadow, and similarly stock grazed on lands that had once been arable.[42]

Another feature of the renewed seignorial interest in exploiting lands is the short-term nature of some home farms. This allowed the lord to make use of his lands in one year, whilst leasing them in another, and allowed for a sophisticated and flexible response to both market circumstances and household needs for a particular year. For those lords who owned more than one estate the establishing of a home farm was obviously a reflection of where their main residences lay. The motivation of others is less obvious. For all his exertions in the 1440s Brome was content to rent out his assets by 1465. The Mountfords had abandoned any direct use of their estate at Coleshill by 1495, while the exploitation of the demesne at Middleton followed a similar pattern. Only the church landowners, Maxstoke Priory and Merevale Abbey, seem to have maintained a long-term continuity of production on their manors.[43]

VI

Recent work on lesser landlords during the later Middle Ages has concentrated on their national and local political role during a time of civil strife, and so much of our awareness of the economic fortunes of the landowning classes during this period is derived from well-established studies of the greater estates. Much of our knowledge of the later medieval seignorial economy has therefore been accumulated as a result of accidents of survival, rather than through any systematic survey, and indeed much of our understanding of the management and nature of a gentry estate in the fifteenth century is still derived from Dyer's work on John Brome at Baddesley Clinton. It has long been appreciated that gentry land management could be less inert during the fifteenth century than that pursued by their social superiors, and often they were in the forefront of those taking on leases of demesne lands of large religious institutions and greater lords. There is now a growing appreciation that some members of the gentry may not have withdrawn from active economic management of their estates to the same extent as the nobility. In some parts of the country during the fifteenth century where local conditions encouraged particular economic specialization, as in Kent and Sussex during the latter part of the Hundred Years War and in Derbyshire, the gentry were active in livestock farming and stimulating industrial

[41] Watkins, 'Society and economy in the forest of Arden', pp 50–1; SBT, DR 37/73; Dyer, *Standards of Living*, pp 68–9; R H Britnell, 'Minor landlords in England and medieval agrarian capitalism', *Past and Present*, LXXXIX, 1980, pp 3–10; Dyer, 'A small landowner in the fifteenth century', pp 1–13; C Richmond, *John Hopton*, 1981, pp 32–95; Watkins, 'Merevale Abbey', pp 87–104; Bod Lib, Ms Trinity 84, pp 129–31; NUMD, 5/167/101(iii).

[42] Dyer, 'A small landowner in the fifteenth century', pp 5–6; Bod Lib, Ms Trinity 84, pp 33, 39, 52, 100, 139; NUMD, 5/167/101(ii); Dyer, *Warwickshire Farming 1349–c 1520*, pp 10–1, 14.

[43] Dyer, 'A small landowner in the fifteenth century', pp 3–12; PRO, SC 11/683; NUMD, 5/167/101(i–iii); Watkins, 'Merevale Abbey', pp 87–101; Bod Lib, Ms Trinity 84, pp 109, 136.

development on their manors, while others used their lands as a source of food supply.[44]

The present appraisal of the fifteenth-century seignorial economy of the Arden is limited by the surviving documentation. Few, if any, of the Arden estates have long sequences of account rolls over consecutive years, and therefore it is difficult to determine trends on particular manors; instead we are offered glimpses of activities on a variety of manors in a number of individual years. However, even if only isolated snapshots do survive to illuminate Arden demesnes during this time, there still are sufficient to indicate that home farms and other types of economic exploitation were common on many estates, certainly on all of those which have left records, and such activity can be traced throughout most of the century.

The maintenance of home farms may have been much more widespread that we can now detect. The use that John Brome, Hugh Willoughby, the abbot of Merevale, and the prior of Maxstoke made of their estates is known to us because, however inadequately, they kept estate records, and some of these have survived. Of the management practices of those members of the gentry below them in status we are largely ignorant; here the lack of survival of material suggests that record keeping, if it existed at all, was very rudimentary. Nevertheless, while we are aware that some of the better documented members of the fifteenth-century Arden landowning class made use of their lands, they were unlikely to have been the only ones who continued to exploit their estates, and such exploitation no doubt extended below into the ranks of those either who kept no estate records, or whose documentation has not survived. It is often assumed that the nobility were among the first to abandon direct exploitation; yet in the Arden, the duke of Buckingham, Lord Grey, and the earl of Warwick adapted their estates for specific needs, cattle grazing, the exploitation of woodland, and horse breeding. The prevailing economic circumstances of the fifteenth-century Arden, with its benign pastoral and woodland economies, offered opportunities to landlords, both lay and ecclesiastical, noble and gentry, to restructure, diversify, and experiment with their estate economies.

The fifteenth-century economy of the forest of Arden offered particular opportunities to its resident landlords, but their experiences need to be placed into a wider context. It is clear that they were far from unique. It was not only within the Arden that the fifteenth-century Warwickshire seignorial class was continuing to make use of estates. Landlords from the rest of Warwickshire, such as the Bishopdons, Catesbys, Dalbys, Lucys, Staffords of Grafton, Throckmortons, Coventry Cathedral Priory, and Bordesley Abbey appear to have created home farms and pursued pastoralism, in the case of those with Feldon estates through sheep ranching.[45] It is even possible to extend this beyond the county boundary. Even the most cursory glance at published studies and printed sources reveal that throughout the rest of the country in the fifteenth century landlords were adapting their estate economies to create small home farms to generate foodstuffs, with some often becoming more specialized in their production. It is impossible to generalize with such a diversity of location as only more detailed studies will reveal the individual and local circumstances which dictated such evolutions in estate economies. In East Anglia such developments can be found in the dairying of Sibton Abbey, and on the estates of the Townshends in

[44] M Mate, 'Pastoral farming in south-east England in the fifteenth century', *Econ Hist Rev*, 2nd ser, XL, 1987, pp 523–36; Wright, *The Derbyshire Gentry*, pp 12–28; *Ag Hist III*, p 24.

[45] Dyer, *Warwickshire Farming 1349–c 1520*, pp 4, 13–22; Carpenter, 'The fifteenth-century English gentry', pp 40–50; Carpenter, *Locality and Polity*, pp 176–88; C Phythian-Adams, *Desolation of a City*, 1979, p 21; PRO, SC 6/1058/4–5.

Norfolk, the lands of Alice de Bryene, John Hopton and the Sulyards in Suffolk.[46] The bishop of Coventry and Lichfield, gentlemen in the Honour of Tutbury, the Talbots, Leicester Abbey, Sir William Skipworth of Lincolnshire, and the gentry of Leicestershire and Derbyshire were active in the Midlands, while in the West Country similar traces can be identified on the lands of the bishop of Bath and Wells, the Lady Porlock, some of the gentry of Devon and Cornwall, and Tavistock Abbey.[47] In the south, reports have been made of the continued exploitation of manors of the bishopric of Winchester, Battle Abbey, Canterbury Cathedral Priory and some of the gentry. Similarly, in the north there is evidence from Durham Cathedral Priory, the Lancashire gentry, some Yorkshire gentlemen, Fountains Abbey and Selby Abbey.[48] If few of these landlords, both within and without the Arden, were as dynamic as Brome, they were not as inert as many of the larger institutions of the time. These developments, if not representing a revivification of the seignorial economy, suggest that it was not as moribund and stagnant as often believed. They indicate evolutions of estate economy in the Arden, and elsewhere, that were peculiar to the circumstances of the fifteenth century; yet, in many ways the re-organization of land and the investment in estates to form compact, specialized, enclosed farms worked by forces of wage labour foreshadow later developments in English agriculture and rural society.

[46] A H Kenny, ed, *The Sibton Abbey Estates: Selected Documents 1325–1509*, Suffolk Record Society, II, 1960, pp 35–9; E W Ives, *The Common Lawyers of Pre-Reformation England*, 1983, pp 345–53; *Household Book of Dame Alice de Bryene*, Suffolk Institute of Archaeology and Natural History, 1931, pp 116–34; Richmond, *John Hopton*, pp 32–95; C Richmond, 'The Sulyard papers: the records of a small family archive', in D Williams, ed, *England in the Fifteenth Century*, Woodbridge, 1986, pp 203–4; *Ag Hist III*, pp 281–3.

[47] C M Woolgar, ed, *Household Accounts from Medieval England*, British Academy Records of Social and Economic History, new ser, XVIII, 1992, part II, pp 455–57, 460, 462–7, 470–1, 550–1; A J Pollard, 'Estate management in the later Middle Ages: the Talbots and Whitchurch, 1383–1526', *Econ Hist Rev*, 2nd ser, XXV, 1972, pp 553–66; Hilton, *The Economic Development of Leicestershire Estates*, pp 79–86; K J Allison, 'Flock management in the sixteenth and seventeenth centuries', *Econ Hist Rev*, 2nd ser, XI, 1958, pp 98–112; E Acheson, *A Gentry Community*, 1992, pp 55–61; Wright, *The Derbyshire Gentry*, pp 12–28; *Ag Hist III*, pp 24, 290, 315–22; H P R Finberg, *Tavistock Abbey*, Newton Abbot, 1969, pp 96–149.

[48] D L Farmer, 'Grain yields on the Winchester manors in the later Middle Ages', *Econ Hist Rev*, 2nd ser, XXX, 1977, pp 555–66; M J Stephenson, 'Wool yields in the medieval economy', *Econ Hist Rev*, 2nd ser, XLI, 1988, p 371; E Searle and B Ross, eds, *The Cellarer's Rolls of Battle Abbey, 1217–1513*, Sussex Record Society, LXV, 1967, pp 18–9; P Brandon, 'Cereal yields on the Sussex estates of Battle Abbey in the later Middle Ages', *Econ Hist Rev*, 2nd ser, XXV, 1972, pp 411–4; Smith, *Canterbury Cathedral Priory*, p 200; Mate, 'Pastoral farming in south-east England', pp 523–36; N Saul, *Scenes from Provincial Life*, 1986, p 133; R A Lomas, 'The priory of Durham and its demesnes in the fourteenth and fifteenth centuries', *Econ Hist Rev*, 2nd ser, XXXI, 1978, p 350; R A Lomas, 'A northern farm at the end of the Middle Ages: Elvenhall Manor, Durham, 1443–4 – 1513–4', *Northern Hist*, XVIII, 1972, pp 26–9; J L Drury, 'Early settlement in Stanhope Park, Weardale, c 1406–79', *Archaeol Aelina*, 5th ser, IV, 1976, pp 141–7; M J Bennett, *Community, Class, Careerism*, 1983, p 86; *Ag Hist III*, pp 189–91.

Mr William Cobbett, Captain Swing, and King William IV

By ROGER WELLS

Abstract

This article attributes a powerful role to political factors in the Captain Swing Revolt during the autumn of 1830. If that rising took place in a context generated by the prolonged post-war agricultural depression, the continental revolutions over the summer were well-known throughout Kent and Sussex not least owing to William Cobbett's journalism and his October south-eastern lecture tour. The latter further fuelled the spectre unleashed by the revolutions, antipathy to Wellington's failure to address agrarian distress, and his refusal to accept public conviction in the necessity for constitutional change. His stance precipitated the collapse of his ministry in November and its replacement by Grey's Whig-dominated Cabinet pledged to reform the Commons. Faced with rural insurrection at the moment of his accession to power, Home Secretary Melbourne intensified the repression of Swing. A complex series of interlocking events, including the conviction of a Sussex arsonist, his alleged motivation through attending a Cobbett lecture, and Cobbett's commentary on the revolt in his *Political Register*, combined to determine the Cabinet on a prosecution for seditious libel. But others came into that decision-making process, among them Tory politicians anxious to embarass the Whigs, Tory Sussex magistrates who encouraged the incendiary's claims and through lobbying William IV at Brighton Pavilion, persuaded the king to exert pressure on his ministers to prosecute. Given Grey's need for royal support over reform, the Cabinet was unable to resist. The trial facilitated a superb self-defence, support from Cobbett's ardent admirers in rural Sussex, and a triumphant acquittal.

WILLIAM Cobbett's trial, and triumphant acquittal, for seditious libel published in his widely-circulated *Political Register* on 11 December 1830, just as the Swing rising was beginning to subside is well-known. The charge accused Cobbett of inciting Swing crimes, including machine-breaking, and above all arson. The principal characteristics of that revolt, and its notoriously ruthless suppression by the newly-installed Whig government, have not provoked much recent academic debate. Historical interpretations appear to concur with Hobsbawm's and Rudé's assertion that most rural protesters' 'ideological...resources' were unaffected by the popular democratic movement, and comprised 'the usual luggage of the pre-political poor, the belief in the rights of poor men by custom, natural justice and indeed law which must not be infringed by the rich'.[1] This appears to satisfy Dr Stevenson in his wide-ranging and now greatly extended synthesis of popular disturbances, and Professor Armstrong's major study of farmworkers from 1770 to 1980.[2] Only the latter gives a token mention of Charlesworth's spatial analysis of the revolt and his emphasis on the role of politicized nuclei in some villages during Swing.[3] The continental revolutions preceding Swing, and Cobbett's south-eastern lecture tour in the autumn of 1830, are customarily relegated to token acknowledgement in studies of Swing. The conjuncture of Swing with the commencement of the prolonged Reform Bill crisis is generally written off as mere coincidence. Only Dr Quinault has recently and incisively revived the discredited thesis that the French Revolution was the fundamental ingredient in the rejuvenation of the parliamentary reform

[1] E J Hobsbawm and G Rudé, *Captain Swing*, 1973 ed, p 43.

[2] J Stevenson, *Popular Disturbances in England 1700–1832*, 2nd ed, 1992, esp p 269. A Armstrong, *Farmworkers. A Social and Economic History 1770–1980*, 1988, esp p 75.

[3] A Charlesworth, *Social Protest in a Rural Society: The Spatial Diffusion of the Captain Swing Disturbances of 1830–1831*, Norwich, 1979.

movement in the second half of 1830. Yet he still asserts that the Swing riots were 'mainly economic protests by poorly paid agricultural labourers'.[4] And this in spite of the fact that Wellington's Tory government fell over his refusal to entertain parliamentary reform, and its replacement by a Whig ministry led by Earl Grey committed to that measure, which occurred in mid-November while Swing raged in the southern countryside.

The motivation behind Cobbett's prosecution by Grey's government, despite its commitment to parliamentary reform, remains obscure. Cobbett's claim that his indictment derived from a ministerial conspiracy against one of its arch-critics is usually written off as an exotic mixture of customary exaggeration, paranoia, and the rhetorical demands of a self-conducted legal defence in court, or a combination of all three.[5] In the footnotes of Professor Dyke's recent penetrating study of *William Cobbett and Rural Popular Culture*, he attributes reports from the Swing epicentre of Battle in Sussex to a 'government informer'. This personage was not the implied run-of-the-mill Home Office correspondent, but George Maule, none other than the Treasury Solicitor.[6] This ultimately poses the question of what this elevated state functionary was doing in Battle, which also happened to be the venue for one of Cobbett's lectures, just under a month before Maule arrived in the town. Battle was also the home of the capitally-convicted arsonist, Thomas Goodman, reprieved for confessing that he was motivated by hearing Cobbett's lecture in the town on 16 October.

[4] Curiously, Quinault approvingly cites a contemporary pamphleteer's view that the 'husbandry labourers conceived that...they...were to be the chief objects of effecting a revolution', to assert – without a shred of evidence – that the 'labourers were roused to action by the revolutions across the Channel': R Quinault, 'The French Revolution of 1830 and parliamentary reform', *History*, 79, 1994, esp p 389.

[5] W Baring Pemberton, *William Cobbett*, 1949, pp 155–62.

[6] I Dyke, *William Cobbett and Rural Popular Culture*, 1992, pp 157–9, and notes 20 and 27.

I

The political temperature across the rural south-east steadily rose from the spring of 1829, when Kent farmers unprecedentedly mobilized to petition for the postponement of the hop tax,[7] and further parliamentary petitioning for relief from agrarian distress recurred over a broader region in 1830.[8] Hostilities spawned by the rejections of these petitions[9] were reflected in the denunciations of the unreformed state by candidates and their agents in the general election of August 1830 after the death of George IV.[10] The simultaneous impact of the continental revolutions was indeed profound. Sectors of the press hailed the 'stupendous and glorious revolution', in stark contrast to the 'buffoneries of...corrupt electioneering' in Britain, and successfully advocated celebratory meetings with collections for the fallen revolutionaries to extend to 'remote country villages'.[11] The 'glorious actions' of the French stimulated political thrusts by popular democrats elsewhere, including Battle where a vociferous artisan and labouring grouping also rallied behind the embattled 'revolutionist' editor of the *Brighton Guardian*, gave 'public testimony to the freedom of the press', and extolled the virtues of people like them-

[7] If the nation 'be not sick' wrote Cobbett privately, 'when...Kent is getting up a general petition for the postponement of the hop-tax, I do not know what will be considered a sign of sickness. Indeed, such a sign of insolvency was never witnessed before': Cobbett to Mr Sapsford, 13 April 1829, Nuffield [College, Cobbett Collection], IV, 38, f 1.

[8] *England in 1830 being a Letter to Earl Grey*, 1831, *passim*; *Kent Herald*, 9 June 1830.

[9] Draft reply by George Courthope to the Poor Law Commission, nd (Dec 1832 or Jan 1833), E[ast] S[ussex] C[ounty] R[ecord] O[ffice], SAS, Co/C/230; *Maidstone Gazette*, 23 Nov 1830.

[10] Although the Kent county election was not contested, with representation split between the anti-Reformer Sir Edward Knatchbull and the Whig Thomas Law Hodges, the latter's sponsor on the Penenden Heath hustings on 9 August urged electors to examine the 'critical state of the country' which was 'Overwhelmed by debt, contracted...by the convenience of those who called themselves the representatives of the people, but who were in fact nominated by the aristocracy, and paid for by the Ministers...That was the canker which consumed us, and while there was rottenness at the root, the branches could not flourish'. Parliamentary reform was vital if electors 'wished to preserve themselves and their families from pauperism, and their country from ruin': *Kent Herald*, 12 Aug 1830.

[11] *Ibid*, 5, 12 and 26 Aug, and 13 Sept 1830.

selves, 'spirits that dwell in humble tenements'.[12] Moreover, these pro-French meetings endured, and Cobbett's lecture tour opportunistically exploited them through his distributions of petitions to be signed in favour of parliamentary reform.[13] A meeting at Maidstone which despatched cash and a euphoric address to Paris on 10 October[14] was quickly followed by Cobbett on 14 October, and two days later he lectured at Battle. By this juncture Swing's mobilizations in Kent, commencing with the expulsion of Irish harvesters in July and August, had extended to the destruction of threshing machines at the end of August and into September, before bursting into widespread incendiarism. In the October correspondence between Kent's Lord Lieutenant Camden and Sir Robert Peel at the Home Office, arson constituted the primary concern.[15] Incendiarism was significantly more intense than revealed by the copious logging in Hobsbawm's and Rudé's tables, as exemplified by a Southfleet farmer's diary note that 'fires continue almost over the county'. Neither of the two specified that day figure in the tabulation.[16]

Cobbett's Battle speech was dramatically paraphrased by Earl Ashburnham – who lived locally and had had a public altercation some years previously with Cobbett[17] – for Camden's consumption:

> there never was such rank treason utter'd in any country, or at any age...he reprobated the laboring class in Sussex for not shewing the example set them...in Kent, where their fellow sufferers were asserting their rights by destroying the property of those who tyrannized over them.[18]

Camden dutifully relayed this missive to Peel; if Peel cursorily and darkly replied that he had 'taken steps with regard to Cobbett and his Lectures',[19] Peel's principal concern with incendiarism remained unshaken. No suspect had been arrested, though Peel had despatched London police officers to help local magistrates, but only in response to specific requests, together with limited army support. The Home Secretary was prepared to consider an unprecedented extension of government pardons and rewards to accomplices of arsonists who confessed,[20] but feared that the result would be *agent provocateurs* whose contrivances would be exposed in court.

[12] They convened at the Eight Bells. *Sussex Advertiser*, 13 and 20 Sept, and 11 Oct 1830; *Hastings and Cinque Ports Iris*, 27 Nov 1830; *Brighton Gazette*, 28 Nov 1833.

[13] Cobbett, in London, immediately commenced canvassing for subscriptions: 'It is the pennies of the working people that I want'. His itinerary took in Dartford, Gravesend, Rochester, Maidstone, Tonbridge, Battle, Lewes, Brighton, Chichester, Portsmouth, Gosport, Isle of Wight, Portsmouth, between 11 and 26 October which 'I may find...impossible; but I will do it if I can'. In the event he terminated the tour at Lewes, though he additionally performed at Eastbourne: *Political Register*, 7 and 25 Aug, 4 and 25 Sept, 2 and 9 Oct 1830, and 16 July 1831.

[14] Postmaster, Maidstone, to Sir F Freeling, 14 Oct 1830, P[ublic] RO, H[ome] O[ffice] 52/8, f 333. For Cobbett at Lewes, see C Brent, *Georgian Lewes 1714–1830*, Lewes, 1993, p 200; R Wells, 'Social protest, class, conflict and consciousness, in the English countryside, 1700–1880', in M Reed and R Wells, eds, *Class, Conflict and Protest in the English Countryside 1700–1880*, 1990, p 184.

[15] Peel to Camden, 16, 18, 22, 25 and 26 Oct 1830, K[ent] CRO, U840/C250/1–7.

[16] F S Andrus, 'Extracts from the miscellany and farm accounts of Francis Andrus of Scadbury in the parish of Southfleet', *Archaeologia Cantiana*, C, 1984, p 376.

[17] Cobbett had taken Ashburnham to task for publishing an address arguing that labourers who kept guns at home should not be employed: *Political Register*, 8 Jan 1831.

[18] Ashburnham to Camden, nd, PRO, HO 52/8, f 219. According to Cobbett's own brief résumé, his two-hour peroration introduced few new elements to his customary litany of attacks on press restrictions, notably printing press licences and the newspaper taxes, state pensions, sinecures, taxes, and eulogies on the recent overthrow of the tyrannical Bourbon government; he reported that 'the working people in many of the towns and villages in Kent had subscribed their pennies to the widows of Paris'. He reiterated his advocacy of labourers joining farmers to petition for parliamentary reform as the prerequisite for reduced taxes, and repeated his warning to Wellington that like the French revolutionaries, farmworkers would rather be hanged or shot than starved: *Political Register*, 23 Oct 1830. His speeches were not denounced by either the local Whig or Tory press: see *Sussex Advertiser*, 18 and 25 Oct, and *Brighton Gazette*, 21 Oct 1830.

[19] Peel referred to Cobbett's lectures at the Rotunda in London, where popular radicals of all hues convened, and were watched by Home Office spies. Peel also sought the Crown Law Officers' opinions on whether the reported 'proceedings' of Cobbett, Henry Hunt, Richard Carlile and others, 'contained anything of a 'Seditious or illegal nature': R Wells, 'Rural rebels in southern England in the 1830s', in C Emsley and J Walvin, eds, *Artisans, Peasants and Proletarians 1760–1860*, 1985, pp 134–5, and note 50, sources cited there; C Bouchier, assistant Treasury Solicitor, to the Attorney General, 13 Nov and 18 Dec, and under-secretary Phillipps, Home Office, 15 Nov, Peel to the Law Officers, 10 Nov 1830, PRO, T[reasury] S[olicitor] 2/23, pp 13, 15, 51; HO 49/7, p 406.

[20] Home Office rewards were customarily restricted to maximums of £100 in cases of firing at soldiers on duty, though Peel added 'precedents...[are] immaterial in a case like this': Peel to Camden, 18 Oct 1830, KCRO, U840/C250/3.

Moreover, Peel quite critically feared that 'if' he 'originated interference with the ordinary exertions of the local magistrates', he risked a debilitating political backlash. Conversely, Peel was convinced that the 'severe example' to be made from an incendiary's conviction and execution would be crucial in its own right, and counter the 'unparalleled Lenity' of the light sentences passed by Sir Edward Knatchbull on the first batch of machine-breakers tried in October at the Kent Quarter Sessions. On 26 October, Camden was informed by an increasingly desperate Home Secretary, that he would 'adopt any Measures – will incur any Expence...that can promote the suppression of the Outrages'. He proposed that

> some-one well versed in Criminal Business & in the art of detecting crime, will [be] establish[ed]... in some central place – place at his disposal...a certain number of Police Officers, and place him in general Communication with the most active Magistrates

in Kent. The sole proviso was categoric assurance that this initiative 'will not give offence to the local magistracy and induce any relaxation of their activity'. On receipt of this assurance, Peel sought Cabinet approval, and despatched Maule to Maidstone where he arrived on 31 October.[21]

Maule's original mission to Kent was soon briefly extended to East Sussex, and he then had ultimate supervision over prosecutions at the Special Commissions which sat in judgment on Swing activists for Hampshire and other counties to the west. The suppression of Swing almost totally absorbed Maule's department for the ensuing three months.[22] The Home Office itself was recurrently 'besieged' by communications over the risings. Once he succeeded Peel, Melbourne 'sat up all the first night he was in office' on 23 November, and subsequently rose daily at 6 am 'to get through the business'.[23] Although arson retained its paramountcy for Maule, other Swing crimes including machine-breaking, attacks on professional poor-law administrators and tithe audits, automatically concerned him. He investigated additional issues, among them clandestine riot-incitement by farmers, their refusals to become special constables, and politically-motivated activists with their suspected linkages with metropolitan radicals.[24] No fundamental policy change derived from Grey's ministry's replacement of Wellington's, though the Whigs were much more determined on speedy repression.[25] Maule's existing brief was uncompromised, and indeed widened firstly by Melbourne's 23 November proclamation offering huge rewards for those who both helped arrest certain categories of Swing offenders and gave evidence against them,[26] and secondly by the decision to create Special Commissions. Maule's tasks included the selection of cases to be financed by the Treasury, and those to be left to the normal county agencies. Government would prosecute only in

[21] These assurances were received at a pre-arranged meeting at the Home Office on 29 October with two justices from Wingham who were 'pressing for the dispatch of Police Officers', to which Camden was now invited, together with Sir Edward Knatchbull, and any other magistrates Camden wished to include: Peel to Camden, 26 Oct 1830, PRO, HO 52/10, ff 372–3. For the dispatch of policemen to the provinces, see Phillipps to stipendiary magistrates at Marlborough Street, Queen's Square and Hatton Garden, 29 Oct 1830, PRO, HO 60/2, p 64. George Maule's subsequent movements can be plotted from his letters to the Home Office, PRO, HO 40/27 (2), and the Treasury Solicitor's out-letter books, PRO, TS 2/22–4, 3/22.

[22] Other office business was 'delayed by the present disturbed state of the Country wh. occupies the attention of my office exclusively': Bouchier to C Ford, 6 Dec 1830, PRO, TS 2/23, p 40.

[23] Marchioness of Lansdowne to Lady Frampton, 29 Nov 1830: H G Mundy, ed, *The Journal of Mary Frampton 1779–1846*, 1885, pp 363–4; R Pollen, Winchester, to Phillipps, 26 Nov 1830, PRO, HO 52/7, ff 25–7.

[24] Maule to Phillipps, 8 and 15 Nov 1830, PRO, HO 40/27 (2), ff 62–3, 68–9.

[25] Grey to Holland, 23 Nov 1830, B[ritish] L[ibrary] Add Mss, 51555, ff 79–81.

[26] Indeed ministers also decided that all depositions respecting Swing offences received by the Home Office, and the Treasury Solicitor, should be inspected by the Crown's Law Officers: Grey to William IV, 23 Nov 1830, Earl Grey, ed, *The Reform Act 1832. The Correspondence of...Earl Grey with...William IV and...Sir Herbert Taylor*, 2 vols, 1867, I, pp 3–5; C C F Greville, ed, *The Greville Memoirs*, 5 vols, 2nd ed, 1874, II, p 73; Hobsbawm and Rudé, *Captain Swing*, p 218.

felony cases where the evidence was strong.[27]

By the time of Maule's appearance in Maidstone, further attacks on threshing machines had occurred in Kent, together with mobilizations over wages, and levels of poor-relief, which were spreading into Sussex. The first rising in that county in fact occurred at Battle on 30 October, not the famous Brede incident of legend, and featured as such on Charlesworth's maps.[28] At Maidstone, Maule supervised prosecution processes, perused all available depositions, directed the deployment of plain-clothes policemen, in order 'to give spirit and courage to the magistrates with... advice and by cordial co-operation'.[29] On 1 November Maule attended a meeting of over seventy Kent magistrates, chaired by Camden, to debate Swing's causes and course. It was widely believed that 'overtaxation, want of work [and] insufficiency of wages' underlay the risings. Knatchbull refused to say what considerations underlay his lenient sentencing,[30] and the ultra-Tory Lord Winchelsea explained why he had given cash to a major Swing crowd he encountered days before.[31] Maule's proposed role was warmly endorsed, and Cobbett went unmentioned, despite the fact that while the magistracy convened, a popular meeting for parliamentary reform, orchestrated by the 'pretty numerous' radical and unionized paper-makers, went ahead on nearby Penenden Heath. Maule resisted suggestions that a magisterial possé should reconnoitre; instead two policemen were despatched, and if their arrival coincided with the audience's dispersal, placards demanding 'Reform in the Commons House of Parlt vote by ballot... or nothing' and enjoining 'respect the Soldiers...they are our friends' remained in place. The magistracy departed once cavalry escorts were available.[32]

After a brief sojourn in London, Maule returned to examine paperwork against Hollingbourne protesters, and the radical Maidstone shoemaker Adams who had led two to three hundred rioting 'agricultural labourers' in the vicinity, demanding cash contributions from various targets, and making political speeches.[33] Maule also received 'disastrous intelligence' of further fires in Kent, more in Sussex, including two at Battle, further details on which came from the local Clerk of the Peace who rushed across specifically to lobby Maule. The clerk insisted on the current escapist line, that incendiaries were 'strangers'.[34] Maule was 'heretical on this point', believing that locals were responsible on the grounds of 'the number of these conflagrations and the intire absence of a trace in any one instance...If strangers do the act', he reasoned, 'some of those...on the spot conceal it'. No suspect had as yet been arrested for arson, and Maule immediately despatched policeman Clements to Battle.[35] Arson also topped others' agendas. One leader of at least three distinct Swing mobilizations, the former naval rating and radical, Richard Price, claimed that the 'burnings were necessary to bring people' – by which he meant establishment 'gentlemen' – 'to their senses'. Customers 'talking about the fires' in the comfort of the Rose in Dover, included Thomas Johnson,

[27] On the decision to appoint Special Commissions, the Home Office informed the Hampshire magistracy that 'It will be a good point to catch an Incendiary, and very little has yet been done in that way in any of the Counties': Phillipps to Richard Pollen JP, 25 Nov, and Maule, 7 Dec 1830, PRO, HO 41/8, pp 128–9, 419.

[28] Battle protesters demanded increased wages for parish employees from the assistant overseer, who subsequently fled, and then regrouped on 1 Nov to intimidate Sir Godfrey Webster from imprisoning their leader: *Sussex Advertiser*, 8 Nov 1830.

[29] Phillipps to Maule, and to F Claridge, Sevenoaks, 1 and 8 Nov; Peel to Camden 26 Oct 1830, PRO, HO 41/8, pp 24–5, 28, 52/8, ff 372–3.

[30] Maule 'understood him to say' that the sentences 'could not have been otherwise under the circumstances which circumstances he was not at liberty to disclose'.

[31] Maule to Phillipps, 1 Nov 1830, PRO, HO 40/27 (2), f 54.

[32] Maule to Phillipps, 1 and 2 Nov 1830, PRO, HO 40/27 (2), ff 54–7; *Maidstone Gazette*, and *Hastings Iris*, 2 and 6 Nov 1830.

[33] Maule to Phillipps, 5 Nov 1830, PRO, HO 40/27 (2), ff 58–9.

[34] Maule to Phillipps, 2 Nov 1830, PRO, HO 40/27 (2), ff 60–1. Cf the argument in the *Sussex Advertiser*, 8 Nov 1830.

[35] Maule to Phillipps, 5 and 7 Nov 1830, PRO, HO 40/27 (2), ff 58–61.

whose 'exulting...manner' in his prediction 'that there would be a great many more' led to fighting. The police removed Johnson in handcuffs, but not before he 'seized' one protagonist 'by his teeth in his private parts'.[36]

II

Wellington's notorious 2 November declaration, categorically ruling out parliamentary reform, shortly precipitated his government's demise, and more immediately generated popular mobilizations in London. These culminated in the abortion of the king's customary regal visit to the inaugural dinner of London's new Lord Mayor on 9 November, as neither the monarch's nor the duke's safety could be guaranteed.[37] The cancellation pre-empted one metropolitan policeman's intention to 'throw off his Coat' and 'join the Mob'; instead, this man, Charles Inskipp, who hailed from Battle, simply resigned, denying his inspector's charge that he was motivated by 'fear', as 'he wished to go into the Country', which he did.[38] The Weald was engulfed by Swing crowds when Inskipp arrived in Battle. On 8 November a Petty Sessions meeting had been targetted by a mass lobby drawn from several parishes, though the full-blown riot advocated by the future arsonist Thomas Goodman was forestalled by the cavalry's arrival.[39] News on 10 November, that serious disturbances had not occurred in London, alleviated local authorities' fears that metropolitan violence would have 'acted electrically' to trigger politically-motivated disorders in the town.[40] Nevertheless, dozens of risings within a fifteen-mile radius, demanding wage and poor-relief increases, tithe and rent reductions, intermingled with attacks on professional social-security administrators and refusals to enrol as special constables, stimulated dark forebodings. The customarily cool and energetic justice Courthope, who chaired the Petty Sessions, had previously focused solely on incendiarism. Once Sussex followed 'the example of Kent' with mass mobilizations, the 'whole fabric of society appears to be shaken', not least owing to

> the general prevailing opinion that all governments must now submit to the will of the people & cannot resist redressing all real and imaginary grievances of the labouring population.[41]

Four days later on 11 November Courthope believed the magistracy was liable to collapse, and urgently supplicated the Home Office.

> Let me again & again entreat...Peel not to leave us without some good adviser...the whole of the County may be hazarded by an indiscreet tho' well intentioned act of one or two County Magistrates.

Maule arrived in Battle on 12 November, though he clearly saw this as a diversion. Although arson suspects had by now been arrested in Kent, the view 'that the incendaries are imported from the Metropolis' was so 'prevalent' in Kent, that Maule had asked for an enquiry by intelligence sources to reveal any links between radicals in country and capital. Among those whose letters he advised intercepted were Stephen Caute, the 'spokesman of the Radical Club' at Maidstone, and a principal speaker at the recent Penenden Heath meeting. While Maule sympathized with the multifaceted problems of

[36] Deposition of William Hooper Bailey, butcher, 30 Oct, depositions against Price, Nov 1830, KCRO, Q/SBe/121, 124; *Maidstone Gazette*, 4 Jan 1831.
[37] W Brock, *The Great Reform Act*, 1973, p 127.
[38] Barton to Melbourne, and Phillipps to Barton and Bellingham, 26 and 30 Nov 1830, PRO, HO 41/8, pp 250–2, 52/10, ff 431–2.
[39] Bellingham to Melbourne, 4 Dec 1830, PRO, HO 52/10, ff 445–6.
[40] *Brighton Herald*, 13 Nov 1830. According to others 'The staying away of the King from Guildhall has caused a great Sensation – A great Mob is said to be...gathering at Battel to overawe the Military by Numbers': E J Curteis, and H Mascall, to H B Curteis, both 10 Nov 1830, ESCRO, AMS 5995/3/13–4.
[41] Courthope to Lord Lieutenant Egremont, and to Peel, 7 and 11 Nov 1830, PRO, HO 52/10, ff 390–1, 618–9.

Courthope's Bench, notably the need for 'some legal assistance', Maule's stay must be brief; if Peel thought otherwise, then he should send a London stipendiary magistrate to deputize. Cobbett did not figure in either Courthope's perceptions or Maule's calculations.[42]

On 14 November Courthope was 'so fatigued & harrassed that I can scarely put two connected sentences together'. The arrival of General Balbiac at Battle to direct military deployment on 15 November restored some confidence, though the cavalry were too stretched to intervene everywhere in the High Weald 'infested with assemblies'.[43] Many activists flourished handbills, 'distributed with the activity of an election', detailing the incomes of state sinecurists and senior ecclesiastics, appropriately entitled 'Nice Pickings'. Justice Collingwood tried to neutralize their impact by ending one negotiation with protesters by orchestrating three cheers for the king and exacting promises not to read Cobbett.[44] Battle remained in ferment. The postmaster remained deeply 'impressed that the Peasants are instigated to pursue their present outrages by persons...anxious to overturn the government', an assertion supported by information that 'a person of notoriously revolutionary principles' had 'gone round to the neighbouring Village Beer Shops lecturing the Paupers after Cobbett's fashion'. This proved to be none other than the recently-resigned London policeman, Charles Inskipp. He donned 'a Cap decorated with tri-colored *Ribbands*', which he stressed 'were worn at the French Revolution...and if they were all of his Mind there would soon be a revolution here'. Inskipp claimed to 'have left the new Police for the purpose of coming down to instruct the people', arguing that

> now's the time to make...Government...comply and do away with the Tythe and Taxes and...said that he did not value his life a farthing and he would head them, and would instruct those unenlightened to fight for their rights.

The issue of arrest warrants for Inskipp in late November coincided with another incendiary attack.[45]

By this juncture, Swing's epicentres were moving swiftly westward, and stimulated renewed populist politicking in West Sussex. A 'riotous and revolutionary spirit' in the Horsham region focused on the town itself, and on 18 November a thousand protesters led by three members of the 'Horsham Radical Party' besieged local gentry, farmers, and a lay tithe proprietor in the church, during which alter rails were demolished for weapons. This meeting limited itself to wage increases and tithe reductions, but was followed by a purely political assembly at the town hall which attributed the disturbances to governmental 'mismanagement'. Employers, whether farmers or master tradesmen, were too impoverished to afford improved wages, unless tithes, taxes and rents were reduced, together with the 'total abolition of all sinecures, useless places and unmerited pensions'; parliamentary reform was indispensable. Only four of the sixty-three householders summoned to become special constables turned out, giving the local Bench – which included the present High Sheriff Thomas Sanctuary – no option but to lobby for military aid. Once troops arrived – by forced marches – warrants were issued against politically-motivated instigators of the first protest who had absconded, and the detective services of a

[42] Maule to Phillipps, 8, 11, 12 and 15 Nov 1830, PRO, HO 40/27 (2), ff 62–71.

[43] Balbiac, Battle, to Lord Fitzroy Somerset, 15 Nov, Courthope to Phillipps, 14, 15 and 16 Nov 1830, PRO, HO 52/8, ff 190–4, 52/10, ff 400–8.

[44] BPP, 1834, Poor Law Commission, Appendix B, answer of Giles Miller, Goudhurst, to q 53; Affidavit, T T Hodges, Benenden, and G N Collingwood, to the Home Office, both 11 Nov 1830, PRO, HO 52/8, ff 166–9, 171–3; for copies of two handbills separately produced by London radical printers, Hetherington, and Harrison, PRO, HO 52/8, ff 320, 344.

[45] Prosecution brief against Inskipp, PRO, TS 11/1007/4051; Bellingham and Barton, to Melbourne, 26 Nov, Postmaster, Battle, to Freeling, 27 Nov and 1 Dec, Freeling to Phillipps, 29 Nov 1830, PRO, HO 52/10, ff 431–7.

London policeman secured to expose the perceived 'conspiracy' to effect 'revolutionary objects, & for the incitement of Riots at Horsham and the adjacent Parishes'.[46] The latter initiative developed into a prolonged farce,[47] played out against continual fears that the county jail in the town would be attacked, with the release of the Swing prisoners, whose numbers were swelling and included arsonists. The army guarded the town until mid-December when the prisoners were carted off to Lewes for the Assizes.[48]

During this period in late November and early December in East Sussex, authority moved temperately gradually to restore order. As many farmers were 'in the greatest poverty & their capital all gone',[49] Courthope refused to compel legally men to serve as special constables. He enrolled those who volunteered, 'made them as friends instead of enemies', and was thus 'able to distinguish our friends from our foes', prior to launching an offensive against the 'perpetrators of these outrages'.[50] County policy to organize parochial night patrols – 'not a very agreeable office these Cold nights'[51] – was slowly implemented, with Battle among the first.[52] Late on the night of 2 December the Battle patrol passed Thomas Goodman, but made no verbal contact with him; shortly afterwards it was called to a blaze at Henry Atherton's barn, though little could be done to save it.

Subsequently, two patrol members insisted on reconnoitering the spot where Goodman had been seen, and his footprints were traced in one direction to the barn, and the other to his lodgings at Thomas Pankhurst's. Both men were arrested, and Goodman speedily committed. Pankhurst was held some time and released only after agreeing to give evidence of his lodger's movements.[53] At Horsham jail Goodman joined three other alleged incendiaries. These were George Buckwell belatedly committed in mid-November for arson at Hartfield one month earlier,[54] a retarded fourteen year-old for incendiarism at Bodiam,[55] and Edward Bushby for firing farmer Olliver's barn at East Preston on 28 November.[56]

Simultaneously, Maule experienced mixed fortunes in orchestrating Swing's repression in Kent. Three arson suspects from Northfleet were eventually released for lack of evidence, while Maule's attempts to indict Wrotham farmers for inciting labourers to force tithe reductions

[46] *Political Register*, 11 Dec 1830; Sir C M and W Burrell, to Melbourne, 25 Nov, W Burrell to Melbourne, 19, 21 and 28 Nov, C W Burrell to Phillipps, 5 Dec, T Sanctuary to Peel, 18 and 19 Nov, T Broadwood to Peel 21 Nov 1830, undated extract from letter to daughter of W Davies, PRO, HO 52/10, ff 534–7, 542–5, 548–9, 552–8, 565–6; deposition of J Mitchell, 3 Feb 1831, PRO, Assi[zes] 36/2; *Brighton Gazette*, and *Sussex Advertiser*, 25 and 29 Nov 1830; *Hastings Iris*, 19 Feb 1831.

[47] The policeman, Johns, identified an informant, labourer Stedman allegedly 'sworn to secrecy' who refused to reveal names unless given a fresh identity well away from Horsham. The Home Office refused both John's request to bring Stedman to London for interrogation, and to reward him; the investigation was subsequently abruptly terminated by Melbourne: Phillipps to C M Burrell, 29 Nov, 9, 11 and 13 Dec, C M Burrell to Melbourne, 3 Dec 1830, PRO, HO 41/8, pp 198–9, 448–9, 473–4, 41/9, p 17, 52/10, ff 561–2.

[48] *Sussex Advertiser*, 29 Nov 1830; Phillipps to C M Burrell, 29 Nov 1830, PRO, HO 41/8, pp 198–9; letters to Sanctuary from, Peel, Phillipps, and W Burrell, 19, 20 and 25 Nov; Sanctuary to Captain Trotter, and under-sheriff Medwin, 24 and 25 Nov 1830, Bodleian Library, Ms Top Sussex, C2, ff 10, 14, 18, 20, 22.

[49] The Battle correspondent for *The Times*, 13 Nov 1830, reported that farmers were 'nearly as bad off' as their labourers, and viewed arson with 'comparative indifference...even...on their own farms; the corn and hay destroyed may be nominally theirs, but they are really the landlords to whom they are pledged for arrears of rent'.

[50] Courthope to Phillipps, and to Peel, 4 and 16 Nov 1830, PRO, HO 52/10, ff 401–8.

[51] Mrs E Beard, Keymer, to her sister at Maidstone, 19 Dec 1830, ESCRO, AMS 5774/4/4.

[52] Resolutions of East Sussex magistrates' meeting, Lewes, 1 Dec 1830, PRO, HO 52/10, ff 595–6; *Sussex Advertiser*, 29 Nov and 6 Dec 1830.

[53] The possé's investigation of Goodman was instigated by two members, the architect John Vidler and draper John Sargent, not the professional policemen Clements: Bellingham to Melbourne, 3 and 4 Dec 1830, petition for reward, Vidler and others, 11 Jan, Maule to Messrs Slater and Sargent, 18 March 1831, PRO, HO 52/10, ff 444–6, TS 3/23 p 387, 5/18, pp 233–6; *The Times*, 24 Dec 1830.

[54] Prosecution brief, and indictment, PRO, TS 11/1007/4051, Assi 35/270/5.

[55] Richard Pennells was found guilty, recommended to mercy by the jury, and the death sentence was commuted to one month's imprisonment: *The Times*, 24 Dec 1830; indictment, PRO, Assi 35/270/5.

[56] Mayor of Arundel, and Olliver, to the Home Office, 30 Nov and 4 Dec 1830, PRO, HO 52/10, ff 295–6, 299–300; *The Times*, 22 Dec 1830.

foundered on the incumbent's refusal to prosecute and thereby generate 'an irreconcilable break between himself & parishioners'. Intelligence sources failed to establish links between radicals in Kent and London. On the other hand a batch of machine-breakers had been transported at the East Kent Sessions, and maximizing press coverage was calculated to have reversed the effect of Knatchbull's early leniency. Radical activists were under arrest. Maule aimed to prosecute them not for political but for typical Swing offences, including at least one for levying contributions, robbery in legal terms, and liable to capital punishment.[57] Moreover, six suspected arsonists were in custody.[58] If the evidence against two was merely circumstantial, one of the three youths accused of incendiarism at Blean had turned King's Evidence. The case of the army deserter John Dyke who had been 'wandering about the Country for some time' raised strong hopes for a conviction at the Kent Assize scheduled for mid-December. Dyke and the two Blean youths were found guilty, and executed on Penenden Heath on Christmas Eve.[59] Once the Kent Assize finished, Maule briefly returned to London, before proceeding to Lewes for the Sussex Assize commencing on 20 December. At this point Maule's correspondence with the Home Office briefly lapsed, restarting with his arrival in Reading on 28 December to oversee prosecutions at the Special Commission for Berkshire.[60]

Maule was in London on 17 December, the day after Arthur Trevor in the Commons advocated Cobbett's prosecution by the government. Maule's return from the Sussex Assize coincided with Trevor's repeated demand on 23 December. The ministry decided to 'fight...Trevor's Motion' by insisting that it infringed executive prerogative, an argument which suggested that government was not going to be bounced into prosecution and only implied that action would be considered.[61]

Cobbett's commentary, principally in print, exploited the Swing crisis throughout the autumn to maximize political capital. His imagery of a 'rural war' and concept of a 'just war' were dramatic, but hardly unsubstantiated by the facts, though his claim that he had 'for many years past' warned 'the middle class, and particularly the farmers, against the...time when millions would take vengeance on the thousands' was an exaggeration. Certainly, Swing legitimated reiteration of all elements of Cobbett's central critique of the agricultural depression, underemployment, inadequate wages, parish-work, benefit-cutting professional overseers, and the game laws; its aggravation by taxes, tithes, national debt, sinecures and pensions facilitated advocacy of unity between farm labourers and their employers to demand parliamentary reform as the panacea for the redress of grievances, and the restoration of rural economic equilibrium. Cobbett emphasized elements of emergent inter-class solidarity, including refusals to serve as special constables, and extolled examples of Swing mobilizations being followed by parliamentary petitioning as at Horsham. He was however cautious, controlling his enthusiasm notably when attempts were made – again in the Battle district – to stop forcibly tax

[57] Maule to Phillipps, 17, 25, 26 and 30 Nov, and 6 Dec, Phillipps to Maule, 30 Nov 1830, PRO, HO 40/27 (2), ff 73–4, 83–6, 89–90, 93–4, 41/8. pp 256–7.

[58] A seventh, a lass in domestic service accused of firing her employer's house, can hardly be counted as a Swing protester.

[59] Maule to Phillipps, 28 and 29 Nov, 10 and 16 Dec, Phillipps to Maule, 16, 17 and 18 Nov, Peel to Postmaster-General, 16 Nov 1830, PRO, HO 40/27 (2), ff 89–94, 101–4, 41/8, pp 48–9, 55, 59–60; *The Times*, 17 and 25 Dec; B Reay, *The Last Rising of the Agricultural Labourers*, 1990, pp 75–7.

[60] Phillipps to Maule, 30 Nov, Maule, London, to the landlord of the Crown Inn, Reading, and to Freeling, 22 and 24 Dec, Maule, Reading, to Phillipps, 28 Dec, C Bouchier to P Gibbon, 13 Dec 1830, PRO, HO 41/8, pp 256–7, 40/27 (2), ff 105–6, TS 2/23, pp 47, 62, 64.

[61] Ministers entertained 'no fear of being beat' by the Tories, and calculated that they would not 'embark on prosecutions' without Peel's leadership. Peel had already left London for the Christmas break. Lord John Russell to Holland, 22 Dec, John Cam Hobhouse diary, 17 and 23 Dec 1830, BL, Add Mss 51677, ff 102–3, 56555, ff 75–7; *The Times*, 17, 18 and 24 Dec 1830.

collections.[62] He would not have been surprised that the Home Office closely monitored the pages of the *Political Register*, and annotations thereon reveal that Cobbett's observations on incendiarism were carefully scrutinized. According to Cobbett, arson was principally resorted to where labourers were too weak to force redress through overt means. He insisted that incendiaries were not strangers, but locals, and that arson in contrast to riot, was 'most easy to perpetrate, the least liable to detection'; 'no power on earth' could forcibly contain this brand of terrorism. Moreover, in the *Register* for 11 December, Cobbett attributed widespread reductions of tithes to 'the terror of...*the fires*, and not to the bodily force' represented by riotous mobilizations. That part of his article was heavily scored in the Home Office's copy. Key components of his argument, notably the difficulty of detection, and that arsonists were locals, coincided with the Treasury Solicitor's perception.[63] Ironically, it was Cobbett's populist political rival, Richard Carlile, who was to be convicted in 1831 for riot incitement, who asserted that Cobbett had 'the power to rouse the country to resistance by one week's Register. A serious word from him to the people would decide that point'.[64]

Cobbett asserted that arson and fears of incendiarism produced tithe reductions, and constituted 'unquestionable' evidence that these 'acts' of 'working people...produced good, and great good too'. These became the grounds for the charges of incitement to 'violence and disorder and to the burning and destruction of Corn, Grain, Machines and other property', which eventually appeared in the indictment. The decision to prosecute was taken in January 1831, but presenting it to the Old Bailey Grand Jury was delayed by the Attorney-General's absence at the Special Commissions until 16 February. Then a True Bill was found, though the trial did not come on until July.[65]

Events at the Sussex Assize between 20 and 23 December were nevertheless crucial. Here, Maule discussed legal details with prosecuting counsel. Non-felony cases, including former policeman Inskipp for seditious speech at Battle, were left to customary county funding. So too was the charge against Goodman for arson at the same place, as in Maule's estimation it 'might possibly fail'. Maule left Lewes on 22 December, after Bushby's conviction for arson, but in the middle of Goodman's eight-hour trial. Unusually, Goodman's conviction hinged on the footprint and supportive circumstantial evidence, and as the judge emphasized, did not include customary proof of animosity between arsonist and victim.[66]

This lack of traditional motivation was critical. It negated a reprieve in response to an orthodox case for clemency based on the concurrence of the victim and good character references, hardly feasible in the fervid atmosphere. Clemency, however unlikely,

[62] Privately, Cobbett's excitement rose to fever pitch over this development at Crowhurst, adjacent to Battle: 'the labourers, and farmers too, in fact, have *forbidden* the collector of the assesed taxes to take any money *out of the parish*. That is *it*! That's coming to the point': Cobbett to Stopford, 26 Nov 1830, Nuffield IV/54, f 1.

[63] *Political Register*, Oct to Dec 1830, esp issues of 27 Nov, 4 and 11 Dec 1830, and 22 Jan 1831. For Home Office annotations, see PRO, HO 52/10, ff 290–7, 333–43.

[64] *The Prompter*, 18 Dec 1830.

[65] It derived from the passage in the *Political Register*, 11 Dec 1830 on which Trevor's motion hinged. The Attorney-General also considered passages in Cobbett's monthly unstamped *Twopenny Trash*, issues V to VII (Nov 1830 to Jan 1831), but decided against enlarging the indictment to embrace – among other potential inclusions – the incisive observation, 'what *defence* is there against the *torch*? If there was but one man in every parish bent on the destruction of consumable property, the property would be a fourth part destroyed'. Cobbett resumed his Rotunda addresses on his return to London, and a report was passed to the Attorney-General: Maule to prosecuting counsel Wightman, and Attorney-General, 7 and 14 Feb 1831, indictment, and annotated copies of *Twopenny Trash*, Melbourne to the Attorney-General, 15 Dec 1830, PRO, TS 2/23, pp 217, 233, 11/73/237, HO 47/9, p 45; Grey to Taylor, 21 Feb 1831, Grey, *Reform Act*, I, pp 137–8.

[66] Bushby, Goodman's fellow capital convict for incendiarism, had targetted his employer Olliver, with whom he had failed to re-negotiate changes to a threshing contract. Bushby reacted by refusing to work, complained of farmers 'driving' their workers, and threatening to appeal to the Bench: *The Times*, 24 Dec 1830; Maule to the Attorney-General, and to Kell & Co, Battle, 26 and 27 Dec 1830, second petition from Vidler and others of Battle for reward, 20 March 1831, PRO, TS 2/23, pp 71–2, 5/18, pp 353–6.

demanded extraordinary grounds, which eventually derived from the three separate, but incremental allegations against Cobbett. The first, a single sentence version, was published in *The Times* on 24 December, the same day as the Thunderer reported the bulk of the Lewes trials, and was verified by the Revd Rush. Much has been made of Rush's supposedly inexplicable presence at Lewes, not least by Cobbett himself, but Rush had given evidence against two men convicted of conspiring to force the tax-collector at Crowhurst to return the cash to the payers.[67] Cobbett accurately claimed that Swing prisoners in Hampshire and Wiltshire jails were 'canvassed' for links with himself, and if he made no mention of Sussex antecedents, it is not impossible that such occurred. If Goodman was approached after his conviction, and volunteered that his incendiarism was stimulated by Cobbett's Battle speech, it was the only conceivable chance, however remote, to save Goodman's life. Irrespective of Rush canvassing, verification of Goodman's statement by a clergyman was logical. Cobbett immediately denounced Goodman's allegations, including *The Times*' embellishment that Goodman's first target, a stack belonging to Charles Emery of the George in Battle on 3 November, which Goodman admitted after his conviction on another charge, was fired in retaliation for Emery's refusal to accommodate Cobbett with a venue for his 16 October lecture at Battle.[68]

William IV not only read the newspapers and worried over the impact of the 'lower orders...of a licentious and unrestricted press', but on occasion brought his ministers' attention to possible seditious paragraphs. Among them was at least one issue of the *Political Register*.[69] The king took a close interest in Swing, and was particularly relieved that the trials at Lewes 'proceed[ed] without interruption'. Doubtless his personal proximity to Lewes underlay this relief, for William spent Christmas 1830 at Brighton Pavilion, where he 'always' kept 'open house', a 'strange life' for a monarch.[70] On Christmas Day, as Bushby and Goodman were transferred back to Horsham for execution on New Year's Day, the king's private secretary informed the Duke of Wellington – who had relayed the latest information of Swing trials at the Hampshire Special Commission – that

> Proceedings at Lewes have been of the same Character and one of the Incendiaries has confessed that he had been incited to the mischief by Cobbett's Publications and Lectures.[71]

On 30 December Francis Burrell and two visiting magistrates at Horsham jail, activated they said by Cobbett's denial, interviewed Goodman 'without the slightest hope being held out to him of any remission of his Sentence'. They interrogated Goodman as to 'whether he had any emnity against' his arson victim, and were reassured that Goodman 'bore no malice'. Then 'without any dictation or suggestion', Goodman penned a more substantial account of Cobbett's lecturing, including advocacy of every man having a gun in 'readdyness' to follow the speaker into action when called upon. The High Sheriff of Sussex, Thomas Sanctuary, showed the second confession to

[67] See for example G Spater, *William Cobbett. The Poor Man's Friend*, 2 vols, 1982, II, pp 475–6; indictment of James and William King, Sussex Winter Assize, 1830, PRO, Assi 35/270/5. Although only one Crowhurst resident signed Cobbett's petition, he had other supporters there: Nuffield XI/8, ff 1–3; *Twopenny Trash*, 1 Dec 1831; *Political Register*, 19 Feb 1831.

[68] *The Times*, 24 Dec 1830; Spater, *Cobbett*, II, pp 457–8.

[69] Taylor to Grey, 20 Dec 1830, and 4 Feb, Grey to Taylor, 21 Feb, William IV to Grey, 3 May 1831: Grey, *Reform Act*, I, pp 26–8, 60–3, 239–46, 250–1; Phillipps to the Attorney-General, 15 Nov, enclosing a copy of the *Liverpool Courier*, 10 Nov 1830, with marked passages, sent by Taylor, PRO, HO 49/7, p 409; William IV to Althorp, 13 Feb 1831, BL, Althorp Mss, H7.

[70] Taylor to Grey, 15 Jan 1831: Grev, *Reform Act*, I, pp 60–3; Greville, *Memoirs*, II, p 106.

[71] Taylor to Wellington, 25 Dec 1830, Southampton University Library, Wellington papers, 1/1157/10. The parallel characteristics no doubt included the participation of politicized artisans, and examples of non-local agitators, including the capitally convicted (and executed) James Thomas Cooper who claimed he had attended proceedings at the Rotunda and did nothing to counteract rumours that he was the celebrated radical Henry Hunt. Cobbett supporters were also identified as leading Swing activists, notably in the Sutton Scotney district north of Winchester. See Wells, 'Rural rebels', p 135, and Dyke, *Cobbett*, esp pp 171–5.

the king at the Pavilion on New Year's Eve, and was introduced by him to Home Secretary Melbourne 'on the subject of Cobbett and the Swing Fires'. William was convinced that 'Cobbett begins to be frightened'.[72]

Melbourne performed a remarkable volte-face between 30 and 31 December. On 30 December he had specifically and personally rejected a petition presented by the Whig MP for Lewes, Thomas Kemp, for a respite for both Goodman and Bushby, to make time for representations for reprieves. On the following day Melbourne formally and hurriedly transmitted the king's commands granting Goodman a fourteen-day stay of execution; within days it was commuted to transportation for life.[73] Ironically, William had also learned

> that Goodman is not acquainted with Cobbett's Person and...he may have mistaken a Disciple of C's who lectured after he left Battle...Cobbett...is supposed to be very wary to have so committed

himself to the language alleged by Goodman. Now the king asked Sanctuary to get 'Corroboration' of Goodman's statement to the visiting magistrates.[73] Bushby was hanged on 1 January as scheduled. Under-sheriff Medwin who presided, reported directly to the king, including the possibility that another party was also involved with Bushby at East Preston. William 'desired' Medwin to preserve the paper to which he committed Bushby's few dying words.[74] The king still hoped that 'Cobbett may be laid hold of' on 2 January, as Sanctuary launched a local investigation into Goodman's character and sought further details of Cobbett's lecture. This elicited a robust response from Sir Godfrey Webster, the somewhat idiosyncratic politician and local landowner, who sat on the Battle Bench, and who had played a determined role in countering Swing. Webster's anger that Maule had refused to 'take up' and finance 'the case of Inskipp for Sedition' was turned to fury by 'one...of the most destructive fires we have yet had' at Battle which greeted the news of Goodman's respite. Locally, Cobbett's 'admirers' had increased, while the 'licentious pasquinador' was now 'looked upon as a guardian angel', an impossible scenario in which to gather incriminating evidence respecting Cobbett's lecture. Moreover, the disparity between Goodman and Bushby's fate induced the local magistracy to believe the latter's execution constituted 'Judicial Murder', and the former's reprieve 'a great mistake'. Later that month, King William told the Duke of Wellington that

> Ministers had carried too far their pardons to the rioters. He took great blame for himself for having been led to propose the pardoning of Goodman. Some Sussex gentlemen had got round him & there was a hope he would have given some evidence against Cobbett.[75]

Further irony derives from the fact that Goodman had witnessed one of Charles Inskipp's beershop harangues. Inskipp's arrest and prosecution itself owed much to very peculiar circumstances. The bar-room orator was denounced by one of the cav-

[72] *The Times*, 1 Jan 1831; Sanctuary to Taylor, 3 Jan 1831, Bodleian Library, Ms Top Sussex C2, f 43; Burrell to Melbourne, enclosing Goodman's second confession, 2 Jan 1831, PRO, HO 52/10, ff 614–6, published in *The Times*, 3 Jan 1831. Another and even longer version was published in the *Brighton Gazette*, 6 Jan 1831 and promptly copied by *The Times* on 7 Jan, acknowledging the *Gazette*; Sanctuary to Melbourne, 31 Oct 1832, PRO, HO 52/20, ff 1–5.

[73] Melbourne to Kemp, 30 Dec, and to Sanctuary, 31 Dec 1830, 8 and 29 Jan 1831, PRO, HO 13/57, pp 60, 74, 148; Taylor, and Medwin, to Sanctuary, both 31 Dec 1830, Sanctuary to Taylor, 3 Jan 1831, Bodleian Library, Ms Top Sussex, C2, ff 37, 41–3; *The Times*, 1 and 4 Jan 1831.

[74] According to this paper nothing said by Bushby in his very short scaffold address could be construed as an admission of guilt: 'Bushby's execution the 1st of January 1831', Bodleian Library, Ms Top Sussex, C2, ff 39–40. A combination of Bushby's 'conviction by circumstantial evidence alone' and widespread rumours that he had denied guilt were vigorously, if belatedly, countered by the claim that he had acknowledged responsibility to the chaplain a week before his execution: *Sussex Advertiser*, 21 Feb 1831.

[75] Wellington saw the king towards the end of the month: Taylor to Wellington, 2 Jan 1831, Southampton University Library, Wellington Papers, 4/1/3/4/1; Sanctuary to Webster, and reply, 3 and 4 Jan 1831, Bodleian Library, Ms Top Sussex C2, ff 48–9; Ellenborough diary entry, 26 Jan 1831, A Aspinall, ed, *Three Early Nineteenth Century Diaries*, 1952, p 42; Wellington to Buckingham, 1 and 26 Jan 1831, Duke of Buckingham and Chandos, ed, *Memoirs of the Courts and Cabinets of William IV and Victoria*, 2 vols, 1861, I, pp 187, 200.

alrymen policing Battle. This character, William Moneypenny, was however no run-of-the mill squaddie, but the scion of an affluent Irish family, cut off from his inheritance for making an improvident marriage. Moneypenny's motives can only be guessed.[76] Significantly, none of the other soldiers who were billeted on the beershop gave evidence, and Moneypenny's initiative may have constituted an attempt to rehabilitate himself. More sinister are the facts that as Inskipp was a Battle man, and about the same age as Goodman, the arsonist was unlikely not to know him. Moreover, the two were fellow prisoners while awaiting trial. In view of these details, Goodman deliberately juxtaposed Inskipp and Cobbett in a cynical attempt to incriminate the latter, encouraged by a number of Sussex magistrates who were probably initially not aware of Goodman's apparent duplicity. This series of developments briefly led the king to believe that conclusive evidence against Cobbett was obtainable.[77]

These led directly to Goodman's pardon, but his testimony was useless against Cobbett, though the charge according to Cobbett's solicitor would have been clinched by any proven incendiary's claim that he had been motivated by Cobbett's speeches or journalism.[78] The commutation to transportation was hurriedly implemented presumably to get Goodman out of the way. Ministers were anxious to stop Tory attacks for not prosecuting Cobbett, and indicting him – and the much more vulnerable Richard Carlile[79] – also had the virtue of holding notorious demagogues partially responsible for Swing. This ruse countered some pamphleteers' claims that the rising was driven by revolutionary protesters in conscious imitation of the French.[80] After the continental revolutions William IV was paranoid about sansculottes. If he came to believe that Swing somehow represented an English form of similar portents, his support for Whig parliamentary reform may have evaporated.[81] Cobbett publicly and grandiosely attributed his prosecution to a combination of Whig fears and malignancy, and a determination to silence his criticism of government early in 1831.[82] However, this claim loses some of its credibility in the context of Cobbett's solicitor lobbying the assistant secretary of state at the Home Office, who in response made it categorically clear that Cobbett's current support of the first Reform Bill would not head off the prosecution; ministers would rather 'add a million to the national debt' than abandon the case.[83] Cobbett's acquittal, at the hands of a hung jury, principally derived from the weakness of the case that he had advocated arson, and Cobbett's production of witnesses who had been in his Battle audience, backed by a petition from many others, denying that he had incited

[76] On Inskipp's conviction, the foreman of the Sussex Assize Grand Jury successfully supplicated a government reward for Moneypenny: Sir John Shelley, Lewes, to Melbourne, 24 Dec 1830, Bouchier to Bellingham, 5 May 1831, PRO, HO 52/10, ff 607–8, TS 2/24, p 146.

[77] Inskipp prosecutor's brief, PRO, TS 11/1007/4051; Melbourne to Sanctuary, 6 Jan 1831, L C Saunders, ed, *Lord Melbourne's Papers*, 1889, pp 126–7.

[78] 'Some proof...of some fire having been set or some property destroyed must be given or it is contended this Indictment cannot be supported': defence notes on indictment by solicitor Faithfull, Nuffield XXI, 9/1, ff 1–2. The prosecution contended that the 'tendency' of Cobbett's passages 'In the first place to excite a suffering people, but at all events a people whose minds were inflamed, to a repetition of crime', a somewhat awkward line of attack, as it implicitly acknowledged that intense incendiarism predated Cobbett's publication on 11 December 1830, and therefore could allege only that they encouraged repetition. Ironically, the fire for which Goodman was convicted, occurred on 2 December: *Trial of William Cobbett*, Strange, 1831, p 6.

[79] Carlile claimed that his *Prompter* 'has not circulated in the agricultural districts', yet while asserting -- before any trials for arson – that there was no evidence implicating labourers, he insisted that if that proved to be the case, husbandry workers 'have more just and moral cause for it than any king or faction, that ever made war, had for making war'; Carlile also argued that in the event of Grey's taking 'severe' repressive steps, the labourers should 'use their congregated strength to put down the Earl': *The Prompter*, 18 and 25 Dec 1830. Not surprisingly, the Treasury Solicitor thought Carlile would be easily convicted, and brushed aside Carlile's private entreaties: Bouchier to T Stafford, 30 Dec 1830, and to Carlile, and 3 Jan 1831, PRO, TS 2/23, pp 76, 79.

[80] D le Marchant, *Memoir of John Charles, Viscount Althorp*, 1876, p 328. See also pamphleteer Edward Gibbon Wakefield cited in note 4 above.

[81] J L and B Hammond, *The Village Labourer*, 1966 ed, pp 313–4.

[82] *Twopenny Trash*, 1 June 1832.

[83] Faithful to Cobbett, 18 April 1831, Nuffield 9/11, ff 1–2.

them. One signatory was Henry Alderton, Goodman's victim. Cobbett's prosecutors were unable to replace Goodman with any other witness from Battle, though Goodman's inadmissable evidence against Cobbett was nevertheless confounded at the trial. Later, Cobbett dutifully and glowingly praised 'the excellent people of Battle' who had preserved him from the 'conspiracy' of 1830–1.[84]

III

A number of conclusions may be drawn from events in Swing's initial south-eastern theatre, Cobbett's activities, Goodman's revelations, and the Treasury Solicitor's campaign. Interpretations of Swing as the inevitable violent response to the intolerable and seemingly chronic deprivation of farmworkers encapsulated by the customary perception of the 'last labourers' revolt' requires significant qualification. Farmworkers were not only joined by considerable numbers of rural craftsmen, some of whom were clearly politically-aware populist democrats, but the revolt also embraced their counterparts in adjacent towns. There were too many conjunctions between village and urban protesters to warrant perceptions of an exclusively rural revolt, and too great a participation by non-farmworkers to accept notions of a labourers' uprising. Farmers clearly played a covert role in stimulating labourers to mobilize principally against the clergy and tithe payments, though as Maule discovered at Wrotham prosecuting delinquent farmers was highly problematic. The injections of politics were critical, and Cobbett's crusading on stage and in print was the very visible tip of an iceberg. Cobbett certainly contributed to publicizing French events in the rural south-east, but others including the radical nucleus at Battle were already active in the same cause. Both clearly contributed to the atmosphere in which people at the bottom of the social hierarchy really did consider that mass mobilizations would remedy grievances, as reported by Justice Courthope among many others. Moreover, the popular democratic politics articulated by Swing activists convinced many previously sceptical electors, and a body of liberal Tories, that modest reform of the Commons was paramount. This was a major reason which eludes some historians, 'why the clamour for constitutional reform...hitherto...contained within safe pockets spread so suddenly and extensively in...1830'.[85]

Maule's orchestration of repression in Kent, especially criminal prosecutions, represented an unparalleled intervention by central government thereby seriously compromising customary local juridical autonomy. But, both in the south-east, and later in those counties for which the Special Commissions sat, Maule and his department were responsible for ensuring that almost all Swing indictments pertained to acts of violence, as opposed to politically-motivated sedition.[86] Inskipp was an exception, but his prosecution derived from the unusually situated cavalryman, Moneypenny, and the trial was financed by county not Treasury funds. Cobbett's indictment followed a unique series of events, namely Goodman's desperate post-conviction claims, and the capacity of Tory magistrates to exploit their proximity and access to the monarch to outmanoeuvre the government, which had recently fought Tory MPs' demands for legal action against Cobbett. Ministers could hardly refuse to act against Cobbett after the publicity accorded to Goodman's assertions, though ironically those assertions could never be transmuted into admissable evidence.

[84] Recognizances for copies of *The Times* of 24 Dec 183c, 3 and 7 Jan 1831, to be produced in court, Nuffield 9/16, f 9; *Trial of Cobbett*, pp 13–6, 18–20; Spater, *Cobbett*, II, pp 476–8; *Twopenny Trash*, 1 Dec 1831; *Political Register*, 16 June 1832.

[85] P Mandler, *Aristocratic Government in the Age of Reform. Whigs and Liberals 1830–1852*, 1990, p 33.

[86] For further evidence see Wells, 'Rural rebels', pp 136–7, and 'Social protest', p 163.

Privately, one MP opined that 'The Whigs were egged on by the taunts of Tories' into Cobbett's prosecution, and once it failed 'laughed at the...defeat'.[87] A warped version of William IV's role in all this was eventually publicized by the *Observer* which claimed that Cobbett's prosecution comprised the 'fulfilment made by a very exalted personage to a few Sussex landowners'. Once acquitted, Cobbett cheekily challenged the government to prosecute the editor for implicating the king.[88] The prosecution of both Cobbett and Carlile on political charges, namely incitement through seditious publications, subscribed to the convenient fiction, that the politics of Swing, along with some of the violence could be ascribed to the demagoguary of a pair of notorious radical publicists.[89] Despite Maule's role in orchestrating Swing's repression, especially the legal counter-offensive, this barrister 'of great ability'[90] played no part in the decision to prosecute Cobbett.

Eventually Cobbett celebrated the Reform Act in another Swing epicentre, Barton Stacey in Hampshire, principally because this locality provided so many – including one of the capital – victims of the Special Commissions. Cobbett insisted that he 'was an utter stranger to the neighbourhood', one reason why the canvas of prisoners in Winchester jail for incriminating evidence failed. He claimed that the second Reform Bill's passage 'owe[d] more to the COUNTRY LABOURERS than to all of the rest of the nation put together', because Swing triggered Wellington's resignation and his replacement by Grey's government committed to reform. If reality was more complex, especially the desertion of Wellington by ultra-Tories who were convinced that Swing demonstrated that some measure of reform was necessary to recreate confidence in the state, Cobbett was not wide of the mark.[91] More critically, he also reiterated the incisive observation that while riots were relatively easily contained in rural regions, arsonists remained elusive, with incendiarism 'the most easy' mode of protest 'to perpetrate, the least liable to detection'.[92] Ironically, the Home Office agreed, stressing as early as January 1831 that the numerous investigations by London police officers of 'many fires' across Swing's territories, had been of 'little use' but of 'great expense' for central funds. In future, policemen would be made available only where local authorities met the full cost. This represented a reversal of policy initiated by Peel, maintained by Melbourne, and initially directed by Maule in the south-east.[93] Cobbett's further claims, that arson would intensify in the aftermath of Swing's ostensible repression, and that the press was subjected to pressures against full reportage, also proved correct,[94] though it was complicated by farmers trying to evade restrictions introduced by insurance companies. Swing did not invent incendiarism as a peculiarly rural form of protest, but that episode not only witnessed a massive recourse to arson, and perhaps more importantly elevated it to the most enduring mode of countryside protest prior to the Revolt of the Field in the 1870s.[95]

[87] Hobhouse diary, 9 July 1831, BL, Add Mss 56555, f 162.
[88] *Political Register*, 16 July 1831.
[89] Ministers were also anxious to compromise the orators who had turned the Rotunda into 'a formidable base of [metropolitan] working-class disaffection': J H Weiner, *Radicalism and Freethought in Nineteenth-Century Britain: The Life of Richard Carlile*, 1983, p 175.
[90] Grey to Althorp, 30 Dec 1830, BL, Althorp Mss, H7.
[91] *Political Register*, 16 June 1832; Dyke, *Cobbett*, pp 197–8; I Newbould, *Whiggery and Reform, 1830–41: The Politics of Government*, 1990, p 53.
[92] *Political Register*, 22 Jan 1831.
[93] Phillipps to R Cracroft, Lincoln, 13 Jan 1831, PRO, HO 41/9, p 337.
[94] In June 1831, Henry Hunt was shouted down in the House of Commons when he contradicted the Chancellor of the Exchequer's claim that incendiarism had ceased: *The Times*, 28 June 1831. A southern commentator observed that it was 'after' 1830 that 'the system of incendiarism...was...carried to such an alarming extent': 'Censor' in the *Sussex Advertiser*, 28 March 1836.
[95] *Political Register*, 12 Feb 1831; Spater, *Cobbett*, II, p 608 and note 86; Wells, 'Social protest', pp 159, 170–3; D J V Jones, 'Thomas Campbell Foster and the rural labourer: incendiarism in East Anglia in the 1840s', Social History, I, 1976; J E Archer, *'By a Flash and a Scare'. Arson, Animal Maiming, and Poaching in East Anglia 1815–1870*, 1990, chaps 4–7; R C Russell, *Three Lincolnshire Labourers' Movements*, Barton on Humber, 1994, chap 1.

Farm Servants and the Development of Capitalism in English Agriculture

By STEPHEN CAUNCE

Abstract

In a recent issue of the *Review*, Alun Howkins argued that the traditional analysis of British agriculture through the tripartite structural model of landlord/tenant/labourer is fatally flawed because large numbers of small farmers and farm servants blurred the supposedly sharp dividing lines between the categories. It is argued here that English farm servants were in recent times associated with highly capitalistic farming, and that most of the individuals involved did not identify strongly with the farmers who employed them. Most would spend their lives as landless labourers, and they knew it. Moreover, both the origins and development of farm service seem to be part of the spread of capitalism throughout the economy, rather than the survival of peasant agriculture. Both the legal history of servants' employment contracts and their role as the only permanent paid labour on early modern farms support this contention. The spread of casual labour in the nineteenth century in the south of England has obscured this fact, given the general perception that the southern experience was the norm and that other experiences were deviant. The general perception of servant contracts as inherently oppressive arises from the same source and is shown to be equally wrong. To remove servants as a group from the landless labourer class is thus unjustifiable, and even though a correct understanding of their real nature does destroy the stark simplicity of the old tripartite model, it does not remove its basic strength in helping to understand the roots of change in agriculture.

In a recent *Review* article, Alun Howkins stated his belief that the tripartite categorization of landlord/farmer/labourer that is usually applied to modern British agriculture does not fit the facts when we take the British Isles as a whole.[1] The continued existence of large numbers of family farms is simply not recognized, and since they also survived in all parts of England, doubt is cast upon the long-standing view that England had no peasantry in recent times. The clear line usually drawn between landlord and farmer is not nearly so clear in this analysis. Furthermore, since farm servants made up a substantial part of the labour force taken as a whole, and were more or less absent only from a small number of counties in south-eastern England, similar doubt is cast on the reality of the division between farmer and labourer if we accept that servants were not proletarianized to the extent of the conventional labourer. They are also differentiated by the relatively close ties between employer and employee which may seem inevitable where the employer boards and lodges employees and assumes quasi-parental responsibilities over them, as was common in farm service. Moreover, service is usually associated with farming ladders which maintain at least a chance of becoming a farmer later in life, causing the employee to identify with the employer's interests rather than alienating them. Since the division of the agricultural community into classes with clearly separated interests has been widely accepted as the driving force behind the transformation of agriculture along capitalist lines, doubt is cast on the accuracy of the whole analysis by such modifications.

This article seeks to be but a contribution to the debate that has begun on the true status of farm servants, and it is made in the same spirit as Howkins' original: tentative and speculative rather than definitive. It is good to have support in saying that

[1] A Howkins, 'The marginal workforce in British agriculture', *AHR*, 42, 1994, pp 49–62.

servants were both more numerous and more significant than previously supposed, but there is a danger here of misunderstanding the real nature of farm service, and so replacing one inaccuracy with another. As far as can be seen, in the late nineteenth century most British farm servants had no option but to sell their labour to get a living, and most had no prospect of ever achieving any significant alteration of that status. In that sense they were proletarians, and the undoubted difference between their long and legally binding contracts and those of ordinary labourers therefore has no automatic implications for the tripartite model. In arable areas, most servants were hired on to large farms, and on these they were part of a large group which was of necessity detached from the farmer, whatever the arrangements made for providing them with board and lodging. In districts of small farms farming ladders still functioned to some extent, it is true, but overall most farm servants would never become farmers, and most of them knew it from the first day they went into service. However, the servant contract did create a different framework within which farmers and their employees worked from that which prevailed in East Anglia in the nineteenth century, and Howkins is surely right to argue that this must be significant.

It is the fundamental question of the nature of service and of its contribution to the spread of capitalist relations between farmers and the bulk of the rural community which is intended to be explored here, and to do so necessitates going back to the sixteenth century at times. Although detailed evidence will be drawn mainly from twentieth-century East Yorkshire, the overall intention is to illuminate national issues.[2] It is worth noting, however, that unlike many other counties the hiring practices of East Yorkshire remained very close to those identified as the mainstream by Ann Kussmaul in her definitive study of English farm service in the early modern period,[3] and this gives it particular interest as a kind of real-life counterfactual to set alongside that nineteenth-century south-eastern experience which has been accepted so widely as prescriptive and definitive.

It is not intended to overturn an existing orthodoxy here, so much as to draw attention to an aspect of social development that seems to have been badly neglected, for too often we seem to take for granted that paid work will be organized in ways analogous to those visible today. The apparent dissimilarity of service from modern forms of employment contracts easily creates the impression of a specialized and limited category that was inherently unsuited to a modern world. However, research on the matter suggested that service was a fundamental concept that could be utilized in many different ways according to circumstances, and that it was used throughout the economy in the early modern period under a variety of disguises. While it certainly tied employer and employee together far more tightly than is the norm today, this is not at all the same thing as saying that it inevitably created personal ties or bound the two groups together too tightly for conflict. It certainly was not archaic: it seems to have actively promoted the spread of both market-oriented and capitalist farming, and over large areas it did not become obsolete until well into this century. Indeed, it may well have been an essential part of the transition from the feudal, status-based economy to one capable of organizing itself along voluntarist, capitalist lines, and it continued to contribute to this process long after the

[2] The factual background to the sections of this article which concern the East Riding of Yorkshire is contained in my book *Amongst Farm Horses*, Stroud, 1991. The general argument was summarized in 'Twentieth-century farm servants: the horselads of the East Riding of Yorkshire', *AHR*, 39, 1991, pp 143–66.

[3] R E Prothero (Lord Ernle), *English Farming Past and Present*, 1912, 6th ed, 1961, pp 86–9. A Kussmaul, *Servants in Husbandry in Early Modern England*, 1981.

traditional framework of British farming is usually held to have been dismantled. This is not just a matter of saying that it survived, but of saying that it continued to contribute to development.

Historians from Prothero onwards have, of course, recognized both the existence of farm service and that fact that it underwent a traumatic period at the start of the nineteenth century, just when many of the features of what we now regard as a modernized economy became visible in England. Only in the south-east of England, however, is this analysis accurate, and it is to be regretted that, as Howkins observed, Ann Kussmaul seems to have accepted that what was really a regional experience was acted out everywhere else as well, and that this marked the natural and inevitable end to the story of service. However, contemporaries saw the swiftness and completeness of the abandonment of service in the south-east as more than symbolic, with Cobbett in particular fulminating noisily against this new order and the clear separation between the classes which it brought. We may well disagree completely with his interpretation, but he was flagging up something that needs more thoughtful consideration than it has generally received, especially the question of whether the ending of service was inextricably linked to economic development, or whether there was an alternative. An apparent change from relatively close and personal hiring practices to distant and purely contractual forms at this time has perhaps been too convenient and we need to recognize that in most areas service helped to promote change by adapting to new needs and circumstances, rather than vanishing or ossifying.

As for the tripartite model in general, it is certainly now evident that the work of Caird, Prothero, and other pioneers, has such manifest deficiencies that their conclusions must be extensively reworked. Alun Howkins and Robert Allen are surely right in claiming that it was its ability to satisfy strong political preconceptions both on the right and on the Marxist left that has made it so difficult to modify, for diversity was not something either school was particularly interested in.[4] It is striking, for instance, that it was only in the 1970s that the Great Depression of the late nineteenth century began to be widely seen as far from uniform in its impact.[5] Yet most recent work on modernization within Europe stresses diversity rather than the following of some linear, pre-determined best path to the future, and coping with diversity requires more precise understanding of the nature and limitations of the analytical categories we are using. Perhaps Howkins' problem with the servant as a proletarian stems from the definition of the proletarian rather than the nature of service. Yet, the very fact that this model has been able to endure so long means that it should not be lightly tossed away. Rigidity and oversimplification must be removed, certainly, but it still seems to be useful as a basic analytical tool as long as we do not expect specific cases to conform closely to its generalized form.

I

The best place to start any re-assessment of service is to look at its origins. We need to understand the fundamental legal basis of servant contracts in the late medieval and early modern periods, for the fact that even in this century they required servants to place themselves entirely at the disposal of masters can easily make them seem to be a modified version of serfdom, or even slavery, and nothing could be more out of

[4] R C Allen, *Enclosure and the Yeoman: The Agricultural Development of the South Midlands 1450–1850*, 1992. In his introduction he summarizes very clearly the political influences which have pre-determined so many conclusions in agrarian history. Fundamentalism seems the right description for this process, and I was encouraged to find someone else using the same term.

[5] P J Perry, *British Farming in the Great Depression, 1870–1914: An Historical Geography*, Newton Abbot, 1974.

step with the modern world than that. However, the reality is that service placed genuine obligations on both sides of the contract in law throughout its history, except when manipulated by employers, and that it drew on a tradition that service by adolescents and young men was present as a central concept of medieval European society at all levels.[6] The *Oxford English Dictionary*, for instance, defines an esquire as 'a young man of gentle birth, an aspirant to knighthood, who attended on a knight, and carried his shield'.

Feudal society in its essence allocated individuals to roles in society and expected them to fulfil them as a duty, with access to food and the other essentials of life allocated by the system rather than coming as rewards for effort. Without reliable cheap supplies of basic foodstuffs and without an extensive and varied labour market, the lot of the permanently landless labourer was uncertain in the extreme in such a system, but building a period of supervised wage labour into the typical life cycle as a bridge to independent adult life short-circuited many of these difficulties. Because service was part of a life cycle it carried no connotations of permanent subordination or of permanent landlessness, and just as it has been argued that industrialization needed a hybrid forerunner, proto-industrialization, to enable it to develop within the older agrarian economy until it was strong enough to stand alone, service created a quasi-proletarian group within the feudal framework. In English law, it was *servant* contracts which were central to permanent and regular paid work, not daily or hourly hires. This is not to say that the latter did not exist, nor that they were not used on a significant scale, but that they could not deliver a reliable permanent labour force, and while serfdom could do that, it could not motivate workers. Service could do both, and capitalism needed that mix.

The Statute of Artificers of 1563 was the first comprehensive attempt to regulate employment contracts in England. It built on the earlier Ordinance of Labourers of 1349, but in strictly legal terms the statute was the bedrock on which everything else was built.[7] Given the similarity of modern Scottish agricultural hiring practices it would be very interesting to find the equivalent bedrock of their system. The English statute was not a specifically agricultural measure, but required everyone without other means of support to hire themselves out to employers for a year, and once a hiring had been agreed, it was legally binding on both sides. Such contracts were afterwards known legally as a *general hire*, and they were assumed to be the normal contract of employment for all full-time workers in the absence of proof to the contrary. Thus, a Chief Justice in the early nineteenth century could still state that 'if a master hire a servant, without mention of time, that is a general hiring for a year'.[8] However, over time it was established that where the work required, it was quite possible to hire for less or more than a year by mutual agreement while remaining within the framework of the general hire, and it is this which has caused much confusion.

The fact that hiring for a year remained widespread in farming well into this century can seem absurd today, but a statement made in court at Scarborough in 1900 showed that the law then still held yearly hiring to be 'founded both in reason and in custom, and [that it] was incidental to the special nature of agriculture, which

[6] Caunce, *Farm Horses*, chap 3, discusses the sense of mutual obligation that characterized the oral Yorkshire contracts.

[7] 23 Edw III (Ordinance of Labourers); 5 Eliz I, c 4 (Statute of Artificers): see W Minchinton, ed, *Wage Regulation in Pre-Industrial England*, Newton Abbot, 1972, for a full account of the statute and its enactment, and also D Woodward, 'The background to the Statute of Artificers: the genesis of labour policy, 1558–63', *Econ Hist Rev*, 2nd ser, xxxiii, 1980, pp 32–44.

[8] Best, C.J., in Beeston v Collyer, 1827, 4 Bing, 309, 311, quoted in C Drake, 'The deserted village', *Modern Law Review*, 33, 1970, p 325.

varied at every season of the year, so that in winter a servant might be earning little or nothing and have to be kept, whilst at seed time and harvest his services were not only of great value, but...if he was not then ready to carry out his contract incalculable injury might be done to the farmer'.[9] Wages would therefore only be properly earned by doing a summer's work as well as a winter's, while they would only be a fair rate if a winter's short hours balanced a summer's long ones. Where six-month contracts prevailed in recent times, such as in Cumberland and Westmorland, winter and summer duties and wages were regarded by both sides as being quite different,[10] and it is likely that farmers needed fewer workers in winter than in summer. By the twentieth century, a yearly cycle was probably appropriate to agriculture alone of the major employment sectors, but in the sixteenth century few trades did not vary with the seasons to some extent. Thus, in its early development mining was a highly seasonal occupation, due both to the flooding of mines in winter and the difficulties of moving coal over muddy roads. In Northumberland and Durham as late as the eighteenth century, most miners were employed on a yearly basis, and could not give notice or even change jobs without permission.[11]

Even today, some employment terminology outside agriculture recalls the supremacy of general hires. Thus, alongside domestic service we have the civil service and the armed services, and until 1912 the Amalgamated Society of Railway Servants represented many railway workers. This is not merely a semantic linkage, for in the early twentieth century taking the king's shilling was the only legal way a farm servant could set aside a farm service contract once the farmer's fastening penny had been accepted. The new service contract overrode the other in the national interest. It is surely significant that these echoes are found mostly in areas where the employment contract is not particularly personal but is intended to be long-term and to reflect a particular commitment to an employer. It is this that is the essence of service, not a paternalistic, cordial relationship. Similarly, while farm service is often seen as separated from other types of hire by its similarities to apprenticeship, this is a very imperfect identification that gives a misleading impression.

Farm servants made no special links with any employer, and regularly changed farms. They never received any formal training, they paid no apprenticeship premium, and they were paid from the first for their work. Where a young boy received only his keep, this was because it was seen as the full value of the work of which he was capable. This is not to say that servants learned nothing, nor even that there was no expectation that they would learn in their earlier years, but the onus was on them to discover what was necessary. The employer made no commitment to admit them to trade secrets, which in this century contrasted clearly with farm pupilage. Modern servants commonly remained in the farmhouse into their mid- or late twenties, and at that point the average lad with no great ambition made no pretence of adding to skills. The modern waggoners and third lads on large East Yorkshire farms thus resembled journeymen more than apprentices and provided the same sort of labour: relatively skilled, but still lacking in some respects and still working under direction.[12] The servant contract's historic roots may lie in a quasi-parent-and-child relationship, but given the relatively high rates of celibacy and of widowerhood in early modern Britain, youngsters had never been the only single people who needed

[9] *Malton Messenger*, 10 Nov 1900, p 3.
[10] See, for instance, *The Yorkshire Post*, 10 Nov 1910.
[11] T S Ashton and D Sykes, *The Coal Industry of the Eighteenth Century*, 1929, chap 6, esp p 87 *et seq.*
[12] Caunce, *Farm Horses*, chap 4.

employment. For those who never married, the farmhouse often remained the best home they could find. It is better, then, to view the servant contract as bringing the hireling into the household rather than the family, for the household has always been much more than a kinship grouping and much less personal.

Moreover, while it is often assumed that most early modern servants were hired in ones and twos, hiring servants in some numbers and using them simply as paid labour also has a long lineage. Henry Best, a gentry farmer who lived near Driffield in the East Riding in the seventeenth century, has left a graphic account of his farming practice in his famous farming book.[13] Firmly entrepreneurial in his outlook, Best supervised work closely and understood the way things were done, but he hired several servants every year, and they were clearly a substitute for the family labour more humble farmers would have used, not a supplement. Ann Kussmaul suggests that the origins of the servant system may lie with the famulus of the manorial demesne, and Best was clearly the natural descendant of the demesne farmer rather than a rising peasant.[14] We need to be careful that we do not let the fact that most early modern farmers had been farm servants lead us to say automatically that most farm servants became farmers. For the majority it was a preparation for simply earning a living as best they could as adults, and men like Best never worked as farm servants.

What encouraged men like Best to hire servants rather than seek permanent day labourers was the fact that adults did not want to commit themselves to labouring for others, and some sort of independence was the ideal for a family man until very recently in historic terms. This rarely meant real self-sufficiency, but the avoidance of dependence on a single individual was so fundamental that in the seventeenth century the Levellers used it as a natural qualification for the franchise in their proposals for a democratic constitution, because the man who depended on another for his livelihood could not be expected to vote independently.[15] Men like Joseph Arch preserved this tradition in the mid-nineteenth century, working for a wide variety of employers on contract, and others with less skill also preferred this way of life. It is widely accepted that the skilled or propertied members of this group were usually in the vanguard of community resistance, whatever form it took, precisely because they were least beholden to anyone. This urge to make one's own living provided much of the driving force behind the complex networks of mutual assistance drawn by Mick Reed, and it meshes closely with Janet Neeson's re-evaluation of the value of commons and similar perquisites that were such an essential part of pre-industrial life:[16] livelihoods were earned from a multitude of sources rather than resting on one wage, and people valued that very fact.

Unpaid personal and family labour was a third alternative for the family farmer, of course, alongside service and casual day or piece work. This created a tri-modal continuum of practices for getting work done on the land. The choices made at an individual, a community, or at a higher level were not fixed, moreover, but subject to rapid change along the continuum at times: Ann Kussmaul has shown the sensitivity of servant hiring to long-run trends

[13] Henry Best, *The Farming and Memorandum Books of Henry Best of Elmswell, 1642*, ed D Woodward, British Academy Records of Social and Economic History, new ser, viii, 1984.

[14] Kussmaul, *Servants*, p 7.

[15] See G E Aylmer, The *Levellers in the English Revolution*, 1975, p 172, for such an exclusion clause in the Third Agreement of the People. The meaning of this is discussed in C B MacPherson, *The Political Theory of Possessive Individualism, Hobbes to Locke*, 1962, pp 107–9 and 282–3.

[16] J M Neeson, *Commoners: Common Right, Enclosure and Social Change in England 1700–1820*, 1993. Noel Whiteside, *Bad Times: Unemployment in British Social and Political History*, 1991, pp 78–80 argues that the nature of urban unemployment between the wars shows that our conception of full-time work and complete unemployment as mutually exclusive alternatives is not valid even in recent times.

in the state of the labour market as the balance between the two paid norms shifted over time, and Cobbett's fulminations against upwardly-mobile farmers show a different sort of switch in progress in the early nineteenth century. It is important to remember that we are looking at choices here, sometimes conscious, and sometimes responses to radical change in the economy. Thus, while there was no sudden switch from subsistence to market orientation in the early nineteenth century, the strains of the French Wars concentrated into a short period changes that otherwise would probably have taken much longer to work through. The choices made then reflect the move of many farmers into much greater market orientation, and once we accept that the collapse of service was more apparent than real in national terms we find that the modernization process has to be seen as more evolutionary and more complex than the classic formulations have ever allowed. The fact that service often expanded in the farming areas serving industrializing regions thus does not mean that the creation of an essentially landless labouring group was any the less complete there. Service contracts could continue to be used in such a situation.

II

Service was thus the prime hiring contract used by early modern employers in search of regular labour, but we know that outside farming this primacy would be almost totally lost in the nineteenth century. This might be, and frequently has been, taken to imply that service was inherently associated with small-scale production and was incompatible with a modern economic system. This section will show that this was not so, however. Just as in farming, regular days in a factory fitted very poorly with the pre-industrial workforce's normal work patterns, and the first stages of industrialization in many countries have been accompanied by the hiring of young, single people, frequently women and girls, and housing them in company dormitories. In this way the total amount of labour power could be maximized without destabilizing society as a whole, and without having to pay adult male wages, so there actually seems no clash between the rise of modern industry and the persistence of tight contracts. In fact, Karen Orren has recently argued that in the USA, judges maintained the old master-and-servant relationship at the centre of employment law down to the New Deal, which explains many of the difficulties labour had in asserting its rights, especially in any collective manner.[17]

Tight contracts certainly did not preclude modernization and efficient use of labour in farming, and the use made of East Yorkshire servants in this century economized on skill in ways which characterize modern industry. There were no career horsemen on farms in the county, and young teenagers were caring for and working four horses each with no formal training and no apparent need for any.[18] In fact, while the foreman had no regular contact with the horses, he acted as the head horseman and stepped in whenever greater skill was required, notably when a mare foaled or a horse was sick.[19] The younger lads were restricted to the most straightforward jobs, especially routine ploughing, usually working under supervision and often using old horses who did not need a lot of guidance. If the logic behind this system had been consciously developed, it might well have been hailed as proto-Taylorism, but as it simply evolved it has attracted no notice. It is also striking that there seemed to be little or no horse-

[17] K Orren, *Belated Feudalism: Labor, the Law, and Liberal Development in the United States*, 1991, esp introduction and chap 3, where she argues that master and servant law is absolutely fundamental to the American constitution as well as to its employment practices. I am grateful to Professor Steven Tolliday for pointing her work out to me.

[18] Caunce, *Farm Horses*, chap 8.

[19] *Ibid*, chap 11.

magic in East Yorkshire of the kind discovered in East Anglia by George Ewart Evans, who showed this to be a highly effective device for wresting some control of the workplace from the employer.[20] The typical East Yorkshire horselad had nothing to gain by such strategies, however, and it is interesting that it was the apparently modernized society which was associated with apparently archaic customs.

In East Yorkshire the married foremen, the hinds, were generally a key group in the adaptation of service to suit the changing requirements of farmers. They were selected on the basis of proven ability and not by inheritance or favour, and they could contribute significantly to the running of the farm, especially where the farmer was an absentee. They always worked their way up through the ranks of the farm servants and moved around to build up their experience. Over the nineteenth century they also took on the boarding of the servants on behalf of the larger farmers, thus putting distance between the farmers and the servants without destroying the hiring contract. The existence of genuine intermediaries between masters and men was a key element in the success of this type of hiring system. Service could play no role on such farms in binding the classes together. The mobility of the servants also reinforced an apparently paradoxical contrast with non-service areas where men might work for the same farmer for decades and depend on him for charity and for a cottage. In indexing my East Riding tapes, I was struck by how few mentions of farmers there were, and on analysing those that did exist, it became clear that on medium and large farms servants had virtually no contact with their employers.

The existence of hinds did keep some form of farming ladder alive for servants even in a district of large arable farms, it is true, for they could in theory save enough money to take a small farm in late middle age.[21] More important, however, was the creation of large numbers of respectable, reasonably well-paid positions in which to spend one's mature years, and this was all most hinds wanted. This could often involve taking on a share of the management responsibility for the farm, allowing them to make a creative contribution to the development of farming techniques. Allen has pointed out that one of the dangers of reducing all workers to the lowest status was to destroy such contributions: 'The yeoman had had to manage his farm, and that stimulus to mental exertion was lost when he was reduced to a labourer.... Depriving the yeomen of their land and lowering them to the status of ploughmen...reduced the intellectual demands in their lives leaving those [intellectual] abilities as merely latent talents'.[22] Even hinds were undoubtedly landless employees, however, and East Yorkshire farmers thus found that servant contracts meshed well with their developing market orientation and did not impose unwanted social closeness with their workers.[23]

Moreover, there is no evidence of worker dissatisfaction with service as an institution in the north. The radical tradition tends to assume that legal processes have never had anything to offer the poor, but East Yorkshire servants were not of this mind. The moral economy of early modern times may be seen as a substitute for recourse to law, but it required that there should be rules which all should obey. It is striking how often the traditional community, whether organized around a place or a trade, had always turned to the law in the early stages of a crisis, not as a forlorn hope, but with the expectation of

[20] G E Evans, *The Horse in the Furrow*, 1967, chaps 20–24 and pp 258–9 for the insecurity of life on Suffolk farms.

[21] Caunce, *Farm Horses*, pp 199–200.

[22] Allen, *Enclosure*, p 289.

[23] Caunce, *Farm Horses*, chap 16.

justice. They were by no means always disappointed and Reed shows that the final check upon abuse of informal credit arrangements in the villages he has studied was the law.[24] Disputes over hiring contracts were settled similarly if no other remedy would do.[25] Throughout the history of farm service they went before one or two justices to be determined 'according to the Equity of the Cause', contradicting the established conception that recourse to law has never been a normal part of the British tradition of employment regulation and negotiation. Servants' rights were enforced as well as masters', and as new forms evolved locally by mutual consent they gained legal status by this means. Northumbrian hiring systems could thus diverge substantially from the standard format without abrogating the basic statutory framework. The system allowed many outcomes and forced none of them,[26] and this adaptability kept service part of a developing economy.

III

The master and servant legislation as a whole therefore needs careful re-assessment, but we must not simply swing over to a view that it was inherently benign. The Statute of 1563 was designed to regulate employment in favour of employers, not to raise the status of labour, and it is this bias that accounts for much of the basic distrust of the system among labour historians. During labour shortages its provisions allowed unwilling workers to be forced to work, and maximum wages were fixed for each county by its justices of the peace. If either side merely wished not to renew a contract they had to give a quarter's notice of their intention, which could only benefit the employer. The system that resulted from this statutory intervention always contained elements that, in the right circumstances, could be used to create a labour force completely tied to an employer, but to whom they were under virtually no obligation. Miners' yearly contracts were of this type, and in certain parts of southern England nineteenth-century farmers went down the same route.[27] Until 1967, in fact, shop managers, sales managers, and others with loosely worded or informal contracts, were taken to court for breach of contract and had damages awarded against them simply for giving notice, which illustrates the fundamental continuity in this branch of employment legislation. The situation only changed then because Lord Denning ruled in the Appeal Court that 'the time has now come to state explicitly that there is no presumption of a yearly hiring. In the absence of express stipulation, the rule is that every contract of service is determinable by reasonable notice'.[28]

The basic anti-servant bias of the original legislation survived extensive changes made by two amending acts passed under George II, and another under George IV.[29] While a servant's breach of contract was a criminal act, the employer's was civil, and while servants could be jailed until they agreed to complete their contracts, an employer was only liable to a 40*s* fine. After the acts, servants could recover wages earned before a wrongful dismissal, but they could also be imprisoned for three months as a punishment for breaking a contract. A striker could be arrested on his employer's accusation and tried before a single justice, possibly sitting at home. Since written contracts were extremely rare, a sympathetic justice could easily be

[24] M Reed, '"Gnawing it out": a new look at economic relations in rural England', *Rural History*, 1, 1990, p 88.
[25] Caunce, *Farm Horses*, chap 3.
[26] See J P Dunbabin, *Rural Discontent in Nineteenth-Century England*, 1974, chap 7.
[27] Caunce, *Farm Horses*, pp 194–6. In the nineteenth century some southern farmers used written contracts to strengthen their own rights while removing all their obligations.
[28] Drake, 'Village', p 327.
[29] 20 Geo II, c 19; 31 Geo II, c 2; and 4 Geo IV, c 34.

persuaded that most contracts were general hires, and in 1854 3000 workers went to prison for leaving or neglecting their work.[30] In Scotland matters were even worse because the arrest of a striker was compulsory, and agitation began in Glasgow in the 1860s to secure equal treatment for both sides throughout Great Britain, and greater safeguards against abuse of the system.

In 1867 the Master and Servant Act repealed all previous laws and instituted a new system whereby a written complaint had to be handed in to a justice or a magistrate, with any damages claimed, and the case was to be heard before two justices or a magistrate not more than eight days from the date of the summons.[31] A victorious employer could have his servant's wages abated in whole or in part, or have the servant made to fulfil the contract, while a servant could have the contract annulled and could recover wages due. A fine of up to £20 could be imposed on either side, or else damages inclusive of wage abatements were fixed. The wages of one year could not be touched to pay for a breach of contract committed in a previous year, but an unusually serious injury to persons or property could still mean a sentence of three months hard labour, and there were no safeguards against justices continuing to imprison strikers by deciding that breaches of a non-existent contract were serious. With 17,100 prosecutions and 10,400 convictions in 1872, agitation for reform continued, supported by the parliamentary committee of the newly formed TUC.[32]

Finally, in 1875 the Employers and Workmen Act recognized that the concern of the law was to define methods of settling disputes rather than the nature of the contract itself and ended the controversy. It placed most workers' contracts outside general hire regulations, including domestic servants, and female servants were treated differently in East Riding farmhouses in the twentieth century even though they were hired by the year.[33] If the damages claimed were less than £10, a police court or a suitably qualified justice could still hear cases, but all serious actions were to be heard in county courts in England. All powers to imprison and fine were removed, and the courts could only award damages or wages due, or otherwise rescind or enforce the completion of the contract. This left a useful procedure for supplying quick action with low costs (around 6–7*s* being the usual figure mentioned in court cases before 1914 in East Yorkshire) for genuine servants.

A key element in this solution was the lack of interest shown by the large employers in using general hires, for as the nineteenth century wore on, they grew more wary of the legal ties that would be placed on them. As long as a yearly contract was not a one-sided obligation, it did not force down wages for young men in itself; instead it built wages into overheads, and inevitable uncertainties over trade made a nonsense of talk of yearly cycles. Courts came to accept such details as 'payment by the piece, payment at intervals shorter than a year or a hiring at will' as proof that no general hire had been intended, unless the parties had clearly stated that it was.[34] On the other hand, casual employment in the old sense would have been unsatisfactory except where there was such a massive surplus of labour that any skills needed could be obtained and retained without difficulty, as in the rural areas of southern

[30] Professor Wedderburn, *The Worker and the Law*, 1965, pp 49, 56, quoted in D N Pritt, *Law, Class and Society. I: Employers, Workers and Trade Unions*, 1970, p 38. This section is largely based on Pritt, pp 36–42.

[31] 30 & 31 Vic, c 141.

[32] Pritt, *Law*, p 38.

[33] 38–39 Vic, c 90. Orren, *Belated Feudalism*, shows that the USA had no equivalent of this consistent and eventually successful attack on the concept of master and servant in the nineteenth century. The conscious manipulation of its potential by employers with the active support of the judiciary made it much harder to attack from below. On domestic service, see Caunce, *Farm Horses*, pp 167–8.

[34] Drake, 'Village', p 326.

England. A hybrid contract, the hiring at will referred to above, therefore evolved which bound no-one legally, was tacitly assumed to run indefinitely, and which could be ended by the giving of an agreed period of notice. In fact, this was also the contract that East Riding farmers adopted for their non-servant regular workers, whereas southern farmers simply took on labour as and when needed and paid by the piece or the hour as it suited them.

IV

Until after the First World War, as Alun Howkins noted, over most of the British Isles the servant contract was not an oddity in agricultural districts but a fact of everyday life. In assessing its prevalence, moreover, it is important to remember that in areas like the East Riding it could never cover more than half the workers at most. Overall, service had been expanding in the north and Scotland throughout the later nineteenth century, and as Lord Denning's judgement did not prevent hiring by the year if both parties agreed, recent work on Scotland has found servant hiring continuing well into the 1970s.[35] Service flourished best in highly capitalist arable areas where the greatest demand for labour existed, and there it was incorporated into highly profitable, efficient, and modern farming systems. It did not depend for survival on isolation or on special circumstances. Both farm servants of the East Yorkshire type and permanently casualized labourers of the East Anglian type were thus creatures of capitalist farming, and they were both inherently proletarian.

As Richard Anthony has argued for Scotland, there is no case for removing English servants from the landless labourer category *en masse*.[36] East Yorkshire servants could only be slightly less proletarianized than the labourers they worked alongside, for in a few years most of them would become labourers too. Even though small farms still existed in East Yorkshire in the twentieth century, an individual had little chance of becoming a farmer except through inheritance. Since many small farmers were visibly always hard at work to secure an income lower than that of the labourers, it is by no means axiomatic that a majority of the labourers would have taken farms of 20 or 30 acres if they had been available to all.[37] Many servants had probably already made the decision to leave agriculture, but this was virtually impossible until they were old enough to move to an industrial district. Working as a servant was acceptable to such teenagers as a short-term measure, which had always been the basis of acquiescence in service.

Hiring fairs held the system together, and the carnival atmosphere associated with them should not obscure the fact that they existed to place lads in jobs through genuine and sometimes fierce bargaining with the farmers. They helped reinforce the servants' sense of a common experience and a common identity as a group by requiring them to stand up to the farmers, not to place blind trust in them. The fairs made the hiring system a real system, something that is all too often ignored. Individual contracts were originally an indivisible part of a whole, not atomistic units that happened to lie alongside each other. In each locality the terms of the implicit contract current at the hirings could reflect purely local needs and norms, but they also had to conform to the legal framework laid down by Parliament. Moreover, the relatively advanced integration of British markets imposed its own pressure for

[35] D G Adams, *Bothy Nichts and Days: Farm Bothy Life in Angus and the Mearns*, Edinburgh, 1991, pp 58–62. He found evidence of hiring continuing to 1978 at least.

[36] R Anthony, 'Farm servant vs agricultural labourer, 1870–1914: a commentary on Howkins', *AHR*, 43, 1995, pp 61–4.

[37] William Johnson, taped interview; see author's tape 25 side 1. See also H Reffold, *Pie for Breakfast*, Beverley, 1984, p 80.

conformity, for any hiring system that brought high overall labour costs would have been very difficult to sustain. The general sense that hiring showed both strength in depth and the ability to adapt and absorb ordinary economic ups-and-downs is why a general economic crisis was an essential part of the abandonment of service in southern England in the early nineteenth century, and in Yorkshire in the mid-twentieth. Ordinary difficulties led neither the farmer nor the servant to cease hiring, but crisis opened up the possibility.[38]

The continued existence of servants in the late nineteenth century does then deserve a lot more attention than it has usually been accorded. Any model which includes service chiefly as a remnant of a friendly, face-to-face past cannot but mislead. Service should best be understood as an intermediate stage between a truly localized, agrarian economy where subsistence farming was the overwhelming rule, and one in which much of the rural population had come to depend upon wages, and which was integrated into a much wider industrializing national and international economy. This transition took centuries rather than decades, and exploring the nature of service offers insights into the nature of industrialization in general. It is important to realize that its early failure in the south of England did not lead to greater commercial success there, and though the labour force there experienced the lowest wages in England throughout the nineteenth century, there was no revolution, so from neither right nor left does a simple linkage between casualization and progress stand up.

The course of events in East Yorkshire shows that capitalism could develop within a traditional framework without destroying it, and that it could develop by negotiating with its workforce as well as by crushing it. Other regions hired servants in different ways, but this generalized conclusion seems equally applicable to them. If it is accepted that casualization is not the same as proletarianization, the existence of servants does not destroy the old tripartite model, only its simplicity. It remains true that there was an inherent conflict of interests across the employer/employee divide, but it took different forms in different places. In many it could be managed and resolved peacefully, but this does not remove the basic fact of conflict. We have to explore this diversity and arrive at a more subtle understanding of the interplay of many forces, replacing the image of a simple structure that defined and shaped events in a crude fashion. Throwing it away altogether leaves the much more daunting task, of seeing every county, and possibly every farm, as unique.

[38] Caunce, *Farm Horses*, chap 17.

'The Last Survivor of an Ancient Race': The Changing Face of Essex Gleaning*

By STEPHEN HUSSEY

Abstract

Past authors have identified the early twentieth century as the point at which gleaning finally vanished from the lives and labour of the rural working-class. This paper seeks to re-position this decline, placing its disappearance forward some forty or fifty years to the decades following the Second World War. However, gleaning did not simply continue unchanged into the twentieth century, as the customary practices that had once accompanied it now became obsolete. The paper examines the reasons for the continued use of gleaning, its changed form, and places the decline of its customary practice within a wider context of changes occurring in rural popular culture at this time.

WISHING to capture what he believed to be the changing character of the inter-war English countryside H E Bates penned his story of *The Gleaner.*[1] Bates chose as its subject the tale of a single day's labour by an elderly woman as she gleaned in the late summer's heat of a harvest field. The tale is a short and unremarkable one. However, the subject matter and the way in which Bates expressed it are of interest as his narration communicates the author's wider observations and emotions. Within the story Bates' gleaner was clearly intended to represent a lost age in which people's lives and fortunes were bound inextricably to the soil upon which they worked. Where once:

> Long ago, in another century, she also came up to the same field, on just such still, light-flooded afternoons, for this same eternal and unchanging purpose. But not alone; they would glean then, in families, occasionally in villages, with handcarts and barrows, from early morn until evening...[2]

Bates' gleaner was now left undisturbed in her efforts:

> It is as though there is no one in the world except herself who gleans any longer. She is not merely alone: she is the last of the gleaners, the last survivor of an ancient race.[3]

The reference to 'an ancient race' was a deliberate attempt by the author to evoke the notion that the twentieth century was bringing an end to the 'traditional' culture and society of the countryside. Sharing a fashionable vision of the rural world with a diverse coalition of contemporary political, artistic and social commentators who included the likes of Stanley Baldwin, Ralph Vaughan Williams, H V Morton, Mary Webb and H J Massingham, Bates believed that this 'tradition' lay at the very core of the meaning of England and Englishness.[4] His likening of the gleaner to an '...earth-figure, as old and ageless and primitive as the corn she carries...' and his description of her as being driven on in her work by '...some inherent, unconscious, eternal impulse...' merely served to underline his views. For Bates the dwindling number of gleaners in the fields of England was just a further manifestation of the erosion of the peasant-like qualitities of rural working people as they moved

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[1] H E Bates, 'The gleaner', *Country Tales*, 1938 (1992 ed), pp 69–73.

[2] *Ibid*, p 69.

[3] *Ibid*, p 71.

[4] For a brilliant exploration of the range of adherents to the belief in the link between the countryside, nation, its people and their character, see Patrick Wright, *The Village that died for England: The Strange Story of Tyneham*, 1995, esp parts 2 and 3.

onwards into the twentieth century. The 'simple' rusticity and organic community that had supposedly characterized other centuries of village life was now being swept aside by the coming of the likes of motor transport, tinned foods, seaside holidays, weekly trips to the cinema and evenings around the wireless.

Bates' assertions regarding gleaning were correct in some respects. It did have lengthy antecedents which extended back into biblical references within the books of Leviticus and Deuteronomy.[5] Gleaning had also long been an established part of the annual agricultural calendar, becoming a widespread feature of many household economies of the rural poor from the sixteenth and seventeenth centuries.[6] Bates was also accurate in his estimations of the importance that gleaners had once attached to their labour when he wrote 'Since it meant so much, since corn was life – that law was as old as time itself – they gleaned incessantly, desperately'.[7] Peter King's research on gleaning in the eighteenth and nineteenth centuries has shown that as much as one-eighth of a labouring household's annual earnings in central and southern England could come from this source.[8]

However, as an overall indication of gleaning activity in the countryside during the inter-war years Bates' account needs to be viewed with a good deal of circumspection. The research presented here employs a range of oral and documentary sources for a single county, Essex, to relocate the end of gleaning in the village from the late nineteenth century, the position assigned to it by Bates and modern historians alike, forward to the mid-part of the twentieth. In doing so it reveals that the gleaner remained a relatively common sight in harvest fields throughout the 1920s and 1930s until the late 1940s and early 1950s.[9] Nor were these gleaners just the solitary elderly members of an 'ancient race'. Instead they also contained the mixed ranks of younger mothers and children that had for decades made up the bulk of the gleaners' numbers. What this article demonstrates is that rather than eradicating the gleaner, the twentieth century brought with it changes in the ways in which people gleaned and the uses they put their gleanings to. Gleaning continued as a feature of village life but the customary regulation that had once accompanied it disappeared, while the place occupied by gleaning in the domestic economies of village people was shifted from their centres to their margins.

I

An elderly Essex gleaner of the 1920s wishing to reflect upon memories of her annual visits to village fields during the cereal harvest would have been able to point to several unbroken features of her days spent gleaning now and those of her youth in the 1860s and 1870s. Not least would be the back-breaking nature of the work amongst the rough stubble which was always ready to scratch the bare flesh of hands, arms and legs. The work remained as tough and as uncomfortable as it had ever been. Gleaning also continued to be dominated by village women and their children. The occasional presence of an elderly man would be the only representation of adult male workers at a time of the year when the demand for farm labour was at its highest point with the annual harvest.

[5] *Leviticus*, xix, 9 & 10; *Deuteronomy*, xxiv, 19 & 21.

[6] Peter King, 'Customary rights and women's earnings: the importance of gleaning to the labouring poor, 1750–1850', *Econ Hist Rev*, 2nd ser, xxliv, 1991, pp 469–72.

[7] Bates, 'The gleaner', p 69.

[8] King, 'Customary rights', p 474.

[9] This article is based upon twenty-five oral history interviews conducted in Steeple Bumpstead, Helions Bumpstead and Toppesfield, North Essex, between 1992 and 1995. Use was also made of the oral history interviews of Basil Slaughter (held at the Essex Record Office, Chelmsford [hereafter ERO]), Essex based interviews within the *Family Life and Work Experience before 1918* project (held at the Department of Sociology, University of Essex), and also the written reminiscences of elderly people collected in the annual Age Concern Essay Writing Competition dating from 1955 onwards (held at the ERO).

Nonetheless, amongst the continuities within her memory the elderly gleaner would also have been able to point to a number of significant changes in the way in which gleaning was now organized in the village. Foremost in her thoughts would have been the virtual disappearance of the formal mechanisms by which gleaning had once been regulated. The sight of the guard sheaf and the sound of the gleaning bell would have formed part of her youthful experience of the harvest fields in the second half of the nineteenth century. However, by the 1920s and '30s such phenomena were likely to be nothing more than dim recollections.

The guard sheaf, or gleaning policeman as it was also known, was nothing more than a single stook of sheaves left in the harvested field. Nevertheless its significance was recognized by all in the village. While it remained none was to enter that field to glean. After reaping it was common practice for farmers to rake the harvested field to ensure that as many as possible of the valuable stray ears from the crop were collected. On occasions too, the farmer might prefer to fold his pigs or fowl upon a newly harvested field to pick amongst the stubble for the remaining grain. It was of course these same stray ears that were the prize of the gleaner. The guard sheaf ensured that the farmer took first claim to this bounty.

The use by farmers of guard sheaves to delay the entrance of the local gleaner was common in the Essex countryside of the nineteenth century. Writing in the columns of the *Essex Review* during 1925 but drawing on memories that extended 'back to the year 1842' one correspondent could recall the power and authority that this simple sign had held to the gleaners in his village, Earls Colne, near Halstead:

> Gleaning was not allowed to commence until the field was cleared and a few sheaves left standing were quite sufficient to ensure this, and I have seen the gleaners, while waiting for the field to be cleared, indulge in games or sing songs to wile away the time.[10]

An Essex farmer's son could also recall his father employing a 'policeman' at his farm in nearby White Colne:

> At Colne we used to leave a trave or a couple of sheaves standing near the gate, until the rakings had all been taken up. As soon as this was removed the gleaners knew that they were free to begin.[11]

At Radwinter and its neighbouring parish of Hempstead it was simply noted by another correspondent that '...there used to be sheaf of wheat left in the field if it had not been raked, and so was not ready for gleaners'.[12]

The regulation of gleaning did not only come from the side of the farmer. There were also rules which were self-imposed and widely respected by gleaners themselves. The central tenet to these was the regulation of hours. Until the late nineteenth and early twentieth centuries gleaning operated in most Essex parishes to strictly controlled and well-observed timetables. In many parishes the beginning and sometimes the end of the gleaner's working day were governed by the ringing of a bell, usually the church bell, or as it was called locally, the gleaning bell. Eliza Vaughan, the Essex author whose books published in the 1920s gave a portrait of the people and events of her own village of Finchingfield 'in days gone by', described the 'ancient' practice of ringing the gleaning bell and the obedience that this exercised over villagers:

> The work was conducted according to ancient customs; women and children might be seen hurrying off in the early morning to take up their places in some distant field, but not an ear might be picked up before, at eight o'clock, the gleaning bell from the church tower gave the signal to commence.[13]

From the Revd Cecil Deedes' and H B

[10] Letter from Reuben Hunt, Earls Colne, *Essex Review*, xxxiv, 1925, p 162.
[11] Letter from Alfred Hills, Bocking, *Essex Review*, xxxiv, 1925, p 107.
[12] Letter from L Myhill, Saffron Walden, *Essex Review*, xxxiv, 1925, p 211.
[13] Eliza Vaughan, *The Stream of Time: Sketches of Village Life in Days Gone By*, Colchester, 1926, p 84.

Walters' voluminous account *The Church Bells of Essex* (published in 1909) it also becomes possible to acquire an accurate guide to the hours of the gleaner's day. Basing their report on a survey of half the county's churches the authors noted those parishes in which a gleaning bell had been heard within the preceding twenty years and recorded that:

> At Gestingthorpe and Hadstock the hours were 8am and 5pm; at Belchamp St Paul's, Boreham, Bulmer, Cressing, Great Maplestead and Stambourne at 8 and 6; at Ashdon, Broxted, Farnham, Hepstead, Henham, and Manuden, at 9 and 5; at Wendens Ambro at 8.30am; at Borley and Dedham at times not specified.[14]

Given the value of gleaning to the labouring household and given its limited supply and the few fleeting weeks at the end of each summer in which it became available, then the gleaning bell offered an important regulatory mechanism by which each household would be given an equal opportunity to take part. Crucially, by delaying the start of the gleaner's day it permitted those women with families the time in which to rise, marshall their children for the day's labour that lay ahead, and also to prepare their husband's breakfast and midday meal (the latter of which would be eaten in the fields). The gleaning bell was vital if this type of household was to be allowed to share in the hard-earned windfalls of the harvested fields. In a letter dated August 1933, Alfred Hills, solicitor and sometime agricultural correspondent to the *Essex Farmer's Journal*, wrote to an acquaintance recalling the purpose of the gleaning bell stating that he believed that 'This was to prevent ardent souls from getting up at two in the morning and starting gleaning before the mothers of the household could get a look in'.[15] Others shared this view. Reuben Hunt recalled in a 1925 edition of the *Essex Review* that at Earls Colne:

> The bell was tolled by the church sexton at 8 o'clock in the morning, and I always understood the reasons for this was to give the married women time to dress their children and give them their breakfast before starting out, so that they had an equal chance with the single women.[16]

While the Essex clergyman and novelist Alfred Ludgater remembered gleaning and the gleaning bell from his youth and associated the latter with:

> ...the desire to give every gleaner a fair chance of getting a due share of the loose corn. Were there no rule of that kind some energetic but greedy gleaners would be in the fields at sunrise and stay till dusk.[17]

Elsewhere in the country the guard sheaf and the bell were sometimes accompanied by a gleaning queen, the name given to a woman elected each year by her fellow gleaners. Her role, which was not dissimilar to that of the 'lord' found amongst the reaping gangs at harvest, was to reinforce established rules of behaviour, restricting gleaning to certain hours and guarding against intrusion from the gleaners of neighbouring parishes.[18] If a person was found to have broken any of these rules then it was the queen who would lead the response from the wider community of villagers. In the most well-known and detailed account of a gleaning queen, from Rempstone, Nottinghamshire in 1860, the list of punishments for disobeying her order in relation to the hours of gleaning was declared at her 'coronation and proclamation' which accompanied the beginnings of each season's gleaning. Part of her address to assembled villagers sounded the explicit warning that 'Should any of my subjects enter an ungleaned field, without

[14] Reverend Cecil Deedes and H B Walters, *The Church Bells of Essex*, privately published, 1909, p 150.
[15] ERO, T/P 116/86, Letter from Alfred Hills of Bocking to Mr Frank Hobson, Silver End, Whitham, 16 Aug 1933.
[16] Hunt, 'Letter', p 162.
[17] Letter from Alfred Ludgater, *Essex Review*, xxxiv, 1925, p 108.
[18] For the functions of harvest lords see Bob Bushaway, *By Rite: Custom, Ceremony and Community in England 1700–1880*, 1982, pp 111–16.

being led by me, their corn will be forfeited and it will be bestrewed'.[19]

There are far fewer references to gleaning queens in Essex than there are guard sheaves and bells. Just two separate sources point to their existence, both coming from the same village, Ashdon near Saffron Walden. Neither account suggests that the election of Ashdon's gleaning queen witnessed the same level of ritual and ceremony of the Rempstone example. Nevertheless the practical purpose of her investiture remained the same. As Ashdon gleaner Mary Goodwin recalled, part of the queen's role was to control entry into the gleaning fields:

> There was a special way of doing it [gleaning]. We'd have to choose a sort of foreman called the 'Queen' and that 'Queen's' job was to see all started and finished at the same time and all had a fair crack of the whip. The 'Queen' would ring a bell for us to start off at about eight o'clock in the morning and we'd work on round till near seven at night. And when the bell rang again, we'd have to stop. Not that we needed telling at that time.[20]

Two other Ashdon gleaners wrote of their village's queen noting that the community power she wielded would mean that miscreants in this part of Essex would suffer a fate identical to that of wrongdoers in Rempstone:

> Those who infringed would have their gleanings taken from them and scattered. 'Fair shares for all' was the motto.[21]

By the inter-war years the excitement within parishes that had accompanied the election of the gleaning queen had been lost in the same way as the sight of the harvest field with a solitary guard sheaf and the early morning sounds of the gleaning bell. It is symptomatic of the disappearance of regulatory customs connected with gleaning that when in 1925 a number of correspondents to the *Essex Review* wrote providing the journal with details of gleaning customs they did not describe the Essex countryside they saw around them but drew on their memories of the nineteenth century. The fact that their letters formed part of the magazine's 'Notes and Queries' column also suggests that the policeman, bell and queen had become consigned to the ranks of historical curiosities as opposed to remaining as contemporary aspects of village existence. This is certainly the category in which Eliza Vaughan placed the sound of Finchingfield's gleaning bell, choosing to include its description in one of her books under a chapter whose rubric simply reads 'Bygone Trades and Handicrafts'.[22]

II

Yet the demise of mechanisms by which gleaning was regulated should not be taken as proof as to the end of gleaning itself. The fact that many families continued with this form of labour is apparent from the way in which gleaning features with striking regularity in the memories of those who grew up in the Essex countryside of the 1920s and '30s. No reference was made to the existence of the regulatory customs attached to gleaning by any of the twenty-five interviewees used for this research from the Essex villages of Steeple Bumpstead, Helions Bumpstead and Toppesfield. Nevertheless, twelve of the sample could recall being taken gleaning by their mothers or, in a minority of cases, by their grandmothers. Furthermore, all twenty-five could recall having seen gleaning taking place in their villages even if they had not participated directly themselves.

Gleaning had also left a lasting impression on those that had worked in

[19] Letter from R F Sketchley, *Notes and Queries*, 2nd ser, Oct 1860, p 285. Also see D H Morgan, *Harvesters and Harvesting 1840–1900*, 1982, pp 158–9.

[20] Mary Goodwin, born 1884, interviewed 1971, in Robert Gibson, *Annals of Ashdon: No Ordinary Village*, Chelmsford, 1988, p 282.

[21] Chris Ketteridge and Spike Mays, *Five Miles from Bunkum: A Village and its Crafts*, 1972, p 81.

[22] Vaughan, *Stream of Time*, chap 9.

harvest fields as youths. Some, like Mr W of Toppesfield, were able to recall with considerable detail the method by which they had gleaned. His experiences relate to the years immediately after the First World War:

I've been gleaning, oh yes. Well, that was a right really. After the farmer had cut the corn, picked it up and, he was entitled to rake the field, but after he'd raked you could go and pick up the straws. We used to go and you'd get about, oh, twenty or thirty straws and you'd put them together like a bunch with just the ears sticking out and you'd twist the straw 'round, tie 'em with their own straw and you'd take 'em like that. Oh, gleaning was a right for anybody who would go on a corn field, at least we used to reckon it was. A farmer never stopped us.[23]

Others, such as Mrs S of Steeple Bumpstead, recalled the sense of urgency that the onset of gleaning still brought each year:

We used to go gleaning. Dad used t'come home for his breakfast and say, 'Oh, you can go up Hungerdown today, the field is ready.' So off we used to go, ten o'clock in the morning, with a gleaning bag 'round here [points to her waist], pick up the short ears, and the other one would pick up the long ones and tie it up. Stop there 'till five and six at night. Take no food up there with us, we was out all day.[24]

While the comments of another gleaner from Steeple Bumpstead suggest that gleaning remained a valued addition to many inter-war households:

The news spread about that so-and-so's field was ready for gleaning, the farmer's ready. There'd be such a rush and you'd go and glean it.[25]

Other oral history work done in the county also points to the persistence of gleaning well into the twentieth century. Ashley Cooper has found people able to recall gleaning amongst the communities of north-east Essex in which he has lived and worked, while several of Rosamund Richardson's interviewees for her portrait of a village community in the west of the county possessed similar memories.[26] Support is also lent to the oral sources from amongst the few written reminiscences from 'ordinary' villagers which survive in the Essex Record Office. Here gleaning features as a regular part amongst an array of other child labour tasks done in support of the household and which made such a constant part of rural working-class childhood experience in the first half of this century.[27]

The qualitative evidence from Essex therefore implies that H E Bates' image of the gleaner as an elderly and solitary surviving member of an 'ancient race' was not replicated in the county. Here, as elsewhere across other grain growing counties of the east of England, gleaning continued to pull a sizeable proportion of the village female and child population into the newly harvested fields each year. What had changed were gleaning's scale, uses and customary practices. Each owed their metamorphoses to the common causes of agricultural mechanization and changes to the rural working-class household economy.

The nineteenth-century harvest field had presented opportunity for both farmers and labourers that neither could afford to ignore. As the scythe displaced the sickle during the late eighteenth century harvesting became a quicker but at the same time a more profligate operation.[28] While the scythe continued to dominate cereal fields then the harvest left considerable amounts of wastage, perhaps more wastage than had ever been the case previously.[29] For the farmer, therefore, the raking and

[23] Interview with Mr W, Toppesfield, b 1909, recorded 1994.
[24] Interview with Mrs S, Steeple Bumpstead, b 1908, recorded 1992.
[25] Interview with Mr A, Steeple Bumpstead, b 1908, recorded 1992.

[26] See Ashley Cooper, *The Long Furrow*, Bulmer, 1982, p 107, and *Heart of Our History*, Bulmer, 1994, p 144; Rosamund Richardson, *Swanbrooke Down: A Century of Change in an English Village*, 1990, pp 32 and 63.
[27] See ERO T/Z 25/1794, T/Z 25/2608, T/Z 25/2562 and T/Z 25/2563.
[28] See E J T Collins, 'Harvest technology and labour supply in Britain, 1790–1870', *Econ Hist Rev*, 2nd ser, xxii, 1969; M Roberts, 'Sickles and scythes: women's work and men's work at harvest time', *History Workshop*, vii, 1979; and Keith Snell, *Annals of the Labouring Poor*, 1985, pp 49–51.
[29] I am grateful to Steve Caunce for suggesting this point.

re-raking of the newly harvested field could substantially increase yields. This simple operation ensured that some of the ears that had been dropped or missed during the cutting, gathering and tying of the sheaves were salvaged. Yet the hand-rakes which were widely used in the nineteenth century could not guarantee to gather up every stray ear. As long as they accompanied the scythe then gleaning continued to provide substantial rewards for the sharp-eyed and dextrous woman and her children. However, in the last quarter of the nineteenth century the hand-rake was gradually replaced by the more efficient horse-drawn rake which, as one Essex correspondent explained, '...searched the haulm [stumps] so thoroughly that there was little left to glean'.[30] This move towards increased efficiency was quickened by the parallel introduction of the horse-drawn reaper and eventually the reaper-binder. These machines harvested the grain closer to the earth than did the hand-scythe which they replaced, and the shorter stubble which was the result allowed the horse-rake to pick up still more of what would once have been the gleaner's prized ears of grain.[31]

Although the customary regulation had dissipated and the rewards for the long hours spent gleaning were now reduced it did not follow that villagers simply ceased to glean. The reaper-binder and the horse-rake reduced the contents of the gleaner's 'cotty' bag (as it was called in north Essex) and with this the number of villagers prepared to go gleaning. Yet the machinery was never efficient enough to eradicate all stray ears and therefore never thorough enough to deter the most determined or needy of gleaners. When questioned about the amount of material left by the reaper-binder one woman who had gleaned the fields of Helions Bumpstead from the 1930s through to the late 1940s replied:

> It left quite a yield. It was surprising. Sometimes the binder wouldn't cut it properly and it would get laid and you used to go along with a pair of shears and actually cut the ears, the stalks off the corn.[32]

This and other oral evidence therefore suggests that the transformation in harvest technology during the second half of the nineteenth century did not, as Bob Bushaway and David Morgan have both proffered, put an end to gleaning.[33] Evidence from Essex shifts this demise forward to the middle of the twentieth century when a further wave of innovation in harvest technology finally served to remove gleaning as a widespread feature of the countryside. Within the written reminiscences of his life in Great Bentley, near Colchester, Carl Morton remembered that gleaning survived locally until just after the Second World War and the arrival of a new machine that was to be central in the transformation of both agriculture and the rural landsacpe over the next thirty years. As he recalled, 'The custom of gleaning the fields at harvest time died out when the binder became redundant, since the combine seldom leaves oddheads of corn behind'.[34] An agricultural engineer from Steeple Bumpstead concluded in the same fashion as he remembered, 'You see as soon as the combines come that was the end of it. There was no gleaning then. That was the end of it'.[35] What emerges from the oral evidence is a picture where gleaning becomes conspicuous only by its absence from the life stories of Essex villagers as these turn to the days of the combined harvester and agri-business during post-war decades of the 1950s and '60s.

[30] Letter from Philip Buck, London, *Essex Review*, xxxiv, 1925, p 211.
[31] Hunt, 'Letter', pp 162–3.
[32] Interview with Mrs W, Helions Bumpstead, b 1933, recorded 1995.
[33] Bushaway, *By Rite*, p 147; and Morgan, *Harvesters*, p 65.
[34] ERO T/Z 25/1574, 'Some old customs', essay by Carl Morton, Great Bentley, Essex, b 1903, written 1979.
[35] Interview with Mr M, Steeple Bumpstead, b 1925, recorded 1995.

Although gleaning survived until the coming of the combine it did not go untouched by machinery. Improvements made in harvest technology had shifted the place that gleaning occupied in the domestic economies of many labouring familes. Once, in the nineteenth century, the efforts of the gleaner had been richly rewarded, as one of Alfred Ludgater's Essex gleaners exclaimed to her companion. 'I ha' sin the day, an' not so long ago, when I had to leave half m'corn in the field and come back for 't, coz I coont carry it all at once...'[36] This sentiment was shared by Eliza Vaughan as she recalled that women in her village of Finchingfield had once returned from the fields with:

> ...great bags on their shoulders full of golden corn. This was usually ground in the village windmill, and excellent loaves of bread were baked in wood-heated ovens from the cream coloured flour, which, of course retained all the nourishing properties.[37]

However, the decline in gleaning yields due to the harvest mechanization of the late nineteenth and early twentieth centuries made the time and expense involved in first threshing the ears and then paying a local miller or farmer to mill the wheat an unviable operation for individual households. Furthermore, the gradual improvements in the real wages of the Essex labourer during the late 1800s, a trend that resumed in the years between the wars, had reduced the amount of self-provisioning undertaken in the village.[38] This is not to say that the labouring family of the 1920s could cover all of its dietary requirements from the wages of its members. The vegetable plot and allotment remained a mainstay and it was a fitting testament to the efforts of men as gardeners that the same village shops that held a vast array of goods, where it was possible to buy anything from an ounce of tea to a full suit of clothes, that these same shops were bereft of green groceries. But other activites such as home-baking and home-brewing were dwindling. So much so that when the architect of a survey of working-class housing conditions in Essex published its findings in an account in 1891 he was able to remark on the number of cottages which had bakehouses but followed this observation swiftly with another which exclaimed that the facilities '...are now little used...' except as '... store rooms for wood...'[39] While in an article titled 'In Harvest Time' that first appeared in *The Land Magazine* in August, 1898, Charlotte Fell Smith wrote of her '...remote village in North Essex...' and recorded that '... most of the villagers have now given up baking at home...',[40] presumably preferring to procure their supplies from local bakers. Even those villagers who still desired to bake themselves may have found it increasingly difficult to obtain the services of a local miller who was prepared to take the time and the negligible remuneration involved in processing an individual's gleanings. In the face of competition from larger companies using the new techniques of roller-milling many village mills disappeared in the last quarter of the nineteenth century. Over a period which stretched from 1878 to 1908 the number of millers in Essex was reduced from 263 to 149. By 1937 this figure had withered to just 56.[41]

By the inter-war years few if any villagers used gleaned wheat for bread-making. In fact none of the twenty-five interviewees used for this research could recall such a practice, while their comments suggested that even the most impoverished rural household now looked towards the

[36] Ludgater, 'Letter', p 109.
[37] Vaughan, *Stream of Time*, p 84.
[38] The rises in real wages of the Essex farm labourer during the late nineteenth century are detailed in Arthur Brown, *Meagre Harvest*, Chelmsford, 1990, pp 114–7. For improvements to inter-war levels of the labourer's real wage see W H Pedley, *Labour on the Land*, 1942, chap 2.
[39] John C Thresh, *The Housing of the Working Classes in the Chelmsford and Maldon Rural Sanitary Districts*, Chelmsford, 1891, p 9.
[40] Charlotte Fell Smith, 'In harvest time', *Essex Review*, xxxiv, 1925, p 243.
[41] *Kelly's Directory of Essex*, 1878, 1908, and 1937.

village bakery for their supplies. As one Steeple Bumpstead man remembered of the village in the 1920s:

One of the head blokes in the village was a baker and if it hadn't been for him lots of people would've starved 'round here. 'Cos he'd go 'round with the bread and when he'd get to the door the woman'd say, 'I can't afford to buy the bread.' He'd say, 'Ne'er mind girl, you have one and pay me when you can.' And he left her bread perhaps three days a week. And when he went 'round the last day of the week she'd most probably found some money and paid him for it. There'd been scores of people gone without bread if it wasn't for him.[42]

A noticeable shift emerges in the reasons given for gleaning when the written reminiscences of Essex villagers living in the late nineteenth centurey are compared to the oral testimonies of those who grew up between the wars. For the earlier generations the rationale behind gleaning was still tied very closely to procuring enough wheat for flour and then bread-making. As one anonymous gleaner born *c* 1880 wrote of her childhood experiences in Great Horkesley, near Colchester:

In those days there were many gleaners to be seen in the fields (including my mother and myself) this wheat would be ground into flour by the farmers (free of charge to the workers), money was very scarce and this flour was for our use during the winter.[43]

This view was echoed by another gleaner born in 1876 at Broomfield, near Chelmsford, who remarked: 'After Harvest we would glean enough wheat to provide us with a sack of flour, and mother baked sixteen quartern loaves at a time'.[44]

By the inter-war years the motivation of the gleaner had changed. Under the influence of improved living standards and less profitable returns on their labour, villagers now gleaned for their animals and not their own consumption. Those people with pigs and especially those with chickens continued to prize gleaning as a welcome opportunity to add to their household economies with a free source of animal feed. The straw from gleaning was also valued for its use as bedding for the animals and as a lining to the earth clamps used by gardeners to store the root crops which acted as such an integral part of the effort to feed the family through winter. Gleaning for animal feed held the distinct advantage of not requiring milling, and it could also be composed of several crops including wheat, barley and beans, whereas gleaning for flour was restricted to wheat alone and of course demanded to be ground. Although none of the inter-war gleaners from Steeple Bumpstead, Helions Bumpstead and Toppesfield had spoken of gleaning for the purposes of home-baking, all mentioned it as a welcome source of sustenance for their animals. One woman described how in the 1920s she and her sisters were sent by their mother to glean expressly for this purpose: 'Oh we had to go and pick up enough corn to feed the chickens in the winter, that was our job'.[45] Her friend and neighbour remembered:

Another thing we used to do, that only happened in harvest time, me grandmother used to keep chickens, we'd go out gleaning. We'd go out into the fields once the farmer had carted his corn, and you'd go and gather wheat. You'd get a bottle of lemonade and a piece of cake. We'd sit and eat our meal in the field.[46]

The same explanation was given by a Toppesfield woman:

Yes we used to go gleaning. My mother would go gleaning. But we only had four or five hens, we didn't keep a lot, we just kept enough for ourselves. We used to go gleaning for other people who had lots of hens and then they'd give us money or cakes.

[42] Interview with Mr T, Steeple Bumpstead, b 1916, recorded 1992.
[43] ERO T/Z 25/27, 'Essex memories', esssay by anonymous author, b *c* 1880, Great Horkesley, Essex, written 1955.
[44] ERO T/Z 25/63 'Childhood memories', essay by L Turvey, b 1876, Broomfield, Essex, written 1956. The link between gleaning and bread-making is made by a number of other writers in this collection of essays. In all instances the experiences of gleaning come from childhood in the late nineteenth century. See ERO T/Z 15/17, T/Z 25/27, and T/Z 25/33 (all written in 1955); also T/Z 25/64 (written in 1956).
[45] Interview with Mrs S, Steeple Bumpstead, b 1908, interviewed 1992.
[46] Interview with Mr A, Steeple Bumpstead, b 1908, interviewed 1992.

Did anybody glean to make bread?
No, I don't remember anyone making bread because we were quite well off with bakers here.[47]

The popularity of gleaning as a means of procuring inexpensive animal feed ensured that it continued well into the twentieth century. Furthermore, it seems it even enjoyed something of a renaissance during the Second World War before disappearing in the 1950s. At a time when strict austerity policies placed commercially available chicken and pig feeds on the lengthy list of rationed goods a growing number of villagers were prepared to return to the fields.

III

If technological change and changes to the household economies of rural people were not enough to end the practice of gleaning until after the Second World War then their combination was sufficient to cause the swifter cessation of the customary framework that had once surrounded gleaning in Essex. The attitudes of rural communities to these customs were pragmatic. They were observed and practised just so long as the demand for controls to gleaning were needed. While the harvest produced enough wastage for farmers to be concerned about their yields then gleaning would be regulated from their side by the use of a guard sheaf. While the bounty of the gleaning fields drew the whole community of labourers and tradesmen to them, offering a munificent and valuable addition to domestic diets, then gleaning also required customary regulation on the side of villagers. It was here that the gleaning bell and, to a lesser extent, the gleaning queen fulfilled requisite controls safeguarding equitable shares for all those willing to labour. In the late nineteenth century the horse-drawn reaper-binder and horse-drawn rake reduced the contents of the gleaner's 'cotty' bags and the demand for gleaning fell. Decline was enhanced by the slow but pervasive changes occurring to the domestic economies of the rural working-class. Central to these changes and most important for the fate of gleaning was a shift away from the home-baking of bread. In the course of the dual processes of mechanization and changing household economy the position of gleaning was transformed from one in which it had been a communal labour process involving a singificant majority of the village to one on which a minority, those with chickens and pigs to feed, relied. As gleaning was moved from the centre to the margins of the village economy its customary regulations lost authority and therefore purpose. Issues of who should be allowed to glean and when slipped from the collective concerns of villagers. In this respect the loss of gleaning customs can be viewed alongside the diminution of others which were once integral to the harvest such as the harvest horkey, the harvest 'lord', the custom of largess and the bringing in of the harvest bow.[48] It might be interesting to note here that the Essex villagers who failed in their oral testimonies to recall the guard sheaf, the bell and the queen could also only recall other harvest rites and rituals as part of the inheritance of stories, folk-tales and local myth told to them by parents and grandparents whose own working lives had dated from the years of the nineteenth century.

This is not to say that gleaning continued in the twentieth century without any regulation. Farmers still gave their consent in allowing villagers to enter their fields. But the mechanisms of control were now informal; a farmer's permission being given through the medium of his men who would pass on this message to their families. To repeat the words of one inter-war

[47] Interview with Mrs E, Toppesfield, b 1929, interviewed 1992.

[48] For the gradual loss of these and other customary practices see Bushaway, *By Rite*, chap 4.

gleaner, 'Dad used t'come home for his breakfast and say, "Oh, you can go up Hungerdown today, the field is ready". So off we used to go...'[49] No longer did women and children stand patiently by the gates of fields singing songs and exchanging news while waiting for the symbolic last stook to be removed.

The gleaners themselves also continued their labour with some informal regulation of their own. From an elderly gleaner writing in the 1980s comes detail of a gleaning dispute from the 1920s at Parndon, an Essex village standing near its border with Hertfordshire:

> Seldom was there any conflict between the gleaners, but rather good-natured gossip and laughter. I do recall one occasion, however, in 'Five Acres' (now a residential area of Harlow) when there was a bit of bad feeling. A well known Parndon lady, a Londoner by birth and upbringing strode across the field to another lady and said tartly: 'Madam, I have reason to believe that you do not live in this parish; if that is so, I would remind you that gleaning here is for the people of Great Parndon only.' Duly chastened, the lady (from Nettleswell) gathered up her children and gleaning and strode away.[50]

In other words the rules that had once governed gleaning could still be evoked where gleaners felt their rights had been transgressed. However, the methods which they used to rectify these transgressions lacked the common customary symbolism that had once been present. There was no election of a gleaning queen in Parndon to warn off the prospective gleaners of neighbouring villages. When the 'well known Parndon lady' chose to stride across the field in order to challenge a foreign gleaner she did so only with the belief that what was grown in the parish belonged to its people but significantly she acted without the authority of the customary office of a gleaning queen.

[49] Interview with Mrs S, Steeple Bumpstead, b 1908, recorded 1992.
[50] Jim Priest, 'The fellowship of the fields', *The Essex Countryside*, 29, 1981, p 53.

IV

Gleaning was in decline during the first half of the twentieth century when it was yielding a diminishing reward even to the most industrious villager. Machinery had combined with changes to the rural household economy to undermine the central position that it had once held in every labouring family. The women and children of Essex villages were no longer entering the harvested fields in the numbers that their mothers and grandmothers had done. Nevertheless, for those households that kept animals gleaning could still offer an additional source of assistance that many villagers were unable or else unwilling to forsake. Given a good harvest, a gleaner might still gather enough material to supply the family chicken coup throughout winter. It was this incentive which meant gleaning remained a relatively common sight in many Essex villages beyond the late nineteenth century until its denouement in the 1950s with the wholesale adoption of the combined harvester.

Although gleaning continued well into the twentieth century its form did not go unaltered. The declining amount of harvest wastage left by machinery for the gleaner and its declining value in the eyes of both farmers and the rural working-class provides an explanation as to why the customs that had once acted to regulate the activity had now disappeared. Put simply, there was less gleaning to be done, fewer gleaners willing to do it, with less in terms of the household or the farm economy at stake. By reducing the numbers involved in gleaning and the pressure on its supply the customary of control provided by the gleaning bell, the guard sheaf and the gleaning queen was no longer needed to fulfil its once vital role in ensuring an equitable supply to all. These practices therefore slipped from the common currency of the Essex village so that while a significant minority of rural working-class people continued to glean they did so

without the accompaniment of collective custom that had gone before. The economic necessity for gleaning had outlived the accompanying gleaning rituals that in turn had formed part of the wider social framework of customary practices that had once thrived in villages. If we return one last time to H E Bates' elderly woman and her labour, we might conclude that though she was not 'the last of the gleaners' she may indeed have been one of the last to remember the activity in the full context in which it had once taken place.

The Contribution to Agricultural Research of an Australian Woman Scientist

By NESSY ALLEN

Abstract

Agricultural science was not a discipline often followed by young women in Australia in the 1930s. An exception was Yvonne Aitken who specialized in the adaptation of agricultural species to climate through flowering responses. Encouraged by her mentor, Aitken stayed at the University of Melbourne after her graduation to work on her Master's degree. For several years thereafter she continued with her research on subterranean clover. Appointed to the full-time staff in the mid-1950s, she spent the rest of her working life at the university. Her work covered many continents and many climates: in the early 1960s she made a systematic study of temperature and daylength in early- and late-flowering varieties of nine agricultural species; in the early 1970s she began a breeding programme on maize, a programme she is still continuing nineteen years after her official retirement. Her achievement was to help plant scientists in selecting more rapidly varieties of a desired species with the appropriate growing period to match a specific climate in temperate or tropical zones.

DURING the early part of this century science was rarely regarded as a suitable vocation for women. Few entered the physical sciences,[1] more the life sciences,[2] though agricultural science in particular was very much a male domain. In Australia an exception was Yvonne Aitken, who specialized in the adaptation of agricultural crops to climate through flowering responses, to such good effect that in 1970 she was awarded the degree of Doctor of Agricultural Science, the first woman to be so honoured by her university. The citation for her degree reads in part: 'the results of her physiological studies have had important applications in plant ecology and genetics. They have enabled agricultural scientists to predict and explain the geographic and climatic limits of different plant species and genotypes and they have thus provided important guidelines for plant breeding programmes'.

This article deals with Aitken's life and work. It is derived from a major study of eminent Australian women scientists active during and after the Second World War, concentrating at present on those who have retired and who are available to be interviewed. The major aim of the project, which draws on both personal interviews and archival information, is to clarify the achievements and document the contributions of women who have helped the advance of science.

I

Australia is usually regarded as an agricultural country, yet even in the early 1960s only 10.3 per cent of the population was employed in rural industries[3] and this figure had dropped to 7 per cent by the mid-1970s.[4] The farm sector was contributing a relatively small and declining proportion of GDP; in fact it fell from 21 per cent in 1948–9 to 7 per cent in 1979–80.[5] The sheep industry was the largest though wheat

[1] See Nessy Allen, 'Australian women in science – a comparative study of two physicists', *Metascience*, 8, 1990, pp 75–85.

[2] See Nessy Allen, '"The sea has many voices": profile of an Australian woman scientist', *Journal of Australian Studies*, 38, 1992, pp 41–50.

[3] D H McKay, 'Agriculture in the economy' in D B Williams, ed, *Agriculture in the Australian Economy*, Sydney, 1967, pp 128–9.

[4] A G L Shaw, 'History and development of Australian agriculture', in D B Williams, ed, *Agriculture in the Australian Economy*, Sydney, 2nd ed, 1982, p 19.

[5] A Stoeckel and G Miller, 'Agriculture in the economy', in Williams, *Agriculture*, 1982, p 168.

was Australia's major crop,[6] but by the end of the 1970s wheat had overtaken wool as far as the value of agricultural exports was concerned.[7] The export trade was the primary one; as an exporter of agricultural products Australia ranked second to the USA in the 1960s[8] and fifth in the early 1980s.[9]

By the time Aitken started her university studies, the great period of agricultural expansion in Australia, between 1880 and 1930, had taken place and large areas of drier country had been opened up for wheat.[10] One of these in Victoria, Aitken's home state, was the Mallee in the north-west, where she was to do much of her work; it is one of the driest areas ('a symbol of man's attack on the dry interior'[11]), with sandy soil, eroded by wind[12] and subject to extreme droughts and very high temperatures.[13] In Victoria, agriculture was the biggest industry even in the 1950s when its production averaged £Australian 290 m per annum.[14] It had always contributed over 90 per cent of the total value of the state's exports.

The major role of the State Department of Agriculture, from its founding in 1872, had been 'to develop research of special advantage to Victoria's agriculture'.[15] In the early part of this century, however, farmers generally were sceptical about science and scientific methods. It was not till the decade of the Depression that it was realized that scientific experimentation was important and that the resulting technical knowledge could increase the fertility of the soil and the efficiency of production. In such a vast, and on the whole dry country as Australia, with widely varying climatic conditions, it is clearly of enormous economic as well as scientific significance to have knowledge of the factors underlying agricultural production. An example is provided by the study of the factors controlling the change from the vegetative to the reproductive stage in different crop species; some varieties of plants may flourish in one place but not in another, even when the climate appears to be similar.

In the circumstances outlined it is surprising perhaps that it was not until 1906 that the Council of the University of Melbourne created a Faculty of Agriculture and not until 1911 that a professor was appointed, when the state government agreed to meet the costs of his salary for five years.[16] From the beginning there was a close connection between the State Department of Agriculture and the university. The founding professor was the former State Director of Agriculture; but when the government refused to renew the grant in 1916, his appointment was terminated. The connection was reinforced, however, by the appointment in 1917 of the man who had pioneered wheat breeding in Victoria, Dr A E V Richardson, Superintendent of Agriculture in the State Department, to teach two days a week and act as Director of the Faculty.[17]

The new Director of the State Department, Dr S S Cameron, who believed in teaching based on precise experiment rather than on informed opinion,[18] was able in 1920 to persuade the government to pass the Agricultural Education Act

[6] McKay, 'Agriculture in the economy', p 145.
[7] Stoeckel and Miller, 'Agriculture in the economy', p 177.
[8] S F Harris, 'Agricultural trade and trade policy', in Williams, *Agriculture*, 1967, pp 315–6.
[9] S Harris, 'Agricultural trade and its international trade policy context', in Williams, *Agriculture*, 1982, pp 383–4.
[10] Samuel Wadham, 'Development of agriculture', in G W Leeper, ed, *The Australian Environment*, CSIRO and Melbourne, 1966, pp 52–3.
[11] G W Leeper, 'Climate', in G W Leeper, ed, *Introducing Victoria*, Melbourne, 1955, p 10.
[12] G W Leeper, 'Soils and their productivity', in Leeper, *Victoria*, p 50.
[13] R T Patton, 'Vegetation in Victoria', in Leeper, *Victoria*, p 63.
[14] Australia's currency was the Australian pound until 1966, when the Australian dollar was introduced.
[15] D S Wishart, 'A century of service to farmers', *The Journal of Agriculture*, Victoria, 70, 1972, p 214.
[16] Ernest Scott, *A History of the University of Melbourne*, Melbourne, 1936, p 203.
[17] Geoffrey Blainey, *A Centenary History of the University of Melbourne*, Melbourne, 1957, p 161.
[18] K M Sillcock, 'One man's vision, many men's work', *The Journal of Agriculture*, Victoria, 70, 1972, p 227.

which provided the University of Melbourne with money for building, equipment and agricultural research. By this act, the university was to provide up to twenty free places a year within the faculty and the government was to appoint up to six graduates a year on a reasonable salary.[19] Needless to say, the faculty began to grow. By the time Aitken began her studies in 1930 there were nearly seventy undergraduates; in 1919, before the passing of the act, there had only been two.

In 1924 Richardson resigned to take up appointment as Director of the Waite Agricultural Research Institute in Adelaide. By this time the faculty, though not large, was important enough for the university to secure the appointment of one of the best botanists of the University of Cambridge. Professor (later Sir) Samuel Wadham took up the chair in 1926 and occupied it for thirty years with the greatest distinction. He was not a conventional academic. Although, like others at the time, he thought universities were primarily teaching and examining institutions, unlike most he thought they should also engage in research and, in the case of agricultural faculties, promote agriculture in as many ways as possible. In fact agricultural research in Australian universities only became significant after the Second World War,[20] and Aitken was by then one of the scientists contributing to this effort.

Within weeks of his arrival in Melbourne, Wadham was touring the Victorian countryside, meeting farmers and examining crops; he was to continue his interest in the people on the land and their concerns for the rest of his life. His approach was informal, whether lecturing to his small group of students or discussing agricultural problems with farmers. He had done such good work in a few years that in 1934 he was appointed a member of a Commonwealth Royal Commission to investigate the state of the wheat, flour and bread industries. In 1943 he was one of the four members of the Rural Reconstruction Commission set up to investigate the present and future position of Australian agriculture. He was a member of the Council for Scientific and Industrial Research (CSIR)[21] and for some years a member of its executive. He sat on committees of various public bodies and was awarded many honours and distinctions. Altogether he exerted an enormous influence on the development of agriculture in Australia.[22] Despite this very active public life, however, Wadham always had time for his students and he influenced and helped many of them, including Yvonne Aitken.

II

Aitken, the elder of two sisters, was born in 1911 in Horsham, a country town in Victoria. As her father was a bank manager, the family moved several times, but chose always to stay in country towns. No doubt this is why Aitken grew to love the countryside, though it does not explain her interest in science, an interest evident from an early age. Her parents were well aware of the value of education and her mother in particular was always encouraging. The Sisters of Mercy had an excellent reputation for their teaching, especially at high school level, in the many country schools which they had established. Aitken's mother ensured that her daughter was educated at the Convent of Mercy in whichever town the family was situated. By the time Aitken was nearing matriculation, however, the Depression was affecting even professional

[19] H A Mullett, 'Scientific agriculture in Victoria', *Journal of the Department of Agriculture*, Victoria, 1955, p 339.

[20] J E Jessup and R B Dun, 'Organization and administration', in Williams, *Agriculture*, 1982, p 106.

[21] The Council for Scientific and Industrial Research (CSIR) was an Australian government research organization, which was replaced in 1949 by the Commonwealth Scientific and Industrial Research Organization (CSIRO).

[22] *Sir Samuel Wadham: Selected Addresses* (with a biographical study by Geoffrey Blainey), Melbourne, 1956, pp 9, 12–13; Blainey, *University of Melbourne*, p 162.

people; fortunately she won a scholarship for the last two years of schooling to the Sacred Heart College in Ballarat where the teaching was exceptionally good. Though Ballarat was a large town, the school did not teach physics or chemistry—very few girls' schools in Australia did at that time—but Aitken was able to study geology and botany, both of which were taught well by enthusiastic teachers. On matriculating, she won a Government Free Place to the University of Melbourne; these were state scholarships offered during the Depression in specified disciplines; the free place which Aitken won was in Agricultural Science. It was thus by chance that her career was established in agriculture.

Her interests at school had been wide and continued to be so all her life. She was fascinated by English, by history, by French, and had the scholarship been in any of those subjects, she would have accepted it. As it was, her natural curiosity propelled her along the scientific path and though the scholarship may have dictated her choice, she was more than happy to accept it and be able to go on to university.

Her sex, however, almost put a stop to her aspirations at their inception. None of the nuns at the college had ever heard of a girl doing agricultural science and her parents were dubious about giving her permission to go. Chance again favoured her. The brother of one of the nuns was in the Department of Agriculture. A broad-minded man, he assured his sister that not just one but two girls had already undertaken the course: it was a suitable subject of study for a lady and the department needed more scientists. The nuns, persuaded, were able to reassure Aitken's parents that agricultural science would in fact be a suitable course for their daughter to follow.

The course, which had been started before Wadham's arrival, was designed to train students in science as it applied to agriculture, the first year consisting of botany, zoology, physics and chemistry.[23] Aitken started at the university in 1930, very much handicapped by the fact that she had no background in physics, chemistry or zoology. She caught up though, with the help of some women demonstrators whom she describes as 'pure gold'.[24] Unlike some of her female contemporaries who were intimidated by being the only girl in their class, she found herself one of four girls in a class of seven. But her good luck ran out at the end of her second year. She became extremely ill and was unable to return to the university for two years. Fortunately – for her parents would not have been able to afford to send her back – the free place was still available to her and she continued her course, now one of only two girls in the class. She was undaunted by this, partly perhaps because, most unusually for those days, there was a woman lecturer on the staff who was generous in her support of all the students. In addition, in a small and friendly school, her professor was very encouraging.

Aitken graduated in 1936 and was keen to start research training in preparation for her Master's degree. (There was no doctorate offered in Australian universities until after the war.[25]) While recuperating at home after her illness, she had had the opportunity to meet a few farmers and had become interested in their difficulties. The question now was, which of the many problems needing investigation – every one of which she found fascinating – should she tackle? And what would she live on?

Wadham solved both problems. It was not the first, nor the last, time he helped her. When she first won the free place to university, the dilemma of where to live loomed large; without suitable accommodation, she could not have accepted the

[23] *Wadham: Selected Addresses*, p 6.

[24] From an interview with Yvonne Aitken. Unless otherwise stated, all the statements made by her are from interviews conducted by the author.

[25] Farley Kelly, 'Learning and teaching science', in Farley Kelly, ed, *On the Edge of Discovery*, Melbourne, 1993, p 43.

scholarship. Wadham personally phoned the principal of one of the women's colleges, Janet Clarke Hall, in order to get her accepted. He had a very great and positive influence on her career, acting as a mentor from the time she first went to the university right up till his retirement. He made her feel she was a member of a small family and that therefore there was no difficulty in approaching him when something special was required. ('He gave me all that was needed'.) Although he clearly had a sense of responsibility, for example telling his women students early in their course that they had very little chance of getting a job on graduation, and that farmers would be prejudiced against them from the beginning, he must have thought very highly of Aitken because he singled her out immediately on her graduation. It is likely that some of her success can be attributed to his influence – the literature on mentoring shows that those who have had mentors, whether in business[26] or in academia,[27] have more successful careers than those who have not.

Now, to enable Aitken to stay at the university and go on with her research, Wadham offered her a small research grant, which was renewed yearly. It was not enough to live on, but fortunately her parents had by this time decided to settle in Melbourne and she was able to live at home; she also supplemented her meagre income by demonstrating both in the Botany Department and the Faculty of Agricultural Science.

The question of her research training was also answered. 'Nitrogen is the primary limiting nutrient for pastures. Australian pastures rely heavily on the fixation of atmospheric nitrogen in the root nodules of legumes to meet their needs. Indeed the function of phosphatic fertilizer is largely to promote the growth of the nitrogen-fixing legumes, rather than to meet the usually lower needs of grasses for phosphorus'.[28] Before chemical fertilizers were widely used, rotations using legumes were introduced as a means of restoring soil nitrogen, but a vigorously growing legume had to be found.[29] The legumes being introduced in Britain were not suitable, as growing seasons in Australia were much shorter.

The Department of Agriculture had become interested in subterranean clover (*Trifolium subterraneum*), the advantages of which had already been pointed out in the late nineteenth century. This plant, which is native to the Mediterranean area where the climate is similar to that of large parts of Victoria and 'which was to make so great an impact in subsequent decades',[30] had been introduced accidentally. It is a reseeding winter annual and can therefore be grown in areas which receive less than 500 mm of annual rain,[31] a great boon in the generally dry Australian climate. There had been difficulties about harvesting the seeds, however, and it was not till the 1920s that it was found that top dressing with superphosphate resulted in increased yields.[32]

By the 1930s the clover was beginning to be commercialized because it had shown some promise in South Australia, though it was not till the 1950s that subterranean clover pastures were used on a large scale in Australia.[33] Since 1928 the Victorian Department had been collecting a range of samples of subterranean clover from dairy areas of the state and from botanical gardens in several countries in Europe. This pion-

[26] Gerard R Roche, 'Much ado about mentors', *Harvard Business Review*, 57, 1979, pp 14–16, 20, 24–28.

[27] William Lyons, Don Scroggins and Patra Bonham Rule, 'The mentor in graduate education', *Studies in Higher Education*, 15, 1990, pp 277–285.

[28] Tim Anderson, ed, *CSIRO Research for Australia: Agriculture*, 16, CSIRO, Canberra, 1987, p 38.

[29] Bruce R Davidson, *European Farming in Australia*, Amsterdam, 1981, p 26.

[30] Samuel Wadham, *Australian Farming, 1788–1965*, Melbourne, 1967, p 33.

[31] Anderson, *CSIRO Research*, p 36.

[32] Davidson, *European Farming*, p 322.

[33] *Ibid*, p 337.

eering selection work was being undertaken by the Pasture Branch of the Department at Burnley Gardens, a plant research laboratory in Melbourne. At Wadham's suggestion, the pasture scientist in charge of this research invited Aitken to help with the listing of inherited characters obvious in the various samples, a project which extended in several ways from 1936 to 1955.

In addition to ranking the characters, two were selected for special study at the School of Agriculture. The first was the variability in plants in relation to the time taken to reach maturity and the relationship of that to the time of sowing; the second was the high level of 'hard' seeds. Farmers were finding that only about 1 per cent of the seeds would germinate because they were hard. Softening was being achieved by scratching the waxy surface of the seedcoat with sandpaper and by the roughened internal surface of commercial seed harvesters. Aitken began to investigate that character of the hard seed which made the seedcoat impermeable to water and which therefore prevented germination. Experiments showed that several treatments changed hard seed to soft – widely alternating temperatures, freezing and thawing, and percussion (bouncing or shaking the seed). She was able to confirm two major points: first, that the natural softening of hard seed, in or on the soil, could result from alternating daily temperatures, especially over summer, and secondly, that the commercial softening by machine harvesting was much more the result of 'bouncing' than of scratching the seedcoat surface.

The hard seed problem was selected as the theme for her Master's degree (awarded in 1939) and became the subject of the first paper she gave to the Royal Society of Victoria.[34] The other study, on variability in plants, was carried out with another postgraduate student and resulted in a joint paper, also published by the society two years later.[35]

III

Aitken continued to work on aspects of subterranean clover for many years. The species is now a major one in Australia, grown over about 16 m ha. It was her work in cooperation with many other colleagues which showed the importance of genetic differences in the plant's flowering response to climatic factors, temperature and photoperiod (that is, length of daylight). These differences are the basis for the range of early to late varieties and explain their development rates in different climates.

In 1938 Aitken's research programme was enlarged to include another legume. The results of crop experiments on wheat in Victoria over the previous fifty years had shown a very disturbing trend. Carl Forster, a former student of the faculty and now an Agricultural Research Officer in the Cereal Branch of the Department of Agriculture, had discovered that yields were decreasing despite the introduction of higher yielding varieties, and despite the use of improved fertilizers. He and Professor Wadham suspected that the amount of nitrogen in the soil was inadequate. A possible way to reverse the trend was to include a rotation crop in which a vigorous legume with an efficient association with *Rhizobium* nodule bacteria on its roots would raise the nitrogen status of the soil.[36] Subterranean clover was showing promise as the vigorous pasture legume in the wheat country with longer growing seasons, but not in the drier country like the Mallee with its short and erratic grow-

[34] Yvonne Aitken, 'The problem of hard seeds in subterranean clover', *Proceedings of the Royal Society, Victoria*, 51, 1939, pp 187–213.

[35] Yvonne Aitken and F R Drake, 'Studies on the varieties of subterranean clover', *Proceedings of the Royal Society, Victoria*, 53, 1941, pp 342–393.

[36] Wadham, *Australian Farming*, p 90.

ing seasons. It was decided to test higher yielding, early maturing varieties of field peas as a rotation crop in the drier areas of the Victorian wheat belt,[37] and to establish whether the customary period of fallow which preceded the wheat crop could be dispensed with. The peas could supply a high protein seed crop and also raise soil fertility through the manurial value of the pea stubble from sheep grazing and from the nitrogen-fixing activity of the *Rhizobium* nodules on the pea roots.

Forster approached Wadham for help in the study, and the latter had no hesitation in recommending Aitken. Initially her interest was caught by the dry Mallee district of northern Victoria because this area has a limited rainfall and plants have to develop quickly in a short growing season. It was the practical problem of developing plants which could do that to which she applied herself for so long and which she so successfully solved.

Wadham also arranged for her to have some research assistance on the pea project, an undertaking which developed in several directions. Over many years she studied the possibilities of improvement of the pea crop for increased grain protein in the wheat areas of Victoria. In fact Aitken herself bred a commercial variety of field pea which is particularly well suited to northern Victorian conditions, a variety named 'Derrimut' after the University Field Station. (It was during this period that officers of the Dookie Agricultural College christened her 'Miss Peabody' – she was out in the sun all day with her sun hat on working with students on field peas.[38])

By now she had spent some nine years working on her research and demonstrating at the university, continuing on the small annual research grant that Wadham arranged for her. It was just after the war and again a series of events came together to favour her progress. Wadham was deeply involved with the Rural Reconstruction Commission and the time he could devote to lecturing was limited. Furthermore, the university was trying to cope with the influx of returned servicemen and needed extra staff. Wadham therefore arranged for Aitken to be appointed to a lectureship and she thus joined the full-time staff of the university in 1945.

By 1949 she was testing crossbreds of field peas at several stations in Victoria and at the Waite Institute in South Australia, and by 1952 was getting encouraging results in higher yielding varieties in both drilled and handsown plots. Wadham had suggested that the pea breeding programme be extended because the Horticulture Branch of the Department of Agriculture and the Heinz Company were interested in the potential for increasing the yield of commercial canning pea crops. This research project lasted from 1949 to 1968 and laid the foundation of knowledge on the yield characters of both the canning pea and the fresh vegetable pea, in the southern Victorian climate, when sown in spring for summer cropping.

In the meantime Aitken was continuing her work on subterranean clover and in 1953 could report: 'It has been found that late varieties [of subterranean clover] like those of some other plant species require an exposure to cold for some months before flower initiation occurs. The length of day affects the length of cold requirement... In early varieties, long daylight can substitute for low temperature. These differences between the early and the later flowering forms can be related to the potential use of the varieties in different parts of Australia'.[39] In other words, her aim now was to be able to predict where

[37] Thomas Cherry, *Australian Settlement*, Melbourne, 1935, p 162.

[38] This story was told to the author in February 1994 by Dr Jack Meagher, who became Chief of Plant Research and Development in the Victorian Department. Aitken had lectured to him on subclovers and legumes when he was a student.

[39] N H Olver, ed, *University of Melbourne Report of Research and Investigation 1953*, Melbourne, 1953, p 1.

the species could be successfully introduced. By 1957 she had determined that the nature of early and late flowering varieties was due to genetic causes and that these were greatly affected by the environmental factors of photoperiod and temperature. She then began to widen the research to a perennial pasture legume, several ryegrass species and the four annual cereals, especially oats.

Dr L T Evans describes her early work as follows:

> At its outset, Aitken's work was shaped by the views on variation of the great Russian plant geographer, N I Vavilov, by the methods of the Carnegie group under Clausen at Stanford, and by the findings of Garner and Allard on the importance of daylength in the control of flowering time. Her first paper on this subject (with F R Drake, in 1941) exploited the technique of serial sowings of many subterranean clover strains at many locations and showed convincingly that the first step in the reproductive process, flower initiation, was predominantly responsible for the great variations in flowering time between strains and between environments. This sharpened the attack and Aitken went on to show, in her classic papers of 1955,[40] some of the ways in which inductive cold (vernalization), daylength and temperature interacted in the control of flower initiation. Other investigators working with other plants had found comparable interactions but, for myself at least, Aitken's findings were the most powerful example at that time of the adaptive flexibility of environmental control of flowering time.[41]

When Wadham made the decision that he would retire in 1956 (partly because of ill health), he arranged that Aitken should take the calendar year of 1955 as a sabbatical year, during which he generously took over her teaching. He arranged for her to go to the University of Cambridge to his former teacher, Professor F Engledow. There she grew a range of pea varieties in spring and summer and found that 'later flowering varieties were accelerated in "flower initiation" by the lower temperatures and longer day of the English latitude compared with the same factors in Melbourne'.[42] She spent most of that year in England but also visited many agricultural institutes in various countries of Europe. These visits enabled her to collect information 'on the type and yield of pea crops in a range of growing seasons: for example, that at Larissa in Greece, where the crop is autumn sown and spring harvested, and that at Lannas in northern Sweden, where the crop is summer sown and harvested'.[43] On her return she was able to report that 'in general, the problem of yield in crop and pasture in Europe was found to be much like that in Australia, and the methods of attacking the problem the same'.[44]

When she returned to the university, Wadham made arrangements for her to be promoted to senior lecturer. The promotion took effect in 1957 shortly after his retirement and under a new professor, H C Forster.[45] Now Aitken no longer had the kind of personal support that Wadham had provided. But she had begun establishing her networks early. She had given her first conference paper in 1939 to a meeting in Canberra of the Australasian Association for the Advancement of Science on the control of flowering in subterranean clover. There she first established relations with many other Australian as well as overseas participants; as a result she was able to ask colleagues from the CSIRO and the Queensland Department of Primary Industries to sow the clover varieties she was working on in Western Australia and

[40] Yvonne Aitken, 'Flower initiation in pasture legumes I-III. I. Factors affecting flower initiation in *Trifolium subterraneum* L; II. Geographical implications of cold temperature requirements of varieties of *Trifolium subterraneum* L; III. Flower initiation in *Medicago tribuloides* Desr. and other annual medics.', *Australian Journal of Agricultural Research*, 6, 1955, pp 212–64.

[41] Dr Lloyd T Evans, former Chief, now Hon Fellow, Division of Plant Industry, CSIRO, in a letter to the author, February 1994.

[42] N H Olver, ed, *University of Melbourne Report of Research and Investigation 1955*, Melbourne, 1955, p 6.

[43] Yvonne Aitken, 'Report on sabbatical leave 1955 to Melbourne University Council', 1956, p 3.

[44] Yvonne Aitken, 'Overseas research in crops and pastures', *Seed and Nursery Trader*, 54, 1956, p 17.

[45] Forster had been a pioneer of statistical plot work in the Victorian Department of Agriculture. Before his appointment to the chair, he was an assistant executive officer in CSIRO.

Queensland, climates which are much hotter than that of Victoria.

In 1962 the cereal research project included a special experiment (in conjunction with the Department of Agriculture at the University of Sydney) with wheat varieties to provide evidence on the flowering character of the first wheat grown in Australia, commonly assumed to have been the 'Lammas' varieties of the English late winter wheat group. In fact the findings suggested that the first wheats must have been of the early type, probably introduced from Mediterranean stocks via Rio de Janeiro, Brazil, after failure of the seed brought from England and South Africa and sown in 1788.

Another project established that the early maturing varieties of wheat, barley, oats and rye used in the cereal belt of southern Australia had very similar development rates to one another, in contrast to the very late varieties. The fast development of the early group suggested that these varieties would be early maturing when sown in winter in northern Australia, and this was found to be so. Aitken stated in 1962 that 'such a genotype should be of use in a short growing season whether at low or high altitudes'.[46]

The conference at which Aitken made her most valuable overseas contacts was the Canberra Symposium on Environmental Control of Plant Growth, to mark the opening of the CSIRO 'Ceres' phytotron in 1962. Here she met Dr William M Hiesey from the Department of Plant Biology in the Carnegie Institute of Washington at Stanford, California, Professor D Chilcote from the State University of Oregon, Corvallis, and Dr J P Cooper from the Welsh Plant Breeding Station at Aberystwyth in Wales. As a result of these contacts and her acquaintance with Dr E Britten of the School of Agriculture at the University of Hawaii, who was working in a similar field and had spent a study leave in the Melbourne Faculty, she was able to spend most of her 1963 sabbatical in California and Wales, together with a week in Hawaii. In North America, she carried out her research not only at Corvallis and the Carnegie altitude plots (at Stanford, and at their centres in the Sierra Nevada Mountains at altitudes of 4600 ft and 10,000 ft) but also at the University of Saskatchewan in Saskatoon, Canada. The comparative development project she was involved in concerned a systematic study of the effect of temperature and daylength on early and late-flowering varieties of nine agricultural species, including cereals, rye grasses, clovers and peas. Again she found that the flower initiation of early-maturing varieties was less affected by climatic factors than the late ones. Temperature, not daylength, was the main factor affecting the growing period (sowing to ripe seed) of both types of varieties in each of the cereals.[47] Unexpected genetic variation within varieties of cross- as well as self-fertilized species was also found.[48] During that year she also visited research centres at Iowa State University, Harvard University, Boulder University, Colorado, and several research institutes in the USA, and attended conferences in her speciality.

Aitken continued this work throughout the 1960s. She also began a study of the rate of leaf appearance in a range of agricultural species in relation to genetic and environmental variation. Her finding was that there was a high positive correlation with temperature except under conditions of moisture stress.[49]

[46] *University of Melbourne Report of Research and Investigation 1962*, Melbourne, 1962, p 6.

[47] Yvonne Aitken, 'Report to the Victorian Wheat Research Committee on study leave, May 1963 to June 1964', 1964, p 2. The Victorian Research Committee gave Aitken a grant of £Australian 400 towards this research.

[48] *University of Melbourne Report of Research and Investigation 1964*, Melbourne, 1964, p 6.

[49] *University of Melbourne Report of Research and Investigation 1969*, Melbourne, 1969, pp 9–10.

Her 1970 sabbatical extended her range of observation even further – to Peru, to the highlands of Mexico, to Alaska. In the highlands of Mexico at an altitude of 7200 ft, latitude 20°N, the mean temperature in the winter is similar to that of the Victorian spring, but daylight is a little less than twelve hours. The centre of Alaska at 500 ft elevation, latitude 65°N, has twenty-four hours of light in the three months of summer but the mean temperature is also similar. Aitken took advantage of the opportunity to spend several months partly at the Postgraduate College, Chapingo, Mexico, which had connections with CYMMYT (the International Maize and Wheat Improvement Centre), and partly at the University of Alaska, Fairbanks, growing the same varieties of the temperate species as were used in the 1963 tests. The outstanding result of her comparative studies was the evident importance of photoperiod to plant development in sensitive genotypes: she found that the genotypes most sensitive to photoperiod took three times as long to reach flowering in Mexico as they did in Alaska. The basic importance of temperature to the rate of reproductive development was also confirmed.[50] During this leave, she also travelled to universities and agricultural research institutes in the USA, South America and Europe for discussions with scientists working on the physiology of plants suited to short growing seasons.[51]

During her last overseas leave in 1975, which she took once more in Mexico, at CYMMYT, she continued her study of the reproductive development of maize varieties of different maturity groups. After her return she was able to report, 'Studies of maize over a wide range of latitudes have shown that, to be suitable for short growing seasons, varieties should have intrinsic earliness and should be insensitive to daylength both before flower initiation and between flower initiation and flowering'.[52] Again she took the opportunity to visit scientists working in her areas of interest in the USA, Canada, South America and Europe.

Eighteen years after becoming senior lecturer and in the year before her retirement in 1976, Aitken applied for promotion to reader. Although from early in her career she was forming contacts with other researchers and collaborating with many people all over the world, there were certain aspects of academic life of which she was not even aware. It was not until a colleague in her department urged her to stop writing papers and put her work together in book form that she thought of doing so. She was also influenced by the sudden realization that a former student had been promoted to reader. Shortly after, another younger man was also promoted. No-one had ever told Aitken it was necessary to apply for promotion. She decided to enquire how such promotions took place and only then discovered that in order to be promoted it was necessary to apply. After her book, *Flowering Time, Climate and Genotype*,[53] the outcome of her research up to 1974, was published, Aitken did apply and in 1975 was promoted to reader.

At the age of 84, she is still continuing in Australia the breeding programme on maize which she began in Mexico in 1970, when she had access to the Maize Bank for seeds from the collections of maize varieties in Mexico and the South American countries. She has also made three visits to China (in 1980, 1982 and 1985) to study the relationship between the climate, the natural vegetation and the agricultural use of land. She found surprising similarities to Australia in the range of

[50] Yvonne Aitken, 'Report to the Wheat Industry Research Council on study leave, June 1970 to May 1971', 1971, p 1. Aitken received financial assistance from the Wheat Industry Research Council towards this research.

[51] Yvonne Aitken, 'Report on study leave, May 1970 – May 1971 to Melbourne University Council', 1971, p 2.

[52] *University of Melbourne Research Report 1976*, Melbourne, 1976, p 10.

[53] Yvonne Aitken, *Flowering Time, Climate and Genotype*, Melbourne, 1974.

climate – from tropical in the south to cold temperate in the north, and from a continuous growing season to a very short one. During the 1980 visit she was given seeds of millets from two communes several hundred miles apart and with differing lengths of growing season. When grown at the University of Melbourne in the Australian summer, these two samples proved to be different in flowering time – that from the shorter drier growing season flowering earlier. The relationship between early development and shorter growing season is now an essential principle in agricultural teaching in Australia, although it is usually related to different crop and pasture species, such as subterranean clover. That her research is still considered important is shown by the fact that, despite her retirement, reports on her work in progress continue to appear in the Melbourne University Research Reports.

IV

Aitken's passionate interest in her subject is obvious at the first meeting with her. She is a pure scientist in that she really wants to *know*. Her eyes sparkle as she talks, the words pour out as she explains to the visitor what she is doing. When describing her first visit to California, to a climate somewhat different to that of Victoria, and her experiments there, she says, 'It lit me up'. To the observer, it is obvious that this must certainly have been the case. But knowing is not enough for her. She wants the knowledge to be applied – 'I like the practicality of doing something that's worthwhile' – and her work has certainly demonstrated that. For example, a practical outcome of her studies on maize is that the concept of development analysis can be used to unify information on maturity genotype in both temperate and tropical groups of agricultural plants. The purpose of her book was to help plant scientists in selecting more rapidly varieties of a desired species with the appropriate growing period to match a specific climate in temperate or tropical zones. Before her work there was no knowledge of the comparative performance of an array of standard, established agronomic varieties of both legume and grass species, grown under comparable cultural practice over a wide diversity of the world's climatic zones. She has begun to fill this gap in knowledge, doing so with critical observations on seasonal development. It is no wonder that one of the reviewers of the book wrote: 'Dr Aitken's command of her subject, as expressed in her book, ensures that it will be the authoritative text in its field for years to come'.[54]

In 1962 she had also co-authored an introduction to agricultural science,[55] which was revised a few years later and re-issued in 1975 in a metric version. Other publications during the course of her very active life included a chapter in another book[56] and some forty research papers. Most of her work is published under her name alone. This is not because she is a 'loner' but because her colleagues were working in areas related to other aspects of crop and plant physiology, whereas she remained interested in understanding the factors which control plant reproductive development from sowing to harvest.

Aitken's range of contacts was, and is, very wide and she has had generous cooperation from researchers at other universities within Australia and overseas, from State Departments of Agriculture, from research organizations such as CSIRO and equivalent bodies overseas. She is very appreciative of the help given by her colleagues during

[54] John Lovett, *The Journal of the Australian Institute of Agricultural Science*, 41, 1975, p 129.

[55] Yvonne Aitken, D E Tribe, N M Tulloh and J H Wilson, *Agricultural Science – An Introduction for Australian Students and Farmers*, Melbourne, 1962.

[56] Yvonne Aitken, 'Temperate herbage grasses and legumes', in Abraham H Halevy, ed, *CRC Handbook of Flowering*, vol 1, Florida, 1985, pp 185–202. Dr Aitken welcomed the opportunity to add her research to the broad but little explored field of flowering controls in the many species in these two plant families.

the many years of research, especially through their shared experience in similar fields.[57] The amount and range of the work that she achieved was, however, extraordinary – and it was unique, as her publications show.

For almost the whole of her career she was the only woman member of the academic staff of the School of Agriculture. She enjoyed her students and she enjoyed teaching. She often became a friend to the women students 'simply because there were so few of them'; indeed many must have turned to her as a mentor and a role model. The students of the school spent their second year at Dookie Agricultural College and usually several would be allocated to help with the sowing of the pea plots and the collection of data at harvest time; one such was Nancy Millis, an eminent industrial microbiologist, now Chancellor of La Trobe University. Aitken taught from second year to postgraduate level and even after her retirement co-supervised several PhD students. A former Professor of Animal Production in the faculty speaks of her extraordinary patience with both undergraduate and postgraduate students.[58] A former student says, 'she never appeared to be lecturing at the limits of her knowledge. In fact her knowledge then and now seems almost endless although the state of her office was such that no-one could comprehend how the retrieval system worked! I believe this knowledge and her readiness to give it to anyone interested was her great strength as a teacher'.[59]

Aitken believed in the value of plant experiment and dissection in teaching and used these techniques as much as possible. When overseas she made a point of visiting high schools as well as university departments of agricultural science; during her 1963 leave she did so, for example, in California, in Massachusetts, in England and in Wales. She devised a special course, the only one of its kind in Australia at the time, for students in agricultural engineering, based on direct learning from experiments with biological material. 'The special problems of the bored agricultural undergraduate, the biologically ignorant engineer and the unacademic school student have concerned me most.' Even today she still accompanies students on excursions and helps them with their practical work, 'because it is my pleasure'.

She has been in touch with students since she was one herself. For a short while after the war she shared with some friends a flat reasonably close to the university. But when members of the group dispersed, she became a resident tutor at Janet Clarke Hall and lived there for twenty-five years until her retirement, under three different principals. She watched the change of attitude towards female students, the growth of student committees, the gradual unwinding of the kind of strictness enforced when she herself was a student (one late leave per month), until now when students come and go as they please. She obviously enjoyed this association and says it was fascinating. She must have contributed greatly to college life because in 1966 she was made a Fellow of the College. On her retirement she bought an apartment close to the university and although she no longer has any formal teaching duties her life has not changed very much.

But in no way has it been narrow. She has always had a wide variety of interests beyond her work. That she is interested in gardening, the environment and all aspects of biology is hardly surprising. What is a surprise is that she paints, and extremely well. She is also interested in music, in various crafts, in history.

[57] Aitken pays tribute to the many colleagues with whom she worked in the course of her long career in the acknowledgments in her book (see footnote 53).

[58] Professor Norman Tulloh, former Professor of Animal Production in the Faculty of Agriculture, University of Melbourne, in a conversation with the author, February 1994.

[59] Dr W M Lush, School of Botany, University of Melbourne, in correspondence with the author, March 1994.

She never married, but then few women scientists of her generation did.[60] Had the right circumstances arisen she would have liked to marry but she knows that she would have had less time to devote to her work and perhaps her travel opportunities might have been restricted. She is aware of the problems that face professional women with children and admires those who have managed to combine the responsibilities of both family and career. She does not consider herself to be a feminist but 'I'm all for equality'. Her generation knew too well that in order to get a job a woman had to be better than a man; but this never posed a problem for her. She would and did encourage girls to go into science but 'it's the keen mind that matters'. In any case, there are now many women in the faculty.

There is no doubt that Aitken has received and continues to receive from her peers the recognition due to her. The fact that she is still producing results which are acknowledged by her university, that she is still in contact with colleagues both in Australia and overseas, attest to that. Some of her former associates are more than happy to talk about her. Dr John Wilson, formerly Reader in Plant Sciences, Faculty of Agriculture, says she was well ahead of her time – in fact the first – in recognizing and formulating the ways plants develop.[61] Dr L T Evans states that 'her research contributed greatly to our understanding of the variation and control of flowering time, the great significance of which was recognized for wheat by William Farrer'.[62] Dr Mary Lush speaks of her 'great gift of curiosity' and her 'legendary dedication'.[63] In support of the latter, she cites her experience of several times seeing Aitken at work (after her official retirement) at the CSIRO Phytotron in Canberra where she was growing lines of maize from South America. Another colleague talks among other things about her 'sheer courage and determination'[64] – qualities which she does clearly possess.

Her book established her international reputation. One of her referees wrote to her: 'I do want to congratulate you on having done such a masterful job in planning and seeing through to completion such an extensive undertaking. Undoubtedly your contribution will be recognized by plant scientists everywhere for a long time to come'. Talking to many of her former colleagues and students has confirmed that his words were prophetic. It is as true today as it was when Australia was first settled that 'any attempt to introduce a new crop into a new land, or even a new district, is not likely to be a complete success until the proper technique has been devised, whether that technique be the selection of suitable species and varieties of plants or the knowledge of how best to cultivate the crop under the local conditions of soils and climate.'[65] Aitken has certainly contributed her share to knowledge of plant ecology. It is more than fitting that her contributions to agricultural science were recognized publicly by the award in 1989 of the Medal of the Order of Australia.

[60] See, for example, Nessy Allen, 'Australian women in science: two unorthodox careers', *Women's Studies International Forum*, 15, 1992, pp 551–62.

[61] Dr John H Wilson, formerly Reader in Plant Sciences, Faculty of Agriculture, University of Melbourne, in a conversation with the author, February 1994.

[62] See footnote 41.

[63] See footnote 59.

[64] Personal letter to Aitken, 19 June 1973.

[65] Wadham, 'Development of agriculture', p 46.

Annual List of Articles on Agrarian History, 1995*

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ADAMS, MAX, and CARNE, PETER, Survey of a farmstead at Low Cleughs Burn, Corsenside, Northumberland, *Durham Arch*, 11, pp 85–95.

ALBARELLA, UMBERTO, Depressions on sheep horncores, *Jnl Arch Science*, 22, pp 699–704.

ALLEN, MICHAEL J, The prehistoric land-use and human ecology of the Malling-Caburn Downs: two late Neolithic/early Bronze Age Sites beneath colluvial sequences, *Sussex Arch Collections*, 133, pp 19–43.

ALLEN, ROBERT C, The two English agricultural revolutions, 1450–1850, in *Land, Labour and Livestock*, Campbell and Overton, eds, (1991), pp 236–54.

ANDREWS, STEPHEN, George Bateman and Son: Lincolnshire's last brewer, *East Midland Historian*, 5, pp 27–36.

ANTHONY, RICHARD, Farm servant vs agricultural labourer, 1870–1914: A commentary on Howkins, *Ag Hist Rev*, 43, I, pp 61–4.

APPLEBY, JUDITH, Farm building designs for Lord Scarsdale at Kedleston Hall Derbyshire: A study of the designs of Robert Adam and Samuel Wyatt, 1760–1765, *Jnl Hist Farm Buildings Group*, 9, pp 25–34.

ARNOLD, PHILLIP, Tadmarton: A village in the making, *Cake and Cockhorse*, 13, 2, pp 52–3.

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Conference Report: 'Farming in Adversity: Patterns of Response' Winter Conference 1996

By PETER DEWEY

An audience of some forty gathered at the Institute of Historical Research, Senate House, London University, to consider the general theme of 'Farming in Adversity'. A medieval crisis was surveyed by Dr Phillipp Schofield (Wellcome Unit for the History of Medicine, Oxford) in his paper on the responses of the English peasantry to the subsistence crises of the late thirteenth and early fourteenth centuries. Although national data are lacking, the population of England may have fallen by about 10 per cent as a result of the dearth of those years (especially 1315–22). Evidence of stress came in such things as the rise in the yield of merchet (marriage tax), as more bereaved spouses remarried, in some evidence of increased mobility (presumably an attempt to evade feudal exactions), and in some evidence of changes in agricultural technique and diet. There was also clear evidence of dearth in the form of high grain prices, and in the growth of distress sales of land. The possibility was raised that there was a large submerged impoverished group of peasants, who were further exploited by the slightly better-off peasants passing the burden of taxation on to their poorer peers. In sum, the peasantry survived these very lean years by a combination of self-preservation and self-promotion.

A slightly different type of adversity was faced by the subject of Dr Elizabeth Griffith's paper, William Windham, on his estates of Blickling and Felbrigg (Norfolk) in the 1670s. Against a background of low grain prices, which led to arrears of rent, ruined tenants, and made it hard to find reliable new ones, this landlord explored the possibilities of share-cropping or, as the contemporary description had it, 'letting to halves'. This device was less successful on the Felbrigg estate than at Blickling. In the former agreement, there was an absence of effective incentives for the tenant to maximize his efficiency; in the latter, the agreement worked more like a modern contract farming agreement than share-cropping, and the result was more satisfactory. But in neither case could it be said that share-cropping prevented fresh tenant failure. It was concluded that in difficult times share-cropping eroded the position of both parties to the agreement, and the then-emerging system of landlord and tenant would provide clearer safeguards for the interests of both parties.

The paper by Professor Hugh Clout (University College London) examined the process of rebuilding the shattered farming systems of the ten French *départements* which were either invaded or formed part of the fighting zone during the First World War. The devastation was enormous, some 620 settlements being declared totally destroyed, and a further 1300 largely destroyed. Most of the damage had been to small settlements (though Reims lost 79 per cent of its properties). While state agencies did much emergency repair work in the few months after the war, there was never a concerted attempt by a specific ministry to effect complete reconstruction, although various newly-established state agencies did something to provide supplies of machinery and livestock until *c* 1922. Thereafter, work proceeded by a multiplicity of voluntary agencies – cooperatives, private agencies, and charities. Throughout, there was a fierce determination by the dispossessed and bereft farmers to restore things as they had been, so that the opportunity was not taken to reapportion the notoriously splintered French agricultural holdings. Reconstruction took almost ten years, and represented an enormous investment of public and private money. A final thought was that the reconstruction was almost too successful, in that little remained to remind visitors of the horrors of war, save the large military cemeteries.

The most recent type of adversity was provided by Dr Linda Merricks and Dr Alun Howkins (University of Sussex) in their examination of recent campaigns against the export of live animals from the UK. After Dr Merricks had considered some of the philosophical issues attendant on the question of animal welfare, Dr Howkins outlined the history of this movement, which could be traced back to the campaign against the export of live horses in the 1960s. More recently, the issue had come to the forefront of public discussion, fuelled by the enormous rise in exports in the 1980s; by 1992,

over a million sheep were being exported annually. The campaign was stiffened by an earlier victory on the unrelated question of raising calves for veal in small veal 'crates', whose use was eventually prohibited. On the export front, there was a victory in the form of the withdrawal of the P & O shipping company from the trade. The highlight of media attention came with the 'siege of Shoreham' early in 1995, when exporting was frustrated by hostile gatherings. Finally, some attention was given to analysing the reasons for the protests, and the composition of the protesters. Using techniques derived from the work of Mass-Observation (whose archive is at Sussex University), it was suggested that they were overwhelmingly white, from south-eastern England, female, middle-class and in late middle age. Their motivation was self-avowedly the 'inhumanity' of the trade, reinforced with a certain amount of anthropomorphism.

The conference concluded with thanks to Dr John Broad for his hard work in organizing another most successful conference.

Book Reviews

P E MCGOVERN, S J FLEMING and S H KATZ, eds, *The Origins and the Ancient History of Wine*, Gordon and Breach, Luxenburg, 1995. xxiii + 409 pp. Illus. £55.

This impressive volume is an extremely valuable addition to the growing body of literature on intoxicants and stimulants in past societies.[1] It comprises twenty chapters packed with botanical, archaeo-chemical, philological, historical, epigraphic and archaeological information on viticulture and wine production and consumption in the Near East and the Mediterranean. The volume contains the proceedings of a conference held at Robert Mondavi Winery in the Napa Valley, California. Californian wineries, together with the University Museum of Archaeology and Anthropology of the University of Pennsylvania funded the conference and the publication, which is the eleventh volume in a series on Food and Nutrition in History and Anthropology.

The volume opens with ancient philological sources on wine and a survey of ancient and modern perceptions of wine and wine drinking, followed by a series of six articles on the domestication of grapevine, the enology of ancient wines, and the detection of wine remains using a combination of archaeological and chemical techniques, with a number of case studies ranging from fourth millennium BC Iran (site of Godin Tepe), to Roman southern France and Byzantine Egypt. In recent years, organic residue analysis has been a quite successful and promising technique in investigating the content of ancient vessels and the function of processing installations, although the technique is more problematic when dealing with alcohol, as in this case. The discovery of what has been claimed as the earliest find of wine remains from Godin Tepe (on the basis of the presence of tartaric acid – which is specific to grapes and can be found only in small quantities in few other plants – and of the archaeological context) was the incidence which led to the symposium in the first place.

The second and third part of the book deals with historical and archaeological studies from Mesopotamia, Assyria, Anatolia, the Levant, Egypt and the Maghreb, and Greece. Through the detailed interrogation of a extremely diverse body of data, ranging from carbonized seeds, to iconography, pottery vessels for storage, transport and drinking, wine making installations and ancient scripts, the authors reconstruct the exciting history of viticulture and wine making and drinking, which reveals more than an important aspect of the agricultural history: wine production and consumption (more than the production and consumption of other food items) was always a social practice connected not with what is usually called subsistence but with the dialectics of social interaction, primarily due to its intoxicating properties. As most of the studies in this book indicate, wine and wine drinking had élite connotations and was entangled with the dynamics of power, not only in environmental contexts which inhibited viticulture or made it extremely difficult, but even in areas with optimal ecological conditions such as the Aegean.

It is thus unfortunate that a number of contributors reproduce a static view on the history of viticulture and wine drinking, by subscribing to the old and discredited notion of the Mediterranean Triad which assumes a continuous and unbroken line of systematic viticulture and wine drinking, as a natural attribute of the particular geographical and cultural context. It has been repeatedly shown that the history of viticulture and wine drinking is a dynamic one with extreme fluctuations as a response to varied social processes, including elite drinking customs and etiquette, conspicuous consumption, and competitive drinking ceremonies.[2] Furthermore, it is unfortunate that there is very little discussion in the volume (with one or two exceptions) on those and other fascinating practices which link an agricultural commodity with issues of identity, domination and resistance, and notions of embodiment, among others. Nevertheless, this volume, in addition to its value as a rich source of information, demonstrates both the merits and the further need for integrated, interdisciplinary research on one of the most multi-dimensional and multivocal phenomena of the human experience, eating and drinking.

YANNIS HAMILAKIS

DAVID HALL, *The Open Fields of Northamptonshire*, Northamptonshire Record Society, volume 38, 1995, xii + 378 pp. £20 + £3 p&p.

For twenty-five years David Hall has walked his way around Northamptonshire mapping the par-

[1] See, for example, the other recent volume on wine, O Murray and M Tecusam, eds, *In Vino Veritas*, 1995; for a recent survey on intoxicants and stimulants see J Goodman, P E Lovejoy, and A Sherratt, eds, *Consuming Habits: Drugs in History and Anthropology*, 1995.

[2] See, for example, Y Hamilakis, 'Strategies for survival and strategies for domination: wine, oil and "social complexity" in Bronze Age Crete,' unpublished PhD thesis, Sheffield University, 1995; Y Hamilakis, 'Wine oil and the dialectics of power in Bronze Age Crete', *Oxford Jnl Archaeol*, 15, 1996, pp 1–32.

ishes, recording ridge and furrow and archaeological sites, and then spending many hours in the record office working through the deeds and other 'copious surviving records' in order to reconstruct an agrarian economy largely swept away by enclosure. Northamptonshire was the county of parliamentary enclosure, but the loss of an earlier way of life has not deterred Hall, who has patiently reconstructed the pre-enclosure county and its agricultural systems. It is a remarkable achievement, and the methodology – discussed in chapter 3 and again in the extended study of Ashby St Ledgers in chapter 10 – reveals just how complex it has all been.

The book has two parts: a series of essays on various topics, and a detailed gazetteer in which each parish and township is described with information about the fields, the agricultural system, the demesne and enclosure. The first part of the book is a veritable barn-full of information for anyone interested in open fields and their operation. There are detailed discussions of field orders and farming methods, the one reflecting the other in the need to maintain vigilance in enforcing the regulations if a mixed farming system on scattered holdings was to be maintained in an area short of adequate pasture. Two, three and multiple field systems are discussed: many townships had a two-field system in the thirteenth century, but a slow change across the county meant that most areas had three fields before the eighteenth century. There are chapters on demesnes, on the medieval farm, and on land uses and resources in the county, with a particularly interesting section on woodland, as well as some cautionary and helpful notes on identifying and dating ridge and furrow. And then, metaphorically gritting his teeth, David Hall launches into the question to which all readers will be awaiting an answer, the origin of open fields. 'Land holding in strips', he concludes, 'dates from the eighth or ninth century in the Midland region' (p 138). There cannot, perhaps, be a more definitive resolution to a long running debate.

Although David Hall is too modest to make much of it, there is also an important contribution to another debate in agricultural history. In an appendix, he lists 209 parishes containing 274 townships of which 37 had no open field data. In no fewer than 100 of the 274 Hall dates enclosure to the period prior to 1750. Thus in the county of parliamentary enclosure, more than one-third of the sample had been enclosed prior to the beginning of the movement in *c* 1760. It is no surprise to find that almost half of Northamptonshire enclosures date from the eighteenth century, but the data reminds us of the importance of the pre-parliamentary era.

This is one of those rare books in which the dust jacket does not lie: it may be predominantly about Northamptonshire, but it certainly has 'significance well beyond the boundaries of a single county'. David Hall's book makes a major contribution to the study of the open fields based not on a handful of examples, but on long and careful study of one county, and through the methodology he describes we can all see the possibilities for work in other areas.

J V BECKETT

H S A FOX, ed, *Seasonal Settlement. Papers presented to a meeting of the Medieval Settlement Research Group*, University of Leicester, Vaughan Papers in Adult Education, No 39, 1996, iv + 69 pp. £4.

This collection of five short papers, with an introductory essay on 'Transhumance and Seasonal Settlement' by the editor, touches on a subject of great importance in English history. For some continental countries, the literature relating to transhumant settlement in particular is extensive, and for Ireland, Wales, and Scotland, where the custom itself survived until recent times, it is also considerable. For most parts of England, by contrast, it is as yet scanty or non-existent, and some of those at the conference seem to have doubted whether anything like the European pattern ever existed. Dr Fox disposes of these doubts with more patience, and certainly more learning, than this reviewer would have displayed. There can now be no better place to begin than his introduction. Its twenty-three pages are packed with perceptive hints and observations, supplemented by a wealth of bibliographical references – British and European – in the end-notes. By comparison the four following papers may seem slight; but Christopher Dyer (on Cotswold sheepcotes) and Peter Herring (on Cornish commons and *havos* place-names) discuss major topics which they explore more fully elsewhere.

The probability is that seasonal origins underlie a great many places in this country. Of course there was nothing here resembling the 'greater transhumance' of Mediterranean countries, where stock had to be driven hundreds of miles at certain periods to alternative pastures. But the pastoral implications of numerous English place-name elements, such as 'stead' and 'wick', the seasonal character of others, such as 'scale' and *denn*, and the humble status of many more, such as 'booth', 'cote', and *scydd* ('shed, hovel'), will often be found to point to it when followed up individually. They are frequently embedded in ancient common land, for example, and surrounded by other telling names and topographical features. The difficulty arises in finding specific local proof of their origins in medieval sources and in the belief that seasonal occupation

rarely survived the Norman Conquest. While that must be true in some areas, Professor Dyer and Dr Fox show that it was by no means always the case. Some forms of transhumance continued well into the early-modern era, and if medievalists looked beyond 1550, they might find quite substantial evidence of it. A very detailed description of a solitary sheepcote on the Marlborough Downs, occupied for three months in the year by the shepherd and his two grown-up sons at lambing-time, actually survives from the early years of the present century.

Until recent generations there were many other forms of seasonal settlement in England. Only the last paper deals with these: Dr Fox's study of the late-medieval 'cellar-settlements' of the south Devon coast, which subsequently gave birth to fishing-hamlets like Shaldon, Hallsands, Starcross, and Dawlish Strand. In a fascinating piece of reconstruction, he discusses their origins, occupations, buildings, morphology, links with inland places, and evolution into permanent villages. This essay raises many thoughts about other fishing-hamlets round the south and east coasts, in such counties as Hampshire, Norfolk, Yorkshire, Northumberland, and Fife, where 'cellar'-names sometimes still exist; about the ultimate, fugitive origins of what seem to be wholly new seventeenth-century towns, like Deal and Whitstable; and indeed about the distinctive fishing-quarters once appendant to ancient boroughs like Hastings and Folkestone. Behind all these places we find one seemingly universal factor: they developed on patches of foreshore, common, or waste. Common-land origins, moreover, often lie behind other seasonally-occupied sites not discussed in these pages: of potters, charcoalburners, quarrymen, tilemakers, brickmakers, limeburners, ashburners, clogmakers, chair-bodgers, pegmakers, and some types of industrial hamlet. Those of us who can recall the last days of such migrant activities will surely hope this conference report encourages further research, both in the medieval period and after. There is a world of interest here awaiting discovery.

ALAN EVERITT

N M HERBERT, ed, *The Victoria History of the Counties of England: A History of the County of Gloucester, V*, OUP for the Institute of Historical Research, 1996. xviii + 440 pp. Maps; illus. £70.

The latest instalment of the Gloucestershire VCH deals with the Forest of Dean, the distinctive area between the rivers Severn and Wye, a region with an unusual history and where numerous ancient customs and rights have survived into the twentieth century. At its heart is the large area of the former royal forest, comprising some 24,000 acres; this was not permanently inhabited until the eighteenth century and was not included in any civil or ecclesiastical parishes until the mid-nineteenth century. During the Middle Ages the restrictive forest law was enforced throughout the forest and the surrounding parishes, from the royal castle overlooking the Wye at St Briavels. Later the forest became a valuable source of shipbuilding timber, particularly oak for the Royal Navy, while 'free miners' acquired customary rights to work the rich deposits of iron ore and coal. Throughout the eighteenth century invasion by squatters eventually created over twenty new villages and hamlets together with the new town of Cinderford, supported by rapid industrial expansion with deep coal and iron mines, foundries, quarries and, later, chemical works. Remote from established villages and neglected by the Church of England, the rough, wild nature of the squatters' settlements was only partially civilised by the efforts of the numerous nonconformist chapels; although the nineteenth century witnessed a remarkable programme of Anglican church building in the forest. The character of the inhabitants, conditioned by their defiant struggles to preserve their rights, the isolated nature of the industrial settlements and the distinctive landscape of the region, continue to set it apart from the rest of Gloucestershire.

This large volume traces the history of the original extra-parochial forest area as well as that of the fourteen surrounding parishes. It includes accounts of the extensive parish of Newland with its fine medieval church, Flaxley which was the site of a Cistercian abbey, the port of Lydney on the Severn, the medieval market town of Mitcheldean and the town of Coleford which obtained a charter for its market and fairs in 1661. Naturally much attention is given to the administration of the royal forest, the working of the Verderers' Court, the exploitation of the timber and the remarkable development of industry. Agricultural historians will be interested in the account of the long tradition of common rights and pannage within the forest, the fierce defence of these customs, the creation of numerous 'assarts' throughout the Middle Ages and the reclamation of rich alluvial lands along the Severn. Woodland management included a programme of large-scale planting carried out during Charles II's reign, and the replanting of large areas of former agricultural land at Staunton with timber trees by the Crown Commissioners during the 1820s. Attempts to change the customs and management of the forest led to frequent disputes and violent confrontations with the commoners, including the so-called 'Skimmington' riots of 1631.

As with other recent volumes, there are numerous well-chosen illustrations giving a flavour of the

varied social and industrial background, together with useful maps. For an adequate understanding of complex areas such as this, maps are of great assistance to the reader, and even more would have been useful. Particularly welcome is a long final section on the royal forest, including its boundaries, administration, courts and society, as well as descriptions of each of the major industries which have had such a dramatic impact upon the landscape and society of the forest. The volume will provide an invaluable source of information and reference for anyone interested in customary rights, unusually widespread licence for mining and squatters' settlements, the protracted struggle of determined inhabitants to preserve their ancient privileges, and in the development of rural industries.

There are numerous references to trade on the rivers Severn and Wye, providing raw materials such as iron ore, coal, charcoal, cattle, hides, timber and bark for the trade with Bristol and further afield by ships, barges or 'trows' from ports such as Lydney and Newnham. The hamlet of Gatcombe on the Severn was formerly an important centre of trade and shipbuilding, ships and barges were also built at Lydney, where a yard was established for building frigates in the seventeenth century, and on the Wye at Brockweir and Redbrook. Redbrook was also the site of one of the most important copper works in England, and later a large tinplate works was established there. In addition to the normal task of providing authoritative and comprehensive references to the relevant documentary sources, the editors of this volume have been faced with an unusually large number of records relating to the royal forest, as well as with many documents from the archives of local landowners, notably those of the Berkeleys of Berkeley Castle and of the Beauforts of Badminton. Notwithstanding the formidable amount of material, they have produced an excellent account of this remarkable area which still retains many of its distinctive characteristics.

J H BETTEY

C M WOOLGAR, ed, *Household Accounts from Medieval England*, Parts 1 and 2, Records of Social and Economic History, New Series XVII and XVIII, British Academy and OUP, 1992 and 1993. xvi + 812 pp. 3 plates. Part 1, £45; Part 2, £40.

These meticulously compiled volumes are the results of over a decade's worth of research. One can well understand that because, first of all, Dr Woolgar had to comb through local and national archives for surviving accounts relating to management of households belonging to the nobility, gentry and clergy. This can have been no easy task, for household accounts are not always separately recognized by compilers of catalogues; they are sometimes listed indiscriminately with manorial accounts which (because they could provide evidence of title) survive in much larger numbers than their domestic cousins and usually swamp them in any collection. The surviving household accounts are listed in an appendix to the second of these volumes, an appendix which will now always be the standard point of departure for social and economic historians who wish to use this rich type of document. Second, Dr Woolgar has provided full transcriptions of a sample of accounts, avoiding the more fragmentary documents which have survived (in part) because of re-use of their parchment for other purposes (a mirror case in one instance) and avoiding those very late medieval accounts which have little formal arrangement, being not unlike what you or I might jot down on the back of an envelope in order to eke out a salary. The task of transcription must have been arduous (not that it shows); the accounts are full of obscure terms, for items of clothing for example, or for the fish which was consumed in huge quantities in all households (the beautiful index lists a great number of fish-related words according to species or method of preservation or type of culinary preparation). Third, there is a detailed and definitive introduction which includes discussions of parallel material from the continent.

The earliest household accounts date from the 1180s when many estates were switching from the old inelastic system of manorial food rents to more sophisticated arrangements for supplying the central household. By the end of the thirteenth century two types of household account were especially common: 'diet' accounts in which the basis of accounting was a record of consumption day by day (*per dietas*, whence 'diet' has come to mean 'food') and accounts arranged according to commodity or household department. At this time and during the fourteenth century accounts were becoming more elaborate; attempts were made to estimate weekly expenditure, presumably in an effort to rationalize and control, and there was a greater elaboration of commodities and departments. The close of the Middle Ages was marked by accounts which were less formed in arrangement and style; this trend was associated with a move away from conspicuous public living of which the pomp of formal accounting and auditing was a part.

These volumes contain material of great interest far beyond the activities which went on in grand medieval households: funerals, hospitality, almsgiving, building works, hunting, travel – and the rations of bread given to the countess of Warwick's bear in 1420. For agrarian historians household accounts are rich sources for all kinds of topics, but perhaps especially for regional varieties in diet and

for markets. By using Dr Woolgar's index we can tell that rye was used in the bakery of the bishop of Coventry and Lichfield when he stayed at Beaudesert, Warwickshire (1461), by Richard Turberville for his household at Sampford Peverell in east Devon (1358), by the bishop of Carlisle (1485) and by an unidentified household near Boroughbridge, Yorkshire (late thirteenth century). We therefore begin to see a geography of rye consumption, of course only imperfectly because the accounts printed by Dr Woolgar do not provide a complete coverage of the country. Of all the households with accounts printed here, cider was consumed only in the establishment of the Turbervilles at Sampford Peverell, Devon; the Welsh borders and the south-east, two other notable medieval cider producing regions, are not well represented in this collection. The most localized food of all was the gannet, consumed only in the household of Lord John Dynham at remote Hartland in north Devon. In 1372 he purchased twenty-seven, using six as a gift to a local landed family and the rest at his own table. Hartland looks out across the sea to Lundy where gannets are mentioned as early as the thirteenth century, because of their food value; today Witherby's *Handbook of British Birds* lists Lundy as the only English gannet colony to struggle into the twentieth century. Information in the accounts on purchases at markets is very good though it is not comprehensive because generally place of purchase is only specified where extra expenses were incurred in transport; in any case most medieval households were spared the current national obsession with 'shopping' because many items could be provided from the estate. For those items which had to be bought a hierarchy of journeys to markets is well illustrated by the account of Robert Waterton of Methley near Leeds (1416). Sea-water fish were sought as far afield as Boston; rather humdrum items such as wax and soap came from Hull; Wakefield provided a craftsman to repair a vase of gold; a bottlemaker was found at Oulton; Malmsey and rumney wine came from London. The account does not specify where 2*d* was spent in purchase of the equally necessary *arsnyk pro distruccione ratonum*.

These brief comments will serve to give a faint taste of the great wealth of detail contained in medieval household accounts. Christopher Woolgar's two volumes provide, for household accounts, the same kind of definitive introduction which Paul Harvey's *Manorial Records of Cuxham* gave for manorial accounts. Perhaps one other class of medieval rural account needs now to be explored in equal depth, namely the detailed listings of tithe payers and their produce which some landlords maintained in order to account for the annual profits of their spiritualities. But will there be time?

HAROLD FOX

DAVID BUISSERET, ed, *Estate Maps in the Old and New Worlds*, University of Chicago Press, Chicago and London, 1996. xii + 184 pp. 8 colour plates; 99 figs. £43.95.

The starting-point for this set of six well illustrated and referenced essays on the history of estate mapping was the 1988 series of Kenneth Nebenzahl jr lectures in the History of Cartography, presented at the Newberry Library, Chicago. The editor sets out a theme for the volume, to relate the need for the precise recording of boundaries and structures by means of maps to changes in economy and society. He contributes not only an introductory definition of the estate map, and a concluding note, but two substantial essays on estate maps in the Old and New Worlds. Their content is intended, he notes in his preface, to fill perceived gaps in the coverage of the original lectures. The resulting collection is still uneven, for despite the value of Buisseret's surveys, the rest of the contributions leave important regions insufficiently explored, notably mainland America. The authors are P D A Harvey: 'English estate maps: their early history and their use as historical evidence', Sarah Bendall: 'Estate maps of an English county: Cambridgeshire 1600–1836', and, with two inter-related essays, B W Higman on maps of Jamaica made in the eighteenth and nineteenth centuries, their making and their interpretation.

Buisseret's chapter on Europe is an uneven survey. It contains a valuable fifteen-page section on the development of the German estate map, but other important regions receive less attention. The Netherlands are noted in a single page, with one colour plate, and France is even more briefly dismissed on the grounds that estate maps concentrated on mines and forests rather than on agricultural land. The inclusion, also in colour, of the plan of housing in a village near Lille, by Christophe Verlet, is a hint that there is more to say, and, unmentioned in this chapter, the use made of estate plans by the Inventaire Général, in their finely-illustrated regional volumes on the French iron industry, demonstrates a rich tradition of cartography at estate level.

The English material is discussed in two chapters. The sixteenth-century part of Harvey's elegantly constructed general essay on English estate maps draws on his other publications, but the later material is fresh and welcome. Of particular interest is the discussion of the rôle of the surveyor and his increasing need for cartographic skills. The chapter is amply illustrated, the monochrome reproduction

of coloured maps being generally successful, but sharing with the rest of the volume the problem of the publisher's choice of an off-white paper, reducing clarity and contrast. Harvey's coverage ends in the first half of the eighteenth century, earlier than the span examined by the other authors. Hence the notable surviving collection of papers left by the Fairbanks of Sheffield, which comprise field books, correspondence and accounts as well as maps for a century from 1750, falls outside its scope. This end-date also excludes surveys of open fields made for estates as a preliminary to parliamentary enclosure. Sarah Bendall, in her essay on Cambridgeshire, chooses a county rich in maps, and characterized by the institutional landowner, the Cambridge college. Her end-date, 1836, allows emphasis on the growth of map production at the end of the eighteenth century. The stress in both of these contributions is on agricultural aspects of the rural estate, without consideration of the development of urban mapping, as exemplified by Ralph Treswell's surveys of the London properties of the Clothworkers and of Christ's Hospital.

The transatlantic half of the book is introduced by Buisseret in a summary of mapping in the West Indies and on the mainland. Some emphasis is given to South Carolina, within a mainland survey which runs rapidly from the St Lawrence to the Lower Mississippi, with a glance at the unrealised potential of the rich collections of maps in Mexico. Higman's two chapters on the estate maps of Jamaica are of considerable interest, deriving from research into the economic history of the island's trades in sugar and coffee. Jamaica is particularly fortunate in the survival of maps from the early eighteenth century, when plantations were becoming less separated by virgin land, making accurate definition imperative. The concerns outlined here are reminiscent of the letters written by the Fullers, Sussex ironmasters and absentee owners of Jamaica plantations, about the problems of their boundaries and the need for survey. The archive in the Jamaican National Library is remarkable for the survival of field books and draft maps, apparently comparable with the Fairbank material. Valuable as these two essays are, it is disappointing that the volume could not have included more detailed examination of mainland work, notably the surveys of estates in South Carolina.

DAVID CROSSLEY

MARK OVERTON, *Agricultural Revolution in England: The Transformation of the Agrarian Economy 1500–1850*, CUP, 1996. xiv+258 pp. £12.95 (pbk).

With every passing year the existence or otherwise of the agricultural revolution seems to become more rather than less of a problem. To Lord Ernle and his generation it was obviously something which took place alongside the industrial revolution, but such simplistic associations have been questioned and debated over the past thirty years. Kerridge, E L Jones, and others argued a case most recently taken up by Gregory Clark, for a revolution which was more or less over and done with by 1770. So complex did the discussion become that a decade ago Joan Thirsk suggested abandoning the term altogether, while G E Mingay having – with J D Chambers – retained the older chronology in his 1966 textbook, wrote in his editorial introduction to volume 6 of the *Agrarian History* (1989) that the classical agricultural revolution 'has long been abandoned in favour of a much longer time span'. To aid this longer span, in 1968 F M L Thompson invented a second agricultural revolution (post-1830), while in 1992 R C Allen asserted that 'there were two agricultural revolutions in English history – the yeomen's and the landlords', one in the seventeenth and the other in the eighteenth centuries. Most recently, as readers of this journal will be aware, Mark Overton has sought to put the agricultural revolution back into the late eighteenth and early nineteenth centuries. His new book is an extended discussion of these ideas.

Overton's view is built up from the work he has being doing on East Anglia over many years: significant and sustained increases in output and productivity brought changes which in the eighteenth century enabled England to escape the Malthusian trap, while changes in marketing, landholding, field systems, farm sizes, property rights, enclosure and social relations, served to transform the agrarian economy on to a capitalist and highly productive basis. These developments, he argues, were nothing short of an agricultural revolution. In turn they led directly to the emergence of a distinctly English rural class structure of landlord, tenant farmer and agricultural labourer.

The key issues are tackled in chapter 3, in which Overton presents a range of data, some of it derived from his earlier work on inventories, but much of it reworked from other published sources. He argues that 'output increased by some two and a half to three times between 1700 and 1850', and even though the sown area doubled the majority of the increase was a result of changes in land productivity. In addition, labour productivity doubled between 1700 and 1850, while 'the key development was the integration of grass and grain and the ability to support a higher density of livestock while simultaneously extending the arable area' (p 131). This occurred initially through convertible husbandry, and then through rotations based on the principle of the Norfolk four-course: it made more efficient

use of nitrogen for arable production and increased the output of fodder per acre. The impact of these changes was enhanced because of related developments including the increased commercialization reflected in the development of the market, the gradual elimination of customary tenures and their replacement by leasehold farms, and the disappearance of common rights.

This book should restir the agricultural revolution pot. By placing it firmly into the period 1750–1850, Overton implicitly questions the findings of R C Allen, Gregory Clark, and many other recent writers. There is, therefore, likely to be much discussion of his figures, particularly table 3.11 (table 1 in his *Review* article and annoyingly unsourced in the book), which purports to show rising output and productivity. Much of the data is far from ideal, but where he does have comparable figures the index of growth seems to indicate that the pace of growth was not necessarily faster in the second half of the eighteenth century than in the first half, but that it was distinctly quicker in the period 1800–50. This would not be entirely out of line with other assessments in recent years, and whether the data is really firm enough to carry his argument must be open to debate.

The agricultural revolution was originally conceived in terms of qualitative changes in the agrarian economy *c* 1750 – *c* 1850. A generation of agricultural historians working with both qualitative and quantitative material have argued the case for a revolution which was effectively over by 1770. Overton has redirected attention to the original concept, now with quantitative support and using a sophisticated analytical framework well beyond the level of a textbook (as this book is labelled). Not everyone will agree with him, but he has at least produced a statistical framework for debating one of the key issues raised by Chambers and Mingay thirty years ago, and often forgotten since: the remarkable success of English farmers in feeding a population which grew from under 6 million in 1750 to nearly 18 million in 1851 without resort to massive imports which would have slowed down the industrial revolution, and without much by way of new machinery. This may not end the debate about the agricultural revolution, but it will at least give future participants a new base from which to begin.

J V BECKETT

ALAN ARMSTRONG, ed, *The Economy of Kent 1640–1914*, The Boydell Press, Woodbridge, Suffolk, and Kent County Council, 1995. xiv+318 pp. 25 tables; 8 figs; 29 plates. £35.

This book is the third in a series of volumes which constitute the Kent History Project; when completed these will provide a comprehensive history of the county from the earliest times to the present day. The *Economy of Kent 1640–1914* has eight chapters: 'Population' (Mary Dobson 1640–1831 and Alan Armstrong 1831–1914), 'Agriculture' (Gordon Mingay), 'Industry' (David Ormrod 1640–1800 and James Preston 1800–1914), 'Road, rail and cross-channel ferry' (Theo Barker), 'Kent and the sea' (Robin Craig and John Whyman), 'The towns' (Christopher Chalklin), 'Labour' (Tom Richardson), and Alan Armstrong draws together some conclusions on 'Wealth and Welfare in Victorian and Edwardian Kent'. As Joan Thirsk points out in her foreword, one of the strengths of the book is that a number of the contributors, who will be well known to readers of this *Review*, have lived and taught in the county and many of the essays are written with an appreciation of broad issues in English economic history as a whole.

As is to be expected, agrarian themes often permeate the individual chapters given that, as David Ormrod observes, in Kent before about 1800 'most manufacturing activity operated under the shadow of agriculture'. The two early Kentish industrial specialisms both had strong agricultural linkages; cordwood for charcoal made up 50–70 per cent of the total costs of Wealden wrought iron production while Wealden clothiers utilized farm profits to maintain their financial independence. Agriculture and other primary activities dominated the labour market in Kent for much of the period covered by this book at the end of which agricultural labourers, at 11.5 per cent of the workforce, were still the largest occupational group in the county.

Kent, of course, has traditionally been known as the 'garden of England' but in his chapter on agriculture Gordon Mingay stresses the diverse nature of Kentish farming which reflects the distinctive settlement history of the county, the marked variations in soil types, and differing degrees of accessibility. The popular Kentish image of orchards and hop gardens is misleading because, as Alan Everitt has also emphasized, the county contains substantial tracts of historically unproductive land, whether it be heath, downland, marsh, or clay. Mingay examines the complexities of Kentish agricultural history although more might have been said about the dynamics of locational change in agricultural specialisation. In posing the question as to whether Kent experienced an 'agricultural revolution' Mingay stresses the uneven temporal and spatial pace of agricultural development within the county, for while there were districts which were agriculturally advanced at an early date there were others, such as the more remote parts of the Weald, which were renowned for their backwardness throughout much of the nineteenth century. The

railways helped to improve market accessibility, but it is worth noting that according to contemporary accounts visitors who traversed the central part of the county on their way to Canterbury for the 1860 RASE show – a scene from which makes an attractive jacket illustration – found little to impress them agriculturally.

Overall this is a valuable book which deserves to reach a wider audience than those with an immediate interest in the county of Kent. While it is suggestive of many research themes which require further investigation at the local scale, it will need to be read with the other volumes to appreciate the full richness of Kentish historical experience. The final volume in the series is planned as *Kent in the Twentieth Century*, and in the conclusion to his chapter Gordon Mingay looks forward to the massive agricultural changes which have taken place in the county since the 1950s. The agricultural history of the recent past deserves detailed scholarly appraisal and in Kent this will no doubt demonstrate how the county has come to be what has now been termed 'the *garden centre* of England'.

NICHOLAS GODDARD

MELVIN HUMPHREYS, *The Crisis of Community: Montgomeryshire, 1680–1815*, University of Wales Press, 1996. xv+293 pp. £25.

The past two decades have witnessed a quantum increase in the outflow of works dealing with the economic, social, cultural and political history of Wales at regional, county and local levels. The present volume represents a further contribution to the *Studies in Welsh History* series, and its elegantly-written and logically-argued pages are a credit both to Dr Humphreys himself and the scholarship of the series editors. Buoyed up by Humphreys' admirable prose, the reader is carried on a lengthy, but never tedious, journey through a century of Montgomeryshire history in which he is exposed to the broad vista of county life. The approach is a conventional one in which chapters on the rural community, land ownership and management are succeeded by discussions of education, belief systems, politics and rural administration, leading to a final and highly-detailed consideration of crime and order in Montgomeryshire society.

To a considerable extent we are on a familiar path, previously trodden by David Howell and Phillip Jenkins, among several others. Here are the embattled and indebted gentry, increasingly absent from their estates, allegedly distanced from their tenants by their abandonment of traditional Welsh values in favour of anglicised cultural influences, and harassed by the *angst* of male line failure. As the corrupt and spiritually-impoverished Established Church succumbed to the growing influence of Welsh Calvinistic Methodism, and the political and administrative oligarchy of the great gentry gave way to increasing middle-class involvement, the attractions of landownership in Wales progressively diminished and by the end of the eighteenth century many estates were left under the control of the reviled land agent. And here too, are the agricultural tenants, continuing in much the same vein as they had done for many generations, against a background of steadily increasing rents, wages and poor rates which had effectively eroded their standard of living by 1800. As uplands enclosure heralded the loss of customary rights and the engrossment of farms eliminated the lower rungs of the farming ladder, an increasingly literate and educated farming community, we are told, smouldered with resentment, especially where they were obliged to pay tithe to what they perceived as an alien church. This applied equally in proto-industrialized textile towns like Llanidloes and Newtown where the libertarian and democratic notions embodies in nonconformity spurred on challenges to oligarchy politics and the apparent incompetence of rural administration. Concurrently the poor continued to be poor, and in some cases to get poorer as the eighteenth century drew to a close. As the local gentry approached their task as magistrates with little more than tepid enthusiasm (as they did their role in the county militia), the poor were exposed to the tender ministrations of the farmers and other 'middle class' members of the community. The former, as resentful and grudging payers of escalating poor rates, had little interest in ameliorating the lot of their less fortunate brothers, and developed a progressively contemptuous attitude towards poverty. Thus the House of Industry became a means of reducing 'idleness and profligacy'; a squalid and foetid institution whose very brutishness deterred people from wanting to go into it. Among the impoverished, petty pilfering and livestock and food theft were almost institutional, and might even have been seen as a means of supplementing a living rather than any manifestations of criminality. In a deeply inquisitive community where everyone knew their neighbour's business, many minor crimes against property were either ignored or dealt with in an extra-judicial manner through the mechanism of private settlement or more rough-and-ready means. Accordingly, unpopular individuals who were beyond the embrace of communal loyalty could anticipate a harsh response to any malfeasance. Except in the cases of violence and assault, Dr Humphreys tells us, people only turned to the law courts '... when the normal channels of neighbourly harmony and community convention failed to resolve a problem'. The drink-induced violence of some of the gentry, the terrible (but under-

standable?) crime of infanticide among the poor, and other serious offences attracted the attention of the courts of Quarters and Sessions. Yet even here, despite the expansion in the number of capital crimes, many managed to avoid the gallows as juries contrived to return 'partial' verdicts and circuit judges were prepared to exercise clemency on the receipt of character witnesses.

It is extremely difficult, in the course of a brief review, to do justice to Dr Humphreys comprehensive coverage of a very broad subject, and leaving aside the somewhat lame and lacklustre conclusion, his book is a fine example of the genre. It does, however, give rise to a number of points for discussion which in themselves reveal the paucity of work in Wales respecting the *minutiae* of rural life and, at the same time exposes our lack of clarity in interpreting some of the more significant issues. Typically, in discussing industrial and textile activity in the Welshpool area, Dr Humphreys draws attention to the enforced use of the packhorse as a consequence of poor local road conditions, thereby reminding us both of David Hey's study of the packhorse in Derbyshire and Yorkshire, and of the fact that detailed investigation may well reveal that this humble animal represented rather more than a footnote in the economic history of Wales. But this is a minor issue relative to other questions which cry out for the attention of the local historian. How, for example, was rural change in lowland Montgomeryshire influenced by developments in the adjacent English counties? Is it possible to quantify the degree to which greater dependency on day labour pauperized a growing sector of Welsh society – if, indeed day labour did lead to pauperization? According to Dr Humphreys the fact that many farmers worked alongside their men, and themselves undertook seasonal labour on larger farms, 'were levelling influences, tending to fuse the farming community and prevent the emergence of a caste system'. I have my doubts about this rather comfortable notion which, as David Pretty has shown, certainly did not apply later in the following century. The myth of a classless peasant society united in its dislike of the gentry, does not square with the attitudes of farmers towards the poor, with their venal approach to the grain market in times of scarcity, or their concern to conduct aspects of their social activities well apart from their labour forces. This question demands close attention, perhaps involving a study of the social origins of Welsh farmers rather along the lines of that undertaken by A W Ashby in the 1920s.

Whether Montgomeryshire was a true microcosm of Wales as Dr Humphreys suggests, is also a matter for debate. Certainly the experience of the uplands closely reflected that of the northern and western counties, although it is difficult to see much parallel between the rich and fertile vales of the Severn, the Dyfi and elsewhere with, for example, the lowlands of Cardiganshire. Soil, climatic and geological conditions apart, a casual comparison of the scale and quality of surviving vernacular architecture bespeaks a very different agricultural world. Moreover, the comparative lack of proto-industrialized communities in the west would have had important implications for social, cultural and economic life.

Meanwhile was there, as the book's title implies, a genuine 'Crisis of Community' in eighteenth-century Wales? To the poor at the fringes of society, forced by economic circumstances to quit their family hearths for America, the sense of crisis was no doubt acute. It is unlikely, however, that the gentry and the larger and middling farmers were touched by crisis in any direct manner. The alleged abandonment of traditional paternalistic values by the gentry, much-condemned in Welsh historiography, was to some extent a reaction to changing economic conditions; a response to an increasingly mercantile and capitalist oriented approach to land management. Upland enclosure (which, in any case rarely resulted in the loss of cottages built by encroachers), the insistence on 'good husbandry' clauses in tenancy agreements, and the move towards annual tenancies, could be interpreted as evidence for rational estate management with just as much justification as interpretations based upon such notions as 'exploitation' and 'dispossession', if and when these occurred. In any case, one man's dispossession is another man's opportunity, and the engrossing of farms on many Welsh estates provided all manner of openings for energetic and competent tenants, allowing them to survive the vicissitudes of changing market fortunes. Evidence from many parts of Wales suggests that where the landlord was an absentee he quite reasonably expected a decent return from his property, but he did not (with a few significant exceptions) employ his agent as a Himmleresque instrument of terror bent on exacting the last penny from the downtrodden tenantry. As Dr Humphreys shows, the Montgomeryshire gentry, many exasperated by the continual munificence expected of the residential squire, pursued the easier course of non-residence and thereby reneged upon some of the duties expected of them. Nevertheless, as a whole they retained a profound and continuing interest in their Welsh properties and the myth of indifference, largely fostered by nineteenth-century radical polemicists, can no longer properly be sustained.

R J MOORE-COLYER

JOHN BECKETT, *The Rise and Fall of the Grenvilles, Dukes of Buckingham and Chandos, 1710–1921*, Manchester UP, 1994. xi + 308 pp. 8 figs, 12 tables, 21 plates. £45; £14.99 (pbk).

John Beckett has presented us here with a masterly study of the social and financial history of a great aristocratic house. In some ways, the story of the Grenvilles that he tells was a typical one in the annals of the eighteenth- and nineteenth-century aristocracy: a rise to greatness during the eighteenth century, followed by varied fortunes in the nineteenth. Very few of the twenty-odd dukedoms of Victorian England were old-established titles, such as those of Norfolk or Northumberland: most were eighteenth- or nineteenth-century creations. In other ways, however, the Grenville story was a quite exceptional one. Nearly all Victorian aristocrats were indebted to some degree, but none to the extent of the second Duke of Buckingham (1797–1862), who came closer than any other to bringing about the total and permanent financial ruin of his house, very nearly making the Grenvilles the first landless dukes.

Beckett begins his story, however, not with the Grenvilles, but with a remarkable fourth baronet, Sir Richard Temple of Stowe (1675–1749) who in 1697 inherited a very modest estate with an income of about £2200 pa, and 'outgoings accounting for 87 per cent of this sum' (p 17). Temple was, however, a very able man who rose through state service, mainly military and diplomatic, becoming Baron Cobham in 1715, and Viscount Cobham in 1718. He amassed a considerable fortune, and married a wife who brought with her a portion of £20,000, but he invested his fortune in stocks, bonds, and shares rather than in land. Cobham's marriage was childless, but he broke the entail of his estate, and succeeded in settling all of his wealth upon his favourite sister, Hester, who had married Richard Grenville of Wotton (1678–1727) in 1710. Hester's eldest son, also called Richard (1711–1779) therefore inherited both the Temple and the Grenville estates, some 7000 acres, and a large fortune, which he laid out upon judicious land purchases, and the building of a magnificent stately home at Stowe. Groomed by Cobham, he was also an astute politician, becoming Earl Temple in 1752, but he too died childless, and his greatly extended estates passed to the son of his eldest brother, George Grenville (1712–1770) who had served as Prime Minister between 1763 and 1765. It was his son, also called George (1753–1813) who inherited the properties and the title in 1779. He was created Marquis of Buckingham in 1784. Throughout the middle years of the eighteenth century, the Grenvilles had been very active politically, working in close alliance with the Pitts. The first Marquis undoubtedly benefited from his political connections, for he was able to secure for himself a number of lucrative government offices, as well as promotion within the peerage. In 1775 he married Mary Elizabeth Nugent, a substantial heiress, through whom the Grenvilles inherited estates in Ireland, Cornwall, and Essex. In 1796 the eldest son of the first marquess, later the first duke, married Anna Elizabeth Brydges, heiress of the third Duke of Chandos, who brought to the family her estates in Hampshire, Middlesex, and Somerset.

At the time of the death of the first Marquis in 1813, the family fortunes were at their peak. Debt levels were negligible, and the Grenvilles owned some 56,000 acres of land in England and Ireland, returning a rental of £64,635 in 1815, and £67,126 by 1831 (pp 133–4), in addition to a considerable fortune in stocks. The family had risen through political activity, the securing of lucrative government offices, extremely judicious marriages, the fortunes of inheritance, and wise investments in stocks and shares. Unlike the dukes of Bridgewater, Sutherland, or Devonshire, however, they owed no part of their income to the industrial development of their estates. Richard Grenville (1776–1839), who became the first Duke of Buckingham and Chandos in 1822, continued to buy land, but he was a profligate, and the rot of the family fortunes had already set in by 1827, with the duke facing debts of £300,000. From 1833 to 1839 the administration of the estates was placed into the hands of trustees. If ever a family needed the succession of a 'saving son', it was the Grenvilles in 1839. But the second duke proved to be even more profligate than his father, borrowing and mortgaging recklessly, and even persuading his son and heir in 1845 to allow a breaking of the entail of the estates, so that he could mortgage even more. At its peak in 1847 the Grenville debt stood at very nearly £1.5 million, something like the entire freehold value of all the Grenville lands. Debt servicing and other outgoings were costing £83,000 a year, while the family income was only £61,000 a year (p 229). In 1847 trustees insisted that control of the estates should pass to the second duke's heir, the future third duke. Beckett comments sadly on the second duke:

> By 1848 he had quarrelled with his daughter, separated from his wife, and was refusing to communicate with his son. He treated them alike with contempt, conjuring up in his own mind a conspiracy in which they were determined to destroy him. So obsessed did he become, that by 1848 it is hard to believe that he was either rational or sane. He was also bankrupt.

It would be very interesting to know just how the second duke had managed to dissipate so vast a fortune, but he kept no accounts, and as Beckett admits, 'The evidence is simply not good enough to draw decisive conclusions about Buckingham's difficulties'. At any rate, in 1848 the sales began: almost everything had to go, including the contents of Stowe House, which were auctioned in that year. However, by highly judicious financial management, the third duke was able to save some 10,000 acres of land, and Stowe House itself. By 1883 he was enjoying a rental of £18,000 a year, and had even bought back for Stowe some of the treasures that had been sold from it in 1848. Incredibly, he died in 1889 entirely out of debt. He had been 'the safe duke', who had saved the family from total disaster. As such he stood in the same tradition as the seventh Duke of Bedford, the eighth Duke of Devonshire, and the third Duke of Sutherland who had also retrieved their families' fortunes, albeit from a far less parlous state than those of the Grenvilles. Ironically, however, the third duke died without male heirs, and so the dukedom died with him. Stowe and its estates passed on to other hands, and in 1921 they were sold as part of that great land transfer which took place after the First World War. In 1923 Stowe was opened as the public school that still stands on the site, preserving one of the greatest of aristocratic homes for posterity.

In the long debate over the nature and significance of aristocratic indebtedness that has gone on since the 1950s, the story of the Grenvilles lends more support to the views of David Spring than to those of David Cannadine or Michael Thompson. We need more aristocratic studies of this quality.

ROSS WORDIE

M J DAUNTON, *Progress and Poverty: An Economic and Social History of Britain 1700–1850*, OUP, 1995. xvi + 620 pp. £45 (hbk); £14.99 (pbk).

'The starting-point of my survey', writes Martin Daunton in the opening pages of this book, 'is the performance of the economy, but the aim has been to integrate social and political history into the analysis.' It is a brave aim: putting the people back into economic history is no mean feat after many years in which economic and social history have been pulled in different directions. But Daunton largely succeeds in a substantial, well written text book which reveals his splendid grasp and understanding of the period and subject matter. The book has six main sections, covering agriculture and rural society, industry and urban society, 'Integrating the economy' (including transport and banking), poverty, prosperity and population, and public policy.

Readers of this journal will be mainly interested in the first part of the book, and in Daunton's understanding of the role of agriculture in the economy, although they will need also to dip into later chapters for his discussion of marketing, wages, poverty and other 'rural' matters. But these chapters offer us an opportunity to see how a 'mainstream' economic historian might now understand the agricultural history of the period. What is immediately clear is that Daunton has digested R C Allen's recent work, and his substantial chapters on agricultural production, landownership, and enclosure, take an – on the whole – firmly Allenesque line. Thus the agricultural revolution is seen to have been more or less complete by 1770, the rise of the large estate at the expense of the small owner altered the balance within rural society, and whatever the social implications of enclosure, it made little difference to agricultural output. Daunton concludes that 'the major changes in agricultural productivity occurred in the late seventeenth and early eighteenth centuries, within a framework of relatively small-scale yeoman farming, through their greater care of the soil and intensification of the work-rate on the farm' (p 57).

In adopting this line of argument and juxtaposing it with the concerns of the classical economists that population towards the end of the eighteenth century was outrunning food supply. Daunton not only shows how far we have travelled from the Chambers and Mingay approach thirty years ago, but like Allen and others who argue in the same manner, he struggles to explain how a rapidly rising population was adequately fed, at least before the introduction of artificials in the 1830s, which he recognizes as giving agriculture a significant boost in the nineteenth century. In this respect I wonder if he has given sufficient weight to the recent work of Overton and Campbell, which is mentioned in his further reading but not really developed in the text.

My other reservation with this book concerns its size. Daunton writes in the acknowledgements that he originally intended to write one book covering 1700–1914, but changed direction as his manuscript grew. The result, for a self-proclaimed textbook, is a very large tome. How attractive its densely printed pages will prove to undergraduates, particularly in these days of potboiling modules, must be more doubtful. OUP have kept the paperback price to £15, and the book is certainly worth placing on student booklists, but maybe the new climate requires us to rethink what we recommend and how we package 'textbooks'? My sense, after using the book with undergraduates, was that this was a little too advanced for the levels that first and second year undergraduates can now expect to achieve.

Finally, for the name of a former vice-chancellor of Oxford University to be spelt in different ways on adjacent lines not once but twice (pp 66, 87) does not suggest this book was very carefully copy edited.

J V BECKETT

TOM WILLIAMSON, *Polite Landscapes: Gardens and Society in Eighteenth-Century England*, Alan Sutton: Stroud, 1995. 182 pp. Illus. £18.99.

Garden and landscape historians have tended to treat their subject as a branch of art history and have viewed changes largely as stylistic sequences governed by landscape artists or designers and supported by contemporary literary or philosophical comment. This book endeavours to investigate the development of eighteenth-century parks and gardens in the broader context of social and economic change. It questions the acceptance of some literary influences and cautions us about too readily applying political labels – Whig or Tory – to architecture or landscapes early in the eighteenth century.

The writer emphasizes the necessity of viewing the design of a house and its garden and park as an interrelated process in order to understand the 'polite' patrons who not only lived in them but used them to impress and entertain. The parks in particular were not always exclusive. The enlightened landowner allowed the 'polite' public in to view his taste and achievements. His own tenants were also allowed limited entry to village fetes and the agricultural and horticultural shows that had their origins there. The landowner often blurred the visual boundaries of his park by including some grazing land for sheep and cattle. Conversely, parkland tree-planting spilled over into the surrounding countryside. Some landowners built public roads through their parks. Nor was the old order and symmetry of the baroque garden quickly cleared away in the eighteenth century. Vestiges remained beyond the 1760s and the writer qualifies the old, generalised view that 'Capability' Brown was a universal destroyer of old gardens.

Whilst the 'polite' recreations of hunting and shooting are dealt with, little is said about the rapidly growing interest in angling. Many gentlemen were developing the rivers that ran through their estates by constructing weirs and waterfalls, fish ladders and fishing bridges. The water bailiff on some estates was as important as the gamekeeper and many landlords allowed the 'polite' public to purchase licences to fish.

The book is appropriately illustrated and well argued on the whole. There are few errors of fact, though the author misunderstands the purpose of the willow-tree fountain at Chatsworth. A 'merry conceit', indeed it was, but this does not mean that it 'showered unsuspecting visitors with water'. Like the Bosquet du Marais (1672) at Versailles, which inspired it, the tree functioned as a weeping willow and visitors were unable to pass beneath it.

The book's style is marred by a few clichés and the occasional jargonese of sociologists. So we read that 'the late eighteenth century was a period in which the social map was being redrawn' and in which there was 'upward mobility' and 'markers' for the historian to observe. What does the writer mean by 'the picturesque package'? The index is largely concerned with places and names (including those referred to in footnotes). However, there are omissions and it is less adequate on topics and themes; for instance, 'grass' and 'turf' are omitted even though part of a chapter deals with these features in the landscape of the park.

The book is a timely check to the hitherto narrow approach of conventional landscape and garden histories. It crosses boundaries of historical study and leaves many interesting assertions to be weighed in the light of further and closer research.

J T BRIGHTON

NORMAN SCARFE, *Innocent Espionage: The la Rochefoucauld Brothers' Tour of England in 1785*, Boydell & Brewer: Woodbridge, 1995. 292 pp. Illus. £25.

The history of tourism and tourist writing is currently fashionable. Observations by past travellers are invaluable to historians for the varied insights and brief flashes that illuminate all aspects of life. When they are the insights of foreign travellers they bring the added dimensions of fresh eyes and ears and comparisons with experiences in their native land.

This book gives us a view of rural, urban and industrial England as seen by two young, enlightened French aristocrats and their tutor. Their descriptions of cities as varied as London, Bath and Bristol and towns like Liverpool, Sheffield and Derby are valuable, especially when interpolated with comparisons with Paris and other French towns. Occasionally, one feels that the spectacles of these anglophiles are rather too rose-tinted. They admired, like Voltaire, Montesquieu and others, the parliamentary system, commerce, agriculture, landscape, industry and technology. The fact that the travellers were foreign and, in the eyes of watchful English factory owners, did not pose the threat of industrial espionage, enabled them to see and describe machinery and processes forbidden to most British enquirers. Their freedom to view and make notes accounts for the book's title.

The Frenchmen's comments on the revolution taking place in English agriculture are more sketchy and far less revealing than those of their Suffolk

friend, Arthur Young, both in England and in their own land. Their tour of England did not take them north of Liverpool, Manchester and Sheffield and omitted the important agricultural counties of Norfolk, Lincolnshire and Yorkshire.

Contemporary illustrations are generally well chosen to illustrate particular observations in the text and the footnotes are useful. There are a few editorial oversights when the Frenchmen are in error; for instance, the duke of Devonshire was not the owner of Matlock (p 49). Conversely, the Frenchmen were not wrong in mentioning slates as a product of north Derbyshire (p 51); a number of quarries on the gritstone and grit-shale outcrops produced them. Nevertheless, the record of the tour is informative and entertaining. There are flashes of unconscious amusement as when the two young beaux fail to mention Chesterfield's renowned crooked spire, having gone to the parish church to view the ladies.

The book has a good introduction and epilogue and a fairly full index.

J T BRIGHTON

NORMAN FOX, *Berkshire to Botany Bay; The 1830 Labourers' Revolt in Berkshire.* Littlefield Publishing, Newbury, nd. 162 pp. nps.

Mr Fox's sympathetic interest in the Swing revolt in his part of Berkshire was stimulated by the reading the Hammonds' classic *Village Labourer* in the 1940s, and confirmed in 1969 by Hobsbawm's and Rudé's now standard study. Thereafter Fox has examined many of the sources, including central government records, among them the Home Office and Treasury Solicitor's papers, together with some of the more localised documentation. He has also discovered details of a dozen or so of the transportees' subsequent life in exile from Australian archives. One or two are shown to have prospered there, but there is no substantive evidence that more than a couple ever returned to English shores.

Fox focuses on one epicentre of the revolt, a geographically very small area, south-west of Newbury. As might be expected, the local sources throw up additional important information about these 'victims of Whiggery' at the notorious Special Commissions of Assize which tried Swing rioters, 138 of them from Berkshire. For example, the only man hanged in the county, for the common act of demanding cash contributions from the crowd's targets, 'Captain' William Smith, and one of his co-accused, had not only been in trouble before, but had been bound over to keep the peace nine years earlier, towards the very same gamekeeper and an estate bailiff who they were convicted of robbing in 1830. Wives of transportees, only two of whom are known to been reunited with their husbands, are subsequently encountered in receipt of public assistance, bearing bastards, and – after 1835 – incarcerated in New Poor-Law Bastilles.

However, Fox's original arguments are unconvincing. He provides no hard evidence in support of his claim that locally-produced threshing machines, costing a mere £8 10s, first advertised in 1829, were quickly and widely purchased by farmers in his district in explanation of why there were so many of the hated decimators of winter-time employment for Swing to target here within a year. Fox's assertion that the men of Kintbury were selected mercilessly for prosecution owing to the influence of one local major landowner and Whig MP for the county, the octogenerian Whig Charles Dundas, loyally supportive of his party's new prime minister's determination to prove himself as fierce an upholder of law and order as his Tory predecessor, the Duke of Wellington, is based on circumstantial evidence rather than a detailed analysis of the Home Office's precise legal strategy. Fox correctly insists that many skilled service-sector workers, blacksmiths, wheelwrights and other artisans, were leading rioters, and rightly attributes this to the adverse impact of technology on their living standards, but this qualification to Swing's status as the 'last labourers' revolt' is well established in recent historiography.

Finally, professional historians, not least this reviewer, ought to welcome contributions from enthusiasts exploring the minutae of revolts from an intensely localized perspective, who are now freed from the worst restrictions imposed by the traditional rigours of commercial and academic publishers. But the opportunities deriving from desk-top technology should not perhaps preclude some advice from experienced editors.

ROGER WELLS

MATTHEW CRAGOE, *An Anglican Aristocracy; The Moral Economy of the Landed Estate in Carmarthenshire, 1832–1895*, Oxford Historical Monographs, Clarendon Press, 1996. 280 pp. £40.

As many of us have long suspected, the landowning gentry and aristocracy of Victorian Wales played a far more significant role in shaping contemporary life than much of the modern historiography would suggest. In this revisionist work Matthew Cragoe sets the landed classes within their real context and in so doing adds to the growing corpus of studies which criticize the rather tired 'them and us' model of later nineteenth-century rural Wales. As he reviews the role of the landowner in estate management, farming, local administration, politics and the Established Church, he constantly exposes the flaws in the conventional view of a countryside seething

with discontent as a nonconformist Welsh-speaking people squared up to their Anglican, anglicized English-speaking masters. Whereas isolated cases can be found to substantiate this view – originally elaborated for political reasons by contemporary radical polemicists – it is, as a general model, grossly simplistic. Indeed, despite tensions over game preservation, the hostilities of the 'Tithe War', and the vicious campaign of the radical press, 'The farming classes of Wales stolidly refused to be agitated on issues relating to their relationship with their landlords throughout the century'. As Thomas Gee and his followers found when tenants refused to contribute towards the establishment of the Land League in Wales in the 1880s, farmers were not prepared to upset the carefully balanced duties and entitlements embodied in the 'moral economy' of the estate.

Within the general framework of the 'moral economy' argues Dr Cragoe, the aristocracy effectively discharged their traditional paternalistic function consonant with their concept of Christian duty. If they devoted less time to their local administration duties as the century wore on, they accepted without question their individual role as leaders of society and guardians of the material world in which all had to live. Dr Cragoe finds common cause with Prys Morgan in questioning the frequently articulated view that the aristocracy had deserted their native language and reneged upon their earlier function as guardians of the Welsh cultural tradition. While it is undoubtedly true that, as with other social groups throughout Wales, fewer members of the landed classes spoke the Welsh language than had been the case a century previously, the fact remained that they continued actively to support antiquarian activity, the *eisteddfodau* and other manifestations of indigenous culture. Concurrently they were prepared to subscribe generously to the building of schools and chapels and, as JPs, to acquiesce to the licensing of meeting houses, actions which would no doubt find favour with dissenting freeholders and enfranchised tenants.

In the main, of course, the landed gentry were staunch churchmen and as such played an important part in the physical and spiritual reforms of the Established Church in the middle and later decades of the nineteenth century. The unreformed Church, plagued by pluralism, absenteeism, incompetent clergy and physical dilapidation, proved an easy prey for radical polemicists opposed to church rates, burial rituals and religious education policy. In 1851, a mere 20 per cent of worshippers attended an Anglican church, but within fifty years, the reforming zeal of Connop Thirlwall and William Basil Jones as successive bishops of St David's had so boosted attendance that the Church had become once again the largest single religious body in Wales. As pluralism and non-residence declined, and appropriately-trained clergy from St David's College, Lampeter, were presented to livings, the church emerged from its eighteenth century stupor to become a major spiritual force. As grants from Queen Anne's Bounty and the Ecclesiastical Commissioners were supplemented by gentry contributions, some 827 new churches were built in the Principality between 1831 and 1900, while others were extensively restored. The Carmarthenshire landowners, in common with their colleagues elsewhere, were sometimes less than critical in their choice of appointments to livings, yet they gave generously to ecclesiastical building projects – often of increasing architectural elaboration. Interestingly enough, Dr Cragoe reminds us, many members of the Nonconformist fold demonstrated a lingering affection for the Church by contributing handsomely to building ventures, which prompts questions as to the true extent of anti-clericism and anti-landlordism among this class. If some educated middle class dissenters viewed the Anglican establishment and its gentry supporters with disdain, others, especially among the rural labourers and small farmers, preoccupied with earning a daily crust, were probably indifferent to the polemics emanating from chapel and meeting house.

Throughout much of Dr Cragoe's discourse, sacred cows, if not dismissed to the nether pastures out of sight and sound are, at the very least, hobbled and muzzled. In his admirable discussion of political representation and electoral behaviour in Carmarthenshire, for example, he addresses the thorny question of political coercion, much-invoked in nonconformist anti-landlord rhetoric. How realistic were the assertions of mass evictions of tenants voting against their landlord's interests, put about by the vernacular press? Hardly at all according to Dr Cragoe. Taking as an example the 50,000 acre estate of Lord Cawdor from which it was alleged that several hundreds of recusant tenants had been dismissed following the 1868 election, Cragoe finds that a mere eight had been turned off, and even in some of these cases bad farming, poaching and other misdemeanours were as much the cause of their dismissal as political issues. In any case, the bellicose attitude of dissenting ministers who threatened their flocks with spirited and social ostracism, (if not eternal damnation) were they to cast their votes for the Conservative cause, was just as deserving of the opprobrium of history as landlord coercion. To be fair, as Cragoe concludes, hard and fast evidence of coercion on either side is difficult to establish, and more local studies will be required before the jury can reach an unequivocal verdict

on this particular issue. As far as the aristocracy were concerned, however, it is probably reasonable to assume that few would have been prepared to risk the communal hostility following a run of evictions, besides which, in view of the shortage of capital-rich tenants to take up vacant farms, wholesale dismissals would hardly serve an estate's bests interests.

Although some might argue against Dr Cragoe's claim that the Welsh aristocracy 'provided almost all the initiative and capital for agricultural improvements', he demonstrates convincingly that in Carmarthenshire at least they attended assiduously to their estate management duties. Faced with a generally undercapitalised tenantry whose 'peasant' mentality favoured the hoarding rather than investment of profits, and whose social attitudes underpinned the notion that status within the community rather than economic efficiency should shape their farming activities, this was no mean task. To an essentially resident landed gentry (only 10 per cent of the land in Carmarthenshire entered in the 'New Domesday' was owned by non-residents), ensuring family succession to tenancies and thus cementing the 'moral economy' of the estate was accorded high priority. Thus, despite the replacement of long leases by annual tenancies, there is virtually no Carmarthenshire evidence to substantiate the radical claim that Welsh landowners 'screwed-up' their rents and inevitably let vacant holdings to the highest bidder. In fact, widows and children were granted succession to tenancies largely as a matter of course. Meanwhile, in a perfectly rational manner rents were periodically adjusted according to changing economic circumstances and ultimately reflected the productive potential of the land. It was, of course, fundamentally important that estate offices maintained their holdings in tenantable condition, and Dr Cragoe finds impressive evidence of expenditure on farm rebuilding and land drainage in the mid- and later nineteenth century. How far this impressed the tenantry and created an infrastructure for improved farming is not entirely clear, although the seeming indifference of tenants to the provision by the estate of improved bulls, stallions and ewes for their use, might suggest that beyond improving the capital value of estates such expenditure yielded little reward. Again, the general failure of landlord-inspired agricultural societies is often associated with the recalcitrancy of the farming population rather than with the economic and technical impracticalities of many of the suggestions and plans adumbrated by those bodies. It is instructive, for example, to compare the enthusiasm of Carmarthenshire farmers for the practical dairying demonstrations given by peripatetic lecturers from the University College of Wales, Aberystwyth, in the 1890s, with their generally torpid view of the agricultural societies.

Whereas the gentry's star waned after 1889, their informal prestige in rural society lingered on, and Dr Cragoe is able to conclude that 'For much of the century, the aristocracy were regarded as the legitimate governors of Wales, and the loyalty of the tenantry was not in question'. In a work demonstrating masterly use of a wide variety of sources, Cragoe focuses on a number of pivotal issues in Welsh rural history. If his study is occasionally repetitious, sometimes marred by a rather eccentric approach to Welsh orthography and slipshod proof-reading, it is nevertheless a fine piece of scholarship. In charting a careful course through the somewhat murky waters of later nineteenth century Carmarthenshire, Dr Cragoe's book will prove an important launchpad for further studies of Victorian rural Wales.

R J MOORE-COLYER

NIGEL GOOSE, *Population, Economy and Family Structure in Hertfordshire in 1851: The Berkhamsted Region*, University of Hertfordshire Press, 1996. 414 pp. 10 maps; 16 tables. £14.95 (pbk).

The Hatfield (later, Hertfordshire) Research Resources Project was started in 1989 with a view to establishing a computerized collection of historical data, to supply local schools with documentary teaching packs and a machine readable datasets for project work, and to lay the foundations for a series of publications in Hertfordshire history. These datasets have included, for example, pauper apprenticeships, 1599–1876, and Bastardy and Removal Orders. However the largest single objective has been to computerise data for the 167,298 individuals listed in the 1851 census enumerators' returns for the county. This is the first time that coverage of an entire English county has been attempted. The basic inputting for 1851 is now completed and the outcome is planned to appear in a series of twelve volumes. The book under review marks the first stage of publication, and the greater part of what lies between its covers is 285 pages of census returns, printed largely as set down by the original enumerators, for two market towns (Berkhamsted and Tring) and six villages, together making up the Berkhamsted registration district of west Hertfordshire. This amounts to 11,578 individuals, or 6.9 per cent of the county population. In addition, there is a comprehensive index of names, amounting to another 45 pages. Full credit is given to a small 'volunteer army' of local historians and genealogists who have helped in this work and to the enthusiastic cooperation of the county record office and the local studies library. However, it is clear that much of the leadership and coordination

has been provided from the University of Hertfordshire, particularly by Nigel Goose and his research assistant, Paul Sawtrell.

Whether trawling through these published returns or by accessing the dataset, present and future generations of Hertfordshire local historians and genealogists will have reason to be grateful to those who have undertaken this heroic task. Moreover, a wide range of readers – with no special interest in this county or any intention of mining the voluminous details – will profit considerably from Goose's 67 page introduction and commentary. Although primarily thought of as an expert on seventeenth-century demographic sources, he shows here an impressive command of the literature on nineteenth-century Hertfordshire and also of the existing critical literature on the census enumerators' books. Appropriate comparisons are made with other studies in respect of age and sex distributions, household size and composition and migratory flows, sometimes closely matching existing findings for other communities, sometimes bringing to light significant variations. Agriculture is discussed in some detail, confirming that the district was dominated by substantial arable farms, servantless indeed, but heavy employers of male labour all the same. Most interest, perhaps, attaches to the section on straw-plaiting, a cottage industry still expanding in the mid nineteenth century. In a series of vivid comparisons this activity is shown to be associated with a strikingly high overall female occupational participation rate and with the availability of relatively more work for married women than has been found even in the cotton manufacturing town of Preston, or the Staffordshire Potteries. Straw-plaiting also provided much work for children who as teenagers were more likely to reside at home than were those employed in domestic service, or on the land. These circumstances must have been beneficial in supplementing family income, although the downside was experienced in notorious educational backwardness, with Hertfordshire experiencing the lowest literacy rates in England and Wales in 1840. Today, on the evidence of this book, the position is transformed, for the county's historians are bidding fair to establish Hertfordshire as a pace-setter for others to follow.

W A ARMSTRONG

TREVOR HICKMAN, *The History of Stilton Cheese, Alan Sutton*, Stroud, 1995. 160pp. Illus. £7.99; and AVICE R WILSON, *Forgotten Harvest: The Story of Cheesemaking in Wiltshire*, Avice Wilson, Calne, 1995. 218 pp. Illus. £12.50.

These two attractively presented histories of regional cheeses could be said to be as different 'as chalk from cheese', a phrase that derives from one of the counties under study, Wiltshire. While both draw on oral evidence and photographs, the study of Stilton cheese is published as part of 'The Best of British in Old Photographs' series and as such is dominated by photographs with text in support of the illustrations. It is clear that much work has been undertaken in preparation of this book and many sources consulted. However, it is unfortunate that in places Hickman's text is presented in a confused manner with some repetition and a strange use of tenses. Conversely, Wilson's book is a scholarly attempt to plot the progress of cheesemaking in Wiltshire using a variety of sources and with supporting academic apparatus such as footnotes, appendices, index and glossary.

Both publications follow a similar format and examine the history and location of cheesemaking, the processes involved, the development of cheese, and the changing fortunes of the industry. However, Wilson also examines closely the role of transport, foreign competition, and the marketing of Wiltshire cheeses while Hickson concentrates more on the towns and villages associated with Stilton.

The actual story of the two cheeses, while ultimately different, has similarities, many of which mirror the fortunes of other regional cheeses. The origins of both cheeses are obscure and their precise locus changed over time. The heyday of Stilton cheese was in the late eighteenth and early nineteenth centuries as road transport increased and the cheese was served to travellers in the nearby posthouses situated on the Great North Road. When these posthouses declined from the 1840s due to rail transport, the cheese industry was adversely affected.

Cheesemaking had always been an important part of Wiltshire farming. Until the fifteenth century cheese was made from ewe's milk and, therefore, was just as likely to be found in the chalkland areas of southern Wiltshire as on the estates in Avon dale in the northern part of the county. However, after the dissolution of the monasteries and the subsequent sale and division of land, dairy farming increased and by the seventeenth century cheesemaking was largely of cow's milk and was predominately in north Wiltshire. As with the Stilton industry, the heyday for Wiltshire cheese appears to have been in the eighteenth century and continued into the nineteenth century when the arrival of the railway led to its decline. The routing of the London-Bristol railway (opened 1841) by Brunel through Swindon and Chippenham, the major cheese area, rather than further south outside the main dairy district, resulted in many farmers moving from cheesemaking to exporting liquid milk.

The establishment of cheese factories in the two areas had different effects. In Wiltshire cheesemak-

ing survived because of the commercial dairies but Cheddar cheese was produced rather than Wiltshire cheese which was less suited to factory conditions. As a result, the art of making Wiltshire cheese was almost lost in the twentieth century. However, a glimmer of hope has appeared in the 1990s with a few private enterprises once again producing Wiltshire cheese. While the move to factory production hastened the demise of the Wiltshire, the converse was true for Stilton, where the transition from farmhouse to factory in the Melton Mowbray area ensured not only the survival of the local cheese but its successful expansion. The changing fortunes of the industry in both areas owed much to the enterprise of individuals. For example, in Stilton it was the purchase of inns by Cooper Thornhill in the eighteenth century and the establishment of factories by Henry Morris in the late nineteenth century that helped Stilton to expand and survive. In Wiltshire, at the end of the Victorian period, Charles Maggs opened cheese and butter factories to combat the earlier establishment of the Anglo-Swiss Condensed Milk Company (later Nestlés) which produced condensed milk. However, the Maggs' company, while helping farmers to survive, also hastened the demise of Wiltshire cheese by concentrating on producing butter and Cheddar cheeses from the Wiltshire dairy herds.

Both books provide a fascinating study of the development of regional cheeses which will be of interest to a wide audience. However, both writers tend not set their particular subject in the broader context of recent research, though Wilson shows some awareness of academic debates on the topic. Wilson's study also examines cheesemaking in the context of the rural economy of Wiltshire and demonstrates how the whole farming system in north Wiltshire was geared towards cheese production. Serious researchers will find more of substance for their own work in *Forgotten Harvest* than in *The History of Stilton Cheese.*

CHRISTINE HALLAS

JAMES SIMPSON, *Spanish Agriculture: the Long Siesta, 1765–1965*, CUP, 1995. xx + 316 pp. £40.

During the final decades of the *ancien régime*, Spain's expanding population, as elsewhere in Europe, began to exert strong pressure on the resources of the ailing nation. Although nineteenth-century Spaniards were spared the worst aspects of famine, traditional agriculture south of the Pyrenees languished under a series of almost insurmountable obstacles to sustained progress. Not until the economic boom of the mid-1960s did the backward Spanish countryside witness a marked increase in labour productivity which finally permitted sizeable transfers of resources to industry and the service sector. In his well crafted monograph on Spanish agriculture from 1765 to 1965, a period which he amusingly labels 'the long *siesta*', James Simpson argues that while it is certainly true that Spain's climate, landscape and soils were, in the main, far from favourable to generations of cereal farmers or olive growers, poor natural resources alone cannot explain the painfully slow progress of low-yielding traditional agriculture. Other factors which he singles out for criticism include mistaken government policies, such as ill-considered tariff and price intervention and the lack of support for cooperatives, along with weak urban demand for both farm products and agricultural labour. Export-led growth in such promising areas as wine and olive oil proved difficult to achieve due to product adulteration and the availability of cheap substitutes, while Spain also suffered from a series of technical restrictions on the improvements of yields in dry-farming. Whatever the case, with his detailed knowledge of rural Spain and profound sympathy for Spanish farmers, Simpson forthrightly rejects the hackneyed stereotype of a nation of 'backward' peasants who allocated their resources inefficiently and consistently failed to respond to the golden opportunities presented by expanding world markets.

The book begins with Simpson's own carefully compiled estimates of agricultural output and productivity. His findings contradict the contentious claims of Leandro Prados that Spanish agriculture experienced notable change after the mid-nineteenth century. In common with the Grupo de Estudios de Historia Rural, Simpson demonstrates that the pace of change only began to quicken during the early years of the twentieth century, not least due to advances in livestock farming and horticulture. Unfortunately, most of these hard-won gains were dissipated in the course of the destructive Spanish Civil War and the disastrous autarkic experiments of early Franco regime. Next, he highlights the enormous diversity of Spanish agriculture and distinguishes four main regions. To no one's surprise, labour productivity comes out higher in the North and the Mediterranean than it does in the Interior and Andalusia. Agriculture in the North is shown to be based on tiny farms, with adequate rainfall allowing for labour-intensive systems of mixed husbandry. Even though the population was adequately fed, the low levels of integration in product markets produced pathetically low disposable incomes. Elsewhere, irrigation helped Mediterranean farmers to specialize in high value fruits and vegetables for urban and international markets. In sharp contrast, Andalusia and the Interior, which together

accounted for four-fifths of the cultivated area, were the perennial victims of summer droughts. As a result, the considerable problems facing Spanish farmers are shown to have varied enormously according to regional location.

In the second half of the eighteenth century, the increasing demand for foodstuffs was largely met by extending the cultivated surface while utilizing existing technology. This process was aided by changes in property rights which strengthened individual ownership. Transport improvements after 1850, consequent upon construction of the railway network, led to greater market integration and an increase in farm specialization. In general, the extension of the area cultivated and improvements in market integration between 1700 and 1900 allowed farmers not only to feed a population which doubled its size, but also to meet increasing international demand for products such as wine and olive oil. What a pity that the most sharply rising increases in demand after 1880 were for meat and dairy products, in which Spain suffered from comparative *dis*advantages! Lastly, Simpson stresses, all of these developments took place against a background of little or no improvement in land and labour productivity.

Simpson goes on to show that the commercial success of new irrigation schemes from the late-nineteenth century onwards depended not only on the construction of reservoirs and canals, but also on a wide range of complementary inputs, including new crops, scientifically selected seeds and artificial fertilizers. Despite its long-term potential, the contribution of irrigation remained small before 1936. In consequence, low cereal yields and the limited extension of irrigation meant that improved labour productivity in dry-farming areas could only be achieved through mechanization. Even so, he insists, 'rational' farmers were naturally reluctant to mechanize at a time when they possessed cheap and abundant supplies of labour, not to mention the high cost of draught energy or the weakness of links between the agricultural and industrial sectors. However, after the mid-1950s Spanish agriculture began to alter beyond all recognition. The rural exodus of both agricultural labourers and peasant farmers to the cities and northern Europe created labour shortages in the countryside, leading to an increase in real wages, thus providing the necessary stimulus to mechanization. As a result labour productivity, which increased by about a third between 1900 and 1950, went on to triple over the next two decades. Spanish agriculture, Simpson tells us, although still lagging behind its northern neighbours, was at last emerging from its slumbers.

JOSEPH HARRISON

JANKEN MYRDAL, *Landbon, Ladan och Lagan* ..., Kungl. Skogs-och Lantbruksakademien, Stockholm, 1996. 336 pp. nps.

This volume of the Royal Academy for Forestry and Agriculture is a tribute to Professor Janken Myrdal who occupies Sweden's first chair of agricultural history at the Agricultural University in Ultuna. It contains twenty-two representative contributions of Janken Myrdal's publications in scientific journals. The contributions are arranged under five headings: 1. Historiography, in which Swedish agrarian history is placed in its broader European setting and methodological context; 2. Studies from the Iron Age through to the sixteenth century; 3. Contributions centred on eighteenth and nineteenth century topics; 4. Ethnographic studies; and 5. Aspects of agrarian history in the light of political and social conditions. There is also a full bibliography of Janken Myrdal's publications, 1972–1995. The range of his work is wide. At one level it follows in the tradition of Sigurd Erixon, Gösta Berg and their contemporaries in Denmark, Norway and Finland. There is detailed work on simple farming implements such as the spade and the fork, with special studies (in English) on the hayrake and plunge churn. The tradition emerges again in an entertaining paper on 'Fences, time use and the local community' which is based partly on a number of diaries kept in former times by *bonder* who were encouraged by the local agricultural societies. 'Den dumma bonden' (the dumb peasant, though 'peasant is scarcely an accurate translation) is anything but dumb in the light of innovations studied by Janken Myrdal and often anything but illiterate. At a higher level, Myrdal follows in the tradition of Gunnar Utterström, one of the pioneers of Swedish agricultural history.

The tribute has been supported by *Kgl. Patriotiska Sällskapet*, an institution which was founded in the middle of the eighteenth century and which did so much in early days to foster agricultural improvement. *Kgl. Skogs-och Lantbruksakademien*, partly in association with other Swedish institutions, has published some forty volumes over the last few years which are major contributions to Swedish agricultural history. They include several written in collaboration with Swedish historical geographers.

W R MEAD

J L VAN ZANDEN, *The Transformation of European Agriculture in the Nineteenth Century: The Case of the Netherlands*, VU University Press, Amsterdam, 1994. xii + 199 pp. £30.

Professor Van Zanden's work is becoming increasingly familiar to British agricultural historians but unfortunately far too much of it is still inaccessible because of language barriers. It is important there-

fore that we take notice when one of his major works is translated from Dutch into English. In this case we have his 1985 doctoral thesis, but very much in a revised, as well as translated, form. The main title is a little misleading since this is a case study of the Netherlands in the nineteenth century, though the author does place the agricultural history of the country in wider European and chronological contexts, in comparisons with England/Wales, Belgium, and France. The book is essentially an analytical history of Dutch agriculture employing the basic tools of analysis of modern economic growth – measures of output and productivity at national and regional levels, and where appropriate the closer analysis of factor productivity. The story is about the processes and dynamics of economic change, with also an important final section on some of the social structural changes that modernization involved. The availability of factor sources – principally land and labour – their relative prices, relative terms of trade, and therefore relative substitutability defined the decision making processes of the farmers. Yet it is not a tale which is wholly inward looking because the farmers not only responded to the relative costs and returns of factors at their obvious disposal, they also responded to the market and in general to external stimuli. This included changes in local demand, and responses to the external situation especially once improvements in the transport system allowed a full participation in international markets to occur.

The analysis of these factors and their outcomes identifies several clear adjustments in modern Dutch agriculture relative to its pre-modern origins. By the second half of the nineteenth century unit labour costs relative to land prices had risen, encouraging technological change which was labour saving. An obviously related consequence was a reaction against large farms with large labour bills and therefore the extension of small family farms with limited inputs of non-family labour. Specialization also became a feature as the century progressed and this had a knock-on effect in the more specialist capital inputs which were required. The emphasis therefore was less on agriculture as a kind of neutral method of employing the land, and more on the process of exploiting and maximizing the output from that land. In other words the adjustment was from relatively passive to increasingly more active modes of economic behaviour. As Van Zanden himself puts it in a succinct concluding chapter, 'Agriculture thus became an "extractive industry", in which farmers employed capital and labour to extract food from the land; it also evolved into a kind of process-industry, in which farmers transformed imported inputs into export products'. This may not sound particularly different from what we encounter in other parts of western Europe, but this short review cannot possibly do justice to the detail involved in Dutch agricultural change nor its regional complexity, especially in the formerly relatively backward eastern part of the country on which Van Zanden places much analytical emphasis. Yet whether the Dutch experience was or was not radically different will have to wait until someone has the courage to write the same book, but without the sub-title.

MICHAEL TURNER

A M MANNION, *Agriculture and Environmental Change: Temporal and Spatial Dimensions*, John Wiley, 1995. x+405 pp. Maps; illus. £17.99.

In this large, densely packed, and heavily illustrated text, Mannion reviews the various sources and manifestations of the environmental impacts of agriculture. The volume begins with a survey of the relationship between agricultural systems and ecosystems, with due emphasis placed on their differing energy requirements. There then follows two historical chapters, the first of which explores the beginnings of agriculture, and the second agriculture in prehistoric and historic times. Approximately ten pages of this chapter cover agricultural change between 1500 and the First World War, with events in the United Kingdom granted rather more than three pages of coverage within this. The book then moves on to consider in turn four different types of agricultural system: transitory agriculture (nomadic pastoralism and shifting cultivation), and arable, pastoral, and mixed farming systems within settled agriculture. Arrangements in different parts of the world are outlined in full. The chapter on mixed farming includes a section on the recent rise of organic farming in the developed world. Successive reviews of the environmental impacts of agriculture in middle and high, and low latitudes cover such topics as biodiversity loss, soil erosion, agricultural impacts on water quality, and desertification. There follows a chapter on new developments, which includes discussions of biotechnology, genetic engineering and global warming. A concluding chapter looks at the challenges for the future, which are many and serious.

This is a book for the bookshelf rather than the bedside table, to be referred to rather than read from cover to cover. Given the book's extraordinary scope, it is perhaps also inevitable that the author should from time to time review texts rather than the original work on which texts are based. It is perhaps also inevitable that, sooner or later, the reader will identify certain topics which appear to have escaped the author's attention. The 'deeper' history of soil erosion, which is probably as old as

arable agriculture itself, is one. The implications of the widespread use in irrigation systems of irreplaceable 'fossil' groundwater, both for the future of irrigation and for sea level, is another. Nevertheless, the book is impressive as a work both of digestion and synthesis. The bibliography of some 1000 or so items is testimony to the magnitude of the author's task and an invaluable source of reference in itself. Mannion's book will appeal to those agricultural historians who are disinclined to treat narrow specialism of period and place as an invitation to consider everything else an extraneous distraction.

J R WALTON

Notes on Contributors

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STEPHEN CAUNCE is Lecturer in Economic and Social History in the School of Business and Economic Studies at the University of Leeds, where he has taught since 1989. His PhD research into East Yorkshire farm servants in the twentieth century was published as *Amongst Farm Horses: The Horselads of East Yorkshire*. Later work in museums on the nature of the industrialization process in West Yorkshire has led to a concentration on Yorkshire as the setting for a case study of the causes of economic and social change and modernization over the past four centuries.

STEPHEN HUSSEY is the current Essex County Council Research Fellow in Local History at the University of Essex, Colchester. Having published works on nineteenth-century rural incendiarism and also women's agricultural work between the two world wars, he is now researching and writing a book which examines the rural working-class household in the period from 1918 to 1950.

PHILLIPP SCHOFIELD holds a Wellcome Research Fellowship at the Cambridge Group for the History of Population and Social Structure, University of Cambridge, where he is presently investigating the impact of harvest failure upon the late medieval English peasantry. His doctoral thesis, which he undertook at Oxford, was an examination of change on a Westminster Abbey manor during the second half of the fourteenth century; sections of this have been published in *Economic History Review* and elsewhere. In addition to his research project, he is preparing a more general work on the English peasantry in the later Middle Ages.

ANDREW WATKINS was both undergraduate and postgraduate at the University of Birmingham. For his doctoral thesis he studied society and economy in the Forest of Arden in the later Middle Ages, and he has published a number of papers based on this research. His main fields of interest are agrarian, particularly pastoral, and the functions of small towns and their markets within fifteenth-century society. Recently he has started to look at the fifteenth-century agrarian history of Herefordshire. He teaches history at the Coleshill School in Warwickshire.

ROGER WELLS is Reader in History at Christ Church College, Canterbury. He is the author of *Insurrection: the British Experience 1795–1803*, 1983 and *Wretched Faces: Famine in Wartime England, 1793–1801*, 1988. More recently he has edited the sociologically-oriented diaries of a Sussex incumbent, *Victorian Village: the Diaries of the Reverend John Coker Egerton of Burwash 1857–1888*, 1992, together with producing many articles on English social history.

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CONTENTS

Dearth, Debt and the Local Land Market in a Late Thirteenth-Century Village Community
PHILLIPP R SCHOFIELD

Landowners and their Estates in the Forest of Arden in the Fifteenth Century
ANDREW WATKINS

Mr William Cobbett, Captain Swing, and King William IV
ROGER WELLS

Farm Servants and the Development of Capitalism in English Agriculture
STEPHEN CAUNCE

'The Last Survivor of an Ancient Race': The Changing Face of Essex Gleaning
STEPHEN HUSSEY

The Contribution to Agricultural Research of an Australian Woman Scientist
NESSY ALLEN

Annual List of Articles on Agarian History, 1995
JANET COLLETT

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CONTENTS

Did Soil Fertility Decline in Medieval English Farms? Evidence from Cuxham, Oxfordshire, 1320–1340	E I NEWMAN and P D A HARVEY	119
Whichwood Forest, Oxfordshire: An Episode in its Recent Environmental History	MICHAEL FREEMAN	137
Land and People in Northamptonshire: Great Oakley, *c* 1750–1850	RICHARD MOORE-COLYER	149
Rural Social Relations, 1830–50: Opposition to Allotments for Labourers	JEREMY BURCHARDT	165
Who 'Betrayed' Whom? Power and Politics in the 1920/21 Agricultural Crisis	EDMUND C PENNING-ROWSELL	176
List of Books and Pamphlets on Agrarian History, 1996	V J MORRIS	195
Conference Report: Spring Conference 1997	RICHARD PERREN	199

Book Reviews:

The Stations of the Sun. A History of the Ritual Year in Britain, by Ronald Hutton	ALUN HOWKINS	201
The Victoria History of the Counties of England. A History of the County of Oxford, XIII, Bampton Hundred, edited by Alan Crossley	MICHAEL HAVINDEN	202
The Pipe Roll of the Bishopric of Winchester 1301–2, edited by Mark Page	PHILLIPP SCHOFIELD	202
The Great Famine. Northern Europe in the Early Fourteenth Century, by William Chester Jordan	CHRISTOPHER DYER	203
Progress and Problems in Medieval England: Essays in Honour of Edward Miller, edited by Richard Britnell and John Hatcher	JANE WHITTLE	204
The Nerves of State: Taxation and the Financing of the English State, 1558–1714, by Michael J Braddick	STEVE HINDLE	205
Parliamentary Taxation in Seventeenth-Century England, by M J Braddick	R W HOYLE	206
The Village and the Outside World in Golden Age Castile: Mobility and Migration in Everyday Rural Life, by David E Vassberg	JOSEPH HARRISON	207

The Writings of John Evelyn, edited by Guy de la Bedoyere	JOAN THIRSK	208
Poverty Portrayed: Gregory King and Eccleshall in Staffordshire in the 1690s, by Margaret Spufford	JOHN BROAD	208
Topographical Writers in South-West England, edited by Mark Brayshay	MICHAEL HAVINDEN	209
Road Transport before the Railways: Russell's London Flying Waggons, by Dorian Gerhold	J A CHARTRES	210
A History of Todmorden, by Malcolm and Freda Heywood and Bernard Jennings	CHRISTINE HALLAS	211
Land and Society in Britain, 1700–1914: Essays in Honour of F M L Thompson, edited by Negley Harte and Roland Quinault	J V BECKETT	212
Farm Animal Portraits, Elspeth Moncrieff with Stephen and Iona Joseph	CHRISTIANA PAYNE	212
The British Brewing Industry, 1830–1980, by T R Gourvish and R G Wilson	J A CHARTRES	214
The Tenant League of Prince Edward Island 1864–1867: Leasehold Tenure in the New World, by Ian Ross Robertson	G E MINGAY	214
After the Famine: Irish Agriculture, 1850–1914, by Michael Turner	F M L THOMPSON	215
Seeds of Change: 100 Years Contribution to Rural Economy, Society and the Environment, by Andrew Humphries	PAUL BRASSLEY	217
Rural Politics: Policies for Agriculture, Forestry and the Environment, by Michael Winter	PAUL BRASSLEY	218
Dartmoor Forest Farms: A Social History from Enclosure to Abandonment, by Elizabeth Stanbrook	JOHN WEIR	219
Notes on Contributors		220
Comment		164

Did Soil Fertility Decline in Medieval English Farms? Evidence from Cuxham, Oxfordshire, 1320–1340*

By E I NEWMAN and P D A HARVEY

Abstract

It has been suggested that during the century before the Black Death the fertility of the soil on English farms was declining, leading to decreased food production and increased mortality. We here estimate nutrient balances for a manorial demesne, to determine whether the nutrient status of the soil was declining. We calculate the losses of nitrogen, phosphorus and potassium in the produce during 1320–1340, using information from the demesne accounts. The main inputs of phosphorus and potassium would be from weathering of rock; these would probably have been enough to balance the losses of potassium but not of phosphorus. Potential inputs and non-produce losses of nitrogen are so large that we cannot say whether the demesne was in balance for nitrogen. The paper thus points to phosphorus as the key element likely to have led to falling soil fertility at this time.[1]

IT is widely accepted that the population of England rose steeply during the century and a half after 1086. From about 1250 until the Black Death in 1348–9 the population was probably higher than it had ever been before, and higher than it would be again until the seventeenth or eighteenth centuries.[2] This high population placed special demands on agriculture. More than forty years ago Postan put forward the view that during the thirteenth century and the first half of the fourteenth century agricultural production was declining, human mortality was increasing due to food shortage, so the human population was already declining before the Black Death; and that these changes had a major impact on economic activity. The primary cause of the decline in farm productivity, he proposed, was declining soil fertility. Farmers 'had been cultivating old land for too long'.[3] In earlier times, if yields per acre from existing farmland declined additional land could be brought into cultivation; but by the fourteenth century scarcely any reserves of suitable unused land remained.

These views of Postan have provoked much debate, which continues today.[4] The debate concerns the evidence on farm yields, on human population changes, and on levels of economic activity; it also concerns the interpretation to be put on this evidence. What has been missing is evidence on whether the fertility of the

* EIN wishes to thank Dr P Glennie for pointing out especially interesting features of the early fourteenth century in agricultural history, and Professor C Dyer for initiating this collaboration by recommending the writings of Harvey on Cuxham. We are both very grateful to Merton College, Oxford, for keeping safely the accounts upon which this paper is based, and for allowing one of us (PDAH) to study them in detail. We thank Professor B M S Campbell, Professor C Dyer and two anonymous referees for helpful comments on earlier versions of this paper.

[1] Meanings of words, as used in this paper. Village: a nucleated settlement; vill: a settlement, nucleated or dispersed, with all attached lands; demesne = manorial demesne: the home farm, the lands tilled for the lord himself, as against those in the hands of permanent local tenants; manor: a single administrative unit of a landed estate, that usually, as at Cuxham, contained the manorial demesne and also lands held by local tenants.

[2] C Dyer, *Standards of Living in the Later Middle Ages*, 1989; R M Smith, 'Demographic developments in rural England, 1300–48: a survey', in B M S Campbell, ed, *Before the Black Death*, Manchester, 1991, pp 25–77; P J Fowler, *The Farming of Prehistoric Britain*, 1981.

[3] M M Postan, *Essays in Medieval Agriculture and General Problems of the Medieval Economy*, 1973, pp 3–27 and 150–85, and *The Medieval Economy and Society*, 1972.

[4] Dyer, *Standards of Living*; B F Harvey, 'Introduction: the "crisis" of the early fourteenth century', in Campbell, *Black Death*, pp 1–24; Smith, 'Demographic developments', pp 25–74; K Biddick, 'Agrarian productivity on the estates of the Bishopric of Winchester in the early thirteenth century: a managerial perspective', in B M S Campbell and M Overton, eds, *Land, Labour and Livestock*, Manchester, 1991, pp 95–123.

soil in English farms was in fact declining during this period. It is this question that we address here. There are other possible causes of decline in crop yields. One is climate change: there is evidence that average temperatures were declining from about 1250 to 1450. Another possibility is that cultivation practices became less effective, for example due to shortage of labour.[5] So it is important to have direct evidence on whether soil fertility did decline.

I

Several sorts of change in soil can reduce its fertility: top-soil can be eroded away by wind or rain; or the amount of organic matter in the soil can decrease, resulting in less ability to hold water and nutrients, and in a less favourable structure for root growth. Here, however, we concentrate on nutrient balance. Plants require various chemical elements, and many of these have to be obtained from the soil, for example nitrogen, phosphorus and potassium. (However, leguminous plants, such as beans and peas, can obtain nitrogen from the air with the aid of bacteria in root nodules.) Without these nutrient elements plants cannot grow at all; if the supply of an essential element is insufficient, crop growth, and hence seed production, will be reduced.[6] When crops and animals are removed some of these nutrients are removed in them; the nutrients can also be lost from soil in other ways, for example dissolved in rainwater that flows into rivers. If these losses are not made good by inputs to the soil, then year by year the nutrient status of the soil will decline, and it is almost inevitable that this will, sooner or later, reduce the growth of crop plants and of plants grown as food for animals. In this paper we present evidence on whether, on one fourteenth-century demesne, the losses of three essential elements, nitrogen (N), phosphorus (P) and potassium (K), were balanced by inputs. These three elements are among the six that plants have to obtain in relatively large amounts from soil.[7] They have been chosen because they are the three that have most commonly limited crop production on English farms during the twentieth century, unless artificial fertilizers have been added. Other essential elements can be deficient locally, but none is a widespread cause of low crop yields in twentieth-century Britain.

The chemical forms of nitrogen, phosphorus and potassium in soil are often classed as 'available' to plants and 'non-available', though in fact there is a range of availabilities. Some N, P and K is in soluble inorganic forms, which plant roots can take up quickly, ie within days or weeks. The other principal form of N is in organic matter. The turnover of organic matter in British arable soil commonly has a time-scale of decades, so organic N would become available to plants on this time-scale. Phosphorus in soil is in a variety of inorganic compounds, which can convert from one to another, but some only very slowly. It also occurs in organic matter. Potassium also has a variety of inorganic forms, but little in organic matter. Therefore, if inputs of these three elements failed to balance losses, the stores in the soil could be expected to continue to supply the plants over a period of some decades, though at a gradually declining rate. In addition, P and K (though not N) occur in the fine mineral (rock) material that forms the basis of soil. This P and K is usually ignored by ecologists studying nutrient cycling. However, it can be slowly

[5] H H Lamb, *Climate, History and the Modern World*, 2nd ed, 1995, ch 11; D Postles, 'Cleaning the medieval arable', *AHR*, 37, 1989, pp 130–43; B M S Campbell, 'Land, labour, livestock and productivity trends in English seignorial agriculture, 1208–1450', in Campbell and Overton, *Land, Labour and Livestock*, pp 144–82.

[6] The biological functions of individual elements are described in text-books of plant physiology, for example, L Taiz and E Zeiger, *Plant Physiology*, Benjamin Cummings, Redwood City, 1991.

[7] The other three are sulphur, calcium and magnesium.

released by weathering (ie breakdown) of the mineral material, a process which can continue for thousands of years. As we shall show, this could play an important part in the long-term P and K balances of medieval farms.[8]

There has been some previous discussion of the importance of soil nutrients in medieval farming. Cooter surveyed the difficulties of maintaining crop yields long-term in the medieval open-field system. He concluded that 'At best, open-field husbandry offered a means for sustaining a mediocre level of productivity at the price of a judiciously slow depletion of the nutrient reserves of the arable's hinterlands'.[9] He was right to draw attention to the nutrient status of the 'hinterland'. If the fertility of the arable can be maintained only at the price of a decline in the fertility of associated meadowland, rough pasture and woodland, then the system as a whole is not sustainable long-term. Cooter's paper was, however, confined to generalities and lacked any firm historical evidence on nutrient balances. In his reply to Cooter, Loomis concentrated on nitrogen, presenting figures to show that the various inputs of nitrogen to a hypothetical medieval farm could be enough to balance the amount removed in grain.[10] His figures were 'best guesses' rather than firmly rooted. He did not ask whether any other essential element might become depleted over a long time.

Shiel discussed in some detail the role of nitrogen in pre-fertilizer agriculture.[11] He was, however, more interested in the forms of nitrogen in soil and their interconversion than in the input/output balance. He makes an important statement about phosphorus and potassium, that before the mid-nineteenth century their 'soil supplies would have tended to decrease slowly with time'. If this is correct, it must have had a crucial role in limiting crop productivity on land that had been farmed for centuries. Unfortunately, Shiel gives no evidence to back up this statement. In this paper we present evidence on whether the statement is correct.

Shiel stated that 'production of arable crops was ultimately limited by the amount of manure available', and other writers on agricultural history have placed great emphasis on the supply of manure.[12] Manure was recognized as a valuable commodity by the fourteenth century. Walter of Henley in the thirteenth century gave instructions for its storage and application. At Cuxham in the fourteenth century people were paid to cart and spread it.[13] However, the precise function of manure was not then understood. The animals do not create the nutrient elements in their faeces and urine: their excreta are merely a processed version of what they ate. Manure can benefit plants in two ways. If it is deposited in the same area where the animals ate, it can provide mineral nutrients in forms more readily and more rapidly available to plants than from decomposing plant materials. Viewed over the long term, however, the animal does not increase the nutrients in the soil, and may even reduce them, since dissolved nitrogen compounds can be readily lost from urine patches, by leaching and as ammonia gas.[14] Secondly, animals can act as transporters of nutrients. The time taken for the food eaten by a horse, cow or sheep to pass through it and

[8] For more information on nutrients in soils and their availability to plants see A Wild, *Soil Conditions and Plant Growth*, Harlow, 1988.

[9] W S Cooter, 'Ecological dimensions of medieval agrarian systems', *AH*, 52, 1978, pp 458–77.

[10] R S Loomis, 'Ecological dimensions of medieval agrarian systems: an ecologist responds', *AH*, 52, 1978, pp 478–83.

[11] R S Shiel, 'Improving soil productivity in the pre-fertiliser era', in Campbell and Overton, *Land, Labour and Livestock*, pp 51–77.

[12] B H Slicher van Bath, *The Agrarian History of Western Europe, AD 500–1850*, 1959; G E Fussell, *Farming Techniques from Prehistoric to Modern Times*, 1966; Postan, *Medieval Economy*; Shiel, 'Improving soil productivity'.

[13] Walter of Henley, *Le Dite de Hosebondrie*, *c* 1230; P D A Harvey, *A Medieval Oxfordshire Village, Cuxham 1240 to 1400*, 1965.

[14] D R Lockyer and D C Whitehead, 'Volatilization of ammonia from cattle urine', *Soil Biology and Biochemistry*, 22, 1990, pp 1137–42; J C Ryden, P R Ball and E A Garwood, 'Nitrate leaching from grassland', *Nature*, 311, 1984, pp 50–53.

the remains to emerge as excreta is between one and several days.[15] Therefore, if animals are moved every twenty-four hours or more frequently, the excreta they deposit in one place will contain materials eaten elsewhere. Cattle and sheep eat mainly during daylight, but deposit urine and faeces about equally by day and night.[16] Therefore, the medieval system of allowing animals to graze on pasture or 'waste' by day and folding them on arable fields at night was an effective way of transferring nutrients from the pasture to the arable. This nutrient transport has important implications for the nutrient balance of the arable and the pasture if they are considered separately. But for the system to be truly sustainable, the nutrient balance of both arable and pasture must be maintained. Therefore, we have here considered the whole demesne as the unit for nutrient balance calculations. We are not denying the importance of nutrient movement within the farm, and the contribution of manure to that; indeed, we are assuming that some movement of nutrients from pasture and meadow to arable did occur. But we are drawing particular attention to the importance of the whole farm being in balance for essential nutrients, because if it is not then no amount of nutrient movement within the farm will prevent long-term decline in soil fertility.

II

This paper presents evidence on the balance of nitrogen, phosphorus and potassium in the manorial demesne of Cuxham, Oxfordshire, in the period 1320 to 1340. The three-field, open-field system was in operation. This demesne was chosen, firstly, because detailed accounts were kept for the years 1288 to 1359 and many of these have survived. One of us has made a detailed study of these accounts, and has published complete, edited accounts for some years, as well as tabulated data from accounts of all available years.[17] We here make use of these sources, and also other, unpublished information extracted from the accounts.

The period 1320–1340 was chosen to provide two decades shortly before the Black Death, but avoiding 1313–1319, when crop yields were unusually low because of unfavourable weather.[18] An advantage of this period is that the areas sown to each crop are reported in the accounts in measured acres, whereas before 1318 only customary acres, of uncertain size, were reported. Another favourable feature is that throughout the period the farm was in the charge of one reeve, Robert Oldman. The accuracy of the accounts was substantially the responsibility of the reeve, although they were audited each year. Robert Oldman was the reeve from 1311 until he died in March 1349, soon after the Black Death arrived in Cuxham. This long service until death implies confidence by the landlord, Merton College, in his competence and honesty. During this twenty-year period the accounts for four years are missing, and two others are seriously damaged and so illegible in parts. We therefore base our calculations on the accounts for the fourteen years 1320–23, 1327–29, 1331–34, 1336, 1338, 1339. The account year runs from July to July, and so includes a harvest and records of what happened to the produce of that harvest. Each twelve-month period will be referred to by its starting year, ie the year of the harvest.

[15] A C I Warner, 'Rate of passage of digesta through the gut of mammals and birds', *Nutrition Abstracts and Reviews Series B*, 51, 1981, pp 789–820.

[16] D C Church, *The Ruminant Animal*, Prentice Hall, Englewood Cliffs, 1988; M E Castle, A S Foot and R J Halley, 'Some observations on the behaviour of dairy cattle with particular reference to grazing', *J Dairy Research*, 17, 1950, pp 215–30; W A Hardison, H L Fisher, G C Graf and N R Thompson, 'Some observations on the behaviour of grazing lactating cows', *J Dairy Science*, 39, 1956, pp 1735–41.

[17] Harvey, *Medieval Village*; P D A Harvey, *Manorial Records of Cuxham, Oxfordshire*, HMSO, 1976.

[18] Lamb, *Climate*, p 195.

TABLE 1
Areas of land in Cuxham in 1320–40

Land areas	*Acres*	*Hectares*
Whole vill	604	245
Arable land	458	185
of which demesne arable	269	109
Meadows	50	20
Pasture land	37	15
Adjoining manorial buildings	17	7
Remainder*	42	17

* Land associated with church, rectory and tenants' houses, plus roads and verges.

TABLE 2
Area sown to each crop, and yield (including tithe)

Crop	*Area sown (acres)*	*Mean yield per year*[a]	
		bushels per acre	*tons per hectare*
Wheat	88.8	17.3	1.02
Oats	52.9	14.0	0.55
Barley	5.3	21.5	1.09
Dredge[b]	19.1	16.1	0.73
Peas	10.4	11.8	0.73
Beans[c]	0.4		
Vetch[c]	1.4		

[a] For basis of bushel/weight conversion, see text.
[b] Mixture of oats and barley.
[c] No seed yield was reported for beans and vetch in most years. Most of the seed for sowing them was imported.

Cuxham lies twelve miles south-east of Oxford, on rolling lowlands a few miles from the edge of the Chilterns. A detailed description of the village and its farmland between 1240 and 1400, based on contemporary records, has been published previously.[19] The whole vill belonged to Merton College, Oxford, from 1271 onwards. However, accounts are available only for the manorial demesne, so it is to this that our calculations apply. The first detailed map of Cuxham is dated 1767. Merton College had remained the owner, and the three-field system was still in operation. After allowing for some changes in land use that had taken place it is possible to use this map, along with earlier manorial surveys, as a basis for determining areas within the vill. Table 1 provides a summary. The arable was divided into three fields of approximately equal size, each of which was part demesne, part glebe and part tenant land. The demesne arable was 59 per cent of the total arable area. The area of meadow plus grazing land was less than a quarter of the total arable land. There was no woodland within the vill.

The customary three-field rotation was practised: fallow, autumn-sown wheat, spring-sown crops. Table 2 shows the mean area sown to each crop in this period; Table 10 shows the same data expressed as percentages. In the spring-sown field cereals predominated, with more than half the area occupied by oats. Table 2 also shows the mean yields per sown acre. As was usual, the accounts record the harvest yields after deduction of the tithe. For the figures in Table 2, the reported yields have been divided by 0.9 to give the true amount harvested, including the tithe; all yields referred to in this paper have been calculated in that way.

Cuxham was primarily a grain-producing demesne, and the area of pasture and hay meadow was relatively small. However, some animals were kept; some were grazed on the fallow, or were fed oats and crop legumes. Hay was brought in from other places. Exports of animal produce were relatively modest: the only animal products exported from the demesne in large quantities were doves, eggs and cheese. There was some production of calves and piglets, but the number of cows present was never more than thirteen and sows never more than two. Sheep were also bred; the number of adult sheep varied considerably from year to year, up to 113 during this period. Chickens and doves were numerous, but geese and ducks few. Horses and oxen were

[19] Harvey, *Medieval Village*.

kept for draught purposes, but were bought in, not bred on the farm.[20]

III

The main aim of this paper is to determine the amounts of nitrogen (N), phosphorus (P) and potassium (K) leaving the demesne per year, and whether this is likely to have been balanced by inputs. The demesne here comprises not only the fields that were growing crops in a given year, but also the fallow field, plus the part of the pastureland and meadowland which fed demesne animals. Transfer of nutrients between these areas within the demesne is not calculated. What we need to know is what left the demesne (here called exports). If we can calculate the weight of crop grain, the number of animals and the weight of animal produce (cheese, eggs, wool) that left the demesne, then the amount of nitrogen, phosphorus and potassium exported can be estimated, using information on their concentration in twentieth-century plants and animals.

The following are classed as exports: produce sold; produce sent to Merton College; the tithe; produce 'delivered' to other villages; 'gifts' (often bribes) to visiting important people; and produce recorded as 'taken not paid for' or simply as 'theft'. Classed as remaining in the demesne are: seed sown; grain fed to farm animals and to visiting horses; and animals that died of disease ('murrain'). An implied assumption here is that all the N, P and K in food eaten by demesne animals found its way, via their excreta, back on to the demesne land (arable, pasture or meadowland), apart from any nutrients in their bodies or their cheese, eggs, wool when they were exported. The carcasses of animals that died of disease were not eaten by people, but presumably rotted, buried or unburied, leading to return of nutrients. However, their bones would take many years to decompose; these contain substantial amounts of phosphorus, which would recycle only slowly.

Not included in these two lists is produce given to people in the village, and used to prepare meals for them or for visitors. Most of the nutrients in their food would reach their excreta, and the question is how much of this found its way back to the demesne fields. Much of it would have been put into middens, along with other domestic rubbish. It is likely that some of this was spread on the open fields. Apart from that, people working all day in the fields presumably relieved themselves there. The houses of the village were mostly close to the stream, which flowed on down to the pasture and meadow areas; it would be surprising if some nutrients from human excreta did not reach the fields this way. On the other hand, it seems unlikely that all the nutrients in the food were returned to the demesne fields. Of the food given to workers as payment, some may have been sold by them outside the village. Some of their excrement probably ended up fertilizing the vegetables and fruit growing near their houses. So two alternative calculations are presented, one assuming that all the nutrients in produce given to people within the village were recycled back to the demesne lands, the other assuming that none of them was; the true value must lie somewhere in between. In contrast, nutrients in the tithe are assumed all to leave the farm; the rector was not resident in the village, and most of the tithe was presumably sold.

The accounts were audited each year, and alterations were sometimes made. Some of these indicate amounts of produce which the reeve had not accounted for. These cannot be allotted to export or non-export and have been ignored in the calculations. The amounts involved were a small

[20] Details of the numbers of animals are given in appendix vi of Harvey, *Manorial Records*.

TABLE 3
Fate of grain (grown on the demesne and imported), expressed as a percentage of the total for each crop species*

Crop	*Remained in demesne*	*To people in village*	*Exported from demesne*
Wheat	13.9	13.1	73.0
Oats	78.3	3.9	17.8
Barley	16.2	35.7	48.1
Dredge	27.4	36.8	35.8
Peas	30.8	52.2	17.0
Beans	66.2	20.0	13.8
Vetch	98.0	0.0	2.0

* For further explanation of the three categories, see text.

proportion of the total; for the cereals it was less than 1 per cent.

In the calculations all the straw from crops is assumed to remain in the demesne. There are occasional references in the accounts to sale of straw, but these would total insignificant amounts. If straw was used for thatching in the village during this period, that could have taken some straw out of circulation for a long time. But nearly all the straw produced was used as fodder, as bedding for animals (which was later returned to the fields as farmyard manure), or was left in the fields to be eaten or to rot.

There were some imports to the demesne: seed was sometimes bought, animals were bought, wool was received. These are used to calculate net exports of each commodity (export - import). Hay was also brought from other places (but never exported); the effect of this on the nutrient balance will be considered later. Firewood, too, was sometimes brought in from other places, and this may have contributed a nutrient input if the ash was spread on the fields. No marling occurred at Cuxham during this period.

Table 3 shows what percentage of each crop fell into each of the three use categories. Some of the wheat, barley and dredge was made into malt. The subsequent uses of this malt were recorded in the accounts, so the end uses have been allocated to the original cereals. As might be expected, the uses differed greatly between crops. Much of the wheat was sold. In contrast, most of the oats was fed to animals. Almost all the vetch seed was retained for sowing. Presumably vegetative parts of the vetch were used for animal fodder. Peas and dredge were mixed together as food for local people.

Our calculations require information on the concentration of nutrients in seeds. This has been determined in mg per g dry weight, and we therefore need to convert the amounts of seed, reported by the accounts in volume units (quarters and bushels), into weights. By 1340 units of volume and weight had not been standardized throughout England. Following the detailed review by Connor,[21] we assume that the weight of wheat in one bushel was 64 troy pounds, which is 23.9 kg. The weight : volume ratio of other cereals is different from wheat. Campbell *et al* give it for wheat : barley : oats about 1300 as 1 : 0.86 : 0.75 (ie the volume holding 1 kg of wheat could hold 0.86 kg of barley or 0.75 kg of oats). This calculation is based on the carrying capacity of carts. Campbell *et al* give the ratios from 1791 statutes as 1 : 0.86 : 0.67. The modern ratios are 1 : 0.90 : 0.68.[22] We have used 1 : 0.86 : 0.67. Dredge is assumed to be intermediate between barley and oats. Peas, beans and vetch are taken as 1.05, on the basis of modern weights of beans. So the weights in kg per bushel are: wheat 23.9; barley 20.5; oats 16.0; dredge 18.3; peas, beans and vetch 25.1. The amounts of grain in the different categories, calculated in this way, are shown in Table 4. In the exports, wheat far exceeds all the other

[21] R D Connor, *The Weights and Measures of England*, HMSO, 1987.
[22] B M S Campbell, J A Galloway, D Keene and M Murphy, *A Medieval Capital and its Grain Supply*, Historical Geography Research Series no 30, 1993, p 41; I Moore, ed, *Primrose McConnell's Agricultural Notebook*, 16th ed, 1976; J A Watson and J A More, *Agriculture*, Edinburgh, 1949.

TABLE 4

Amount of grain imported to demesne; fate of grain (imported and grown on demesne); and net export from demesne (export – import): all expressed as air-dry weight (metric tons per year)

Crop	*Import*	*Fate of grain*			*Net export*
		Remained in demesne	*To people in village*	*Exported from demesne*	
Wheat	0.93	5.52	5.20	29.02	28.10
Oats	1.34	11.45	0.58	2.60	1.26
Barley	0.11	0.39	0.86	1.15	1.04
Dredge	0.0	1.45	1.95	1.90	1.90
Peas	0.17	0.89	1.50	0.49	0.32
Beans	0.15	0.15	0.05	0.03	−0.12
Vetch	0.08	0.09	0.0	<0.01	−0.08

crops combined. There was a net import of beans and vetch, since seed brought in exceeded exports.

Nutrient concentrations of seeds have been taken from published measurements on crops grown on unfertilized soil in Britain, in the twentieth or late nineteenth centuries. Many of the crops were grown at Rothamsted, Hertfordshire, or one of its associated farms. Often the same crop had been grown continuously in the field for some years. It might be more realistic to use data for wheat grown after fallow, and for other cereals second year after fallow. But where these growing conditions have been compared with continuously cropped unfertilized plots, the nutrient concentrations in the seeds have generally differed little. The values used are given in Table 5. There is little difference among the cereals in concentration of any of the nutrients elements, but the legumes are higher in N and K.

These concentrations are per g oven-dry weight. The weights of grain in Table 4 are air-dry weight, so for calculating nutrient contents they have been multiplied by 0.85, to allow for the normal water content of air-dry seed, about 15 per cent. Use of figures in Tables 4 and 5 then allows calculation of the nutrients in the plant produce exported and given to people in the village (Table 7).

The accounts also provide figures for the number of animals that were born on the demesne and that died there, and the numbers imported and exported. Horses and sheep have not been included in the calculations: horses were not bred on the demesne; some lambs were born, but their numbers approximately equalled the number of lambs and sheep that died of murrain. The number of sheep increased greatly during the period, mainly due to a large purchase in 1336, but their nutrient content clearly did not end up in the soil. Table 6 provides information on the other animals. A 'customary render' of 81 chickens was received from tenants each year at Martinmas and Christmas; this exceeded the number sold and sent to Oxford, so the demesne was a net importer of chickens. The only large numbers of exports were doves, eggs and cheeses. Cheeses were of three sizes, which we have assumed to be the standard 2 lb, 4 lb and 6 lb. Weights of fleeces are given in the accounts. For conversion to kg we have used modern lb. In fact the *libra mercatoria* may have been used at Cuxham, but this differs only slightly.

The nutrient concentrations assumed in

TABLE 5

Nutrient concentrations (mg per g) in plant and animal produce, assumed for calculations*

Product	*Nitrogen*	*Phosphorus*	*Potassium*
Wheat, oats	18	3.6	4.8
Barley	14	3.1	5.2
Dredge[a]	16	3.35	5.0
Beans	43	4.0	10.0
Peas, vetch[a]	40	4.0	10.0
Hay	18	1.4	14.0
Firewood		0.11	1.7
Cattle, pigs, geese, chickens, ducks, doves	23	6.0	1.6
Eggs	20	2.2	1.3
Cheese	40	5.0	1.2
Wool	90	1.0	1.0

* Concentrations in seeds, hay and wood are per g dry weight, in animals and animal produce per g fresh weight.

[a] Dredge was taken as the mean of oats and barley. No published values were found for vetch, so it was assumed to have the same concentrations as peas.

Sources: Grain: E J Russell and J A Voelcker, *Fifty Years of Field Experiments at Woburn Experimental Station*, 1936; J B Lawes and J H Gilbert, *The Rothamsted Experiments*, Edinburgh, 1895; A E Johnston, 'The plant nutrients in crops grown on Broadbalk', *Rothamsted Annual Report* [hereafter *RAR*] *for 1968*, pt 2, 1969, pp 50–62; A E Johnston and P R Poulton, 'Yields on the Exhaustion Land, 1852–1975', *RAR for 1976*, pt 2, 1977, pp 53–83; G V Dyke, B J George, A E Johnston, P R Poulton and A D Todd, 'The Broadbalk wheat experiment 1968–78: yields and plant nutrients', *RAR for 1982*, pt 2, 1983, pp 5–44; D S Powlson, G Pruden, A E Johnston and D S Jenkinson, 'The nitrogen cycle in the Broadbalk wheat experiment', *J Agric Sci*, 107, 1986, pp 591–609; F V Widdowson, A Penny and M V Hewitt, 'Results from the Woburn Reference Experiment', *RAR for 1981*, pt 2, 1982, pp 5–21; J I Sprent and A M Bradford, 'Nitrogen fixation in field beans as affected by population density, shading and soil moisture', *J Agric Sci*, 88, 1977, pp 303–10; D J Greenwood *et al*, 'Comparison of the effect of fertilizers on the yield, potassium, phosphate and nitrogen content and quality of 22 different vegetable and agricultural crops', *J Agric Sci*, 95, 1980, pp 441–85.

Hay: A B Stewart and W Holmes, 'Some effects of heavy dressings of nitrogen on the mineral composition of grassland herbage', *Jnl Science of Food and Agriculture*, 4, 1953, pp 401–408; B Thomas, W B Holmes and J L Clapperton, 'A study of meadow hays from the Cockle Park experiment', *Empire Jnl Experimental Agriculture*, 23, 1955, pp 102–8; R G Warren and A E Johnston, 'The Park Grass Experiment', *RAR for 1963*, 1964, pp 240–62; A Penny, F V Widdowson and R J B Williams, 'An experiment measuring effects of fertilizers on yield and N, P and K contents of grass', *J Agric Sci*, 95, 1980, pp 575–82.

Firewood: D E Reichle, *Dynamic Properties of Forest Ecosystems*, 1981, p 647.

Animals and animal produce: J B Lawes and J H Gilbert, 'Experimental enquiry into the composition of some of the animals fed and slaughtered as human food', *Phil Trans Royal Soc*, 149, 1859, pp 493–680; Lawes and Gilbert, *The Rothamsted Experiments*; W S Spector, ed, *Handbook of Biological Data*, Saunders, Philadelphia, 1956; D T Crisp, 'Input and output of minerals for an area of Pennine moorland', *J Applied Ecol*, 3, 1966, pp 327–48; P H Williams and R J Haynes, 'Balance sheet of phosphorus, sulphur and potassium in a long-term grazed pasture', *Fertilizer Research*, 31, 1992, pp 51–60; E A LeFebvre, 'Measuring energy metabolism in *Columba livia*', *The Auk*, 81, 1964, pp 403–16; A L Romanoff and A J Romanoff, *The Avian Egg*, Wiley, New York, 1949; S K Kon, *Milk and Milk Products in Human Nutrition*, FAO, Rome, 1972; H Tiessen, ed, *Phosphorus in the Global Environment*, Chichester, 1995, pp 9, 45; A A Paul and D A T Southgate, *The Composition of Foods*, HMSO, 1978.

animals and their produce are given in Table 5. We have assumed the same concentration in all animals, based on published data for cattle, pigs, sheep, poultry and pigeons. There is no certainty about the weight of farm animals at this period. The weights we have assumed for cattle and pigs (Table 6) are based mainly on sixteenth- to eighteenth-century reports. The weights for birds and eggs are based on the low end of the range in the twentieth century. Using figures in Tables 5 and 6 then allows calculation of the total nitrogen, phosphorus and potassium in animals and their produce, given in Table 7.

IV

The aim of this paper so far has been to produce the figures on the bottom line of Table 7. On that line there are two figures for each element; the actual total loss per year of that element from the demesne, due to export plus use by people, lay somewhere between those two figures. Table 7 shows that wheat played a pre-

TABLE 6
Data on animals and animal produce

Animal	*Number per year*		*Assumed weight*[b] *(kg per individual)*
	Net export[a]	*To people in village*	
Adult cattle	1.2	0	200
Calves	4.8	0	50
Adult pigs	2.1	2.2	40
Piglets	1.4	0.2	10
Geese	11.1	5.1	5
Chickens	−18.1	31.9	2
Ducks	2.8	1.1	2
Doves	603.6	94.5	0.3
Eggs	282.4	37.3	0.06
	Total weight per year		
Cheese (kg/yr)	235.7	55.6	
Wool.(kg/yr)	22.8	0	

[a] Net export: export from demesne – import to demesne.
[b] *Sources*: G E Fussell, *Farming Techniques from Prehistoric to Modern Times*, 1966; G Clark, 'Labour productivity in English agriculture, 1300–1860', in B M S Campbell and M Overton, eds, *Land, Labour and Livestock*, Manchester, 1991, p 217; J A S Watson and J A More, *Agriculture*, Edinburgh, 1949; H-J Rothe and W Nachtingall, 'Pigeon flight in a wind tunnel', *Jnl Comparative Physiology B*, 157, 1987, pp 91–109. Young are assumed 1/4 of adult weight, based on the ratio in modern cattle and pigs.

TABLE 7
Nutrient content (kg per year) of produce exported from the demesne and received by people in the village

Product	*Nitrogen*		*Phosphorus*		*Potassium*	
	Export[a]	*Export+*[b] *people*	*Export*[a]	*Export+*[b] *people*	*Export*[a]	*Export+*[b] *people*
Wheat	429.9	509.4	86.0	101.9	114.6	135.8
Other cereals	57.5	103.0	12.0	21.6	17.8	32.2
Legumes	3.9	56.6	0.4	5.7	1.0	14.2
Animals	18.1	22.9	4.7	6.0	1.3	1.6
Eggs + wool + cheese	11.8	14.1	1.2	1.5	0.3	0.4
Total	521.1	705.9	104.4	136.6	135.1	184.2

[a] Export means net export from demesne.
[b] Export + people means net export plus received by people in village.

dominant role in determining these totals. This might be expected, since wheat occupied the largest area each year (Table 2), and a large percentage of its yield was exported (Table 3). These numbers on the bottom line of Table 7 may not mean much to the reader at this moment; the key question, which we shall now try to answer, is whether these annual losses are likely to have been balanced by inputs to the farm. We consider nitrogen first (Table 8).

One source of nutrient input to the farm was hay brought in from other villages: the nutrients in the hay, passing through the animals that ate it, would reach the farm soil in their excreta. The accounts record purchase of hay in all but two of the years of our period. The price paid is given, but unfortunately not the quantity of hay

TABLE 8
Estimated nitrogen inputs, for comparison with losses

Losses and inputs	*kg/ha/yr*	*Whole demesne (kg/yr)*
Losses in produce		521–706
Inputs		
(a) Based on information from accounts		
Hay bought		110
N fixation by crop legumes	19.6	97
Total (a)		207
(b) Additional N fixation, based on twentieth-century rates*		
Legumes in pasture and meadow	5	105
Legume weeds in cropland and fallow	?	?
Cyanobacteria in cropland and fallow	3+	327+
Free-living bacteria in soil (whole demesne)	2+	273+
Total (b)		705+
Grand total inputs		912+

* The inputs per hectare are set at the bottom end of the likely range.
Sources: Losses in produce, Table 7. Inputs (a), see text. Inputs (b), D W Cowling, 'Biological nitrogen fixation and grassland production in the United Kingdom', *Phil Trans Royal Soc*, 296, 1982, pp 397–404; P Newbould, 'Biological nitrogen fixation in upland and marginal areas of the U.K.', *Phil Trans Royal Soc*, 296, 1982, pp 405–17; J F Witty, P J Keay, P J Frogatt and P J Dart, 'Algal nitrogen fixation on temperate arable fields', *Plant and Soil*, 52, 1979, pp 151–64; K E Giller and J M Day, 'Nitrogen fixation in the rhizosphere: significance in natural and agricultural systems', in A H Fitter, ed, *Ecological Interactions in Soil*, 1985, pp 127–47.

bought. We have therefore estimated the quantity from the mean price paid at Cuxham during 1320–40, and the mean price paid per load between 1307 and 1343 at other places in southern England, tabulated by Rogers.[23] In 1336 and 1338 no payment for hay at Cuxham is recorded in the accounts, yet in 1336 the accounts report that oats were provided to feed horses carrying hay from Holywell to Cuxham. Therefore, rather than assuming the amount of hay bought in 1336 and 1338 was zero, we have used the mean of the other twelve years. The mean amount paid was 19.84*s*. Rogers reports price per load at eight places (one of them twice), ranging from 1*s* 8*d* to 4*s* 5*d*, averaging 2.91*s* per load. A load was traditionally 18 cwt (0.9 tons) of air-dry hay.[24] Hence the mean amount of hay bought per year is estimated at 6.1 tons. The nitrogen concentration in the hay is taken as 18 mg/g, from measurements on the unfertilized long-term hay plots at Rothamsted; similar concentrations have been reported elsewhere. So the nitrogen input in hay is estimated at 110 kg/year.

Imported firewood could not have provided a nitrogen input, because during burning all the nitrogen in wood is lost as gases.

Rain-water contains dissolved nitrogen compounds. We have decided, however, not to count this as an input to Cuxham. The source of the nitrogen in rain is mainly dissolved ammonia and nitrogen oxide gases. Nowadays some of this comes from industrial sources, but in 1320–40 ammonia would have come mainly from animals' urine, and nitrogen oxides from soil by the action of some bacteria. So Cuxham would be receiving this nitrogen from other farmland in England, and as a first approximation the gains in rainfall would balance the losses from Cuxham in these gases. Hence we do not consider it to be a net gain. For the same reason, we have not made any allowance for loss of nitrogen as ammonia or N-oxides from animal excreta.

[23] J E T Rogers, *A History of Agriculture and Prices in England*, vol 1, 1866, p 404.
[24] Rogers, *Agriculture and Prices*; Connor, *Weights and Measures*.

The main opportunity for gain of nitrogen is by nitrogen fixation. This means conversion of nitrogen gas from the air into other compounds. Plants and animals cannot do this, but some bacteria can: bacteria in nodules on the roots of leguminous plants, some bacteria living free in soil, and some cyanobacteria ('blue-green algae') which live on the soil surface. The leguminous crops grown at Cuxham were beans, peas and vetch, and we know the area sown with each (Table 2). One way to estimate their N fixation would be to assume that their fixation rate per acre was the same as has been found in the same species in the twentieth century. However, modern legume crops, under more favourable conditions, grow substantially more than in the Middle Ages, and hence may fix more N. To allow for this, we have used the seed production as a measure of growth. We have assumed that the ratio N fixed: weight of seed produced was the same at Cuxham as in modern legume crops. We have found data on this ratio from two experiments, one in Denmark, one in Canada.[25] The ratio was similar at the two sites and for beans and peas; it averaged 41.5 kg N fixed/ton seed, and we have applied this for all three legume crops. This gives 97.2 kg N fixed per year; this is 19.6 kg N per hectare of legume per year, which is substantially lower than rates reported for modern beans and peas.

These two inputs, hay and crop legumes, provide an annual input large enough to balance only about one-third of the losses (Table 8). Section (b) of the table provides figures for the other likely inputs by N fixation. The pastureland and haymeadows at Cuxham were shared between the demesne and the manorial tenants. In the absence of any firm evidence on how the use was divided, we have assumed that the demesne obtained 59 per cent of the produce, since it had 59 per cent of the arable area. The figures taken for input per hectare in section (b) are all chosen to be 'pessimistic' – at the bottom end of the range measured by modern methods; the true inputs in section (b) could easily have been two or three times as high as the figures given. We have put no figure for N from legume weeds, since there is no information on how abundant these were. In spite of this caution, the total inputs of 912 kg/year cover the losses of 521–706 with a comfortable margin to spare. This suggests that the nitrogen content of the soil on the farm was not decreasing year by year. However, there is another likely loss not yet mentioned, leaching – in other words nitrogen compounds dissolved in water percolating through the soil and ultimately into rivers.

Rates of nitrogen loss by leaching from unfertilized arable fields have unfortunately rarely been measured. Probably the most thorough measurements were on a barley field in Sweden, whose leaching loss averaged 5 kg N/ha/yr. Loss from the long-term wheat field at Rothamsted was estimated in the nineteenth century to average 12 kg/ha/yr. The true value may well have been lower. But on the other hand, loss from fallow could be higher: soil at Rothamsted kept bare long-term lost in one year of measurement 25 kg N/ha/yr.[26]

However, nutrients leached from the fields were not necessarily a net loss to Cuxham. Two streams entered Cuxham parish, carrying dissolved nutrients from other vills. One of them flowed through the village and between the arable fields, where it no doubt received further nutrients, then through the pastureland and on to the meadow area, where it joined the

[25] E S Jensen, 'Symbiotic N_2 fixation in pea and field bean estimated by ^{15}N fertilizer dilution in field experiments', *Plant and Soil*, 92, 1986, pp 3–13; R J Rennie and S Dubetz, 'Nitrogen-15-determined nitrogen fixation in field-grown chickpea, lentil, fababean and field pea', *Agronomy Jnl*, 78, 1986, pp 654–60.

[26] K Paustian *et al*, 'Carbon and nitrogen budgets of four agro-ecosystems', *J Applied Ecol*, 27, 1990, pp 60–84; D S Jenkinson, 'The nitrogen economy of the Broadbalk Experiments', *Rothamsted Annual Report for 1976*, pt 2, 1977, pp 103–109.

TABLE 9
Summary of phosphorus and potassium balances

Balances	*Phosphorus*	*Potassium*
Losses in produce (kg/yr)	104.4–136.6	135.1–184.2
Input in hay bought (kg/yr)	8.5	85.4
Deficit (losses – input in hay) (kg/yr)	95.9–128.1	49.6–98.8
Deficit per hectare of whole demesne (kg/ha/yr)	0.70–0.94	0.36–0.72
Release by weathering of rock material (kg/ha/yr)	0.05–0.5	0.5–20

Sources: Losses in produce, Table 7. Input in hay: 6.1 tons/yr (see text) × nutrient concentrations in Table 5. Rates of P release by weathering: E I Newman, 'Phosphorus inputs to terrestrial ecosystems', *J Ecol*, 83, 1995, pp 713–26; T E Crews *et al*, 'Changes in soil phosphorus fractions and ecosystem dynamics across a long chronosequence in Hawaii', *Ecology*, 76, 1995, pp 1407–24. Rates of K release by weathering: S M Colman and D P Dethier, *Rates of Chemical Weathering of Rocks and Minerals*, 1986, pp 468–550; G E Likens, F H Bormann, R S Pierce, J S Eaton and N M Johnson, *Biogeochemistry of a Forested Ecosystem*, Springer, New York, 1977; G S Henderson, W T Swank, J B Waide and C C Grier, 'Nutrient budgets of Appalachian and Cascade region watersheds: a comparison', *Forest Science*, 24, 1978, pp 385–97; E K Miller, J D Blum and A J Friedland, 'Determination of soil exchangeable cation losses and weathering rates using Sr isotopes', *Nature*, 362, 1993, pp 438–41.

other stream and finally left the parish. The meadows were probably flooded in winter, so some of the nutrients would have been retained, and returned through the hay and the animals that ate it to the arable soil. So the net loss of nitrogen from the demesne by leaching is very uncertain. If we take 10 kg/ha/yr as the average for the cropland and fallow, the loss would total 1090 kg/yr for the whole area. Leaching loss from the grassland would be small. Combined with the losses in produce (Table 8) this would give total losses of about 1600–1800 kg/yr. This could be balanced by inputs if those in section (b) of the table totalled about 1500 (plus 200 from section (a)): in other words about twice as much as assumed in the table. This is by no means impossible: the inputs per hectare given in the table are definitely at the bottom end of a wide possible range. However, the nitrogen balance includes large uncertainties, and the overall conclusion must be that nitrogen inputs may or may not have balanced losses.

The balances of phosphorus (P) and potassium (K) are summarized in Table 9. Hay brought in made a substantial contribution towards balancing the losses of K, but only a minor contribution for P. This is because (as shown in Table 5) hay contains ten times as much K as P, whereas cereal seeds, the main export from the farm, are only slightly higher in K than P. Table 9 shows 'deficits' for P and K, the losses so far not balanced by inputs; as a result of its low input in hay, P has a greater deficit than K.

In the air there are no gases containing P or K, so there is no source of these elements analogous to nitrogen fixation. The two possible sources are in rain and in release by weathering from the finely divided rock material in the soil. The P and K in rain, like the N, must have come mainly from other parts of England. Seawater contains K, but Cuxham is too far from the sea for this to be a significant source. Major sources of P and K in the rain falling on Cuxham are likely to have been fine dust from soil and dead plants, smoke, pollen.[27] Therefore, as for N, we assume that input of P and K to Cuxham in rain approximately balanced losses. The main potential net input is thus weathering of rock material. Rates of weathering are difficult to measure, and data are scanty. Most of the estimates for phosphorus have

[27] E K Berner and R A Berner, *The Global Water Cycle*, Prentice-Hall, Englewood Cliffs, 1987; E I Newman, 'Phosphorus inputs to terrestrial ecosystems', *J Ecol*, 83, 1995, pp 713–26.

given rates from 0.05–0.5 kg P/ha/yr. A rate of 1 kg/ha/yr has been reported from New Zealand, but from material freshly ground up by a glacier, a situation not found in England for more than 10,000 years.[28] If these figures are representative, the P input by weathering would probably be too slow to balance the calculated P deficit of 0.70–0.94 kg P/ha/yr.

Table 9 contains no figure for gain of P in firewood or for loss by leaching. P is not a mobile element in soil. P losses from unfertilized fields by leaching have rarely been measured, but figures from North America suggest that they will usually be about 0.2 kg/ha/yr or less.[29] Any net loss of P by leaching will reinforce our conclusion that losses often exceeded inputs; but the leaching loss is unlikely to alter fundamentally the balance shown in Table 9.

It is not possible to determine from the accounts the amount of firewood imported. The concentration of P in branches and trunks of typical British trees is very low, compared with hay or seeds (Table 5), so the amount imported in firewood would be low. To obtain a very approximate figure, suppose that the amount of firewood used at Cuxham per person per year was similar to present-day use in subtropical Third World countries with much agricultural land. Figures given for such countries by a United Nations handbook[30] range from about 100–600 kg/person/yr. To err on the high side, suppose that in Cuxham the average firewood use for the whole population of the village[31] was 1000 kg/person/yr; if this contained 0.11 g P per kg (Table 5), none was lost during burning, and the ash was spread evenly over the whole parish area, this would provide only 0.05 kg P/ha/yr, too little to contribute significantly to the P balance (Table 9). Clearly this is a very uncertain estimate; among other things, it ignores the fact that there were trees in Cuxham hedges, which probably provided some of the fuel needs, thus reducing the P imported. The basic point is that P concentration in wood is low.

Turning now to potassium, rates of its release by weathering at eleven sites in Europe and United States ranged from 0.5 to 17 kg/ha/yr; only one site had a rate below 1. Potassium's higher rate of weathering over phosphorus is because many rocks contain higher concentrations of K than P. These rates suggest that weathering in most soils would be releasing K fast enough to balance the deficit of 0.36–0.72 that occurred at Cuxham. As with P, there remain two uncertainties, input of K in firewood and loss in leaching. The concentration of K in wood is much higher than P (Table 5), and an estimate of the input in the same way as for P gives an input in ash of 0.8 kg K/ha/yr. We are not aware of any relevant measurements of K leaching rate from unfertilized fields, but the K^+ ion is less mobile in soil than the nitrate ion. To a first approximation, gain in firewood and loss by leaching may be viewed as balancing each other. It is unlikely that they could alter our conclusion that the potassium deficit was probably balanced by natural inputs.

There are thus two important differences between phosphorus and potassium relating to inputs: potassium is about ten times as concentrated in hay and firewood, and its release from rock by weathering is about ten times as fast. So although the losses in produce of K from Cuxham were slightly greater than of P, our prediction is that the available pool of K in the soil would not decrease year by year, whereas the pool of P probably would decrease.

[28] Newman, 'Phosphorus inputs'; T E Crews *et al*, 'Changes in soil phosphorus fractions and ecosystem dynamics across a long chronosequence in Hawaii', *Ecology*, 76, 1995, pp 1407–24.

[29] H Tiessen, ed, *Phosphorus in the Global Environment*, Chichester, 1995, pp 186–88.

[30] *Forest Products Yearbook*, United Nations Food and Agriculture Organization, Rome, 1987, p xlvii.

[31] About 110 people just before the Black Death: Harvey, *Medieval Village*.

V

If our conclusion is correct that the phosphorus status of the soil was declining year by year, did this result in declining crop yields? The Cuxham accounts provide yield data for many of the years over a period of about half a century. However, for most of the crops the yields per acre can be calculated accurately only for the period when areas sown were reported in measured acres, which started in 1318. From then until the Black Death provides few years in which to see any clear trend, taking into account the wide fluctuations from year to year. However, for wheat the time can be extended. From 1318 to 1347 the total area sown on each field was almost always the same – $93\frac{1}{4}$ acres on the West Field, $88\frac{1}{4}$ on the South Field and 87 or $87\frac{1}{2}$ on the North Field. Since a whole field was sown with wheat each year, and we know which field, it is reasonable to assume that these areas applied to wheat before 1318. In this way yields per acre can be calculated for wheat for most years from 1298 onwards. Figure 1 shows the yields up to 1348. Values after that are not used, since they may have been affected by the disruption caused by the Black Death. The yields varied widely. The lowest were about 11 bushels per acre in 1316 and 1319, during a period of very wet summers.[32] In contrast, there were several years when the yields exceeded 20 bushels per acre. In spite of this large scatter, there is a clear downward trend during the fifty years. The straight line is the best fit calculated by linear regression; its slope is statistically significant (probability < 0.05).[33] This decline was not caused by a decrease in the amount of seed sown; in fact the amount of wheat seed sown per acre increased during the period. So the yield expressed as yield ratio (grain harvested/grain sown) also declined during this period (statistically significant at probability $= 0.001$).

For the other crops we can use the yield ratio over the whole fifty-year period, or bushels per acre for 1319–1347. The yield of dredge declined significantly with time according to both criteria; peas showed a downward trend, but it was statistically significant only by yield ratio; and barley and oats showed no significant change with time according to either criterion. It is surprising that neither barley nor oats showed a clear trend, when a mixture of the two, dredge, did. The overall conclusion is that some crops showed a declining trend of yield, others did not, but no crop showed an increase during this period.

As explained earlier, in many soils the store of 'available' phosphorus is large, so the declining phosphorus status of the soil would affect crop growth only slowly. As an example, if available P in the Cuxham soil was in the range 100–150 kg/ha (as reported from long-unfertilized fields elsewhere),[34] and declined at 0.5 kg/ha/yr (see Table 9) then it would be exhausted in 200–300 years. This is similar to the time-scale of wheat yield decline shown in Figure 1. Such a slow decline in soil fertility and yield would not be noticed by a fourteenth-century farmer within his lifetime, given the large yield fluctuations from one year to the next; but over the time-scale of a century or more it could be extremely important. Of course, crop yields did not in fact continue to decline until they reached zero in the sixteenth or seventeenth century. If agricultural methods had continued unchanged, the declining yields would have resulted in reduced annual nutrient removals in crops, so that inputs and losses would gradually have come more into balance. In reality

[32] Lamb, *Climate*, p 195.

[33] Linear regression was calculated using the Minitab statistical computer package. Linear regression is explained in most standard statistical text-books, for example, R C Campbell, *Statistics for Biologists*, 3rd ed, 1989.

[34] A E Johnston and P R Poulton, 'Fields on the Exhaustion Land, 1852–1975', *Rothamsted Annual Report for 1976*, pt 2, 1977, pp 53–83.

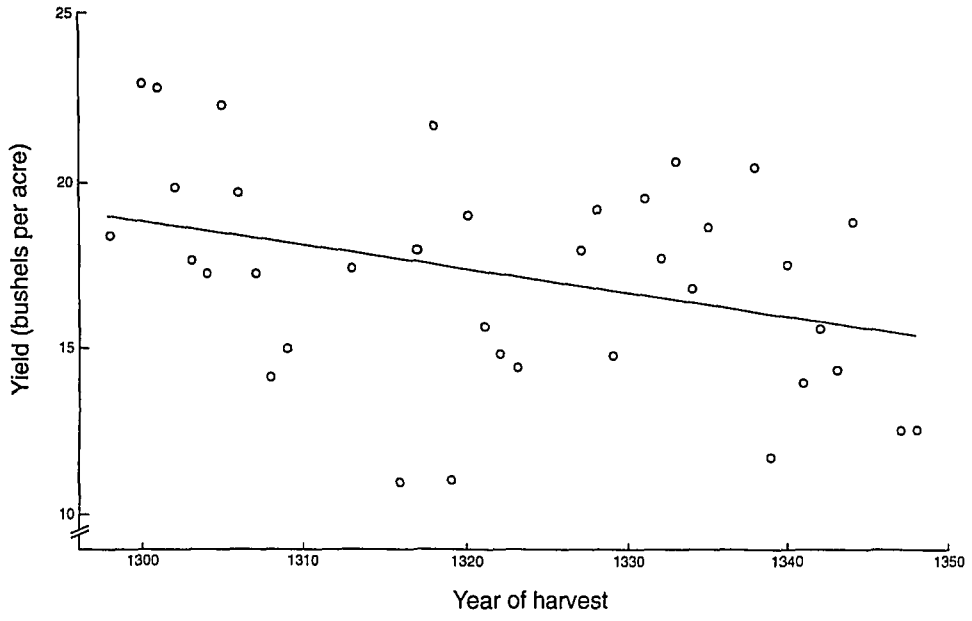


FIGURE 1
Yield of wheat per acre at Cuxham, including tithe, for each year from 1298 to 1348 for which data are available. (The line is the best fit calculated by linear regression.)

agriculture changed greatly after the Black Death, at Cuxham and elsewhere. Changes that would have helped to restore nutrient balance include a higher ratio of pasture area to arable area, with a consequent lower removal of phosphorus in crop harvest per input by weathering; and less produce exported from the farm, for example because of reduced population of towns. Significantly, deliveries of produce from Cuxham to Merton College ceased soon after 1349.

Our nutrient balance calculations are for one manorial demesne. It is relevant to ask how typical Cuxham was among demesnes of its period. A high proportion of the vill was cropland, relatively little was pasture and meadow (Table 1). This was true also for many other vills in the English midlands at that time. The hay brought to Cuxham from other vills allowed it to benefit from nutrient inputs to their meadows; Cuxham's non-crop area was thus effectively increased, but still not enough to cure the phosphorus deficit. In contrast, a vill with a high proportion of pastureland and meadow, or access to much common rough grazing, could have a markedly different nutrient balance, because all those areas could contribute to nutrient input. Such farming systems did occur at this time, particularly around the margins of England.[35]

Campbell, Galloway, Keene and Murphy have compiled data from about 200 demesnes in central and south-eastern England.[36] The data from each are for a few years, between 1288 and 1315. Table 10 compares means of these 200 demesnes with Cuxham. At Cuxham about half the sown area each year was wheat, as was normal for vills operating the three-field system; the average for the 200 demesnes was pulled down by those

[35] H S A Fox, 'Some ecological dimensions of medieval field systems', in K Biddick, ed, *Archaeological Approaches to Medieval Europe*, Western Michigan University, Kalamazoo, 1984, pp 119–58.
[36] Campbell *et al*, *A Medieval Capital*.

TABLE 10

Comparison between Cuxham (mean 1320–1340) and the mean of about 200 manorial demesnes in central and south-eastern England (1288–1315)

Crop	*Area sown (percentage of total area sown)*		*Yield*[a] *(bushels/acre)*		*Exported from farm (percentage of (yield + import))*[b]	
	Cuxham	*200 demesnes*	*Cuxham*	*200 demesnes*[c]	*Cuxham*	*200 demesnes*
Wheat	49.8	32.9	17.3	10.5–11.6	73	55
Oats	29.7	30.3	14.0	12.2–12.8	18	28
Barley	3.0	11.1	21.5	17.2–17.6	48	37
Dredge	10.7	6.7	16.1	14.7–16.0	36	44
Peas			11.8	10.2–12.8		
Beans	6.8	9.2				
Vetch						

[a] Yield includes seed and tithe.
[b] Percentage exported counts tithe as an export.
[c] Calculated in two alternative ways.

operating the two-field system. The yield per acre was higher than average at Cuxham for wheat, oats and barley, though not for dredge or peas. However, yields varied widely from one manor to another, and some had yields as high as Cuxham. For example, the mean yields (including tithe) of some Norfolk demesnes during 1325–49 were wheat 17.3 bushels per acre, oats 16.7, barley 19.1, similar to those at Cuxham.[37] So Cuxham may be considered as within the range of demesne production of its time. Nevertheless, we should bear in mind that Cuxham had a high proportion of its area as cropland, it had a high yield of wheat, and a high proportion of that was exported: Cuxham was primarily a wheat-exporting demesne.

Our calculations apply to the demesne only, and this is clearly a limitation. We have no basis for calculating nutrient balances for the remainder of the parish area, cultivated by tenants. There would be nutrient transfer between the demesne and the other parts. Some of this would be through people, especially tenants who worked part time on the demesne and were paid in kind. This uncertainty should lie within the range of the two alternative figures given for each element (for example, Table 7, bottom line). Animals could also transfer nutrients, for example when demesne and tenants' animals grazed on the fallow. We cannot put a figure on how much this could have altered the nutrient balance of the demesne. A fundamental problem in the agricultural history of the Middle Ages is shortage of information about peasant cultivation.

In the final nutrient balances (Tables 8 and 9), much greater uncertainty attaches to the inputs than to the losses. Some readers may wonder why we have made no measurements on the soil at Cuxham. The answer is that the soil must have been so much altered by twentieth-century farming that any measurements made now would not be relevant to the Middle Ages. For example, rates of nitrogen fixation would probably be very different now. Measuring rates of release of P and K by weathering involves considerable technical difficulties, and could not be carried out at Cuxham, with present methods. So the rates of input we have used are, we believe, the best available.

[37] Campbell, 'Land, labour, livestock and productivity trends'.

VI

Our conclusion on the nutrient balance of Cuxham in the early fourteenth century is that phosphorus losses were probably not balanced by inputs, potassium losses probably were balanced by inputs, and for nitrogen we cannot say with any confidence. Clearly some uncertainty attaches to these conclusions. However, this paper does make a contribution to answering the question of our title, did soil fertility decline in medieval England. Decline of even one essential element would sooner or later result in reduced plant growth and crop yield. So we are predicting that soil fertility did decline. It would be very desirable to have nutrient balances for other places, and we hope that this paper will encourage and help other people to make such calculations.

This paper has drawn attention to phosphorus as a possible key element in maintenance of crop yields before the era of bag fertilizer. In ecologists' jargon, nitrogen has a relatively open cycle, phosphorus a much more closed cycle, with potassium intermediate. This means that a system (for example, a farm) is likely to have large natural inputs and losses of N each year, but only small natural inputs and losses of P. This in turn means that removal of P in crops harvested is potentially a serious upset to the natural cycle, because there is little opportunity for it to be made good by natural inputs. We suggest that the possible importance of soil phosphorus as a limitation on pre-nineteenth-century farming deserves further study. As a hypothesis for future testing, we suggest that phosphorus may have played a crucial role in determining what crop yields could be sustained long-term, and also how much of the produce could be exported to towns, and hence how many people could live in towns. Viewed in this light, phosphorus may have played a key role in limiting the whole social and economic development of Europe.

Whichwood Forest, Oxfordshire: An Episode in its Recent Environmental History

By MICHAEL FREEMAN

Abstract

Much writing on the social ecology of English forests has been cast in isolation from their evolving *natural* ecologies. Using evidence from Whichwood Forest in Oxfordshire, it is demonstrated that social and natural ecologies were inextricably intertwined. As a wood pasture environment, the overall traditions of Whichwood's management and use were by no means detached from the needs of ecological stability. However, over the centuries, periods of lax forest regulation acted in combination with the increasing demands of the commoning populace to effect what was eventually to become a spiral of deterioration in Whichwood's natural ecology. Some measure of the deterioration is provided in studies undertaken by ecologists in the twentieth century when parts of the forest were placed under scientific protection. When these studies are coupled with the documentary record of forest use and misuse, the picture that emerges is one of steadily increasing ecological stress. By the late eighteenth century, Whichwood's forest commoners faced not only the pressures of the reforming agrarian interest, but also the undermining of the very ecosystem which underpinned their livelihoods.

The landscape is in truth nothing less than the complex, interrelated and unified material product of the geographical environment, a seamless totality in which the immemorial processes of nature and the much more recent activities of mankind interpenetrate. Society is not a supranatural category which creates cultural landscapes isolated from nature; rather it remains inextricably related to natural elements and forces, constraints and resources.[1]

THIS paper seeks to offer an insight into the changing interactions of social and natural ecologies in a forest environment of the south Midlands in the eighteenth and nineteenth centuries. It is an approach which falls within the realm of what has come to be known as *environmental history*. To borrow Worster's aphorisms of 1984, environmental history grew out of there being 'little history in the study of nature' and 'little nature in the study of history'.[2] North America has provided much of the subject material of environmental history and North Americans have become its leading exponents.[3] One particular work that could be said to have formed an apotheosis of the genre was William Cronon's now widely-quoted study of the ecological history of New England.[4] Alongside the cultural consequences of European invasion, Cronon set out the ecological ones. English colonization of New England's forest landscape impressed not only new forms of social organization that were alien to the communities of Indians there, but also instituted ecological transformations which progressively undermined the delicate symbiosis that Indians maintained with their natural habitats.

Despite the recent round of challenging work on the *social* ecologies of *English* forests, pioneered by E P Thompson,[5] the

[1] P Coones, 'One landscape or many? a geographical perspective', *Landscape History*, 7, 1985, p 5.

[2] D Worster, 'History as natural history: an essay on theory and method', *Pacific Hist Rev*, 53, 1984, p 16.

[3] See, for example, L J Bilsky, ed, *Historical Ecology: Essays on Environment and Social Change*, 1980; R White, 'American environmental history: the development of a new historical field', *Pacific Hist Rev*, 54, 1985, pp 297–335; M Williams, 'The relations of environmental history and historical geography', *Jnl Hist Geog*, 20, 1994, pp 3–21.

[4] W Cronon, *Changes in the Land: Indians, Colonists and the Ecology of New England*, 1983.

[5] E P Thompson, *Whigs and Hunters: The Origin of the Black Act*, 1975; *idem*, *Customs in Common*, 1991; J Broad, 'Whigs and deer-stealers in other guises: a return to the origins of the Black Act', *Past and Pres*,

interdisciplinary perspective represented by Cronon has found scant registration on this side of the Atlantic. Neeson touches on the theme in her recent, arresting examination of commoners and common right, focusing in particular on the forest communities of Northamptonshire.[6] But otherwise there remains in much of the work of Thompson and others an apparently unconscious presumption that forest environments are ecological constants against which human agency operates,[7] echoing the failing identified in the opening quotation. The present paper sprang from exactly such a lacuna in a project on the social ecology of the royal forest of Whichwood. A research focus which was originally set entirely around the 'crimes' of deer-stealing and wood-stealing and upon the social frameworks within which such activities were located was brought face to face with evidence suggesting a regressive natural ecology.

The argument of the paper is structured as follows. The first section describes Whichwood as a forest ecosystem in history and examines the traditions of its social use. This is succeeded by an account of the forest ecology as commentators have recorded it in recent time, that is over the last hundred or so years. The third section of the paper then seeks to depict the ways in which changes in the social ecology of the forest community interacted with the forest's natural ecology so as to produce the degraded environment that observers have since described.

As a prelude to the discussion, it is necessary to indicate the nature of the forest bounds. The specific geographical extent of Whichwood over the period under consideration is depicted in Figure 1.[8] In broad terms, the forest extended in a band one to two miles wide running ENE-WSW for some five miles, with the settlements of Burford and Charlbury at western and eastern ends respectively. Its 3750 acres were roughly equally split between coppice and open forest.[9] The boundary as defined on the map was commonly described as forming the perambulation of the forest.[10] Beyond it, in what was frequently known as the purlieu woods, the commoning rights of forest dwellers and the forestal rights of herbage or feed for the king's deer also applied.[11] The purlieu woods were basically parts of the old royal forest that had been disafforested in former times, either by specific grant or by trespass.

When the act to disafforest and enclose Whichwood was passed in 1853–4,[12] not all parts of the wooded area were grubbed up and converted into crown farms. A residue, amounting to approximately 1700 acres, was retained by the second Lord Churchill in lieu of his former office of ranger. In 1901, this residue, together with the Churchill family seat of Cornbury Park, was acquired by the Watney family.[13] Later, in 1955, part of the Watney estate was declared a National Nature Reserve (NNR).[14] Today, it forms the Wychwood [*sic*][15] Site of Special Scientific Interest (SSSI).

119, 1988, pp 56–72; D Hay, 'Poaching and the game laws on Cannock Chase', in D Hay, P Linebaugh, J G Rule, E P Thompson, C Winslow, *Albion's Fatal Tree: Crime and Society in Eighteenth-Century England*, 1975; R W Bushaway, 'Custom, crime and conflict in the English woodland', *Hist Today*, 31, 1981, pp 37–43.

[6] J M Neeson, *Commoners: Common Right, Enclosure and Social Change in England, 1700–1820*, 1993.

[7] See note 5.

[8] For a brief history of Whichwood, J F Archibald, 'Report on Wychwood Forest, Oxfordshire, for the Nature Conservancy', 1954 (from files in the possession of English Nature, loaned by courtesy of Dr Keith Payne, Conservation Officer for the Oxford region). See also the extensive Wickham-Steed manuscript files in the Centre for Oxfordshire Studies, Westgate Library, Oxford.

[9] House of Commons Journals, 47, 1792, *Tenth Report of the Board of Land Revenue – The Forest of Whichwood*, pp 240–1.

[10] *Ibid*, p 230.

[11] *Ibid*.

[12] 16 and 17 Vict c 36.

[13] V J Watney, *Cornbury and the Forest of Wychwood*, 1910.

[14] See files in possession of English Nature.

[15] An enormous range of spellings of Whichwood can be found in history. The one used in the present paper was that current in the eighteenth and nineteenth centuries and refers to the area of the royal forest. The modern spelling, Wychwood, describes a much contracted geographical area and a private domaine. For fuller information, see Watney, *Forest of Wychwood*.

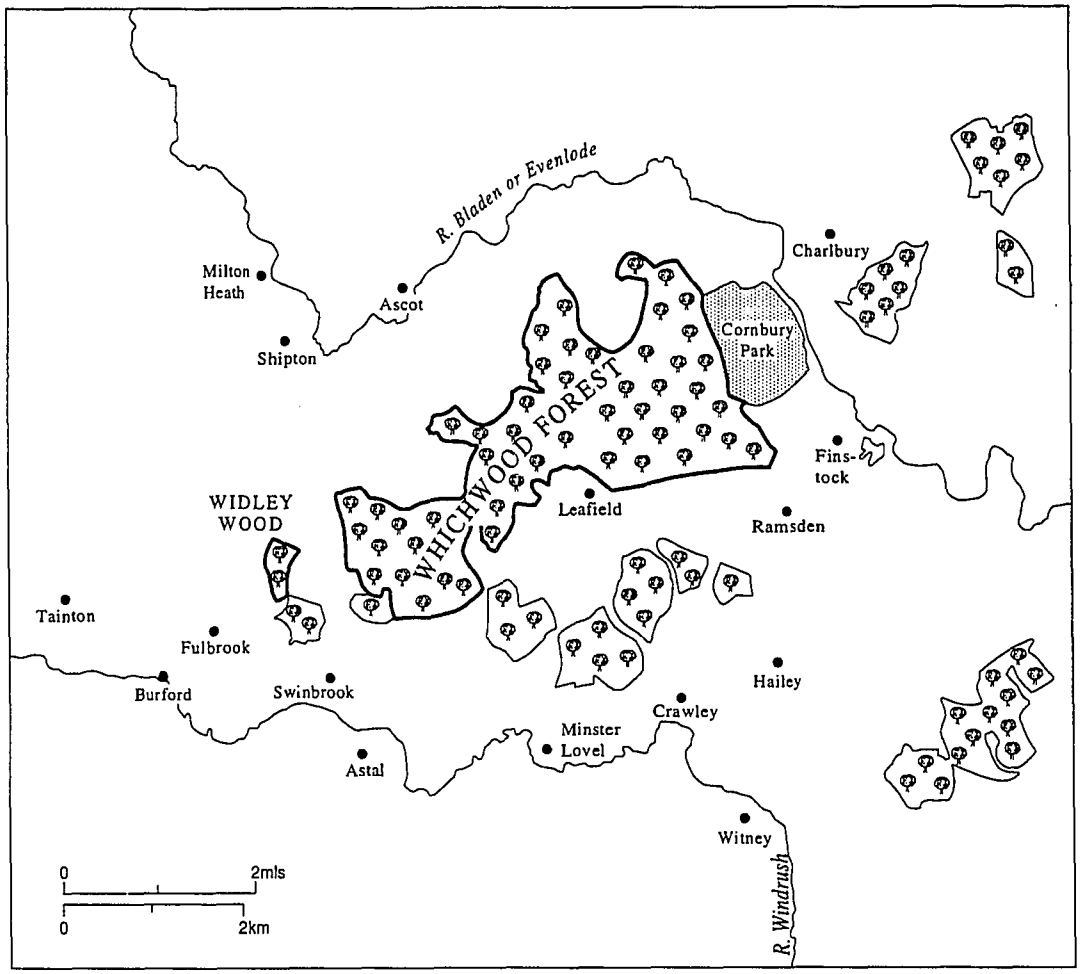


FIGURE 1
Whichwood Forest in the eighteenth and nineteenth centuries.

I

For a thousand years or more, it seems, Whichwood was an oak-ash forest, with an understorey of hawthorn, hazel and field maple.[16] Place-name evidence offers confirmation of the spectrum of timber and underwood species.[17] Coppice names, for instance, included 'Five Oak', 'Shaken Oak', 'Hazlewood' and 'Pollard' (very likely oak). Sites in the open forest had names like 'Cross Maple Hill', 'Five Ashes', 'Hazle Hill' and 'Fern Hill'. The area is almost wholly on Great Oolite but the valley systems cut down to Fuller's Earth clay and, occasionally, high places reach Forest Marble limestone above.[18] As the forest lies just south of the southern edge of the ice during maximum glaciation, downwash clays (drifts) are found over much of the area, often much stained with black humus.[19] All told, Whichwood soils provided healthy ground for the growth of

[16] Centre for Oxfordshire Studies, Wickham-Steed Ms, esp Box 2: The Great Days of Whichwood Forest, 1158–1306.
[17] Bodleian Library, MS Top Oxon c. 179, 'A Plan of Whichwood Forest and Blandford Park taken by order of His Grace the Duke of Marlborough, Lord Warden of the Forest', drawn by J Underwood, 1813, from Pride's Survey, 1770.
[18] W H Pearsall, 'Notes on soils', 1955, from files in possession of English Nature.
[19] *Ibid.*

timber and underwood.[20] There was also (incidentally) a healthy woodland flora.

As a royal forest, Whichwood's primary purpose was to provide hunting for the royal household. It afforded a habitat for deer and, as game, deer were heavily protected in law. Indeed, forest law in medieval times brought large tracts of the country under an especially repressive social regime complete with its own bureaucracy of courts and officials.[21] As part of this, the deer were looked after and protected by a hierarchy of officials on the ground, of whom the keepers became the most well-known and, in some cases, most hated.

Deer are voracious feeders. The forest understorey and the lower branches of trees, along with the grass of clearings, provided their basic sustenance, but this was often inadequate in the winter season. Then it was the practice of keepers and their assistants to feed them hay or else to cut browsewood specially for the purpose; as Birrell has remarked, the most prized red deer can eat the equivalent of their own body weight in fresh forage in a ten- to fourteen-day period.[22] During the fawning season, it was also the task of keepers to make certain that the deer were left as undisturbed as possible. This meant ensuring that there was adequate cover for the deer and ensuring, too, that the activities of commoners and of timber management were limited or suspended. A further task of forest officers was to maintain the perimeter fencing, for deer are notorious for their ability to break down or jump obstacles.[23] In Whichwood's case, the perimeter was mostly formed by a high stone wall[24] but, within that, fencing was necessary to protect saplings and any crop enclosures, particularly those around keepers' lodges.

It is fair to say that the deer remained paramount in Whichwood throughout the medieval period. However, this altered somewhat from the sixteenth century as the needs of regular naval shipbuilding expanded, especially after the Restoration.[25] It seems clear that some form of coppicing was practised in Whichwood in medieval times, but that of the modern period appears to have followed from the Act for the Preservation of Woods of 1543.[26] It was known as coppicing with standards and involved allowing isolated timber trees to grow to their full height among the coppice wood. Standards were cut almost every one hundred years, whereas the coppice was cut at much shorter intervals. Arthur Young, in 1807, recorded that in Whichwood the king's coppices were cut at eighteen-years growth.[27] The act of 1543 established the minimum of twelve standards to the acre. Such spacing yielded wide, spreading crowns and hence much bent and forked timber to furnish the 'crooks' and 'knees' of ships' hulls,[28] what, in the language of the day, was known as 'navy timber'. Whichwood was, of course, peculiarly well-placed as a supplier for the dockyards on the lower Thames. Its oak and ash stands were within a few miles carting distance of the upper Thames at Eynsham which afforded a relatively easy navigation downstream to Oxford and London. From 1596 until 1831, it was common practice

[20] House of Commons Journals, 47, 1792, p 241.

[21] For general commentary on forest law, see, for example, C R Young, *The Royal Forests of Medieval England*, 1979; N Neilson, 'The forests', in J Willard and W A Morris, eds, *The English Government at Work, 1327–1336*, 1940, pp 394–467; W Nelson, *Manwood's Treatise of the Forest Laws*, 1717; R Grant, *The Royal Forests of England*, 1991.

[22] J Birrell, 'Deer and deer farming in medieval England', *AHR*, 40, 1992, p 118.

[23] These various features are considered in Birrell, 'Deer and deer farming', pp 118ff.

[24] House of Commons Journals, 47, 1792, p 240.

[25] O Rackham, *Trees and Woodland in the British Landscape*, 1976, pp 99–102, 156; C R Tubbs, *The New Forest: An Ecological History*, 1968, pp 152–6.

[26] The method in general is outlined in H L Edlin, *Forestry and Woodland Life*, 1947, pp 81ff; details for Whichwood are taken from House of Commons Journals, 47, 1792, p 232.

[27] A Young, *General View of the Agriculture of Oxfordshire*, 1809, p 237.

[28] Edlin, *Forestry*, p 85.

for the coppices in Whichwood to be leased, typically to the forest ranger.[29]

As well as providing an environment for the royal deer and for the growth of coppice wood and 'timber',[30] Whichwood also afforded grazing for the livestock of its inhabitants. Forest commonage, so-called, was in compensation for damage done to crops by wandering deer and had a basis in forest law.[31] Such commoning rights figure in local manorial rolls. In 1636, the lords of the manor of Charlbury, for example, claimed for the hamlet of Finstock 'common or mast in time of pannage in the wastes and commonable places within the forest for all their hogs and pigs, ringed, levant and couchant in and upon their lands and tenements in Finstock'.[32] Tenants exercising pannage paid a schedule of fees in relation to the age of the hogs and pigs.[33] By contrast, in the parish and manor of Ascot, tenants there in 1591 claimed free common in Whichwood for *all* their cattle, horses and hogs, *without stint*.[34] Grimaldi, in his exhaustive legal examination of rights in Whichwood completed in 1838, listed seventeen places with 'rights of common for beasts (not oxen) as annually settled by marksmen and for sheep without stint', but excluding swine.[35] In this particular citation, animals were driven from the forest as often as the officers and marksmen pleased; any cattle belonging to strangers were impounded and fines levied on their owners.[36] It is plain from the variety of documentation on forest commonage, as indeed some of the preceding examples indicate, that commoning practices were subject to significant variation, notwithstanding the citations of court rolls and forest ordinances. In effect, commonage reflected what was custom. It embraced the activities which enjoyed the common consent of interested parties and thus was open to flux. It was also, as Thompson, has remarked, an arena of contest between social groups as the equilibria of social relations altered.[37]

The combination of the deer population, the livestock of commoners, and the timber requirements of the Navy clearly had the potential to make for formidable demands upon the forest's ecology. The manorial and forest courts, along with the forest officials on the ground, afforded one vital means of regulating these pressures, but there were others. When Elizabethan forest administrators framed the legislation on coppicing with standards, it appears that they had more than a passing familiarity with the ecology of timber nursing and wood pasture. Coppicing with standards naturally led to a very open forest canopy and gave rise to a vigorous understorey, particularly of hawthorn and hazel. If unchecked, this understorey had the potential to diminish the open canopy in due course of time, notwithstanding the practice of coppicing. The oak timber could also become overshadowed by ash which is especially vigorous on the lime-rich stonebrash of Whichwood.[38] What grazing animals did, therefore, was to exercise some control over the woodland understorey, helping to maintain its open condition. Even as late as 1990, commentators for English Nature were remarking from field evidence that much of Whichwood's

[29] S Grimaldi, 'Report on the Rights of the Crown in the Forest of Whichwood in the County of Oxford', 2 vols, 1838, manuscript kindly loaned by the late Edward Thompson, now on deposit in Oxfordshire Archives (hereafter OA). Stacey Grimaldi (1790–1863) practised as a solicitor for more than forty years. He was eminent as a 'record lawyer' and was engaged on various prominent record trials and peerage cases.

[30] The word 'timber' is used in this paper to refer to trees for potential use by the Navy. Typically, this meant oak. In law, however, 'timber' covered a wider range of species, including beech, chestnut, walnut, ash, elm, cedar, fir, aspen, lime, sycamore and birch (5 Geo III c 48). The list of species in fact grew under successive statutes and reflected attempts to curb wood-stealing by commoners: R W Bushaway, *By Rite: Custom, Ceremony and Community in England, 1700–1850*, 1982, esp ch 6.

[31] See note 21.

[32] Grimaldi, 'Forest of Whichwood', II, p 341.

[33] *Ibid.*

[34] *Ibid*, II, p 543.

[35] *Ibid*, II, p 305; see also note 29.

[36] *Ibid.*

[37] Thompson, *Customs in Common*, pp 102–3.

[38] Edlin, *Forestry*, p 85.

woodland derived from open wood pasture – seen in the presence of very open grown trees amongst uniform stands of 'forest grown' timber.[39] The cutting by keepers of browse for the deer (the 'lopping and topping of the maiden ash') would have fulfilled the same function as the grazing animals,[40] as, in turn, would the cutting of firewood from the understorey by the commoning population. There are senses, then, in which one might well regard Whichwood's wood pasture regime as sustainable. With regular management of the timber to remove dead or decayed trees and to prevent shrouding of the standards, with regulation of commonage, including the deer, Whichwood could have yielded oak for the Navy, feed for the king's deer as well as sustenance for the commoning stock.

II

The designation of part of Whichwood as a National Nature Reserve (NNR) in the mid-twentieth century exposed what remained of the forest to a measure of scientific scrutiny unprecedented in its history. In this section of the paper, material from these surveys is introduced as a datum from which it is possible to construct something of the deteriorating condition of Whichwood as a wood pasture environment from the late eighteenth century, if not earlier.[41]

Hemsley, visiting the NNR site in 1957, was struck by the ubiquitous occurrence of Dog's Mercury (*Mercurialis perennis*). The plant formed a continuous field layer in many areas.[42] He noted that he never recalled seeing the plant so prominent or so overpoweringly dominant. The plant is frequently found in the field layer of woods. It is generally poisonous to animals and its overabundance indicates that competing species had been denuded, almost certainly by a long history of overgrazing.[43] Dog's Mercury is also characteristic of infertile soils and Jarvis's report on Whichwood's soils, undertaken in the mid-1970s, indicates that they had become leached and non-calcareous.[44] His soil borings discovered many yellowish (E) horizons beneath dark (A) horizons. The tendency for soluble mineral salts to be washed into lower horizons, so leading to pan formation and infertility, would have been accelerated by excessive grazing of the woodland understorey. The distinguished naturalist, W H Pearsall, on a visit to the site in 1955 in the company of the then estate owner, Mr Oliver Watney, offered a more direct verdict: Whichwood showed evidence of *severe* grazing in the past, especially of the valley sides and outer edges.[45] He attributed this to heavy stocking of deer up until disafforestation in the mid-nineteenth century, but it is unlikely that Pearsall could have distinguished the depredations of deer from the livestock of commoners.[46]

The degraded soil regime noted by Jarvis in the surviving areas of forest would almost certainly have found parallel on the farms that the crown created in the parts of Whichwood that were cleared from the late 1850s. Indeed, Orr, writing in 1916, records how much of the area grubbed up for farming proved very poor in the returns that it yielded.[47] At the same date, Morison commented that the area offered poor grassland and, as arable land, presented 'the

[39] J W Spencer, 'Wychwood Forest and management of former wood pasture', from files in possession of English Nature.
[40] Grimaldi, 'Forest of Whichwood', I, p 230.
[41] See note 8.
[42] J H Hemsley, 'Fieldnotes of visit to Wychwood. 11–12th April, 1957', from files in possession of English Nature.
[43] For details of the ecology of Dog's Mercury, see O Rackham, *The History of the Countryside*, 1986, pp 108, 120, 203, 230; and, more especially, H Peat and A Fitter, *The Ecological Flora Database of the British Isles*, Bath Information and Data Services, Bath University, 1995.
[44] M G Jarvis, 'Notes on the soils of the Wychwood Forest National Nature Reserve', Soil Survey of England and Wales, 1976, from files in possession of English Nature.
[45] W H Pearsall, 'Note on Wychwood Forest, 1955', from files in possession of English Nature.
[46] *Ibid.*
[47] J Orr, *Agriculture in Oxfordshire*, 1916, p 51.

difficulties of clay without its compensatory advantages'.[48] It was, all told, 'cold and late country of bad reputation'.[49] Monk, writing in 1902, confirmed these accounts. He claimed that the soil ought never to have been cultivated, as those who farmed it found 'sorrowfully to their cost'.[50] The pattern was echoed in the turnover of tenants who found the hungry soils and poor water supplies a constant drain on profits.[51]

Unduly heavy grazing, along with the soil compaction and impeded drainage that went with it, probably had a bearing on the disease that was noted as prevalent in Whichwood's wood pasture by the 1840s.[52] This appears to have been Johne's disease, a chronic bacterial enteritis of sheep and cattle. It was common in this part of Oxfordshire at the time and its spread was facilitated by undrained pastures and stagnant pools.[53] In the parts of Whichwood where the stonebrash was overlain by clay, trampling stock would have contributed to form just the sort of ground where the microbes of Johne's disease could become fixed.

In the section of Whichwood which survived as forest after the Disafforestation Act, the withdrawal of the deer and of the commoners' stock, not to mention the dramatic fall in the Navy's demands for timber, led to changes in the forest ecology. The first stage in the process was, as indicated previously, the domination of oak by ash. Succeeding this, according to Archibald's account of 1954, was a 'high forest' of hawthorn as the understorey was no longer browsed or cut. This, in turn, was being followed by elder scrub. Archibald was unclear on the final successional product, but the sequence offers a useful perspective from which to examine how Whichwood's wood pasture ecology evolved in the early modern period.[54]

III

It is clear that one of the most critical controls on Whichwood's particular forest ecosystem was grazing. As has been remarked above, in the later nineteenth century, the forced withdrawal of stock had serious repercussions for the traditional open woodland regime. In a similar way, *over-stocking* could undermine the regenerating capacity of 'timber' species: oak saplings, for instance, needed protection or cover. The history of grazing in Whichwood over the seventeenth, eighteenth and nineteenth centuries forms an almost continuous tale of misuse, over-use and lax regulation. In Charles I's reign, for instance, the then ranger, Anthony Cooke, allowed his beasts to 'depasture' in some of the crown coppices at times when they should have been fully enclosed and permitted some of his servants to do likewise.[55] What little pasture was then left was destroyed by the beasts of commoners 'wandering and depasturing for want of fences'.[56] It seems, in fact, that Cooke, despite his holding the lease of the coppices, had abandoned any pretence at managing them, for by the 1630s no less than eight had suffered deterioration in *vert* on account of deer entering them.[57] And as if the deer and wandering cattle were not enough, Cooke also presided over the introduction of another band of grazing competitors: rabbits. He allowed coney burroughs [*sic*] to be established in various of the forest ambits.[58]

[48] C G T Morison, 'Soils', in Orr, *Agriculture in Oxfordshire*, p 185.
[49] *Ibid.*
[50] W J Monk, *Walks and Drives around Burford*, 2nd ed, 1902, p 16; see also K Tiller, 'The transformation of Wychwood', *Oxfordshire Loc Hist*, 1(7), 1983, pp 20–22; F Emery, 'The transformation of Whichwood: some fresh evidence', *Oxfordshire Loc Hist*, 2(2), 1984, pp 19–22.
[51] C Miller, ed, *Rain and Ruin: The Diary of an Oxfordshire Farmer, John Simpson Calvertt, 1875–1900*, 1983, p 8.
[52] BPP, 1847–8, XXIV, pt 1, *Report from Select Committee on Woods and Forests and Land Revenues of the Crown*, p 64.
[53] Orr, *Agriculture in Oxfordshire*, pp 53–4.
[54] Archibald, 'Report on Wychwood Forest'.
[55] Grimaldi, 'Forest of Whichwood', I, pp 124, 130.
[56] *Ibid*, p 130.
[57] *Ibid*, pp 123ff.
[58] *Ibid*, p 136.

Evidence from the second half of the eighteenth century paints a similar picture. In the 1760s, the *vert* had so deteriorated that the forest woodward cut down young oaks in the coppices in an effort to generate a more vigorous understorey.[59] The position was made worse after 1780 with the introduction of oxen by one minster commoner.[60] Oxen, which are heavy feeders, had never been permitted in the forest, but after 1780 the practice became commonplace, one keeper even implying a forebearance in this on the part of the crown and the then forest ranger, the duke of Marlborough.[61] Sheep provided another case in point. Grimaldi, in his report of 1838, asserted that there was no legal authority for sheep pasture and suggested that interested parties had illegally established it among themselves.[62] By the 1790s, there appears, too, to have been a problem with pigs: the forest was over-run with them – in the coppices as well as in the open forest.[63] It was the duty of forest officers to control livestock commonage (including pannage), by determining the time for allowing stock in and the time for clearance.[64] However, by the 1790s, forest officials seem to have cleared it 'only by necessity'.[65] Indeed, owners of stock took them home of their own volition – when want of food obliged them to do so.[66]

It was not just animals which contributed to the deterioration of the Whichwood's grazing. Somewhat ironically, humans were culpable, too. It had long been customary for commoners to take rotten wood to make their fires, the so-called 'right of fuel' or 'estovers'.[67] Any coppice wood taken as part of the 'hedge acre' and not used for hedging was also claimed by commoners.[68] However, by the 1790s, commoners are recorded as cutting bushes, cutting and lopping young trees, and taking the spoils away under cover of night, ostensibly to be sold.[69] Thorn, maple and hazel were their primary targets, all critical elements of the forest *vert*.[70] In doing this, they were in some ways merely copying the practice of one former forest ranger, Lord Cornbury, who in the earlier eighteenth century cut browse for the deer and then sold much of it.[71]

The grazing that Whichwood offered has to be understood within the context of a local agricultural economy that was heavily tied to stock-keeping. Given that many holdings were too small in themselves to be self-supporting, forest commonage became vital to their viability. A plan of the community of Leafield drawn up for the duke of Marlborough in 1764 shows that most holdings were less than ten acres and many were less than five.[72] The significance of pasture, generally, is underscored by the dominance of freehold tenure, including many of the yardlands in the open fields.[73] Field orders in the local court leet in 1749 echoed the place of livestock in the economy, with their precise references to the times when different stock could be baited or could have common in the arable fields.[74] A perusal of the notices and advertisements for freehold lands in and around Whichwood in *Jackson's Oxford Journal* in the later eight-

[59] House of Commons Journals, 47, 1792, p 251.
[60] *Ibid*, p 246.
[61] *Ibid*, p 251.
[62] Grimaldi, 'Forest of Whichwood', II, p 321.
[63] House of Commons Journals, 47, 1792, p 262; Thomas Walker, in evidence to the Board of Land Revenue (p 233), claimed that no swine were admitted to the forest. The board's view seems to have been the more accurate one, as is apparent from the following advertisement in *Jackson's Oxford Journal* (hereafter *JOJ*) in 1788 (311b): 'Stolen out of Whichwood Forest – large white sow and 9 pigs property of James Empson of Leafield'. The reference number in brackets refers to the entries in E C Davies, ed, *A Chronological Synopsis and Index to Oxfordshire Items in Jackson's Oxford Journal, 1753–1780*, 1967, and E H Cordeaux and E Davies, eds, *idem, 1781–90*, 1976.
[64] Grimaldi, 'Forest of Whichwood', II, p 305.
[65] House of Commons Journals, 47, 1792, p 233.
[66] *Ibid.*
[67] *Ibid.*, p 244.
[68] Grimaldi, 'Forest of Whichwood', II, pp 290–1.
[69] House of Commons Journals, 47, 1792, p 262.
[70] *Ibid*, p 250.
[71] Grimaldi, 'Forest of Whichwood', I, p 242.
[72] OA, Plan Leafield 1764, Photo 53.
[73] *Ibid.*
[74] OA, Misc Watney III/i/1, Court book for manors of Leafield, Langley and Ramsden, 1671–1827.

eenth century demonstrates forcefully the part played by common grazing rights in the local agricultural economy. Some entries even went so far as to refer to 'unlimited rights of common'.[75] It was no wonder, then, that, even as late as the 1840s, there was apparently no *general* pressure from the forest populace for Whichwood to be cleared and enclosed.[76] In fact, the intensity of the stock-keeping regime appears to have been growing during the first half of the nineteenth century, especially among the poorer commoners. The local courts leet increasingly record encroachments for pigstyes and instances of commoners' livestock being allowed to wander without control.[77] In parallel, common regulation of grazing became harder and harder for court stewards to enforce.[78] These trends reflected the rising poverty levels that were becoming manifest in Whichwood after the 1790s, as well as the pressures to which small-time tenant farmers were exposed in trying to maintain the poor.[79]

A second critical element of Whichwood's particular forest ecosystem was the management of its 'timber' and, in tandem with that, its coppices. But the story that Whichwood presents in this regard is a chequered one to say the least.[80] The coppices were poorly managed some of the time and widely abused a great deal of the time. There were phases when parts of the forest canopy were heavily depleted, both in the open forest and in the coppices. There were times when the timber was shrouded, making for much 'unthrifty' growth.

It can be stated with some certainty that conditions were rather *less* unfavourable in the decades between 1730 and 1760, and between 1790 and 1830. This is reflected in the former case in the recording of some good timber stocks in 1789–90 which, subsequently, became an important source of 'navy timber' during the French Wars. It was reflected in the latter case in the fine timber noted by various observers in the 1830s and 1840s. When good 'navy timber' was being recorded, or when unthrifty growth was being removed, the certainty is that the wood pasture regime was effective. As indicated previously, 'navy timber' came from oak standards with wide, spreading crowns, possible only within an open forest canopy. So when such timber was in good supply, the inference must be that the understorey conditions were productive for grazing purposes. By the same token, the clearance of 'unthrifty' trees, that is standards unfit for the Navy, indicated attempts to re-instate the open forest regime. Naturally, too, felling of *good* 'navy timber' helped to re-instate the forest's open condition. A further indicator of the effectiveness of the wood-pasture regime was when there was adequate cover for young trees and saplings. In the mid-eighteenth century, it was regular practice during cutting of the underwood to mark saplings with paint and to protect them from foraging animals subsequently.

The times of relative failure of the wood pasture regime registered in a variety of ways. In the 1720s, for instance, Charles Withers, Surveyor-General of Woods and Forests, complained how the timber in Whichwood was 'shrouded and browsed', 'none coming up in the knipes or coppices'.[81] His counter-

[75] See, for example, *JOJ*, 1784 (260a), sale notice of three inclosed freeholds (*c* 12 acres), with 'unlimited rights of common on Ramsden Heath and in Whichwood Forest'.

[76] BPP, 1847–8, XXIV, pt 1, p 64.

[77] OA, Misc Watney III/i/1, and I/i/3, Court book for manor of Ascott Doiley, 1818–1924.

[78] See esp OA, Misc Watney I/i/3.

[79] See M Freeman, 'Plebs or predators: deer-stealing in Whichwood Forest, Oxfordshire, in the eighteenth and nineteenth centuries', *Social Hist*, 21, 1996, pp 1–21.

[80] Unless separately footnoted, the sources for this discussion are as follows: 1) the survey of Whichwood Forest undertaken in 1789–90 at the instigation of the then Surveyor-General of Woods and Forests, John Robinson – the survey is set out in full in House of Commons Journals, 47, 1792, pp 230–64; 2) timber warrants in the Land Revenue records: PRO, LRRO/82, Accounts, Whichwood Forest, 1677–1851; also PRO, LR.4 16/98, Whichwood Forest: woodsales etc; 3) BPP, 1847–8, XXIV, pt 1.

[81] Quoted in Thompson, *Customs in Common*, pp 103–4.

TABLE 1
Stocking rate of coppices (oak standards), 1789–90*

Coppice	*Theoretical*	*Actual*	*Percentage*
Cranehill	1165	296	25.4
Hazlewood	1800	586	32.5
Eveddon	864	140	16.2
Buckleap	744	386	51.9
Five Oak	684	335	48.9
Slate Pits	1176	232	19.7
Lankridge	1488	1045	70.2
Cockshoothill	1248	601	48.1
Smallstones	1824	1081	59.2
Kingswood	1968	812	41.2
Shakenhoof	468	368	78.6
Pollard	1152	984	85.4
Gadley	876	277	31.6
Hawkes	1032	342	33.1
Broad Quarter	1716	755	43.9
Rowstage	1116	447	40.0
Wastage	912	150	16.4
Knottage	1764	692	39.2
Total	22,092	9529	43.4 (x)

* Taking twelve oaks to the acre as standard and using acreages as given in the 1789–90 survey. There is, in fact, considerable disagreement among the various sources as to the coppice acreages. For example, Underwood's 1813 revision of Pride's map of 1770, drawn up for the duke of Marlborough, gives a total acreage for the coppices of 1649, whereas Robinson's survey of 1789–90 gives the acreage as 1841.

part of seventy years later, John Robinson, remarked upon the astonishingly poor stocking rate of the coppices. There were remarkably few oaks greater than fifty years old, plainly a legacy of the conditions that Withers had recorded half a century before. As stated earlier, the leases required twelve oaks to the acre, giving a theoretical figure for the coppices of some 23,000 standards. In 1789–90, in fact, there were just 9500-odd. Table 1 sets out the stocking rate of the eighteen coppices at the time.[82] A few had little standing timber at all. Robinson found the open forest rather more favourably supplied with 'navy timber', but even here the open canopy was being filled out with ash in places and some keepers complained that the understorey was so destroyed that the timber was not regenerating.

Under Robinson's surveyor-generalship, the claims of the timber in Whichwood took on a significance beyond that prevailing in any previous era. Supplying the Thames dockyards of Deptford and Woolwich by sea from the New Forest and from Dean in Gloucestershire was expensive and risky in time of war. Whichwood was thus a critically placed source of supply. Robinson directed the planting of acorns in coppices cut within five years. He also circulated notices threatening with prosecutions those who injured the timber and recommended that Whichwood be taken in hand as a timber nursery. Moves in the latter direction met resistance from the forest ranger and, after 1815, as the value of timber and bark fell, their impetus inevitably waned.[83] One effect of the more assertive management of the timber after 1790, though, was that some of the abuses

[82] The table has been computed from material in House of Commons Journals, 47, 1792, p 261.

[83] Details can be found in a document in OA, Misc Watney VIII/i/1, Duties of West Oxfordshire Yeomanry in Whichwood Forest, 1817–1836.

and misuses of the grazing were curtailed, especially in the coppices. But against the backcloth of a rising demand for stock-grazing from around that time, this merely served to enhance the pressure on remaining parts of the forest. Such pressure was re-emphasized from the 1830s when the ranger's legal dispute with the crown brought felling of timber in the open forest to an abrupt halt and when he also re-introduced the highly destructive red deer.[84] The cessation of felling allowed ash to begin to fill up the open spaces between oak standards and the red deer added to the degradation of the already contracting area of wood pasture. Commentators rightly remarked upon the way Lord Churchill, as ranger, was peculiarly tenacious of his customary rights of office.[85] But the paradox was that his dispute with the crown actually compromised the customary rights of commoners by suspending one of the activities that was critical to the maintenance of the forest's open condition: regular felling.

IV

It almost goes without saying that one cannot begin to grasp the environmental history of Whichwood in the two centuries up to the Act of Disafforestation without embracing the transformation of the social relations of production that has figured so prominently in recent traditions of writing on social history.[86] Whichwood was little different from other 'resources in common' in the way it was itself exposed to the forces of commercialism and, perhaps more pertinently, in the way it struggled to survive as an island of commonalty amidst an increasingly privatized and proletarianized agrarian landscape. It also goes largely without saying that few social historians would fail to register the way commoning systems were not in any sense immune to becoming implicated in market mechanisms. Innes and Styles, for example, have described plebeian attitudes to the emerging capitalist order as 'ambivalent and contingent'.[87] E P Thompson's delineation of the 'forest habitus' reflects much the same mould: within it, all parties strove to maximize their own advantages, the common people as much as the rich or the 'middling sort';[88] and as has been argued elsewhere, some of the plebeian elements among Whichwood's inhabitants can be cast as predators as much as they can be cast as losers in an increasingly weakened customary economy.[89] However, the analysis needs to go further than this. Whichwood's natural ecology was not static, as so much writing on the *social* ecology of English forests would lead one to believe. It was dynamic and human occupancy was itself part of that dynamism. At different stages in time, the activities of the parties which variously looked after the deer and the timber, together with the activities of commoners, contributed to the transformation of Whichwood's natural ecology. It was not, though, a transformation that was *necessarily* downward. The deer could co-exist with the beasts of commoners, and the 'timber' storey could yield a harvest for the Navy alongside. But such multiple usage required regulation and, in Whichwood, as in so many of the other royal forests, regulation was intermittent and fluctuating in force. The upshot *was*, therefore, a varyingly regressive natural ecology. And when coupled with a commoning population whose livelihood was being undermined, especially from 1800, the ecological pressures intensified and

[84] The case for the crown is set out in Grimaldi, 'Forest of Whichwood'; a summary of the case (which never in fact came to court) is contained in BPP, 1847–8, XXIV, pt 1, pp 62–3 and Appendix O.

[85] See Anon, *English Forests and Forest Trees*, 1853, p 259.

[86] See note 5.

[87] J Innes and J Styles, 'The crime wave: recent writing on crime and criminal justice in eighteenth-century England', *Jnl Brit Stud*, 25, 1986, p 209.

[88] Thompson, *Customs in Common*, pp 102–3.

[89] Freeman, 'Plebs or predators'.

resulted in negative feedback. The combination of uses became unsustainable and the entire forest environment suffered degradation.

It is clearly a reasonable presumption that Whichwood's environmental history in the early modern period was replicated in varying ways in other royal forests. The work of Tubbs, on the ecological history of the New Forest, offers some confirmation of this.[90] Indeed, Tubbs provides a very early example of a partial attempt to study the interactions of social and natural ecologies in a forest environment. The New Forest was for long a primary royal hunting ground and thus the maintenance and protection of its deer were paramount. In parallel, though, the forest had a long history of use for grazing – not just for commoning stock, but also on a rental basis and as part of the pickings of forestal offices. Like Whichwood, the New Forest had also long been a source of 'timber'. In medieval times, coppicing was practised to provide industrial fuel. The first real demands for 'navy timber' emerged in the mid-seventeenth century, although construction in the Hampshire yards was slow compared with those on the lower Thames. The upshot, then, was that the New Forest demonstrated much the same combination of multiple usage as Whichwood. In turn, under proper regulation, it was possible for these uses to be sustained. The reality, though, often proved otherwise. By the mid-twentieth century, parts of the forest ecosystem had degraded in ways rather similar to Whichwood. The oak-dominated canopy had given way to beech; hazel had largely disappeared from the understorey; areas where woodland had been removed or had retreated were exhibiting degraded soil profiles. The ecological downturn sprang from a long run of confused and overlapping official competencies which made for a tortuous relationship between the needs of silviculture and the needs of deer and livestock. When the demand for coppice wood for industrial fuel declined in favour of coal, coppices degenerated into stock pounds, adding to the potential ecological instabilities. There was a contrast here with Whichwood, where coppice wood actually remained a local industrial fuel for the forest potteries and lime-kilns well into the nineteenth century.

In Whichwood by the nineteenth century, it was not just the new political economy that was bearing down upon the customs of commoners, but a new bourgeois morality which saw commoning communities as undisciplined, idle and depraved.[91] The pressure to sweep away the old order was thus formidable. However, one cannot begin to understand the process without registering that commoners faced what, in some senses, was an even more powerful agent of change: the deterioration of the very ecosystem within which their livelihoods were founded. Most students of the social ecology of forest communities in England in the period have argued their cases in isolation from this critical frame.

[90] Tubbs, *The New Forest*.

[91] This saw, for example, the cessation in 1827 of the Whitsuntide forest feast at Capp's Lodge, on the edge of Whichwood near Burford, under pressure from a reforming local clergyman; later, the annual forest fair held on Newell Plain was abandoned: R and J Moody, *The Book of Burford*, 1983, pp 58–60; E Corbett, *A History of Spelsbury*, 1962, pp 103–4.

Land and People in Northamptonshire: Great Oakley, *c* 1750–1850

By RICHARD MOORE-COLYER

Abstract

Through the study of a single parish this article seeks to contribute to the continuing debate surrounding the survival of the small owner/occupier in the nineteenth-century countryside. Within the context of a livestock-dominated economy, open-field tenants of Great Oakley had access to a number of enclosed grazing pastures, together with extensive common grazing in the forest of Rockingham, and the relative importance of the latter is discussed in some detail. Following enclosure in 1784 and 1829 there was some dislocation among the cottager population, yet there remained available numerous parcels of land for the smaller occupiers. Whereas there was a tendency for smaller freeholds to be purchased by large landowners before enclosure, this was by no means a prelude to dispossession, since many of those selling held rented land in adjacent parishes and may have viewed sales as a means of releasing capital for reinvestment. If the smaller occupier, usually employing family labour only, contributed only modestly to the national economy, his significance at the local level was of some importance both from a commercial and social standpoint.

SINCE the early years of the present century when the Hammonds penned their sombre picture of the effects of enclosure on the fate of the small freeholder, much intellectual effort has been expended in debating both the timing and the effects of the decline of this group in the English countryside. The course of the debate has waxed and waned over the decades according to changing views as to the definition of 'peasantry' and 'yeomanry', and the extent to which loss of customary rights delivered the hammer blow leading to the virtual elimination of the small freeholder. More recent reviews have highlighted the complexity of the issue, particularly with regard to regional variations, while Ginter has raised serious objections to the methodology employed in many of the earlier land-tax-based studies.[1] Although there was undoubtedly post-enclosure dislocation in some areas, there is a growing consensus that economic and technical factors set into motion the decline of the small freeholder in the century or so prior to 1780 so that in many cases enclosure played little or no part in the process. Nevertheless, the small owner had by no means 'disappeared' by the later eighteenth century, and where financial stringency could be circumvented by combining farming with a variety of other occupations it was possible to avoid the pressure to sell.[2] Again, even where they did sell out their freeholds, they may often have done so in response to investment opportunities elsewhere.

In the parish of Great Oakley, located on the intractable clays of north-east Northamptonshire, there were no small freeholders in the later eighteenth century, the parish being dominated by a single landowning family. On the other hand a considerable proportion of occupiers of land held freehold and copyhold tenure within adjacent parishes and the effects of

[1] J V Beckett, 'The decline of the small landowner in eighteenth and nineteenth century England: some regional considerations', *AHR*, 30, 1982, pp 93–9; D E Ginter, 'Measuring the decline of the small landowner', in B A Holderness and M Turner, eds, *Land, Labour and Agriculture, 1700–1920: Essays for Gordon Mingay*, 1991, pp 34–8.

[2] J M Martin, 'The small landowner and parliamentary enclosure in Warwickshire', *Econ Hist Rev*, 2nd ser, 32, 1979, pp 328–43; G E Mingay, *Enclosure and the Small Farmer in the Age of the Industrial Revolution*, 1968, pp 16, 30; J V Beckett, 'The decline of the small landowner', in F M L Thompson, ed, *Landowners, Capitalists and Entrepreneurs: Essays for Sir John Habakkuk*, 1994, pp 111–12; M Reed, 'The peasantry of nineteenth-century England: a neglected class?', *History Workshop*, 18, 1984, pp 53–76.

enclosure on these properties will be considered below. However, the main concern of the present article (beyond contributing to the history of Great Oakley itself, nearly all of which has disappeared beneath the bricks and mortar of the expanding town of Corby) is with the small *occupier* who has received little attention in the historiography of the countryside. Whereas the enclosure of the Great Oakley open fields in 1784 had led to the creation of five farms varying in size from 100 to 150 acres, by the late 1850s three further holdings averaging 121 acres had been brought into being by combining existing enclosed fields with land won from the clearance of forest. By this later date, meanwhile, there still remained numerous closes which came under the tenancy of occupiers engaged in a variety of by-employments. Thus it will be argued throughout that whatever may have been the case in the predominantly arable areas of England, in this overwhelmingly pastoral economy sufficient land was available to contribute to the income of many who would not necessarily have defined themselves as 'farmers'. Indeed, the 1784 enclosure and the Rockingham Forest Inclosure of 1829 actually *increased* the number of parcels of land for the use of small-scale part-time cultivators. For this reason, perhaps, neither enclosure appears to have provoked the hostility of the denizens of Great Oakley, a fact which calls into question the value of the pre-existing forest commons. In reality these were probably of marginal importance to the majority of the community except in seasons where the availability of grazing and forage in the common fields and commonable grazing areas was limited by climatic factors. The Great Oakley evidence, moreover, does little to advance the case of those who would argue that small owners unable to resist the temptation to sell their freeholds in advance of enclosure inevitably joined the ranks of the landless. Since a significant proportion of Great Oakley tenants also held freeholds in adjacent parishes, often some distance from their main holdings, the sale of these to release capital for investment either in their tenanted farms or even in non-agricultural enterprises would seem perfectly rational in strictly economic terms. In emphasizing these points and considering a variety of aspects of the wood-pasture economy, the present article, albeit focused narrowly on a single parish, is offered as a contribution to the continuing debate surrounding the survival of the small owner/occupier in the nineteenth-century countryside.

I

Clustered around the stream of Harper's Brook to the south of what remained of the ancient forest of Rockingham, the village of Great Oakley continued to be dominated by an open-field economy until the penultimate decade of the eighteenth century (Fig 1). In 1780 the village comprised 48 dwellings wherein 144 individuals lived in well-ordered routine under the watchful eye of the court leet whose rules and orders regulated village life in time-honoured manner. Whether concerned with the conduct of the village bull, the behaviour of gleaners, the prevention of the fouling of water courses by geese, or the organization of the commons, the influence of the court impinged upon virtually all aspects of daily life.[3] On the face of it, then, Great Oakley was little different from dozens of villages in and around the Rockingham Forest or, for that matter, the Weald of Kent, where wood-pasture economies were heavily reliant on both statutory and customary rights of common.[4] Apart from four houses occupied by single men or women, the remaining dwellings accommodated families, the heads of which

[3] Northamptonshire Record Office (hereafter NRO), Brooke of Oakley, B 125, Great Oakley Court Books.

[4] B Short, 'The evolution of contrasting communities within rural England', in B Short, ed, *The Rural Community: Image and Analysis*, 1992, p 27.

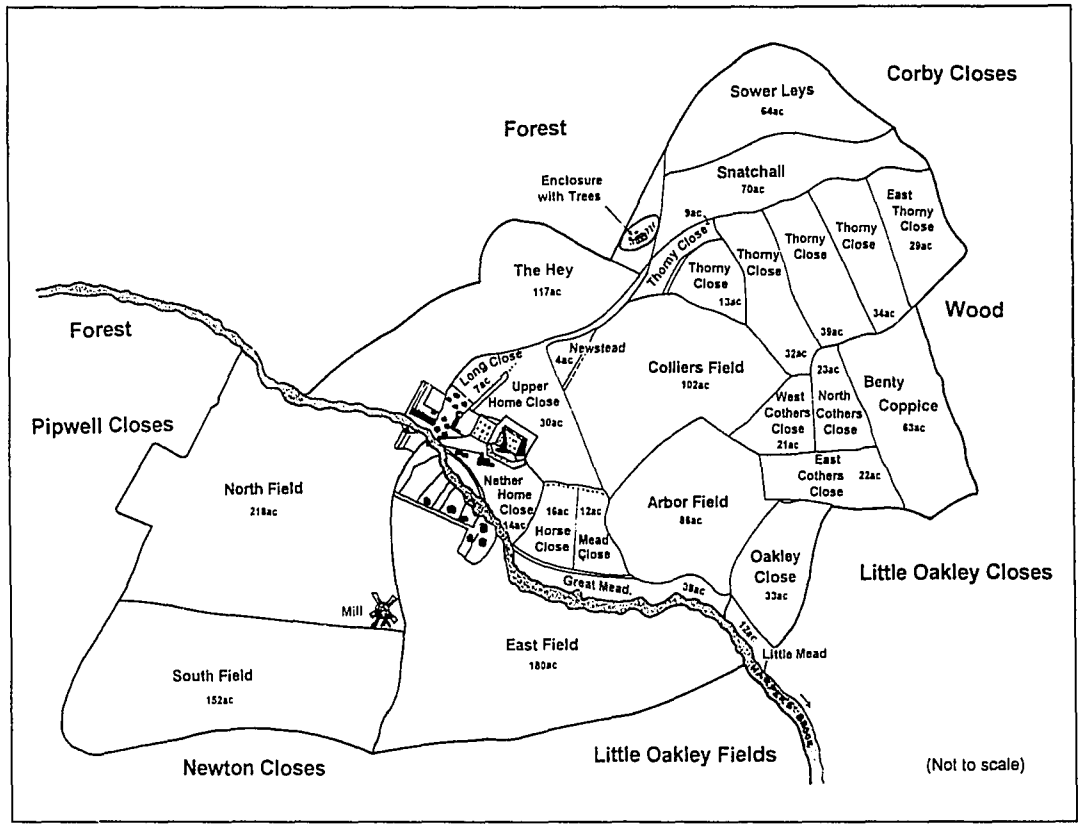


FIGURE 1
Great Oakley, 1744.

were exclusively returned as being engaged in agricultural activities or village crafts. Thus by 1789 the majority of the community worked the land in one capacity or another while a miller, an alehouse keeper, two shoemakers, three weavers, and a schoolmaster plied their trades in the sanguine hope of avoiding '... the Hovel in Dent's Old Close' which served as the village workhouse.[5] In contrast to the situation in other parts of England where post-enclosure conversion of arable land to permanent pasture often led to a decline in the village crafts and trades followed by cottagers and cultivators, the passage of time seems to have had little effect in Great Oakley.[6] Comparison of the militia lists of 1777 with the census enumerators books and Kelly's Directory of 1854, for example, reveals that although the three Great Oakley handloom weavers had disappeared from the reckoning, the village continued to support two inns, a carpenter, a shoemaker, a blacksmith and a wheelwright together with a miller and a veterinary surgeon by the latter date.[7] Throughout the same period, total population changed but marginally, and although the census for 1851 returns only forty households, the population, at 197, was a mere eight souls more than the occupants of forty-nine houses in 1801.

[5] NRO, Brooke of Oakley, vol 122.
[6] J M Martin, 'Village traders and the emergence of a proletariat in south Warwickshire, 1750–1861', *AHR*, 32, 1984, p. 184.
[7] V A Hatley, ed, *Northamptonshire Militia Lists*, Northants Record Society, 1973. Boots were last made in Great Oakley by the Woolston family in 1948, thereby bringing to an end two hundred years of shoemaking in the village: *Recollections of Gertrude Bagshaw*, typescript in Corby Public Library.

Apart from some 350 acres, the property of the dukes of Buccleuch, the whole of the two-thousand-acre parish was owned by the de Capell Brooke family whose stately late Elizabethan house nestled comfortably within its enclosed park by the church.[8] The Brookes had originally risen to gentry status at Astwell, near Brackley. However, following the exchange of the manor of Astwell with that of Great Oakley in 1472 they accumulated property in the latter village, Rushton, Stanion, Little Oakley and Newton. Subsequently much outlying land was sold and as this was reinvested by way of purchase of a proportion of the dissolved abbey of Pipewell, the nucleus of the Brooke estate was established in Great Oakley.[9] With the death of an unmarried life tenant in 1762, the estate passed to a brother whose daughter married Richard Supple of Aghadoe, Co Cork, by which means extensive lands in Ireland came under the control of the Brooke family. The Supple's son, another Richard, took on the name and arms of de Capell Brooke and, in 1803, shortly after he inherited the family property, he was created baronet.[10]

While the surviving manuscript material provides few clues as to the efficiency with which the eighteenth-century Brookes managed their patrimony, many documents cast interesting light on land occupation and aspects of tenancies within the open-field village. In the 1780s, for example, cottage tenants were expected to pay the parish rates on their dwellings and to meet the full cost of repairs for both two-room and four-room cottages let, respectively, at £1 5*s* and £2 2*s* per year. A garden was available for a further guinea, but since all villagers enjoyed right of common in one or another guise, they may have viewed a garden as a luxury rather than an absolute necessity.[11] In addition to having access to a range of common grazings as described below, individual cottagers occupied a variety of quite separate closes of land, most of them in the form of permanent pasture.[12] Indeed, by the end of the Napoleonic Wars at least twelve villagers specifically described as cottagers held parcels of land from 1 to 9 acres in area together with gardens, orchards and quarter-acre allotments in the parish hay meadows. Thomas Humphrey, for example, was paying £3 5*s* for a house and cottage, and £13 10*s* for a 9-acre close, while Thomas Croxon held Parson's Close at £1 10*s*.[13] Elsewhere John Shaw rented the village osier bed for £5 5*s* in addition to his cottage and garden. These examples apart, a further fifteen tenants, not specified as farmers, occupied more substantial acreages to supplement their hayfield allotments. Besides his house, garden and mill, for which he paid £15 in rent, Joseph Tebbott held a brickyard and closes of land valued at £38 10*s* annually.[14] His neighbour Joseph Crabtree rented three enclosures adjoining his inn while Samuel Woolston, whose house and barn near Harper's Brook were valued at £5 8*s* per year, held 18 acres at a yearly rent of £25. Both Crabtree and Woolston were anxious to expand their holdings, and like Joseph Cooper who supplemented his 19 acres with a further 3 acres in 1831, they went

[8] Where it still remains, despite the loss of the majority of the estate to iron-ore extraction and subsequently the expansion of nearby Corby.

[9] J Bridges, *The History and Antiquities of Northamptonshire*, II, 1791, p 325.

[10] 'Sir Edward de Capell Brooke, Bart, CBE: Obituary', *Northants Past and Present*, 4, 1968, p 138. Sir Richard's son, Arthur, the author of several books including *A Winter in the North Cape*, was eventually elected to a Fellowship of the Royal Society.

[11] NRO, Brooke of Oakley, B 112.

[12] With reference to Laxton, John Beckett has drawn attention to the seemingly random use of the term 'cottager' in surveys and inventories, in the sense that a man might appear as a 'cottager' in one survey or as a 'labourer' or 'farmer' in another. This problem does not occur in Great Oakley with only the titles 'husbandman' and 'yeoman' being mutually interchangeable in pre-1800 documentary material: J V Beckett, 'The disappearance of the cottager and the squatter from the English countryside: the Hammonds revisited', in Holderness and Turner, *Land, Labour and Agriculture*, p 60.

[13] NRO, Brooke of Oakley, B 112.

[14] Local readers will note that the claypits for the brickyard were located close to the present-day 'Field Cottages'.

to some lengths to rent extra closes when such became available.[15] This sort of evidence lends strength to the view that by the close of the eighteenth century opportunities were afforded for both cottagers and (for want of a better description) 'middling tenants' to expand their economic base. Occupation of enclosed fields and the availability of forage from the hay meadows meant that even where they enjoyed no rights in the open fields, villagers could supplement their incomes as labourers or craftsmen with agricultural produce. The extent to which farming their closes was the primary, as opposed to supplementary, source of income for these smaller landholders would depend in large degree on individual attitudes and aspirations and technical competence. It is, after all, a fact of agricultural life that an able and enthusiastic farmer will often derive more profit from a small area of indifferent land than his incompetent neighbour with access to broad acres of productive soil. In any event, a basis for rural pluriactivity was established within the parish.[16]

Within the Rockingham Forest area generally, arable farming had long given way to an essentially livestock economy both in the open fields and on the old enclosures. Indeed, in the hundred of Corby alone, sheep numbers had advanced almost fourfold from 1000 to 4830 between 1547 and 1564.[17] Over the next two centuries the area had evolved specialized systems of livestock farming based upon permanent pasture to the extent that the Board of Agriculture's reporter was able to confirm that of the 227 Northamptonshire parishes, more than one hundred were laid down to grass, many of them in 'old enclosures'.[18] In effect, then, farmers and holders of closes in Great Oakley between 1750 and 1850 would, in general, have directed their efforts towards the livestock economy thereby capitalizing on the growing local and national demand for meat and dairy products. Farming permanent pastures on the heavy, ill-drained soils typical of the parish would have been by no means easy and would have raised technical and management problems of some complexity. But the reverse, that of attempting to establish productive leys would have been equally problematic, besides which, a tenantry employed in permanent pasture farming required less buildings, a fact which may have commended the system to the Great Oakley estate.[19] In reality, despite the objections of Stapledon and other detractors in the 1920s, the annual productivity of a permanent pasture for both feeding and dairying is, given careful attention to stocking levels and manuring, often higher than that of indifferently-established medium and longer-term leys.[20]

II

As far as the parish of Great Oakley was concerned, most of the closes and pasture fields occupied by late eighteenth-century tenants had been in existence for at least a century if not considerably longer. The 102-acre Collier's Field is delineated on early seventeenth-century plans as are Robinson's Close, Arnesby's Close and several other ring-fenced parcels of land within the parish fields.[21] In like manner, Benty Coppice and the Thorney Closes, covering in excess of 200 acres, represented relict

[15] NRO, Brooke of Oakley, 313/3.

[16] The situation is broadly comparable to that in the medieval Forest of Arden where common field was limited in area and there was an abundance of closes held in severality by inhabitants pursuing by-occupations: A Watkins, 'Cattle grazing in the Forest of Arden in the later Middle Ages', *AHR*, 33, 1989, p 13.

[17] J M Martin, 'Sheep and enclosure in sixteenth century Northamptonshire', *AHR*, 36, 1988, p. 43.

[18] J Donaldson, *General View of the Agriculture ... of Northamptonshire*, 1794, p 24.

[19] J Broad, 'Alternate husbandry and permanent pasture in the Midlands', *AHR*, 28, 1980, p 81.

[20] A H Charles and R J Haggar, eds, *Changes in Sward Composition and Productivity*, British Grassland Society Symposium 10, 1979, *passim*.

[21] NRO, Brooke of Oakley, B 53. A clue to the antiquity of Arnesby's Close lays in the single reference to the christening of one Francis Arnesby in 1564: NRO, *Transcript and Index of Registers, 1562–1710*.

forest which had been converted to pasture in the 1650s and, by 1780, was under the tenancy of the farmers Joseph Smith and Thomas Clitheroe.[22] Laying between Oderfield (a purlieu wood subsequently converted into pasture) and the edge of the open forest was a piece of land which was eventually to become known as the East Frett Meadow. This had been enclosed for pasture by the Great Oakley copyholder William Downhall, under whose will, dated 1670, it was left to trustees charged with the duty of ensuring that its profits be directed towards the upkeep of Cottingham Church and the benefit of the poor of Cottingham. Rented for generations by tenants of the de Capell Brooke estate, this enclosure remained outside the Brooke property until it was exchanged for land in Middleton after the Rockingham Forest Inclosure in the late 1820s.[23]

In effect, the eighteenth-century open-field tenants of Great Oakley had access to a number of enclosed pastures provided that, like Fisher, Wright and Gascoigne, joint tenants of Collier's Field in 1780 at £53 5s per year, they could raise the necessary rent. Enclosed pastures apart, the parish boasted two other grazing resources in addition to open-field grazing and commonable browse in Rockingham Forest. The first of these was the 70-acre Snatchill Plain, mentioned as a commonable Sheepwalk in 1612 with rights enjoyed by Great Oakley tenants in accordance with the scale of their open-field holdings. Since it was open to the forest and thus subject to the depredations of deer, the Plain was probably of limited value, and even this would have been reduced in the mid-seventeenth century when a rabbit warren was established over much of its area. Whatever the case, rights of common seem to have elapsed in the 1750s when the whole Plain came under the tenure of Richard Berry and William Frisbey.[24] The Hay (Hey), 117 acres of land 'anciently enclosed' from Rockingham Forest was quite another matter. Originally in arable cultivation, the Hay had been securely fenced in the 1750s to exclude the deer, after which it was divided into a series of pasture paddocks common at the will of the landlord.[25] The stocking of the Hay was determined by a complex procedure monitored by the court leet and supervised on a daily basis by the fieldman who was responsible for ensuring that the pasture was utilized efficiently and remained in good heart. Whereas grazing rights associated with cottages meant that at specified times 473 sheep could feed on the open fields, sheep stocking on the Hay was strictly limited to fifteen cottage commons each with a stint of five animals. The grazing of cattle, meanwhile, was the preserve of specified farmers occupying 15-acre yardlands in the open fields, one animal being permitted on the hay for each yardland held.[26] By the early 1780s yardlands were occupied by William Collis (5), Jonathan Cooper ($3\frac{1}{2}$), William Gascoigne (5), John Lewin (5), Jonathan Moore (5), John Wright (6) and Robert Wright ($4\frac{1}{2}$) who thereby between them grazed 34 cows on the Hay. Of these farmers, Wright, Gascoigne, Lewin and Moore also enjoyed 25 cow commons in the open fields, and as with William Fisher and William Clitheroe who held eleven such commons these rights were not associated with yardland holdings.[27]

In view of the importance of these various grazing resources both to individ-

[22] NRO, Brooke of Oakley, B 112.
[23] NRO, Brooke of Oakley, B 163.
[24] *Ibid.*
[25] NRO, Brooke of Oakley, 318/10.
[26] Throughout the country as a whole the yardland varied widely in area. Some Northamptonshire yardlands were in excess of 20 acres of arable and pasture although the Great Oakley yardland was fixed at 15 acres: for details see I Adams, *Agrarian Landscape Terms: A Glossary for Historical Geography*, IBG, 1976.
[27] NRO, Brooke of Oakley, B 53. Some copyholders perceived cow commons to be a tradeable commodity to be let out to other members of the community when not required. John Wright, for example, let one of his cow commons to Jonathan Little between May and Michaelmas 1780, receiving one guinea in return.

uals and to the community as a whole, there is every reason to believe that they would be managed with the greatest of care and that every effort would be made both to control livestock breeding and to limit the spread of disease. The Great Oakley court books lend eloquent testimony to the lengths taken to monitor the quality of bulls and rams entering areas of common grazing, while strict regulations as to the times of entry and exit of stock to both the Hay and the open fields ensured the protection of crucial pasturelands. Meanwhile, pigs were to be ringed, cows were to be branded and have their horns tipped with wood, and the fieldsman was to be apprised of all association between the village bull and tenants' cows.[28] If nothing more, the last regulation hints at the possibility of some sort of record of matings being kept, perhaps as an aid to a localized programme of selective breeding. Given the importance of livestock in this wood-pasture economy, it would be naive to accept the traditional view that random matings between undernourished and even diseased stock occurred with monotonous regularity. In fact, the opposite was probably the case, and any livestock improvement taking place in a particular locality could be facilitated just as effectively in a well-controlled open-field context as in a fully enclosed system.

III

As suggested above, many Great Oakley villagers in the last half of the eighteenth century occupied closes of land which had been enclosed from the forest generations previously. They would, moreover, continue to enjoy extensive common grazing within and around adjacent stretches of the forest of Rockingham until parliamentary enclosure in 1829 finally extinguished shared use rights. Even then, as will be shown later in this article, the fact that a significant proportion of small occupiers not only retained but even expanded their holdings in the 1830s and 1840s suggests that within this particular community the impact of parliamentary enclosure was relatively untraumatic. It is even possible that, in stark contrast to their Corby neighbours, who steadfastly resisted moves towards the Rockingham Forest Inclosure, the people of Great Oakley were largely indifferent to the prospect of losing what remained of their common rights. Even the copyholders of the manor of Corby were prepared, in 1725, to surrender their common rights in the coppices of Upper and Nether Shrub to the earl of Cardigan on condition that he would grub out the timber and create a cow pasture for which they would pay an agreed rent.[29] Undoubtedly squatters and residents who regarded themselves as holding extra-judicial rights of common would have maintained vigorous opposition to any infringement, but legal holders of such rights were sometimes more amenable to the surrender of commons provided reasonable terms could be negotiated.[30]

This line of argument raises questions as to the significance of common rights in areas like the forest of Rockingham where arable farming played only a limited role in the agrarian economy. Forest commons would, of course, contribute to the human diet by providing a ready supply of nuts, berries, fungi, crab-apples and so on, and although these would be a welcome seasonal bonus they would provide little towards maintenance requirements beyond a minor contribution to vitamin and mineral status. It is conventionally argued that forest and moorland commons were important sources of fuel for the open-field community. Yet, it is important to bear in mind that from the standpoint of

[28] NRO, Brooke of Oakley, B 125.

[29] J Wake and D Webster, eds, *The Letters of Daniel Eaton, 1725–1732*, NRO, 1971, p 44.

[30] For opposition to enclosure in Northamptonshire see, for example, J M Neeson, *Commoners: Common Right, Enclosure and Social Change in England, 1700–1820*, 1993, p 62; B Bellamy, *Geddington Chase: The History of a Wood*, Irthlingborough, 1986, pp 50–1.

the human time budget, fuel gathering is extremely costly with, for example, some contemporary Mexican communities absorbing up to 25 per cent of their day gathering wood for heating and cooking purposes.[31] The experience of the present author, possessed of extensive woodlands, a modest physique and a bow saw, suggests that approximately one hour is required to harvest and transport by hand a distance of 100 m the 40 kg of wood required for ten-hours firing of a woodburning stove. The commoner, obliged to collect fallen timber, and normally prohibited from removing growing material, would need to devote considerably more time to achieve the same objective. The landless cottager would, in many cases, have little alternative but to resort to the woodlands for his fuel, whatever the cost may be to his cash-earning activities as a labourer, craftsman or village trader. To the occupier of closes and allotments within the open fields however, there would be a heavy opportunity cost associated with fuel gathering unless this could be accomplished by other family members. Time devoted to collecting fuel would essentially be time lost in husbandry pursuits. Accordingly, like today's East African cultivator, he would need to come to some carefully considered judgement over the degree to which time spent working his fields would generate sufficient cash to enable him to purchase brushwood and other timber for fuel. In other words, if he could intensify his pastoral farming activities, the commons, as a fuel source, might be of little real utility.

Of what value were woodland grazing and forage rights to this small occupier? These, presumably, would vary according to the amount of grazing available in the open fields or in enclosures held in severalty, and upon the density of stocking therein. Where a small landholder attempted to maximize his agricultural income by intensifying his acreage (at the expense, perhaps of spending less time at his by-employment), forest grazing would be an invaluable resource when summer grass was in short supply. Of even greater significance was the woodland as a pool of winter forage. Given the notoriously fickle English summer, reliance on the hay crop was (and continues to be) something of an act of faith, while in areas like Rockingham Forest locally-available straw would have been difficult to come by. In this context a ready supply of browse in the form of holly (*Ilex aquifolium*), ivy (*Hedera helix L*) and gorse (*Ulex europaeus*) was undoubtedly a valuable bonus.[32] Other species too would have extended the subsistence base in late summer and autumn, with cattle, sheep and horses being prepared to eat both the leaves and bark of hazel, oak, alder and ash when other forages are scarce. The nutritional value of browse would, of course, vary seasonally while individual leaves on a given tree would be at various stages of senescence. Nevertheless, random samples of leaves and bark of the above species collected by the present author in late July and August 1992 provided crude protein and energy supplies in many cases equivalent to those of medium quality hay.[33] Since there is ample evidence in the archaeological record for the winter foddering of housed livestock with tree browse, there is no reason to doubt that those enjoying common rights in the Rockingham Forest in the later eighteenth century would on occasions carry browse from the woods for both inwintered and outwintered ruminants on their enclosures.[34]

[31] See, for example, P Harrison, *The Third Revolution*, 1991, *passim*; P Smith, *The World at the Crossroads*, 1991, p 80.

[32] J Birrell, 'Deer and deer farming in medieval England', *AHR*, 40, 1992; J Radley, 'Holly as a winter feed', *AHR*, 9, 1961; M Spray, 'Holly as a fodder in England', *AHR*, 29, 1981; S Ely, 'On the cultivation of gorse as a feed for cattle', *JRASE*, 6, 1848.

[33] R J Moore-Colyer, 'The horse in prehistory: some speculations', *Archaeol Jnl*, 151, 1994, pp 1–15.

[34] P Rasmussen, 'Analysis of goat/sheep faeces from Egolzwil 3, Switzerland; evidence for branch and twig foddering in the Neolithic', *Journ Arch Science*, 20, 1993, pp 491–3; D Robinson and P Rasmussen, 'Leaf hay and cereals, as animal fodder', in A Milles *et al*, eds, *The Beginnings of Agriculture*, BAR International Series 496, 1989, p 528.

A competent small landholder, well-versed in his trade or by-employment, could in theory at least accumulate a modest capital reserve to invest in livestock or infrastructural improvement to his closes so that over time the contribution of his landholding to total income would increase. In this sort of situation, common rights and access to forest browse would become less significant or even unnecessary. Given the ready availability of grazing closes in Great Oakley, neither private nor parliamentary enclosure would enforce the more efficient of the population to shuffle, in Turner's phrase 'inexorably down the agricultural ladder'.[35]

IV

The modest impact of the Rockingham Forest Inclosure of 1829 on the parish of Great Oakley was further cushioned by the earlier experience of the enclosure of the 550 acres of parish open fields and the 117-acre Hay in 1784. Details of this enclosure are contained in a remarkably interesting notebook compiled by Sir Richard de Capell Brooke from the context of which it is clear that the measure was undertaken by common consent of the parishioners.[36] Brooke's general plan was to create a number of self-contained farms while concurrently satisfying the requests of 'the Persons who want closes', presumably individuals who had applied to him in advance of the enclosure proposal. These included Austen, the Little Oakley shoemaker, Sargeant the tailor, who wanted 5 acres of grassland and Jones, the butcher of Geddington who was keen to secure several closes of accommodation land. Among the more substantial requests were those of Perkins (20 acres), John Jones of Weekley (14 acres), and Austen of Rothwell, a farmer of some substance and a cousin of the Great Oakley farmer William Gascoigne, who required 100 acres and a barn. Lists of Great Oakley tenants from the 1820s and 1840s suggest that with the single exception of Perkins, these external applicants were unsuccessful and that although some *closes* were let to new arrivals, the newly-created farms were granted to long-term residents of the parish. Brooke was of the view that the interest of the estate would best be served by the creation of three enclosed farms occupied by tenants of proven ability, although he was prepared to accommodate the wishes of villagers by carving out additional holdings. However, being only too aware that this policy would involve considerable expense in the longer term, he stipulated that tenants of the new holdings be obliged to meet their own repair costs, besides complying with a whole complex of regulations designed to keep their holdings in good tenantable condition. These included the usual stipulations as to rotations and subletting, along with restrictions on the cutting of trees and foraging of pigs in the newly-enclosed fields. Moreover, by way of supplementing parish rules laid down by the court leet, tenants of these new enclosures were forbidden from working on Good Friday and were to be fined a crown for allowing beasts into the churchyard or 'for Boys suffered to play there'.

Prior to the enclosure itself, a great deal of preliminary work was undertaken, including some 7500 yards of ditching in the South and East Fields. Concurrently thirty 'great gates' and ten handgates were made, all of which were carefully coated with tar oil, while quickset hawthorn for hedgerows was ordered from Spalding and Wisbeach. In the autumn of 1784 planting began in earnest and as quicksets were rooted along future hedgelines, close attention was paid to protecting them with rails

[35] J Sheppard, 'Small farmers in a Sussex Weald parish, 1800–1860', *AHR*, 40, 1992, p 141; M Turner, 'Economic protest and rural society: opposition to parliamentary enclosure in Buckinghamshire', *J Southern History*, 10, 1988, p 144.

[36] NRO, Brooke of Oakley, B 53.

or cut thorn bushes. While this was going on, hedgerow trees, primarily oak and crab-apple, were inserted at intervals in pre-dug holes lined with rotted turf. In the meantime, as oak and crab saplings were removed from Sowerleys Wood, labourers collected acorns and crab-apples for nursery planting, thereby to secure future supplies of replacement trees. Occasionally other planting materials were used. 'On Mr Gascoigne's land' beside the Willow Brook, for example, hedgerows of furze interspersed with elder bushes were planted, with the centre of the double ditch dug around the Hay being embellished with beech and fir. Besides hedgerow planting, the enterprise entailed the construction of an extensive network of trackways for which material was dug from the limestone outcrops on the Snatchill Plain. A total of 750 tons of stone, each load advancing an 11-foot wide road by 3 feet, were absorbed at a cost of $3\frac{1}{2}d$ per load, adding to the 34*s* per acre expended on hedgerow planting materials. In view of the extensive infrastructural improvements to the newly-enclosed land, more especially ditching, stone removal and alterations to farmhouses and buildings, the total cost of the enclosure cannot be accurately assessed. The net result, however, was the creation of five self-contained farms together with a variety of separate closes. Tenancy agreements drawn up between January and December 1783 indicate that the new holdings were let for an average of 15*s* per acre, although this concealed a wide variation both between and within farms according to land quality. Land on the Hay, for example, was valued at between 10 and 12*s*, whereas enclosure in the old North Field let for up to 14*s* and those in the East Field 18*s* per acre[37] (Fig 2).

Beyond increasing the capital value and income-generating potential of the two-thousand acre Great Oakley estate, enclosure of the open fields and the Hay probably had little effect on the farming economy in the short to medium term. In an animal husbandry context, the simple expedient of dividing grazing land into paddocks would offer few advantages to what was already a well-regulated pastoral economy, albeit one operating in an agriculturally backward part of the country.[38] The Rockingham Forest area was generally held to harbour the 'more inferior' grasslands of Northamptonshire whose ill-drained acres were a morass of rushes, moss, thistles and molehills which had been suffered 'to drag out a profitless existence and to become less productive'.[39] If true, this equally applied to the land to the north and west of Great Oakley village and in the Snatchill/Sowerleys area which was eventually enclosed under the provisions of the Rockingham Forest Inclosure and which remained for the most part undrained before the 1860s.[40] That adverse contemporary comment regarding the productivity of these woodland pastures was more than a little hyperbolical is borne out by the apparent level of demand for farms and closes both before and after each enclosure. After all, why bother to yoke oneself to the agricultural treadmill if the result would be 'a profitless existence'? There must have been profits to be made by occupiers large and small, although the influence of enclosure *per se* on the realization of these profits was probably minimal. While the 1784 enclosure may have conferred some minor benefits to occupiers of the limited acreage of arable land, its effects on pastoral farming practice would have been of little significance compared to its

[37] NRO, Brooke of Oakley, B 112.

[38] J P Dodd, 'Aspects of the agriculture of Northamptonshire in the first half of the nineteenth century', *Northants Past and Present*, 7, 1988–9, p 428.

[39] W Bearn, 'On the agriculture of Northamptonshire', *JRASE*, 13, 1852, pp 78–81.

[40] 2 and 3 Will IV c 22, An Act for Disafforesting and Inclosing so much of the Forest of Rockingham as is situate within the Bailiwick of Rockingham, and for Inclosing open and common field lands in Gretton, all within the Country of Northampton.

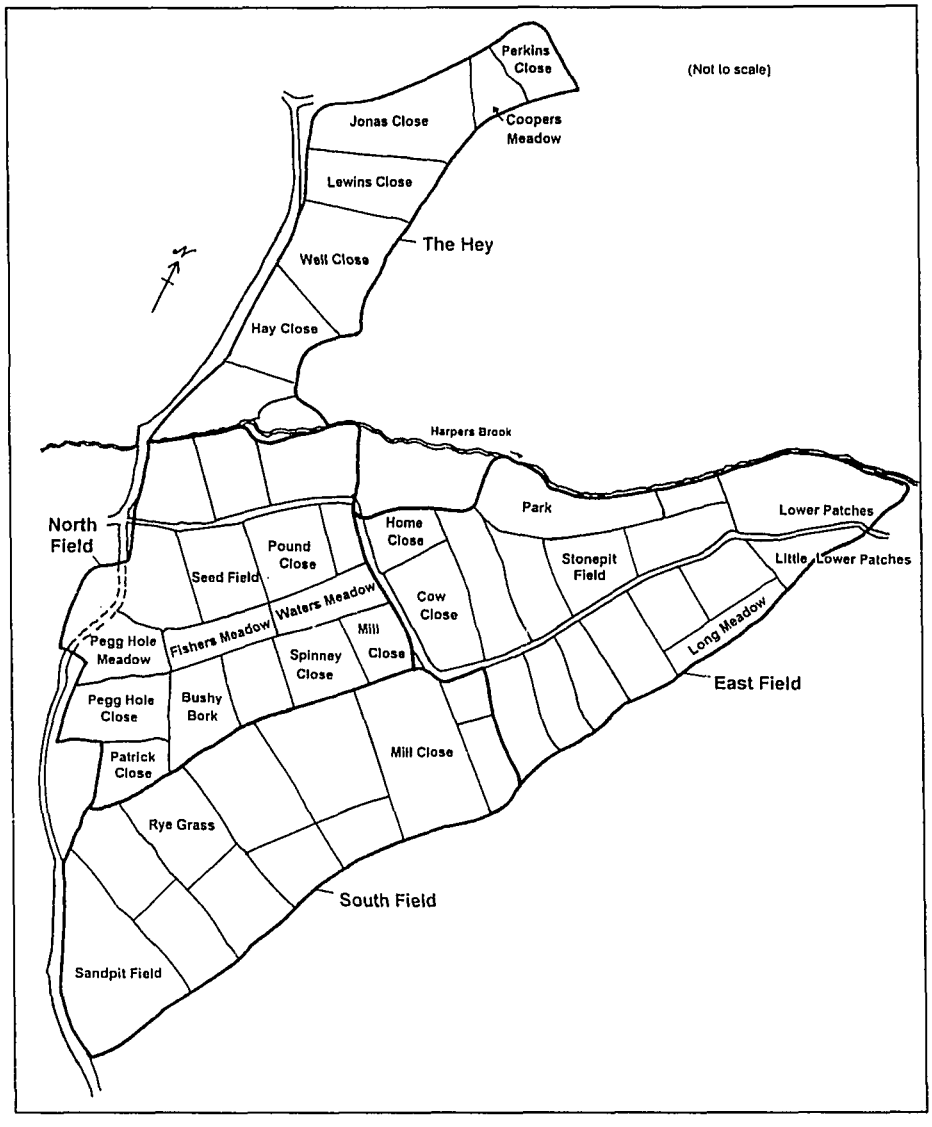


FIGURE 2
The enclosure of the Great Oakley open fields and the Hey, 1784.

influence on landholding patterns within the community.

V

Comparison of lists of heads of households in Great Oakley in 1780 and 1844 reveals that by the latter date a mere 30 per cent of the 1780 inhabitants remained in the parish. For example, of the tenants William Fisher, Samuel Gascoigne, John Lewin, Francis Waters and Joseph Moore who occupied the holdings newly-created in 1784, only the descendants of Joseph Moore were living in the village sixty years later.[41] Although some names would have disappeared as a result of male line

[41] Among other families, the Tebbotts, prominent in the village in the sixteenth century, remained until the middle years of the 1960s, while the Colyers, who eventually became established as substantial freeholders in Corby, held copyholds in Great Oakley in the 1560s and continued to farm as tenants in the parish until 1962: NRO, *Transcript and Index of Registers, 1562–1710*.

failure, the lists convey the overwhelming impression that the bulk of disappearances was within the cottager population with some 60 per cent of 1780 cottagers having been replaced by 1844.[42] There is no reason, of course, to assume that these disappearances were necessarily directly associated with the 1784 or 1829 enclosures, and emigration, either to nearby communities or further afield may have been occasioned by a variety of factors. In any event, a period of stability followed the 1840s and by 1865, when the population of the village stood at 195, the names on the list of heads of households remained much the same as twenty years previously.[43] It is clear, moreover, that subsequent to the enclosures of 1784 and 1829, more than 40 per cent of Great Oakley villagers, *not specifically identified as farmers*, continued to occupy areas of land varying from 1 to 30 acres, with an average of slightly more than 10 acres per household. It would seem that these particular enclosure works, besides leading to the creation of self-contained farms for letting to capitalist tenants, amplified the stock of pre-existing closes available for the use of craftsmen, labourers and others. If the smaller occupiers of the 1840s were not always descendants of those holding closes a generation or so previously, the fact remains that there had been an addition to, rather than a diminution of, parcels of land appropriate to part-time, small-scale farming. To men like John Patrick (10 acres), John Woolston (5 acres), William Brown (13 acres), and James Riddle (9 acres), occupation of such land offered an opportunity of avoiding the risks and uncertainties inherent in the lot of the day labourer. The land provided a safety valve, a buffer against periodic unemployment, a certain status within the community and the confidence born of a sense of belonging.

Although there were no small *owners* of land within the bounds of the parish of Great Oakley, adjacent parishes within the Rockingham Forest contained numerous small parcels of land under copyhold or freehold occupation, some held by tenant farmers of the Great Oakley estate. Where these small freeholds, often a mere handful of acres, abutted onto a more substantial acreage of tenanted land, they might well have proven of considerable value by facilitating the spreading of fixed costs. If, on the other hand, they were in remote locations difficult of access, their value as agricultural units was probably marginal. In such cases the temptation to sell out and thereby to raise capital for stocking tenanted land, to buy into business, or generally to enhance economic status would often prove irresistible.

In 1815 Sir Richard de Capell Brooke of Great Oakley purchased almost 1000 acres of land to the north of his existing estate, most of it in the parishes of Middleton, Cottingham and Corby (Fig 3). This comprised a combination of mature timber, scrub, open grazing land and a number of early enclosures between which were interspersed numerous assarts and closes under freehold and copyhold tenure. By 1830, the rights of Sir Arthur de Capell Brooke, who had now succeeded his father to the Great Oakley estate, were confirmed by the terms of the Rockingham Forest Inclosure and a long-awaited opportunity to make full use of the woodlands could be exploited. Essentially the plan involved clear-felling and conversion to pasture, a commodity in short supply on a national scale and necessary for the burgeoning livestock economy.[44] To prepare for this eventuality Sir Richard and Sir Arthur had for some years adopted a vigorous policy of buying up the allotments of copyhold tenants awarded as compensation for the

[42] NRO, Brooke of Oakley, B 112; B 250.
[43] NRO, Brooke of Oakley, 313/1.
[44] J Chapman, 'The extent and nature of parliamentary enclosure', *AHR*, 35, 1985.

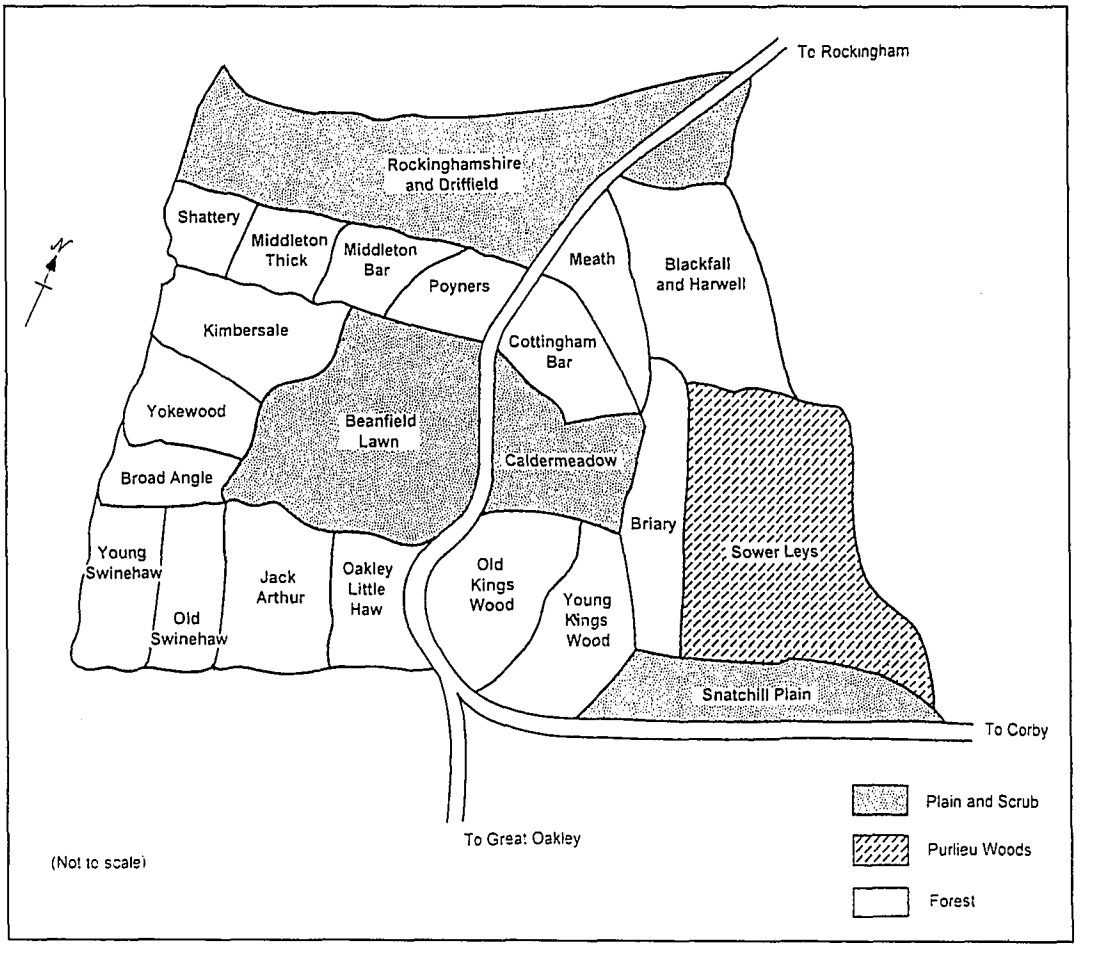


FIGURE 3
Rockingham Forest in the western bailiwick, *c* 1700.

loss of common rights at inclosure of the Rockingham Forest, or of freeholds held by small owners for many generations. For example, John Cannam, a copyholder with 41 acres in Poyners Coppice and Middleton Thick was unable to resist Sir Arthur's advances when offered £742 for his birthright. In total no less than forty-two freeholds/copyholds covering 167 acres and in the hands of twenty-one owners were purchased by way of removing obstacles to the development of the forest.[45] Of these twenty-one owners, more than half held rented land in one or more of the parishes of Cottingham, Middleton, Corby and Great Oakley, which suggests that far from being dispossessed, they were realizing capital previously tied up in physically and economically marginal land holdings. The remainder disappeared into the shadows. Proof of whether or not they, or their fellows in other parts of the country, descended into pauperism must await the results of careful and detailed research at parish level over a wide geographical area.

[45] NRO, Brooke of Oakley, 319/3.

VI

Of the small landholding group mentioned in the foregoing paragraphs, the chronology of the Tebbott family provides a typical example.[46] In the 1780s there were no less than four heads of households bearing the Tebbott name, all of whom, apart from Miller Tebbott, were cottagers or labouring folk.[47] By the early 1830s the miller's son Joseph had succeeded his father and in addition was in occupation of the local brickyard, a house, garden and close (for which he paid £34 in rent) and 15 acres of land valued at £19 5*s*. Meanwhile his brother Jonathan, described as a veterinary surgeon, held 12 acres along with his house and garden, eventually passing on his professional business to his son William who continued to occupy the 12 acres of closes until his death in 1890. The third of the old miller's sons traded as the village blacksmith, paying £14 14*s* annually for his premises and a further £26 4*s* 2*d* for 24 acres in Forest Close and Darn Slade, all of which he handed on to his son William some time after 1841.[48] Both the smith's wife, and his unmarried sister Maria who lived with them, supplemented the family income with dressmaking. Back at the mill, Joseph Tebbott remained in harness until he died at the age of eighty-one in 1858, continuing to occupy 30 acres of land at his death.[49] In his declining years, Tebbott had been assisted by James Pain, scion of another Great Oakley family who eventually took over the management of the mill, brickyard and agricultural land.[50] Mrs Pain died in 1867, but not before she and her husband had founded the Particular Baptist Chapel in Kettering.[51] Pain himself passed away in his seventy-seventh year in 1891, by which time he had retired from the mill whose profits had yielded sufficient to allow him to purchase 9 acres of land in Corby parish.[52] Thus, from modest origins had James Pain established himself on the lower rungs of the landowning ladder.[53]

Testamentary and other documentary material upholds the view that despite the absence of legal security of tenure, farms held at will in Great Oakley tended to remain within the occupation of a single family for several generations.[54] Jonathan Moore, who held the 20-acre Robinson's Close in 1759 was succeeded by his son Joseph who left his farming stock to *his* son Joseph when he died in 1791. In turn, Joseph's son Jonathan took on the tenancy of a 156-acre farm created under the 1784 enclosure, which continued to be occupied by family members until the death of an unmarried descendant in 1904.[55] In drawing up his will in 1834, the year before he died, Jonathan Moore ensured the continuity of his farming business by leaving his stock-in-trade in trust for his wife Anne.[56]

[46] Details are to be found in the census enumerators books: PRO, HO 107/798, HO 107/1744, HO RG 9/958, HO RG 10/1053, HO RG 11/1575, HO RG 12/1219.

[47] NRO, Brooke of Oakley, B 112.

[48] NRO, Brooke of Oakley, B 122.

[49] Dates of death are taken from inscriptions in Great Oakley churchyard.

[50] The post-mill, consisting entirely of timber, stood to the south of the village on the western side of the road leading to Little Oakley. It does not appear on Eyre's 1779 map, but is prominently featured on the OS 1 inch map of 1834. It was pulled down in a decrepit state in 1895: *Northants Notes and Queries*, ns(4), 1912, p 84.

[51] Despite being almost entirely owned by a churchman landowner, there was a strong tradition of nonconformity in Great Oakley. Thus the wills of William Collis (1762) and Ann Little (1821) refer to money in trust for the support of 'a lecture' in the village: NRO, *Index of Peterborough Wills*. Preachers from Toller Church in Kettering provided services in the ample kitchen of the Coales family farmhouse before it was pulled down in the 1930s. The Coales' had been to the forefront of Great Oakley nonconformity since their arrival in the village from Aldwinkle in 1831: NRO, Village memories, Mrs E V Palmer, b 1896; Mr William Coales, Biographical details, reprinted in P Hill, *A History of Great Oakley in Northamptonshire*, privately printed, 1991.

[52] BPP, 1874, LXXII, *Return of Owners of Land in England and Wales, 1873*.

[53] An entrepreneur of some flair, Pain lived at Bridge Farm and developed the local claypits in addition to working the mill. His son James began the ironstone workings at Corby which were eventually to create in that town one of Europe's most extensive steelworks: F Scopes, *The Development of Corby Works*, Stewarts and Lloyds, 1968.

[54] See, for example, G E Mingay, *Rural Life in Victorian England*, Stroud, 1990, p 48.

[55] NRO, *Index of Peterborough Wills*; NRO, Brooke of Oakley, 313/1.

[56] J A Johnston has shown that by the later eighteenth century wills reflected less concern than previously with the community (in the sense of legacies for the church and the poor) than with future family security: J A Johnston, 'Family, kin and community, 1567–1800', *Rural History*, 6, 1995, pp 189–91.

In common with numerous Great Oakley residents, be they farmers, small occupiers or tradesmen, Jonathan Moore also bequeathed property in other parishes, thereby emphasizing the fact that although a man may have been a tenant at will in one parish, he could be a freeholder or copyholder in another. Moore himself left a copyhold cottage and meeting house in Rushden, while Henry Colyer, farmer of Great Oakley Lodge (d 1851), willed his personal property, sworn at £450, to his son Thomas, along with freehold and copyhold property in the manor of Corby. In like manner William Mitchell, wheelwright (d 1783) left copyhold tenements in the parish of Middleton, while the yeomen William Collis and George Gascoigne who died in 1762 and 1781 respectively, bequeathed land and property in the villages of Doddington, Desborough and Rothwell which were to be sold to discharge legacies.

Comparing the occupational details contained in wills with those set out in estate and parish documents urges some caution among historians drawing up lists of trades and employments at parish level. Take, for example, the case of Thomas Clitheroe whose will of 1779 describes him as a farmer and, fortunately for his two nephews, a bachelor. To his nephew Robert, mentioned in the 1777 militia list as a labourer, he gave two milch cows, eight lambs and the produce of the close called Benty Coppice. Thomas's second nephew William, a waggoner paying £60 annually in rent in 1783, received four milch cows and fifty-seven sheep, but this was relatively trivial compared with the twelve draught horses and associated waggons and equipment in his uncle's bequest. This clearly infers that Thomas Clitheroe, nominally described as a farmer, probably earned a high proportion of his living as a waggoner. Interestingly enough, William Clitheroe's son John, for all his father's good fortune, was returned as a labourer holding a house, garden and 3 acres in 1832.[57] The Clitheroes, who had lived in Great Oakley since the seventeenth century, disappear from the local record after this date.

Indeed, beyond glimpses in the decennial census and documents cited in this article, the imprints of men like the Clitheroes on the physical and social map of Great Oakley have all but disappeared. The seemingly inexorable spread of Corby, even in its post-industrial phase, has eliminated the fields and farms which sustained this small pastoral community, although the nucleus of the old village remains.

Yet the survival of small land occupying families like the Clitheroes into Georgian and Victorian times raises a number of general issues concerning the contemporary rural economy. Given the limitations often imposed by tenancy agreements on the grazing of horses, how significant was the occupation of pasture closes in the conduct of, for example, Thomas Clitheroe's waggoning business? The carefully drafted strictures on stocking embodied in agreements for the larger farms on the Great Oakley estate suggest that the estate office would have taken a dim view of twelve draft horses treading their ponderous way through the pastures, with the clear implication that Clitheroe would have had to seek their maintenance elsewhere. Again, what was the contribution of these small landholdings to household income or, equally important, to the local economy? It is not difficult to envisage a situation wherein the principal breadwinner engaged in a by-employment while other family members, more especially the women, were involved in fieldwork to cultivate products either for household consumption or for sale. The census returns are often equivocal regarding women's occupations and although, for example, some wives in Great Oakley are identified as 'dressmakers' or 'seamstresses',

[57] NRO, Brooke of Oakley, B 122.

this does not preclude the possibility of seasonal land work. Elsewhere in England, where market conditions and soil type permitted, small-scale vegetable and soft fruit production could well have proven a profitable option yielding a high return to intensive labour input. Whether such work was undertaken by the occupier himself or by members of his family, it would call for considerable inputs in terms of fertilizing materials. The limited numbers of livestock sustainable on these small acreages would restrict the production of farmyard manure, thereby creating demand for other sources of plant nutrients. These might include such noisome items as tannery waste, household refuse, and night soil, and in purchasing (or perhaps bartering?) these materials, the small occupier would contribute, albeit in a minor way, to the local economy. More significantly, his husbandry activities would frequently necessitate the services of the miller, the wheelwright, the carpenter and other local craftsmen. In the overall context of the parish economy then, the smaller occupier would have complemented the full-time farmer in sustaining these important elements of the community before their ultimate disappearance later in the nineteenth century.

These brief concluding remarks, of course, raise more questions than they provide answers. On the other hand, they emphasize the importance of further research towards a clearer definition both of the numerical and economic significance of the smaller land occupier in eighteenth- and nineteenth-century England. Both locally and regionally there are likely to be significant differences in numbers and rôles, yet taken overall the contribution of this humble class to the rural economy of England may have been greater than that accorded them in the historiography.

Comment

In Andrew Watkins' paper, 'Landowners and their estates in the forest of Arden in the fifteenth century', which appeared in the last issue of the *Agricultural History Review* (volume 45, part 1, 1997, pp 18–33), the document mentioned on p 28 in footnote 34, and from which an excerpt was given in the text, was discovered recently in Chetham's Library, Manchester, and is the largest collection of letters of the fifteenth-century English gentry to have been found since the Paston, Stonor and Plumpton correspondences. The letters were mostly written or received by members of a minor gentry family, whose landed interests were concentrated principally in Warwickshire, Hertfordshire and Essex. The manuscript had been edited, with a full introduction, by Dr Christine Carpenter of Cambridge University, and will be published by Boydell and Brewer in 1998.

Rural Social Relations, 1830–50: Opposition to Allotments for Labourers*

By JEREMY BURCHARDT

Abstract

The allotment movement played an important part in rural class relations after 1830, but its history has been neglected. This article explores one aspect of that history, opposition to allotments between 1830 and 1850. Opposition to allotments amongst landowners seems to have been largely confined to those who felt an ideological commitment to political economy. These landowners feared, on what it is argued were mistaken grounds, that allotments would prove economically damaging, and in particular that they would increase population. Opposition amongst farmers was common, although by no means, as some historians have supposed, universal. Farmers opposed allotments for a variety of reasons, principally out of a desire to keep labourers in as dependent an economic position as possible and to maintain a sharp status distinction between themselves and labourers. Labourers, surprisingly, also often opposed allotments at least on their initial introduction. This opposition is best explained as an indication of the depth of suspicion existing between labourers and their social superiors at this time. The article concludes by arguing that the existence of opposition to allotments in this period does not afford grounds for doubting their social benefits, but that the divergence of opinion between farmers and landowners over allotments contributed to a serious deterioration in the relationship between the two classes in this period.

THE allotment movement was of major economic and political significance in rural England between 1830 and 1850. Numerous accounts testify to the crucial importance of allotments in helping labouring families make ends meet in many parts of rural England in this period, and the movement achieved considerable political prominence in 1830–4 and again in 1843–5. Historiographically, the subject of allotments has been neglected, only one article and no books having been published on the nineteenth-century movement. This situation requires remedy, and to that end the present article concentrates on one particular aspect of the history of allotments, namely opposition to allotment provision between 1830 and 1850. This is a subject which has important implications for our understanding both of the allotment movement and of rural society in this period more generally. The three rural classes most directly affected by allotments were landowners, farmers, and labourers, and, after a brief outline of the development of the allotment movement in the first half of the nineteenth century, the remainder of this article assesses the extent and causes of opposition within each of these classes.[1]

I

The allotment movement originated as a response to the food shortages experienced during the early years of the Napoleonic Wars. But although the movement initially attracted some prominent support, this was not sustained, and the number of plots grew only slowly until 1830. In this year, the 'Captain Swing' riots drew public attention to the condition of the agricultural labourer again, and the Labourer's

* This article is an emended version of a paper given to the British Agricultural History Society's 1995 Spring Conference. I have benefited from comments made on that occasion and by Dr E J T Collins and Dr J R Wordie of Reading University. Any remaining errors are of course my own.

[1] The article referred to is D C Barnett, 'Allotments and the problem of rural poverty, 1780–1840', in E L Jones and G E Mingay, eds, *Land, Labour and Population in the Industrial Revolution: Essays Presented to J D Chambers*, 1967, pp 162–83.

Friend Society began an effective campaign to promote allotments as the most plausible remedy for the social problems of the countryside. The number of allotments began to rise quite rapidly, and by 1850 there may have been more than 100,000 plots in existence, concentrated in the Midlands, East Anglia, and some parts of southern England. The first legislative measure to promote allotments had been passed as early as 1819, when clauses in the Select Vestries Act permitted parishes to provide up to 20 acres of allotments. This was supplemented, and extended to 50 acres, by three acts passed in 1831 and 1832. However, none of the acts had a significant impact on the availability of allotments, because the farmers who dominated most parish vestries proved unwilling to make use of the legislation. A further period of active political interest in allotments in the early 1840s led to the setting up of a select committee, which recommended additional legislation. This recommendation appears to have influenced the General Inclosure Act of 1845, which included clauses requiring allotments to be set out in future enclosures under the act, unless the commissioners thought this inappropriate in a particular case. However, the 1845 Act proved almost as nugatory as previous legislative efforts: of 614,800 acres of land enclosed under the act between 1845 and 1869, only 2223 acres appear to have been set aside for allotments. In the period 1830–50, public provision of allotments was virtually negligible. The success of the Labourer's Friend Society and its adherents in persuading individual landowners to provide allotments was therefore the most important factor in the growth of the number of plots which occurred in this period.[2]

[2] *The Labourer's Friend Magazine*, CXXXVII, 1842, p 107; BPP, 1868–9, X, *SC on the Inclosure Act*, p 329. The acts mentioned in the text are 59 Geo III c 12, 1 and 2 Will IV c 42, 1 and 2 Will IV c 59, 2 Will IV c 42, 8 and 9 Vict c 118, and 50 and 51 Vict c 48.

II

Opposition to allotments amongst landowners after 1830 seems to have been quite rare. Whilst many landowners showed only limited interest in allotment provision, and others thought that various restrictions and regulations were required to make the system work, it is difficult to find more than a handful who evinced outright hostility to the movement. All of the many select committees and royal commissions which remarked on allotments in this period were in favour, and the national and local press was nearly as unanimous. Indeed, opposition to allotments amongst landowners appears to have been largely confined to a small sub-group: those who were strongly under the influence of political economy.

Almost all the attacks attributable to landowners on allotments in this period are marked by the language and arguments of political economy. The leading political economists had written critically – indeed often scathingly – about allotments. McCulloch condemned them at length in the 1824 supplement to the *Encyclopaedia Britannica*, and J S Mill subsequently attacked them as a means of making the poor produce their own poor rates. Writers of the so-called 'Christian Economist' school were also hostile to land provision for labourers. Malthus thought that if such a system was made general it would result in a subdivision of holdings, a decline in the customary standard of living, and a catastrophic increase in population. Chalmers argued that it was better to leave the distribution of land to natural economic forces, and declared that he did not wish to give any encouragement to 'either the potato system, or the cow system, or the cottage system, or the village system of Mr Owen, or any one system of miraculous achievement...'. Copleston was similarly hostile, stating that cottage farms 'notoriously' decreased national wealth. The hostility of these Christian Economist writers

is especially significant in that it has been argued, notably by Peter Mandler, that they had a formative influence on the mentality of many of the more active and articulate of the early nineteenth-century country gentry.[3]

There were of course some landowners who felt an ideological commitment to political economy but were not hostile to allotments. The third marquis of Lansdowne, to take one example, was both an enthusiast for political economy and one of the most extensive proprietors of allotments. Nevertheless, it remains broadly true that those landowners most influenced by political economy, whether liberal Tory or Whig liberal, were hostile to allotments.[4]

Political economists and their landowning followers objected to the provision of land for labourers on a number of grounds. In the first place there was a general sense that the plan was a retrogressive one. John Wilson, one of the assistant Poor Law commissioners, thought that the provision of land for labourers by the duke of Northumberland and the marquis of Waterford had 'too much of a family resemblance to other modes of disinterring feudal habits and feelings' such as the volunteer corps, and amounted to 'a luxury attainable by enormous wealth alone, and by disregard of economical considerations'. Linked to this idea that the provision of land for labourers was retrogressive was the feeling that it militated against the clarity of the functional division between labourers, farmers and landowners. 'A consideration hostile to allotments of this kind', as Wilson said, 'is that they seem to be attempts to do the work of united labour and capital by means of individual and isolated efforts'. It was similarly argued that if labourers were given large plots of land they would merely become undercapitalized small farmers, which, as we shall see below, was a prospect which those influenced by political economy often looked upon with horror.[5]

But the most alarming spectre raised by the political economists was the claim that allotments would increase population. Two principal assumptions were generally involved: first, that if labourers had land, their better economic position would lead to earlier marriages and hence a rising birth rate; and second, that the offspring of these marriages would choose to remain on the land, resulting in ever greater subdivision of holdings in each successive generation and ultimately a 'cottier population'. The great fear was that the allotment movement would lead to the reproduction in rural England of the worst features of the Irish agrarian economy. It was widely believed at the time that the cause of Ireland's problems was excessive subdivision of land and the lack of a 'progressive' class of highly-capitalized tenant farmers. D O P Okeden, another of the 1834 assistant commissioners, illustrates this concern well:

> But let us consider a still more enlarged allotment, one which will occupy the whole time of the man and his family to obtain support. The labourer then becomes a petty farmer, without capital, working land inadequately manured and half cultivated, and yielding, of course, insufficient crops as the return of fruitless exertions. Nor is this the only evil of these large allotments; a hovel perhaps is erected on the land, and marriage and children follow. In a few years more, the new generation will want land, and demand will follow demand, until a cottier population, similar to that of Ireland, is spread over the country, and misery and pauperism are everywhere increased.[6]

References to Ireland occur very frequently in discussions of the possible draw-

[3] J R McCulloch, 'The cottage system', *Encyclopaedia Britannica Supplement*, III, Edinburgh, 1824; J S Mill, 'The claims of labour', *Edinburgh Review*, LXXXI, 1845, pp 521–5; Thomas Malthus, *An Essay on the Principle of Population*, III, 5th edn, 1817, p 241; [Thomas Chalmers], 'The Report of the Select Committee on the Poor Laws', *Edinburgh Review*, XXIX, 1817/8, p 272; [E Copleston], *A Second Letter to Robert Peel, on the Causes of the Increase of Pauperism, and on the Poor Laws*, 1819, p 106; Peter Mandler, 'The making of the New Poor Law *Redivivus*', *Past and Pres*, 117, 1987, p 156.

[4] Earl Fortescue, 'Poor men's gardens', *The Nineteenth Century Magazine*, CXXXIII, 1888, pp 395–6; see also Boyd Hilton, *The Age of Atonement*, 1988, p 38.

[5] BPP, 1834, XXVIII, *RC on the State of the Poor Laws*, pp 27, 124–6.

[6] BPP, 1834, XXVIII, p 27.

backs of providing labourers with land, but there were a number of counter arguments. Perhaps the most persuasive to modern ears was put succinctly by G T Scobell, one of the foremost advocates of allotments:

> Many persons, I am quite aware, think it increases population. I think otherwise; the more comfortable you make a poor man, the more likely his children are to wait a little, rather than to rush into marriage without forethought.[7]

Historical experience seems to have proved Scobell correct; but many contemporaries took Okeden's view of the matter.

Ironically the hostility of political economists and their landowning followers to allotments rested in large part on a misunderstanding. Used to thinking in terms of abstractions and ultimate tendencies, the political economists addressed themselves to the question of whether the principle of subdividing the entire country, or at least a large part of it, into smallholdings, and turning every agricultural labourer into a peasant proprietor, was a viable solution to the problem of poverty. But almost none of those who argued for allotments wanted to see more than a fraction of the country divided into allotments, and they envisaged not smallholdings but plots of, in general, only a quarter or half an acre, which would supplement rather than replace the labourer's wages.

III

Historians often suggest that farmers were universally hostile to allotments. In fact the situation was more complicated than this, and many farmers were indeed in favour of allotments. A J Lewis, assistant commissioner for Shropshire, Herefordshire and Monmouthshire in 1832–4, found that:

> The farmers with whom I conversed on this subject (and I believe it to be the general sentiment) seemed favourably inclined to its adoption, provided care were taken that such allotments did not interfere with the labourers' ordinary employments.[8]

Some farmers went beyond this, and gave active support to the allotment movement. For example, William Sanxter, one of the agents of the Labourer's Friend Society, was a farmer. At East Peckham (Kent), all the subscribers to the local allotment society were farmers, and whilst this level of involvement was uncommon, it was not unusual for farmers to offer labourers occasional assistance with the cultivation of their allotments. Sir Henry Fletcher, speaking of Walton-on-Thames (Surrey), told the Select Committee on the Labouring Poor of 1843 that many of the local farmers had 'a very kind feeling' towards allotment holders, and that 'they are disposed to lend their teams [to the allotment holders] to plough'. Henry Martin of the West Kent Labourer's Friend Society informed the same select committee that in west Kent the farmers were 'very kind to the labourers in lending them their horse and cart, so as to get the manure to their ground of an evening; we find that the farmers generally render them assistance in that respect'. At Great Somerford (Wiltshire) the farmers sometimes carted manure for allotment holders and occasionally ploughed their land for them. Farmers at Hawkedon (Suffolk) also lent labourers horses and carts.[9]

There is in addition some reason to believe that farmers became less hostile to allotments with time and experience. One dramatic case was reported by the Revd B Lambert, who initially encountered much opposition from farmers in his Oxfordshire parish. However, after a year the farmers apparently came and begged him to continue the allotments, the future of which was evidently in doubt. Whilst such enthusiasm was atypical, there is enough evidence of softened attitudes to allotments amongst

[7] BPP, 1843, VII, *SC on the Labouring Poor*, p 26.

[8] BPP, 1834, XXVIII, p 669.

[9] *The Labourer's Friend Magazine*, CXXX, 1842, p 10; BPP, 1843, VII, pp 11, 14, 122; *The Labourer's Friend*, XXX, 1846, p 208.

farmers after they had been in existence locally for a number of years to suggest that this was a common pattern.[10]

We also need to remember that much of the hostility expressed by farmers to allotments was, as with the hostility of landowners influenced by political economy, relative to the size of the plots being offered. The strongest hostility was reserved for large allotments.

However, whilst not all farmers opposed all sorts of allotment, far more instances of farmers opposing than of farmers co-operating with allotment provision could be cited. How did farmers attempt to resist allotment provision, and why did they feel so strongly on this point?

Farmers were limited in the action that they could take to impede the allotment movement by the simple fact that they did not own the land and so did not ultimately control its use. But there was much they could do to make the progress of the allotment movement more difficult. James Orange, proselytizing for the allotment movement at Ashby Magna in Leicestershire in 1843, found that none of the farmers would lend him a barn to lecture in. Undeterred, he lectured to the labourers in the open air, to the great anger of the farmers. Orange's method of appealing directly to the labourers was unusual. In the south of England, allotments were generally initiated by the landowner or clergyman rather than through the labourers, and farmers could not attempt to throttle the idea at source in this way. However, they had considerable power at the next stage – finding land for the intended allotments. This was very often the stumbling block in attempts to provide allotments. The farmers were in a stronger position than might at first appear. If allotments were to be provided, someone had to give up the land. Even assuming that the principal landowners in a parish had land in their own occupation, it was quite possible that none of it would be suitable for allotments. Such land might be too distant from the labourers' cottages, too poorly drained, emparked, or otherwise inappropriate. In such a case, if land was to be provided for allotments, one of the farmers would have to agree to give it up. Unless a convenient lease fell in, the farmers were the ones who held the strong hand in this situation. Few landowners were so determined to provide allotments that they would risk their reputation by attempting to coerce farmers into relinquishing land.[11]

It seems that farmers often took advantage of the strength of their position by refusing to give up land for allotments. Lord Carnarvon was quoted in *Facts and Illustrations*, the precursor to the *Labourer's Friend Magazine*, as stating that in Hampshire there was 'great indisposition' on the part of the farmers to give up land. Similarly, Francis Pym told the 1830 House of Lords Select Committee on the Poor Laws that he knew of instances of proprietors having found difficulty in inducing farmers to give up any part of their land for allotments. Farmers were sometimes able to prevent the introduction of allotments into their parishes by this simple means even when local landed opinion was otherwise unitedly in favour. The *Labourer's Friend Magazine* reported in January 1841 that in a village in west Kent, a local farmer had succeeded in preventing the creation of an allotment site despite the fact that there was a long waiting list for allotments and that the rector, curate, and local gentry were sympathetic to the plan.[12]

If farmers were sometimes able to thwart private attempts to offer the labourers allotments, they were still better placed to block the creation of parish allotments under the acts of 1819, 1831 and 1832, since in most parishes, the farmers were in effective

[10] *The Labourer's Friend Magazine*, CXVII, 1840, p 176.

[11] *The Labourer's Friend Magazine*, CLIII, 1843, p 179.

[12] BPP, 1834, XXVIII, p 300; 1830–31, VIII, *SC on the State of the Poor Laws*, p 311; *Facts and Illustrations*, nd [*c* 1830], p 124; *The Labourer's Friend Magazine*, CXVIII, 1841, p 9.

control of the vestry. At Cranfield in Bedfordshire, for example, allotments were initially proposed in 1827. Agreement was secured from twenty-three of twenty-four farmers, but the single dissentient was able to block the project for the next three years. Only the excitement of 1830 gave the rector, who was behind the proposal, the necessary leverage to carry through his plan.[13]

Even after allotments had been provided, the struggle was by no means over. There are frequent reports of farmers refusing to employ labourers who had allotments. At Byfield in Northamptonshire, farmers apparently often refused to employ labourers with allotments, seriously diminishing the anticipated benefits of the scheme.[14] The 1834 Poor Law Report provides further examples. Assistant Commissioner Pringle reported that: 'at Lymington I learned from some labourers, that their accepting the allotments offered would have led to their being discharged by their employers'.[15] John Wilson found a similar unwillingness amongst farmers in Northumberland to employ labourers with allotments (although in this case the allotments were large, which may have made the farmers unusually hostile).[16] At Blockley in Gloucestershire, the *Worcester Chronicle* reported in 1843 that the large farmers had refused to employ any labourer who had more than two chains of land.[17]

Less drastic methods of discouraging labourers from taking allotments were also practised. As we have seen, farmers sometimes loaned horses and farming equipment to allotment holders. But more often they withheld them, or charged exorbitantly for their use. The problem was especially likely to arise on large allotments, not only because farmers were more hostile to them anyway, but also because large allotments needed ploughing. Farmers in Northumberland, for example, were unwilling to loan labourers their horses for this purpose.[18] But even on ordinarily sized allotments labourers might well need to use horses for certain operations, particularly carting manure. Richard Pollen, a Wiltshire landowner, explained the problems this could cause for allotment holders to the 1830 House of Lords Select Committee on the Poor Laws:

> One of the great difficulties I have found is in the carting of manure for those people; the manure which is produced by their pig is all they have: the farmers are very much prejudiced upon that subject, and as they must be the persons to lend the team in the winter, they charge them very high for it. I think, for instance, in my tithing they charge in a very short winter's day for a cart and two horses at the rate of twelve shillings a day, which is enormous; and I have had serious thoughts of setting up a cart and horse for those poor people and let it be employed at any other time, in any other way, and receive for a cart and one horse three shillings or three shillings and six pence a day.[19]

There is some evidence to suggest that large farmers were particularly hostile to allotments. We have already seen that at Blockley in Gloucestershire it was the large farmers who said they would not employ labourers with more than two chains of land. Similarly at Horsebridge (Sussex) it was the large farmers who opposed William Sanxter's attempts to introduce allotments. This supports the Hammonds' assertion to the same effect, and would also be in line with the findings of Barry Reay that in Hernhill and Dunkirk (Kent) the social divide was between the large farmers on the one hand, and the labourers and small farmers on the other. The Hammonds may also have been right in thinking that the relationship between small farming and allotment holding was a symbiotic one. Not only were the more intermittent labour requirements of small farming better adjusted to the allotment system, as the

[13] *Facts and Illustrations*, p 114.
[14] BPP, 1830–31, VIII, p 40.
[15] BPP, 1834, XXVIII, p 298.
[16] BPP 1834, XXVIII, p 126.
[17] *The Labourer's Friend Magazine*, CLIV, 1844, p 5.
[18] BPP 1834, XXVIII, p 126.
[19] BPP, 1830–31, VIII, p 51.

Hammonds suggested; there seems also to have been a complementary relationship between allotments and the small farmer's sometimes underutilized equipment – in particular horses, carts, and ploughs. According to W J Denison, for example, labourers on his north Yorkshire estate were offered 'the option of one, two, three, or perhaps four acres, and they get their ploughing performed by one of the small farmers, of whom we have some who rent forty or fifty acres, and keep a couple of horses'.[20]

Resistance to the introduction of allotments seems to have been more bitter amongst East Anglian farmers than it usually was elsewhere. This is perhaps unsurprising bearing in mind the notoriously bad relations between farmers and labourers in the region, and the not unconnected prevalence of large farms. Contrastingly, there is some evidence to suggest that farmers in west Kent, where the local branch of the Labourer's Friend Society made particular efforts to reconcile farming opinion, were by the late 1840s less hostile to allotments than was the case in most other parts of the country. But although there may have been some regional differences in the degree to which farmers opposed allotments, these do not seem to have been apparent to contemporaries, who almost invariably assumed that farmers' opposition to allotments was a general and national, rather than a regional, phenomenon. This assumption is broadly borne out by the surviving evidence, which implies that for almost every county in which allotments were common in this period, there was much opposition to the allotment movement, offset by a small but persistent undercurrent of support. The next section of this article attempts to explain why opposition to allotments was so widespread and sometimes bitter amongst farmers.[21]

IV

The reason that farmers most often gave for their opposition to allotments was that allotments would weaken their bargaining position *vis-à-vis* the labourers. This fear was expressed in several different forms. Often, for example, farmers said they were afraid that allotments would interfere with the labourers' work.[22] A particular aspect of this concern was the expectation that at the time when the farmer most needed the labourer, the labourer would be unwilling to work for him, because he would want to harvest his own crop.[23] When John Mallows wrote a letter on behalf of the labourers of Bozeat (Northamptonshire) asking for allotments to be provided in their village, it was this anxiety that he primarily addressed himself to:

> Some gentlemen think that if a poor man has land enough to maintain him he will be careless about working for him at a time of need, but I can prove to the contrary – it is not likely that any industrious man will be against cutting down that which he subsists on...[24]

Another way in which farmers expressed what was essentially the same concern was to assert that labourers would become too 'independent' if they had allotments.[25] A statement made by Richard Pollen to the 1830 House of Lords Select Committee on the Poor Laws gives an indication of what farmers meant by this:

[20] *The Labourer's Friend Magazine*, CLIV, 1844, p 5; *Facts and Illustrations*, p 422; J L and B Hammond, *The Village Labourer*, 4th edn, 1927, p 136; B Reay, *The Last Rising of the Agricultural Labourers*, 1990, pp 31–4; J L and B Hammond, *The Village Labourer*, p 136; BPP, 1833, V, *SC on Agriculture*, p 525.

[21] For the bitterness of opposition to allotments in East Anglia, see for example: *Facts and Illustrations*, pp 194, 226; BPP, 1834, XXXVII, *RC on the State of the Poor Laws*, pp 372–3; 1843, VII, p 39; 1843, XII, *Report on the Employment of Women and Children in Agriculture*, p 269; *Bury and Suffolk Herald*, 22 Jan 1845; *The Labourer's Friend*, XXXIV, 1847, pp 40–43, and XCVI, 1852, pp 66–73. For the efforts of the West Kent Labourer's Friend Society to reconcile farmers to the allotment system, and evidence of its success in doing so, see *The Labourer's Friend Magazine*, CXXX, 1842, p 9, CLIII, 1843, p 186, and CLIV, 1844, p 6.

[22] BPP, 1843, VII, pp 2, 133, and XII; p 265; *The Labourer's Friend*, VI, 1844, p 115; *The Labourer's Friend Magazine*, CII, 1839, p 123.

[23] BPP, 1843, XII, p 265; 1834, XXVIII, p 126.

[24] *The Labourer's Friend Magazine*, LIX, 1836, p 36.

[25] BPP, 1843, VII, pp 2, 39; 1834, XXVIII, pp 170–1.

...I think if a pauper has sufficient land or a cow, for instance, to make him above receiving the common wages of farmers, and not willing to be employed by them as a weekly labourer, that directly sets the farmers very much against the system, they being, I need hardly say, sufficiently prejudiced against it already.[26]

The second major reason farmers gave for their hostility to allotments was that labourers who had allotments would not be such good workers. They would exhaust all their strength on their plots, and then be unable to 'do justice' to their employer.[27] D O P Okeden expressed the farmer's point of view well:

The allotment of larger portions of land than ten rods to an individual has this evil: if the labourer cultivates it himself with only the aid of his family, he overforces his strength, and brings to his employer's labour a body exhausted by his struggle.[28]

Farmers also claimed that allotments encouraged labourers to steal from them.[29] A Mr Richardson, of Heydon, Norfolk, explained the farmers' fears on this count to S J Denison in 1843:

Generally speaking, farmers don't like it. They think it interferes with the labour they are entitled to; and many of them [ie the allotment holders] get pigs; and as the men have access to the corn, turnips etc on the farm, it is often supposed the temptation to help their own pigs may be too strong for some of them.[30]

In addition to the objections described above, which farmers acknowledged openly, they had other concerns which, because they were less likely to command sympathy, were not in general voiced. One of these was the fear of economic competition from labourers. Ashurst Majendie explained that:

In the mind of many occupiers there exists considerable prejudice on this subject; they are afraid of making labourers independent; and some look with an evil eye to a supposed diminution of their profits by introducing a new class of producers.[31]

The competition in this respect can, however, hardly have been severe. Labourers only rarely sold even a part of the produce of their allotments. It is true that the food a labourer and his family grew on their allotment and then consumed themselves was food which might otherwise have been bought in the market and thus ultimately from the farmer. But the agricultural labourer was by the mid-nineteenth century only a small part of the farmer's total market. So whilst we should allow for a certain degree of anxiety on this front, it seems unlikely that fear of competition from labourers' allotments was a very significant cause of hostility to allotments amongst farmers.

Another concern that some farmers seem to have felt was the fear of losing land. It is easy to understand that even had farmers been generally well-disposed towards the allotment system they would rarely have been willing to give up land for the purpose. However, as remarked above landowners were unlikely to take the drastic step of forcing farmers to give up land, and it was not until 1887 that legislation permitting compulsory purchase by public authorities was passed.[32]

One interesting dimension to the hostility of farmers to allotments is the question of the extent to which they were already involved in letting land to labourers in the form of potato grounds. Potato grounds were small plots of a farmer's fallow temporarily let out to labourers. The labourer would cultivate potatoes on one of these plots for a season, after which it would revert to the farmer. Potato grounds were often let at extraordinarily high rents – typically £8 an acre. Land let at rents like these was admittedly manured and ploughed by the farmer. But even if we ignore the high rent, the

[26] BPP, 1830–31, VIII, p 51.
[27] BPP, 1843, XII, pp 265, 294; 1834, XXVIII, p 481; *Facts and Illustrations*, p 124.
[28] BPP, 1834, XXVIII, p 27.
[29] BPP, 1843, VII, pp 2, 133, and XII, p 88.
[30] BPP, 1843, XII, p 269.
[31] BPP, 1834, XXVIII, pp 170–1.
[32] *Bury and Suffolk Herald*, 22 Jan 1845; BPP, 1834, XXVIII, pp 124–6.

labourer in general gained much less from the arrangement than the farmer did. Potatoes made a good preparation for corn, and the farmer would also have the benefit of the labourer keeping the land clean and of any additional manure the labourer might collect for his plot. Potato grounds had existed in many parts of England since the food shortages of the Napoleonic Wars, and it is clear that in some parts of the country – Dorset, for example – they were very common. It is unsurprising that farmers involved in letting them resented the intrusion of the allotment movement. Allotments were not only let at much lower rents than potato grounds – typically less than £2 an acre – but also gave labourers more independence and the full value of their inputs. There is indeed evidence to suggest that allotments drove out potato grounds. Certainly what had been a common arrangement in the early nineteenth century became progressively less common as the century wore on. The landowners and clergymen who were behind the allotment movement were at best indifferent to the effect of their plan on the farmers' potato grounds, and quite often rejoiced to see what they saw as an exploitative arrangement brought to an end. In a revealing statement, Sir William Miles MP told the 1843 Select Committee on the Labouring Poor that:

> ... I have found a difficulty with farmers, but I have found that gradually wear off; the difficulty with the farmers arose with those farmers who were in the habit of letting their land for eight pounds an acre for potato land, and these allotments knocked that on the head; I inquired whether the tenants of the allotments rented any land of the farmers, and their answer was, 'Oh, no sir, we get it so much better, and all our labour and manure goes to our own benefit'.[33]

Miles's statement throws a somewhat ironic light on another contemporary comment on potato grounds, made by John Kirkham of Anderby in Lincolnshire. According to Kirkham:

> The farmers in this parish cultivate a portion of potato ground for each labourer, according to his family; he has only to set, and take up the produce. The farmers find this works much better than the allotment system.[34]

There is no doubt that the potato grounds issue, and equally the other fears expressed by farmers discussed above, were important sources of hostility to the allotment movement. But having taken all these factors into account, there is still something about the hostility of farmers towards allotments that seems to remain unaccounted for – its bitter edge. To understand this bitterness we need to look deeper than the simple economic aspects of the farmers' relationship to the labourers beneath them and the landowners above them. Farmers were a group whose status in the second quarter of the nineteenth century was far from secure. The gains they had made during the Napoleonic Wars, when they had thrust the farm servants out of their farmhouses and adopted a more middle class way of life, were under threat from the low prices of the agricultural depression that lasted well into the 1830s. Farmers were largely left behind by the growth of a free-trading mentality, entrenching themselves ever deeper in their protectionist fortress. After 1830 attacks on the Corn Laws by northern industrialists, and later the Anti-Corn Law League, intensified. Just at this moment the farmers found that their traditional leaders, the gentry and aristocracy, seemed to be deserting them. Whilst farmers responded largely to the economic pressures of the first half of the nineteenth century and hence pulled towards a traditional, protectionist, ruralist solution, the gentry and aristocracy, better insulated from these economic pressures, were by and large more responsive to the political pressures which eventually led, through Peel, to free-trading liberalism. In this context of status insecurity it seems to

[33] BPP, 1843, VII, p 108.

[34] BPP, 1834, XXXI, *RC on the State of the Poor Laws*, p 289.

have become particularly important to farmers to draw the line sharply between themselves and the labourers. What farmers seem to have resented most of all about allotments is that they blurred the distinction. We need to remember that allotments were larger then than now, occasionally ranging up to an acre or even more; that social status in the countryside was to a considerable extent defined by one's relationship to the land; and that the early nineteenth-century agricultural labourer occupied the lowest social rung of any non-criminal occupational group.

This anxiety over status finds expression again and again in jibes directed by farmers at labourers for trying to ape their superiors. Labourers who had allotments were called mocking names such as 'johnny farmer'. There was particular hostility to the attempts of some labourers to grow wheat on their plots. Wheat had a symbolic significance for farmers, and a hostility out of all proportion to the insignificant quantity produced on allotments was directed at labourers who tried to grow it. Whilst this hostility may partly have been motivated by the suspicion that labourers who grew wheat would be tempted to steal from their employers, contemporaries more plausibly attributed it to what they termed 'jealousy' on the part of farmers. The intensity of farmers' feelings on this particular point was sufficient to persuade landowners to incorporate clauses forbidding the cultivation of corn into many allotment tenancy agreements.[35]

The bitterness of the farmers' hostility to allotments, and their efforts to thwart the spread of the system, led to a deterioration of their relations with landowners, who tended to see the farmers' attitude as being motivated by blind prejudice, greed, and a politically short-sighted wish to keep the labourer in as abject a state as possible. At Blockley, Gloucestershire, for example, relations between the leading farmers and the proprietor, Lord Northwick, seem to have broken down completely over allotments in 1843. Northwick's reaction to the refusal of the leading farmers to employ any labourer who held more than two chains of land was to offer the labourers even more land.[36]

The rise of the allotment movement was a significant chapter in the deteriorating relationship between farmers and landowners in mid-century, and future studies of rural social relations should give this episode its place alongside the better-known strains created by the repeal of the Corn Laws.

V

The last group whom we should consider as potential opponents to the allotment movement is, paradoxically, the labourers themselves. A letter to the *Morning Chronicle*, written by Alexander Somerville, argued that allotments had caused 'discontent, starvation, despair, and crime' because they were, according to the writer, only offered to those who were already considered to be of deserving character. This was not in fact true: allotments were frequently offered to all applicants precisely in order to 'reclaim' bad characters. However, Somerville's letter is an interesting echo of the suggestion made by John Archer to the effect that after 1830 a gap may have opened up between the increasingly 'respectable' married labourers, and the 'undeserving', rebellious single young men. In villages where allotments were reserved for the 'deserving' it would not be surprising to find some hostility to the movement amongst the excluded portion of the community.[37]

The second respect in which we can speak of hostility to the allotment move-

[35] BPP, 1834, XXVIII, pp 124–6.

[36] *The Labourer's Friend Magazine*, CLIV, 1844, p 5.

[37] *Morning Chronicle*, 17 June 1844; J E Archer, *By a Flash and a Scare*, 1990, pp 61–6.

ment from labourers relates to their initial reception of the idea. In a surprising number of cases, the labourers' initial reaction to the offer of allotments was lukewarm at best, and often it was downright suspicious. Interestingly, after the allotments had been established for a while – usually no more than a year – the labourers of the village concerned, and often of surrounding villages too, seem frequently to have developed a strong desire not only to hold on to those plots they already had, but to be provided with more in addition. This phenomenon can perhaps best be understood as an indication of the degree of mistrust between labourers and their social superiors in the early nineteenth century. Anything proposed by the landowners or farmers was deeply suspect.

It would not be accurate to portray the agricultural labourers in this period as being in the main hostile to allotments. But we can recognize that there were elements of hostility present.

VI

Most historians who have discussed the allotment movement in their writings seem to have assumed that landowners were fairly evenly divided in their attitudes to allotments, and that farmers were almost always hostile. It also seems to have been supposed that opposition to allotments was motivated by practical experience of the drawbacks of the system. These assumptions have led many historians to adopt very cautious estimates of the economic value and social significance of allotments. In this article a different view of the opposition to allotments has been argued. Far from being evenly divided on the merits of allotments, landowners were almost all in agreement that allotments were beneficial. Opposition to allotments amongst landowners seems to have been almost confined to a relatively small if often highly articulate sub-group, those landowners who were literate in, and dogmatically wedded to, political economy. The opposition of those influenced by political economy to allotments was based on theory and rested on a misunderstanding of the nature of the allotment movement, and should not mislead us into underestimating the benefits brought by allotments. Similarly, not all farmers opposed allotments: the leaders of farming opinion in fact were almost all in favour of allotments. Farmers' opposition to allotments appears to have been based mainly on anxieties over status and on a desire to keep labourers in as weak an economic position as possible; there is little to suggest that farmers, and still less farming, were seriously affected by the introduction of allotments.

Examination of the opposition to allotments also suggests conclusions about rural social relations more generally. It appears that the allotment movement was a significant source of tension between landowners and farmers. This tension resulted not merely from the difference of opinion over allotments, but from the motives perceived to have generated this difference. Landowners often became impatient with what they saw as a narrow and ungenerous if not downright bigoted opposition to allotments on the part of farmers. Farmers in their turn often reacted sourly and grudgingly to the attempts of landowners to extend allotment provision. The fact that the allotments issue provoked, not merely a difference of opinion, but suspicion, mutual incomprehension, and even, as we have seen, aggressive action on the one hand to thwart and on the other to promote allotments, suggests that a considerable gulf in outlook and values was opening up between landowners and farmers in this period. Allotments and the opposition to allotments may have been one of the prime causes, and were certainly a striking symptom, of deteriorating relations between landowners and farmers in the 1830s and 1840s.

Who 'Betrayed' Whom? Power and Politics in the 1920/21 Agricultural Crisis

By EDMUND C PENNING-ROWSELL

Abstract

In the summer of 1921 the Lloyd George government repealed the Agriculture Act 1920, just six months after its enactment, when faced with a seriously deteriorating economic situation, plummeting cereal prices, and the prospect of substantial subsidies payable under its interventionist provisions. The act was a continuation of a wartime and post-war policy of controlling agriculture, and thereby protecting it in peacetime from world competition in the interests of greater self-sufficiency in food. The period following 1921 was the last time that free trade in agriculture was attempted in Britain, and therefore that date forms a watershed in British economic and social history. The sudden move away from the control of agriculture, in favour of *laissez-faire*, has since been hailed by Whetham as 'the great betrayal' of farming. But, if anyone, it was the farm worker who was betrayed by a secret deal between the government and the National Farmers' Union which paid farmers a bounty in exchange for their acceptance of the policy reversal. Farm workers received nothing in compensation for the demise of the Wages Board. The incidents in this story show, first, the crude exercise of power by government and its kindred interests. They also show, secondly, the fragility of the political case for the nurturing of agriculture at this time and, thirdly, the major effect that the deteriorating economic circumstances had on the way that decisions were made.

A MAJOR change in British government thinking concerning agriculture occurred between 1920 and 1921. The result was a move away from the purposeful control of the industry, executed through a range of interventionist mechanisms, to abandoning completely this in favour of decontrol and *laissez-faire*. This paper seeks to unravel the evolution of ideas, events and political processes at this time, with particular emphasis on the complex three-way interplay between government, farmers and farm workers.

Interventionism has ebbed and flowed in the previous fifteen decades. Prior to 1914 free trade in agriculture was accepted, even in the 1880s Great Depression, because of the perceived greater good for British industry of an open economy: 'If farming went down, so much the worse for it'.[1] During the 1914–1918 War intervention grew to become almost complete. After 1931, the government began again to succour the agricultural industry with subsidies and support. But between 1918 and 1921 agriculture was protected from the chilly winds of exposure to free world markets so as to control the production of food for the home market. The end of this period, in 1920 and 1921, is a pivotal point in the continuing debate about government and agriculture which endures to this day. In essence, the last time that free trade in agriculture was attempted in Britain was the decade after 1921,[2] and this date therefore marks a watershed in British economic and social history.[3]

But this significance has not always been recognized. Sweeping in one vision from the repeal of the Corn Laws in 1846 to the 1930s protectionism, some conventional historical accounts boldly state that 'the massive state intervention in agriculture in the 1930's ... reversed a policy of laissez-

[1] E Hobsbawm, *Industry and Empire*, 1968, p 199.

[2] The government did intervene once in the 1920s in the case of sugar-beet, which received a growers' subsidy from 1926 under the British Sugar Subsidy Act 1925.

[3] See Edmund Penning-Rowsell, 'The rhetoric and reality of the 'Great Betrayal': British government and agriculture 1917–1922', unpublished Middlesex University MA thesis, 1985.

faire which was nearly a century old'.[4] This ignores the peacetime period of systematic government control of agriculture prior to 1921. The significance of this period is that many attitudes were then formed and alliances made, and lessons learnt, which were later used in the next era of intervention after the deep depression of the early 1930s.

I

The significance of the events of 1921 cannot be accorded due weight without an understanding of the history of the previous seven years, and particularly the evolution of policy and events between 1918 and 1920.[5]

Two contrasting intellectual positions had developed during the 1914–18 hostilities concerning the post-war situation: there were those 'reconstructionists' who felt that the country should capitalize on the perceived gains from a more regulated society during the war experience, and the relatively fewer 'restorationists' who urged a return to the status quo ante. Both sets of ideas contributed significantly to the debates about food and agricultural policy during the later war years and in the early period of peace.

In wartime the Ministries of Food and Agriculture had gradually taken almost complete control over their respective industries. By the end of the war they were determining the utilization of land, giving orders as to the crops to be grown, organizing food distribution, fixing prices, and buying and selling on a large scale. They also were the greatest or, for a time, almost the sole food importers. By 1918, over 80 per cent of all food consumed by civilians was brought and sold through the Ministry of Food and over 90 per cent was subject to its system of fixed maximum prices.

But, as is well documented elsewhere,[6] the government's strongly interventionist wartime food and agricultural policy had only been put on course after 1916. This came with the change in government, through the creation of the Ministry of Food in January 1917, and with it the post of Food Controller 'to regulate the supply and consumption of food'.[7] The new Minister of Agriculture also established a parallel Food Production Department to organize increased home grown supply under the Corn Production Act 1917. This dual initiative, on both food and agriculture, was forced upon the government because of the growing threat from submarines to the lifeline of imported foodstuffs. Shipping losses had risen to alarming proportions in the later months of 1916, and there was therefore a real danger of food shortages and hence a need for concerted action.

The key principles underlying the Ministry of Food's operation all follow from the need to control prices to enhance the control of supply. Prices were controlled and linked to the least efficient producer to prevent them being forced out of business, given the overall policy of the Ministry of maintaining existing channels of trade. To enforce the system of control a total of 391 separate legally binding orders and some 650,000 prosecutions for infringements were made between 1 October 1917 and 31 December 1918.[8] The results also included substantial profits for the larger traders or others who had some cost advantage through increased efficiency or geographical location.

[4] S Pollard, *The Development of the British Economy 1914–67*, 1969, p 141.

[5] For important texts on key agricultural issues in this period see A F Cooper, *British Agricultural Policy 1912–36: A Study in Conservative Politics*, Manchester, 1989; R Perren, *Agriculture in Depression, 1870–1940*, 1995; G Robinson, *Agricultural Change: Geographical Studies of British Agriculture*, Edinburgh, 1988.

[6] See, for example, W H Beveridge, *British Food Control*, 1928; Lord Ernle, *English Farming, Past and Present*, 6th ed, 1961; E H Whetham, *The Agrarian History of England and Wales, Volume 8: 1914–1939*, 1978; F M L Thompson, *English Landed Society in the Nineteenth Century*, 1963.

[7] Beveridge, *Food Control*, p 2.

[8] *Ibid*, p 342.

But controlling the food distribution industry was not seen as sufficient. With the Corn Production Act 1917 the government also sought to increase food production as a complement to controlled food prices, product standardization and regulated allocation. Despite considerable resentment from farmers the government attempted to push arable agricultural production levels 'back to the 1870s'[9] so as to provide a larger proportion of food supplies from home production.

Three key instruments of this policy were interlinked and each has profound implications for the events in 1921. Firstly, farmers were offered guaranteed minimum prices, on a descending scale, for their crops to be grown between 1917 and 1922. These prices applied only to wheat and oats and were set well below the market prices then obtaining. The objective of the policy was therefore not immediate income support but to give confidence to the farmers in increasing their production levels under the parallel policy of encouraging (or requiring) the ploughing up of grassland to increase arable acreages. Farmers were to be protected against a slump in market prices coinciding with, or caused by, the increased output. These guaranteed prices were to extend for six years, and therefore well beyond the most pessimistic assessments of the duration of the war, to take account of wheat and oats grown in crop rotations.

More controversial were the powers in part IV of the Corn Production Bill given to local War Agricultural Executive Committees to penalize 'bad farming', thus continuing powers exercised prior to 1917 under the Defence of the Realm Act. Considerable parliamentary opposition during the debates on the bill focused on the proposed long-term continuation of this policy and the lack of adequate appeal procedures. These provisions appeared to be introducing, during the emergency of war, a permanent policy for British agriculture; 'suspicions were encouraged by the enthusiasm with which ministers and eminent agriculturalists spoke of the new era for agriculture'.[10] As enacted, part IV allowed for only twelve months' continuation of the policy after the end of the war, but even then certain modified powers of dispossession were to continue, albeit with the right of appeal. The government's aspirations towards compulsorily increasing the efficiency of farming were clear.

The third element of the Corn Production Act was the control of agricultural wages. This was designed so as to retain skilled labour on farms by setting a statutory minimum wage, by adding to the 25*s* weekly minimum wage imposed earlier in 1917, and by establishing a central Wages Board for England and Wales, complemented by local district wages committees. These committees had powers to impose local minimum wages and, perhaps more significantly, powers to enforce standard hours of work and thereby minimum overtime conditions and rates. The arrangement was designed to honour Lloyd George's pledge in the House of Commons on 23 February 1917 that 'if the government guarantees prices, labour must also be guaranteed'.[11]

There appears little doubt in most accounts as to the overall success in wartime of the twin policies of agricultural intensification and intervention in food markets.[12] The acreage of arable land in England and Wales increased by 1,232,000 acres between 1914 and 1918 (an increase of 11.2 per cent), taking wheat production to a level not seen since the 1880s.[13] The significance of the overall food production campaign of 1917–1918 was later under-

[9] Whetham, *Agrarian History*, p 92.

[10] *Ibid*, p 96.

[11] *Ibid*, p 95.

[12] But see the reservations, based on more recent research, in P Dewey, *British Agriculture in the First World War*, 1989.

[13] Whetham, *Agrarian History*.

lined by Lloyd George who indicated that 'without the extra millions of tons of home grown food which it secured the nation would have gone hungry in 1918'. He further concluded that 'the food question ultimately decided the issue of this war'.[14]

With the end of the war in November 1918 the government immediately began the decontrol of the food industry. But the proponents of decontrol and the restoration of free enterprise had to contend with the highly unstable price movements that resulted, and these coincided with and contributed to a highly unstable political situation. These circumstances led, in 1919, to a change in the government's policy towards the abolition of the Ministry of Food, in favour of its retention, thereby perpetuating a reconstructionist philosophy for at least two years more than had been anticipated previously. Decontrol had led to chaotic market conditions, soaring prices, and middlemen's profits 'fantastically in excess of the liberal margins allowed under control'.[15]

The continued rise in agricultural prices during 1919 and 1920, despite control, also had a profound effect on land values, as did county council purchases for land settlements for the returning heroes.[16] The rise in land values caused or contributed to a massive sale of estates, at what were historically very high prices; sales were partly 'forced' by taxation increases and the need to meet death duties. Many landlords capitalized upon the advantageous conditions by diversifying their investment away from land while the going was good. 'England is changing hands' was the cry, and well over a million acres was reckoned to have been sold during the year.

In the meantime the farm workers had also benefited, during the immediate post-war period, from both the continuation of controls through the continued existence of the Wages Board and its district committees and the boom conditions. Wages for farm workers rose significantly, in contrast to the wartime decline in real wages (despite the large farming profits between 1914 and 1918). The National Union of Agricultural Workers (NUAW) saw this post-war success as the fruits of increased unionization which had taken membership from an estimated 15,084 in 1917 to 121,045 in 1920 (Table 1). Over 10,000 complaints and 300 prosecutions by the wages committees for failure to pay minimum rates had secured for the workers what they were legally due.

Yet throughout 1920 the government veered again against control, fuelled by the increasing dominance of the Treasury as the economy deteriorated, but the process was extraordinarily slow. In effect a transition occurred from a food price control

TABLE 1
Growth in the membership of the National Union of Agricultural Workers

Year	*Membership*	*Year*	*Membership*
1906	227	1927	31,451
1907	2052	1928	32,056
1908	3963	1929	34,786
1909	4068	1930	31,016
1910	4141	1931	31,190
1911	3569	1932	30,400
1912	3290	1933	30,510
1913	4643	1934	30,940
1914	9299	1935	31,474
1915	8141	1936	33,535
1916	7167	1937	40,767
1917	15,084	1938	46,943
1918	53,086	1939	50,069
1919	126,911	1940	53,709
1920	121,045	1941	60,549
1921	103,526	1942	75,832
1922	46,695	1943	92,497
1923	37,714	1944	110,581
1924	28,916	1945	128,678
1925	31,673	1946	152,892
1926	32,139	1947	162,533

Source: R. Groves, *Sharpen the Sickle!: The History of the Farm Worker's Union*, 1949, p 245.

[14] D Lloyd George, *War Memoirs*, III, 1934, pp 1269 and 1322.
[15] Beveridge, *Food Control*, p 295.
[16] Thompson, *Landed Society*. The effect of the land purchases was probably small, but it would be difficult to separate this from the general trend.

policy aimed at helping the consumer by securing supply towards an agricultural policy focused on producer protection. This took many forms but is best exemplified by the introduction of the Agriculture Act 1920.

Thus, while food marketing was being decontrolled between 1918 and 1920, at a pace depending upon market trends and political circumstances, the government's agricultural policy remained strongly within an interventionist wartime and post-war reconstructionist mould, at least partly because of the turbulent economic conditions. Two key episodes illustrate this. Firstly, the policies enacted under the 1917 Corn Production Act were continued, albeit as amended, into 1918 and 1919. Secondly, a royal commission was established in 1919, and asked to give primary consideration to the rapidly increasing cereal prices, and the policies and proposed legislation that resulted were strongly interventionist. Its report looked forward to a new era of agricultural control, stability and prosperity.

Both led directly to the Agriculture Bill presented to parliament in June 1920 which embodied virtually a complete acceptance of the royal commission majority report's recommendations. The future of agriculture was to be based on continued control: firstly, guaranteed prices; secondly a central board to determine wages; and thirdly, measures to control the standard of cultivation as originally contained in the 1917 Act. The seeds of each strand of this policy were first shown eighteen months before the end of the war, and they were now being confirmed eighteen months after its end. The third of these elements was savagely amended, virtually out of existence, by the House of Lords during the autumn of 1920 in defiance over the continuation of direct 'interference' in agriculture. Nevertheless, the act became law on 23 December 1920 with the system of guaranteed prices to operate from the beginning of the cereal year in August 1921.

II

Agricultural prices began to fall, and this fall began in 1920, *not* 1921 (Fig 1). The 1919/1920 boom was over, and with a vengeance, owing to increased imports generated from massively expanded production abroad, government attempts to correct an 'under valued' pound sterling, and a world economic depression. Overall unemployment in Britain rose sharply, from 2 per cent to a total of 18 per cent of the workforce, and industrial activity fell from an index value of 117.9 to 90.0, all in the space of one year. The government was trying to deflate the economy with a severe budget in 1920 and a rising bank rate, to curb inflationary tendencies. Retail prices began to fall and public expenditure was cut back, to balance the budget (principally in spring 1921). Agricultural wages remained at their 1920s level throughout the winter of 1920/21 despite the crash in output values and declining wages in other industries. The government supported the coal-owners when they 'took on' the miners to force down wages, resulting in a major lockout in the winter of 1920/21. Industrial unrest was rife with all the appearance of a general revolutionary tendency.

The government's view was that the agricultural situation could not continue in these circumstances. During the spring of 1921 it began to examine the liabilities inherent in the guaranteed prices in the Agricultural Act 1920. The Cabinet decided in June to repeal that legislation and the Corn Production Act 1917, and thus reverse the decisions made less than six months before to protect agriculture permanently in order to boost home production. Negotiations were held with farmers' representatives to agree to 'compensation' for lack of notice about this

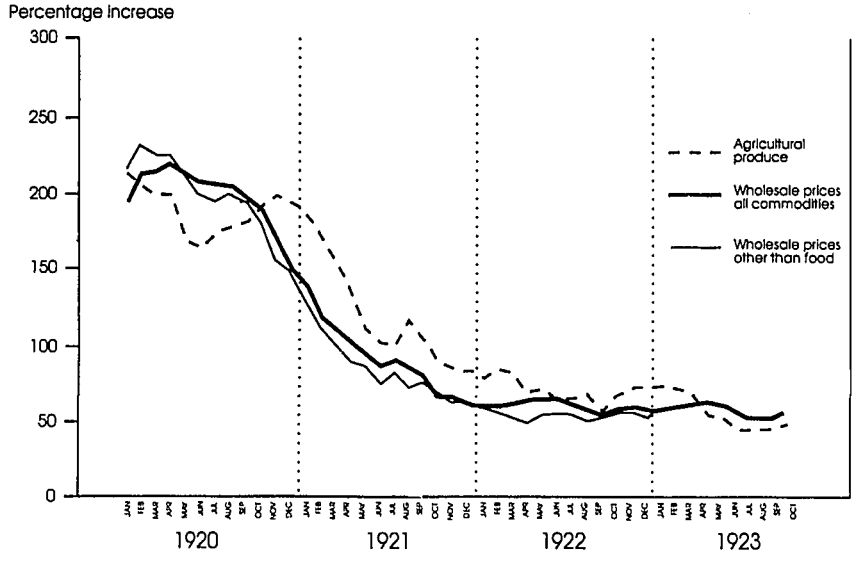


FIGURE 1
Percentage increase in the prices of agricultural produce, of wholesale commodities, and of wholesale commodities other than food, from January 1920 to September 1923, compared with the average of the years 1911 to 1913 (*Source*: R R Enfield, *The Agricultural Crisis 1920–1923*, 1924).

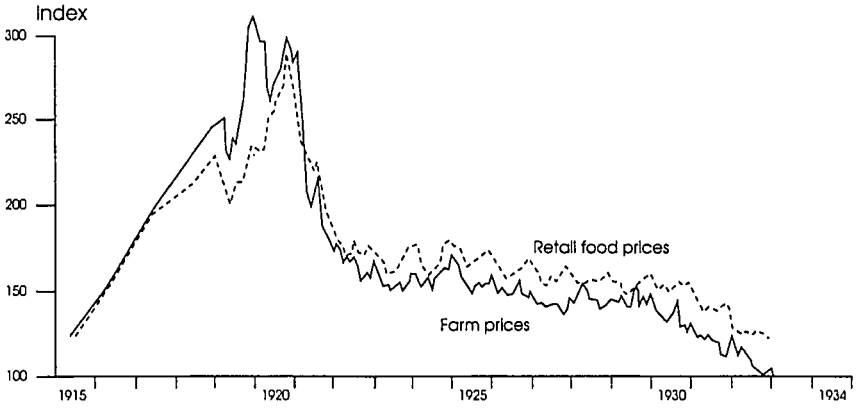


FIGURE 2
Index numbers of the retail prices of food and of agricultural products, 1915–1932 (*Source*: Lord Astor and K A H Murray, *The Planning of Agriculture*, 1933).

repeal. At the same time the farmers were attempting through the Wages Board machinery to reduce farm workers' wages, which they successfully achieved in August 1921.

Following the repeal of the protectionist legislation, with effect from 1 October 1921, prices continued to fall (Fig 2), and many of the new farmers who had bought their estates during the time of high land prices went into bankruptcy. The farm workers were driven back to a lower standard of living than they had obtained in the boom years of 1918–1920 and their organization was split and suffered a major decline in membership. Throughout the whole of 1922 the conditions for farmers and farm workers continued to deteriorate,

with continuously falling prices in the world-wide depression. Not until 1923 was there any respite and by this time the farmers' compensation had long since ceased to appear to be the bargain they had accepted in 1921. Market forces had created a major collapse of agriculture and the government had acquiesced, apparently in the interests of free enterprise but perhaps more correctly with a view to creating a stronger currency on the way to restoring the gold standard in 1925.

III

In essence, three parties were jousting for the control of ideas and events during the 1921 agricultural crisis. First, there was the government – and principally the Treasury – seeking to limit public expenditure in order to deflate the economy after the post-war boom and reduce public expenditure at a time of falling tax revenues.[17] Secondly, there were the farmers and landowners, seeking to protect their prosperity at a time of rapidly falling market prices.[18] Between the Treasury and the farmers was the Ministry of Agriculture, which often in these events appears to be the official wing of the farmers' lobby rather than a neutral or independent force. Thirdly, there were the farm workers, seeking to defend the better wages and working conditions they had won in the post-war period of rising prices and labour shortage, but who were now threatened by falling wages linked to those falling prices and by rapidly increasing unemployment.[19]

The sources used to investigate this jousting are – perhaps inevitably – richest when the party concerned appears to be most active in pressing its cause in the developing crisis. Information on the government's position and tactics is therefore most comprehensive for the period leading up to June 1921, surrounding the decision to repeal part I of the Agriculture Act 1920 and the Corn Production Act 1917. After this, the archives of the National Farmers' Union (NFU) and the Country Landowners' Association (CLA) are most useful for June and July 1921, as they bargained with the government. Thereafter, with the passage of the repeal act through Parliament, the sources describing the campaign of the National Union of Agricultural Workers (NUAW) provide the richest descriptions of the ideas and debates during this long hot summer of rural discontent.[20]

IV

The Treasury was the first department within government to become concerned about the possible level of subsidies for agriculture under the Corn Production Act 1917, as amended by the Agriculture Act 1920, and this concern arose in 1920, not 1921. Sir Robert Horne, Chancellor of the Exchequer, reported to Cabinet on 6 December,[21] only two weeks before the Agriculture Act 1920 reached the statute book. He was concerned that cereal prices were falling and alarmed at the possible liability built into the impending legislation, which he gauged at between £20–30 million per annum. The economy was already deteriorating and industrial strife was growing. The same Cabinet meeting heard from the Directorate of Intelligence's *Report on Revolutionary Organisations* that 'unemployment hangs like a dark shadow over the community'.[22]

[17] Pollard, *British Economy*.
[18] R R Enfield, *The Agricultural Crisis 1920–23*, 1924.
[19] F E Green, *The Agricultural Labourer: 1870–1920*, 1927, p 6.

[20] The archives of the NFU, the CLA and the NUAW are held at the Institute of Agricultural History at the University of Reading (hereafter IAH). In the cases of the NFU and the NUAW these archives are extensive and yet almost entirely neglected by agricultural historians despite containing much valuable information on the processes and politics of agricultural policy change. They have considerable potential for further research.
[21] PRO, CAB/CP, 2247.
[22] PRO, CAB/CP, 2631.

Horne advocated that the bill should be altered, even at that late stage, particularly in relation to the guarantees for oats, to protect the Exchequer from extravagant commitments it would be unable to meet.

No decision was made. Not unnaturally, counter arguments came from the Secretary of State for Scotland:[23] to alter the oats prices away from the royal commission figures[24] 'would be regarded as a breach of faith. Apart from its political effect it would have the worst possible effect on British farming'. Hugh Paul, chairman of the Wheat Commission, was brought in by the Ministry of Agriculture to reassure the Cabinet ten days later, and the conclusion then was to leave the matter as it was until after the Lords debate, perhaps in the hope that the problem would go away.[25]

But it did not go away and the bill was passed, despite stiff opposition. Soon, however, the alarm bells were ringing in the Ministry where an analyst ('RJS') demonstrated that production costs had increased over the standard year (1919) by between 10 and 20 per cent[26] and that, given the market price falls, the payment of guaranteed prices under the Agriculture Act 1920 would indeed be triggered. They would require an Exchequer subsidy of £1,880,000 for wheat and £17,000,000 for oats in any one year. The guaranteed price for oats had been set too high by the royal commission, by some 47 per cent, and the consequences could be dire.[27]

A key actor within the Ministry was Sir Francis Floud.[28] Floud wrote on 5 May 1921 that 'it was practically certain that the price of oats will be below the minimum (guaranteed) price but for wheat much would depend on the American harvest and the trend of world prices'. Compounding the problem, however, was that the Chancellor's earlier fears that farmers were switching from wheat to oats were being realized, in that the acreage of oats was increasing 'to secure the subsidy'.[29] Potential subsidies of £5.9 million and £28.3 million are cited for wheat and oats, and 'it seems very doubtful if Parliament will be prepared to subsidise corn growing in this country indefinitely on such a scale'.[30] Total corn acreage was static or falling so that 'corn growing farmers will be paid substantial cheques for doing no more than they would have done without any payment from the state'.[31]

The Minister of Agriculture, Arthur Boscawen, had alerted the Prime Minister on 3 May to the seriousness of the problem,[32] and Floud began canvassing agricultural opinion about the possibility of repealing the act passed just five months earlier. Even at this early stage the Ministry's perception of the most problematic area was the political effect of the abolition of the Wages Board. Floud surmised that 'the great majority of farmers would heartily welcome its disappearance, [although] some of the more far-sighted farmers fear that its abolition would lead

[23] PRO, CAB/CP, 2283.

[24] As indicated the royal commission had been asked specifically to examine the question of cereal prices and had advocated certain guaranteed prices as part of its plan for the control of agriculture. This plan was accepted by the government, and the prices had been written into the Agriculture Act 1920.

[25] PRO, CAB 73/73/71/20, pp 245–7.

[26] The guaranteed prices were linked to input costs with the effect that as input costs rose so did the guaranteed prices, thus creating the circumstances where market prices would be lower than the guaranteed prices and these would then become payable.

[27] PRO, MAF/48/235, document signed 'RJS,' dated 19 March 1921.

[28] We are very fortunate to have a key archive of surviving material collected personally by Floud, who was Permanent Secretary to the Minister of Agriculture at the time; the file perhaps only survives because he had the papers bound into a single volume (PRO, MAF/48/235). This material was apparently missed by both E H Whetham, 'The Agriculture Act 1920 and its repeal – the "Great Betrayal"', *AHR*, 20, 1974, pp 36–49, and A F Cooper, 'The transformation of agricultural policy 1912–36: a study in conservative politics', unpublished University of Oxford D.Phil. thesis, 1980. The former appears to rely almost entirely on just the formal Cabinet papers.

[29] PRO, MAF/48/235/10, 5 May 1921.

[30] *Ibid*, p 8. The context was, of course, the governments's refusal to subsidize coal production.

[31] *Ibid*, p 10. The overall aim of the interventionist policy was to raise home production to increase self-sufficiency.

[32] PRO, Lloyd George papers, vol V, 3 May 1921.

to State interference of a more objectionable character in the shape of a Trade Board under the Ministry of Labour'.[33]

The growing severity of the country's economic problems was discussed at the Cabinet on 11 May 1921, with the Chancellor requiring plans for large budget cuts in all departments to be prepared within ten days; there was a major problem with balancing the budget. Boscawen raised the corn subsidy question, indicating that 'the fall in prices has been perpendicular' and that the necessary subsidies would conflict with the many statements that 'the government is not prepared to subsidise the coal or any other industry'.[34] He advocated the repeal of the act and suggested that if complete decontrol were granted the farmers would accept this 'perhaps even with satisfaction'.[35] It was for Cabinet to decide whether the interventionist policy could be maintained, and a bargain be struck with the farmers. If additional resources were made available to education and research 'it might even be possible to retain the present measures of [good husbandry] control'.[36]

The government was under intense pressure from all sides: the next Cabinet item reviewed the need to declare martial law in the twenty-six Irish Counties. Nevertheless, a Cabinet committee was appointed to begin sitting the very next day to review both market trends and the Prime Minister's commitments towards agricultural support in previous speeches. The tactic was to seek rationalization for repeal in any previous political position or loophole.

Austen Chamberlain argued that, with the rapid growth of the Labour Party, farmers would see advantage in sticking with the current coalition government. Reconstructionist arguments in favour of the status quo and delay were put forward by Lee, First Lord of the Admiralty, but these lost the day. Boscawen concluded that repeal was possible, although he was much opposed to it, and that 'strictly confidential and secret enquiries would be made of the farmers, as to the basis of a possible settlement'.[37] Boscawen had written to Chamberlain that the NFU was being 'very reasonable' and 'promised to help as much as they could'.[38] What was clearly of vital importance to the government at this stage of the crisis, in July 1921, was that they could present a repeal bill to the Commons with the organized farmers at least grudgingly on their side.

Given the Lloyd George coalition government's huge majority from the 'Coupon' election in 1918, there was never any doubt that the Corn Production (Repeal) Act would be passed. But the government's position was not easy to argue. Boscawen disingenuously suggested that the 1917 Act was essentially wartime legislation (ignoring the 1920 Act) and that 'the Wages Board is essentially coercive... and relies on prosecutions for its success'.[39] He argued for free enterprise rather than fixed wages, supported by Horne painting a picture of severe fiscal difficulties.

Opposition came within speeches but not significantly in the lobbies. The chairman of the Commons Agricultural Committee 'deplored' the government's new attitude towards agriculture. Ackland, of the Wages Board, indicated that 'this Bill is simply the beginnings of a confession of national bankruptcy' and 'the government are steering towards an enormous agricultural disaster'.[40] Clines, the Leader of the Opposition, cleverly deplored the ending of 'the great work of national reconstruction to which the government

[33] PRO, MAF/48/135/14.
[34] PRO, MAF/48/235/21.
[35] *Ibid*, p 22.
[36] PRO, MAF/48/235/23.
[37] PRO, MAF/48/235/36.
[38] PRO, MAF/48/235/letter dated 23 May 1921.
[39] *Hansard*, 4 July 1921, col 70.
[40] *Hansard*, 5 July 1921, cols 91 and 107.

had set its hand'.[41] In the Lords came opposition from the Lords Milner and Selborne who had initiated the reconstructionist policy in the war years. As in the Commons, however, these 'moderate' voices for the continuation of some government controls were outvoted by those who were frightened by the sudden deterioration in the economy and who sought refuge in *laissez-faire*.

In summary, the government's perception of the problem posed by falling prices and its consequent liabilities was at the time both financial and political. The sources imply that the former dominated but this is almost certainly misleading: the political consequences were probably largely implicit, clearly appreciated by all concerned and not written down. The Cabinet was worried about the political implications of the inconsistency of supporting subsidies for farmers and not for the coal industry. They implicitly chose to support the coal-owners in their lock-out rather than the farmers pursuing increased production. The argument was that the reconstructionist promotion of national self-sufficiency by increasing corn production through price guarantees had failed, although by now it was illogical to argue for increased production: the last thing needed at times of falling prices was more corn!

The government chose the option of seeking repeal of the legislation because in financial terms this gave the greatest benefits and solved the problem quickly (the government having other issues to tackle at the same time: Ireland and the coal crisis). The principle of the state underwriting agricultural production was thrown out of the window without a second glance, the government thereby rediscovering the virtues of free enterprise when subsidies were found to be embarrassingly expensive. The fatal flaw for the government was that the 1920 Act was passed at all, given that prices were falling in the summer of 1920, well before the crisis in 1921. No doubt they regretted the legislation, but this was a view in hindsight;[42] it conveniently forgets Lloyd George's characteristically nationalistic call as late as 21 November 1919 for a new era for agriculture and the more stable society that would then result.[43]

V

The National Farmers' Union was formed in 1908 and its archive is unusually rich.[44] The minutes of the numerous committees and the council are very detailed in recording both discussions and decisions. Since the documents were apparently kept strictly confidential they probably reflect faithfully the real ideas and debates within the union. Much of the informal lobbying of government obviously goes unrecorded, but much is reported back. The NFU president and his staff were clearly in constant contact with the agriculture Ministers during the events of 1920/21, and we have a series of valuable verbatim reports prepared in the Ministry on the deputations that were received.[45]

In 1920 the NFU opposed the continuation of controls on farming, while at the same time accepting the government's view that increased corn production was in the national interest. The emasculation of the cropping controls in the Lords was welcomed, and the continuation of the Wages Board was accepted reluctantly as the price for the continuation of guaranteed prices.

[41] *Ibid*, col 294.

[42] A Boscawen (later Griffith-Boscawen), *Memories*, 1925, pp 234–5.

[43] Whetham, *Agrarian History*, ch 8.

[44] The full set of minutes include those of the council (IAH, NFU/3), the all-important general purposes committee (IAH, NFU/23), the organization committee (IAH, NFU/28 & 29), the legal committee (IAH, NFU/34), the labour committee (IAH, NFU/36) and the parliamentary and press and publicity committee (IAH, NFU/31). To date their use by agricultural historians appears to have been minimal.

[45] IAH, NFU/137.

The union's general stance was complete freedom for farming.[46]

As the government debated the country's economic and financial crisis in early 1921 the NFU was apparently first approached by Boscawen 'early in May 1921'.[47] The key event was a secret meeting on 7 June 1921 between the union's general purposes committee and Boscawen, the Secretary of State for Scotland, and Sir Francis Floud.[48] That day the news had leaked that the government proposed to repeal the Corn Production Act 1917 and speculation was rife as to what was planned.[49]

It is clear from what is said at this meeting on 7 June that the Minister had previously met the NFU president, R R Robbins, to stake out the basis of an agreement. Boscawen rehearsed the arguments that he was to use later in the Commons, but with clear farmer-oriented embellishment. With regard to prices 'If, as we had hoped, the fall had been gradual, we could have begun with a modest amount [of subsidy] and I don't think any trouble would have arisen'.[50] But the country now saw 'a great failing in the revenue' and there were no signs of improvement. He emphasized ('and this is a very important point') that 'in these negotiations with the miners ... the object of the country must be to decontrol industry and not support industry on a state subsidy'.[51] He recognized however that 'we[52] are therefore in a hopelessly weak position' and 'I do not believe that the House of Commons, unless something is done to stop it [ie the subsidy] in the future, would vote money for this year's crop'. Instead, however, 'the government would like to make a bargain right out' asking 'is it possible to proceed on these lines? ... we might say if the NFU agree that should be binding on everybody, and similarly in Scotland'.[53]

Boscawen needed the NFU's support in difficult circumstances. 'I hope you realise in this matter I have had a most difficult task in this matter, and also Mr Munro,[54] and we have done our very utmost to keep the agriculture end up ... we are trying to be the best friends of agriculture and I ask you to help us in this matter'.[55] The NFU was clear as to its powerful position. Robbins minced no words when he said that while 'the government find themselves in a hopelessly weak position, our position with the government is pretty strong ... You remember I said (when we met previously) I hoped I should find you in a very generous mood when we met. The whole thing depends on what you are prepared to offer ... we are hoping you will pay 19*s* in the £'.[56]

A central challenge by the NFU was the promise in the 1920 Act to give four years' notice of withdrawal of the guaranteed prices. In reply Boscawen urged the coincidence of interest between the Ministry and the NFU: 'Undoubtedly it was intended that we should get four years' notice. We shall urge the government to be as generous as they can'.[57] Boscawen also promised support at the forthcoming International Labour Organization conference at which it was feared that the hours of labourers' work would be prescribed under the Treaty of Versailles. To defuse the immediate situation the abolition of the Wages Board would be left until October: 'I did not want anything done before as there might be labour troubles and it would be unfortunate to have labour troubles at harvest

[46] IAH, NFU/3, Report of 24 Nov 1921.
[47] IAH, NFU/3, 14 Aug 1921. Note that there is no direct archival record for this first approach and contact.
[48] PRO, MAF/53/12/14; IAH, NFU/3, 22 June 1921.
[49] IAH, NUAW/13/D/II/1, p 103.
[50] PRO, MAF/53/14/2.
[51] *Ibid*, p 3.
[52] This is a revealing comment; he clearly means farming interests, not the government's interests.
[53] PRO, MAF/53/14/3.
[54] The Secretary of State for Scotland.
[55] PRO, MAF/53/14/3.
[56] *Ibid*, pp 3 and 6.
[57] *Ibid*, p 4. Note again the use of 'we' (presumably referring to Munro and Boscawen) as well as 'the government'.

time'.[58] Boscawen concluded the meeting by hoping that 'we can do a deal on payment for the 1921 crop' but 'I think it would be very inadvisable to let anything get into the papers about negotiations'.[59]

But the negotiations, in effect, were over and the bones of the deal were agreed on 7 June. The NFU council congratulated the president 'for the most able way that he had looked after their interests'.[60] More government concessions over and above the £4 per acre for oats and £3 per acre for wheat were sought but none was forthcoming, and the results were announced to the NFU council meeting on 26 June. The payments for the 1921 crops were confirmed, as was a grant of £1 million for education and research as suggested by the NFU to the Ministry. The president clearly considered that the NFU had the better side of the bargain and the council minutes record that 'he thought they could congratulate themselves'.[61]

For the NFU, two important tasks remained. The first was to hold the line that had been agreed with the Minister in the Commons and Lords debates on the repeal bill. The second was to manage the demise of the Wages Board whilst appearing to be reasonable and responsible employers at a time of severe economic problems.

In the Commons the key issue for the NFU was to retain its advantage by not losing any of the gains made in the secret negotiations prior to the public decision over repeal. As a young organization the NFU's political credibility was thus at stake. The union was, first, concerned to deflect blame from farmers for the failure of the 1920 Act; this failure might be perceived to revolve around the lack of increase in corn production. The union's language centred on the loyalty of farmers to Britain and when figures were later produced of a small increase in wheat growing, the union claimed this as 'striking proof that the British farmer was prepared to carry out a policy that is admittedly for the benefit of the Nation, provided he was guaranteed against loss'.[62]

Secondly, it was important politically for the union to refute suggestions that the payments for the 1921 crops were 'doles' for the beleaguered farmers or, worse, bribes to accept decontrol. The NFU propaganda machine included its *Newsletter* which counteracted this suggestion with claims that the system of guaranteed prices were not subsidies but a form of 'insurance', and hence the legitimacy of the payments to compensate the farmers for their 'losses'. And in any case these guarantees 'are entirely paid away in wages to the labourers employed in the production of the crops'.[63]

At the same time the union was seeking to ensure that the provisions of the agreement were passed through the bill into law. One of the problems was that many influential members simply wanted complete decontrol: the union, for example, was somewhat divided about the nature of the conciliation committees that were to replace the Wages Board. These committees had been agreed at the meeting on 7 June as the 'safeguard' against more draconian controls in the form of a trade board.[64] Whilst some of the council felt that these committees were an irrelevance the officers saw the need to stick by their agreement with the Minister but also to secure as much influence as possible. Indeed all through July and August the union was pressing for named statutory rights of employer representation on these committees, so as to consolidate publicly its enhanced influence.

In the event this provision was struck

[58] *Ibid*, p 7.
[59] *Ibid*, p 8.
[60] IAH, NFU/3, 22 June 1921.
[61] *Ibid.*
[62] IAH, NFU/137, 8 Aug 1921.
[63] IAH, NFU/137, 14 July 1921.
[64] PRO, MAF/53/12/14.

out by the Lords, perhaps reflecting the landowning as opposed to farming interests there, to the obvious chagrin of the union.[65] But the president had been given freedom to manoeuvre[66] since the NFU saw that intransigence on this issue might lose them their bargain. One amendment to the bill allowed for wage agreements to be registered by the Ministry if both the employers and the employees requested him to do so. This was passed by Parliament but then condemned by the union although privately the result was considered to be tolerable. It was the 'least harmful of the various substitutes for the Wages Board machinery'[67] and in any event the employers obviously held a veto over its use.

Alongside the arguments in Parliament and the rhetoric about free enterprise, the NFU's representatives were hastening the official reduction in wages at the last meetings of the Wages Board. The tactics of the employers were complex. The employer side of the board and the labour committee of the NFU overlapped by five members and that committee had decided as far back as 24 May 1921 to seek a cut in the minimum wage from 46*s* to 40*s* per week 'at the earliest opportune moment'.[68] The opportunity arose at the next meeting of the board (23 June) but the situation was complicated by the immediate resignations of all employer board members, approved by the NFU general purposes committee, at the news of the impending repeal. To hold the line, however, Boscawen and Robbins persuaded their board members to return for the last meeting and thereby retain credibility. At this long and stormy meeting, the appointed members voted for a reduction in wages to 42*s* per week for men and 8*d* an hour for women workers. The next day the vote was reported to the NFU council and the vice-president moved that a 'vote of thanks to the Employer's representatives was heartily deserved'; it was carried unanimously.[69]

In summary, the NFU struck a hard and secret bargain, and then continuous pressure was kept on the Ministry of Agriculture to keep the terms of this bargain intact. The union mobilized support in the Commons and the Lords to assist the Minister in making sure that the bill was passed, thereby demonstrating both their independent influence and their support for the government at the same time. In this way the NFU consolidated its status as a key 'insider' group by maintaining the trust of the Minister through keeping his confidence and keeping their membership in line with the deal as first struck. Perhaps most important of all, the unity of the union was maintained through a clever combination of anti-government rhetoric and an ability to deliver to their members the 'bargain' with the government. Taking a broader view the close relationship between the NFU and the Ministry meant that the latter was in a weak position in the 1921 crisis in that it did not have an alternative constituency to which to turn to seek support. As a result of that weakness the union was able to extract, with little apparent difficulty, a further £4 million from the beleaguered Minister (at £4 and £3 for wheat and oats respectively). This was the difference between the actual settlement and what the Chancellor said could be offered,[70] and was agreed in exchange for a policy change towards free enterprise that was in any case central to the beliefs and aspirations of the majority of NFU members.

[65] IAH, NFU/3, 22 June 1921. Only small landowners were eligible for membership of the NFU. Estate owners joined the less influential Country Landowners' Association.
[66] IAH, NFU/36, 14 July 1921.
[67] IAH, NFU/3, report of 24 Nov 1921.
[68] IAH, NFU/34.
[69] IAH, NFU/3, 24 Aug 1921.
[70] *Ibid.*

VI

The large archive of the National Union of Agricultural Workers contains the minutes of its council and committees,[71] as well as voluminous notes, press cuttings, documents and letters to the press. One limitation of this material is that it was almost all assembled by R B Walker, the union's general secretary. Much of the material relates to his interests in the media, since at the time he was also a director of the *Daily Herald*, and substantial elements of the archive relate to material published in the *Land Worker*, the union's organ.

It is not clear the extent to which the union retained the support of agricultural workers throughout the period. Membership declined rapidly during this time (Table 1), but this may largely be explained by the rapid rise in unemployment. What is clear is that the union was hard hit by the crisis as it evolved in 1921, and it mobilized considerable support in its opposition to the government's proposals for decontrol.

The union's political position was avowedly socialist and much time was spent in the early months of 1921 in supporting the coalworkers, 'fighting with their backs to the wall',[72] locked out by the coal-owners. The link between the miner's cause and that of the land worker was clearly perceived. Walker wrote that 'Labour is confronted with a struggle that resolves itself almost into a fight for existence',[73] and that 'in this fight which the miners are waging for justice we recognise a fight as much on account of the agricultural workers as on account of the miners themselves'.

In terms of agricultural policy, however, the union's attitude to – and rhetoric on – the Agriculture Act 1920 was somewhat contradictory. They roundly condemned the guaranteed prices, and criticized the House of Lords for emasculating the provisions requiring good husbandry, which they saw as the *quid pro quo* for the price support.[74] Those powers to enhance the extent and quality of cultivation were supported as a counteracting force against unemployment.[75] The Wages Board, moreover, was also supported as a mechanism for the defence of workers' pay.

As winter gave way to spring in 1921, however, the union became increasingly worried about the threats to its members' wages and conditions. Deflation was becoming severe, the cost of living was falling, and workers in other industries were suffering wage reductions. As aired in the columns of the *Daily Herald* 'the most serious attack on farm workers' conditions is the attempt to extend the number of hours to be "put in" for the minimum wage. The motive is obvious. Employers are determined to secure the exclusion of farm workers from any "48 hours" legislation', designed to reduce the working week to 48 hours.[76]

In parallel with domestic moves to counter threats to the Wages Board, the union was also making preparations for the International Labour Organization conference in Geneva in October. The membership was warned to be 'On guard!' and the secretary of the ILO hinted at a conspiracy between governments and employers to secure official representation at the conference of those 'who are known to be opposed to the application of labour legislation to agriculture'.[77] Such a conspiracy was thought unlikely since 'we do not think that the government would dare to lend themselves to a policy which will make them the tools of the master class'.[78] How wrong he was.

While the negotiations were in progress between the government and the National

[71] IAH, NUAW/B/I/5; B/II 2 and 3; B/III 1 and 2.
[72] IAH, NUAW/D/II/3.38, unattributed newspaper cutting.
[73] *Land Worker*, May 1921, p 13.
[74] IAH, NUAW/D/II/11 Jan 1921.
[75] *Land Worker*, March 1921, p 1.
[76] *Daily Herald*, 5 April 1921.
[77] *Land Worker*, February 1921, p 1.
[78] *Ibid.*

Farmers' Union, during May and early June 1921, the farm workers' organizations were kept completely in the dark. The news of the government's intention to repeal the 1920 Agriculture Act was first released to them at a meeting between Boscawen (accompanied by Floud) and Walker, representing the NUAW, and George Dallas and John Beard of the Workers' Union. The meeting had been called at the unions' request, to discuss the creation of a separate wages board for Wales in place of the single national board.

What is apparent from the verbatim note on the meeting[79] is that the workers' representatives were completely taken aback. Boscawen announced that 'agriculture will be completely decontrolled and the Wages Board will cease to exist'. The Minister was rather less than honest in his indication of the state of consultation with others. 'I am making you a very frank statement ... I thought it only fair to tell you at once ... It is quite right that your Committee should know ... I have just informed the Committee of the National Farmers' Union, and I thought it only right that you should know too'.[80] The Minister tried to get the unions' to reveal their reaction, which was not forthcoming, and the meeting concluded with a discussion of the current strength of the union, with what appears to be some very veiled hints from the union officials that industrial action might result.[81]

Following the meeting with the Ministry the union began an intense campaign to protect what it saw as its interests and those of its membership. In contrast to the approach of the NFU, which kept the political process in the hands of its key officers, the first priority of the workers' union was to notify the membership of the crisis via its 3000 branches. The instruction was for support to be rallied by calling meetings and sending resolutions to leading politicians; the result was two hundred resolutions being sent to Arthur Henderson alone.[82] When the news about the proposed reduction in wages at the Wages Board was announced, the union requested its branches to hold public meetings at which resolutions should be passed against 'the breach of faith on behalf of the government'.[83] In addition to the members' own activities there also began the most intense campaign of propaganda on the form of letters to the press. The Workers' Union also produced a pamphlet by Dallas entitled *Farm Workers: Greatest Betrayal*,[84] which was circulated to all branch secretaries, all agents of the Labour Party and all MPs.

The NUAW called a major conference which was reported by several newspapers on 23 June but for which no other source material appears to have survived. Walker called the government's actions 'one of the most wicked and brutal of its many gross betrayals of the workers of the country',[85] and Dallas indicated that the Wages Board 'had been a real charter of freedom to the agricultural worker and effected a great transformation in the rural areas of England and Wales'. While the repeal bill was being debated the union also organized a mass lobby of Parliament. The central issue for the workers' representatives was the retention of the Wages Board and its machinery for determining minimum wages. All the union's efforts were geared to reversing the government's decision to abolish the

[79] PRO, MAF/53/12/15. The date of this important meeting was 7 June 1921.

[80] *Ibid.*

[81] *Ibid.* See also the union president, W R Smith, writing in the *Daily Herald*, 23 June 1921: the threat of industrial dispute was real, but he 'hoped that it would not be necessary to resort to direct action although at the same time the conditions of the farm worker had got to be maintained'.

[82] *Star*, 18 June 1921.

[83] Penning-Rowsell, 'Rhetoric and reality', appendix 4.4: letters from R B Walker to branch secretaries and organizers dated 9 and 14 June 1921 respectively. Copies also in IAH, NUAW/D/II/1, 2 and 3.

[84] G Dallas, *Farm Workers: Greatest Betrayal. An Exposure of the Coalition Government*, Triumph of Labour Pamphlets No 2, undated (but the Agriculture Act 1920 'has not been quite six months on the Statute Book' so the date is early June 1921).

[85] *Sussex Daily News*, 23 June 1921.

board as a *quid pro quo* to the farmers for the loss of their guaranteed prices. In this way the agricultural workers, their MPs and the union, strove to emphasize the importance of the board, which they saw as having secured the gains in both wages and union membership that 1919 and 1920 had brought. And of course it had also brought industrial peace.

Four main areas of debate contributed to this argument: the popular appeal of the Wages Board and its local committees; the demand for a 'living wage' in relation to pre-war conditions; the links between wages and guaranteed prices; and the potential of the proposed conciliation committees for employee/employer wage bargaining. The situation was far from simple, however, and the union was faced with contradictions in its position which perhaps diluted the force of its argument.

The real appeal of the Wages Board is impossible to gauge from the union's rhetoric, and we must remember that the union and its officials had an interest in obtaining and retaining the political visibility that the board and its membership brought to them. What the officials stressed was the way that the board had brought industrial peace and its success of prosecuting employees for underpayment of wages or non-payment of overtime. We have a definitive analysis of the extent of these prosecutions (Table 2) and the union made much of this information both to rally the support of its members and show the need for statutory enforcement of minimum wage agreements rather than voluntary conciliation.

The second argument concerning minimum wages – crucial at a period of wage deflation – was more problematic for the union in that its opponents (and the government) claimed that with its increased membership and power the union could negotiate for adequate wages even without the Wages Board. The union was therefore caught in a trap of either arguing that it was not sufficiently powerful in this way (and thereby losing face) or, if it had the power it often claimed for itself, admitting that the Wages Board was unnecessary. The strength of the union was therefore a key underlying issue, and the farm workers' opponents tried at this crucial time to undermine that strength with what today would be called a 'smear campaign' concerning the expenditure at election campaigns fought by its officials.[86]

The third key issue in the union's propaganda campaign was the link between guaranteed prices and guaranteed minimum wages. Here the union was also in slight difficulty in that the guaranteeing of a farmer's income was hardly a policy the union was keen to support, yet the link between guaranteed prices and the enforceable minimum wages was obviously a central part of the government's argument which needed refuting. Walker admitted that 'there is difference of opinion amongst labour men on the policy of "subsidies for farming" just as there is amongst farmers and the general community. What I am for the moment most interested in is the maintenance of the Agricultural Wages Board'.[87] Ackland claimed that 'farmers are practically invited to make good the loss of the guaranteed prices by cutting wages',[88] which, of course, was clearly the unwritten basis of the understanding between the NFU and the government.

The fourth and last issue that needed addressing was the merit of the voluntary conciliation committees. The union appears to have preferred largely to ignore this policy suggestion, rather than debate its merits, since the power of compulsion was what the union wanted and the offer of purely voluntary conciliation was treated with contempt. The kind of comment made was 'why good machinery [ie the Wages Board] must be scrapped for some

[86] IAH, NUAW/D/II/47.
[87] *Western Daily Press*, Letter, 8 July 1921.
[88] *West Gazette*, Letter, 9 June 1921.

TABLE 2
Action on complaints to the Wages Board of non-payment of minimum rates of wages, 1918–21

Period	*Total arrears collected through the agency of the board (£)*	*No of farms from which complaints received*	*Completed cases*	*Prosecution cases*
28 Oct–31 Dec 1918	338	717	107	—
During 1919	9195	4549	3791	113
During 1920	20,303	3595	3990	143
1 Jan–18 June 1921	8634	1343	1608	55
18 June–20 Aug 1921	2107	322	481	10
Total	40,667	10,536	9977	321

Source: PRO, MAF/62/5D, Report of Administration Committee, 22 Aug 1921.

other of doubtful quality is not explained [by the government]'.[89]

As we know, the farm workers lost their war but on the way they won a solitary battle; the battle to have some reserve element of compulsion in wage bargaining through the registration of agreements. Walker considerably exaggerated the importance of this concession,[90] the agreement to which 'finds us in a very much happier position than when we began,[91] no doubt as a 'face saving' ploy on behalf of the union officials after their hard fought campaign which had otherwise showed so little return.

In summary, the union lost its campaign because it lacked the power to counteract the combined and united forces of the government and the National Farmers' Union. The National Union of Agricultural Workers and the Workers' Union chose to mobilize mass support, rather than work clandestinely within the political system, but even the latter approach might have failed given the resolute and united position of its opposition. The support for the union in Parliament was strong, and indeed on the second reading of the bill in the House of Commons the combined opposition vote of 113 members was the largest vote against the coalition government within that administration. It is difficult to see what else the union could have achieved given the parliamentary circumstances and the panic response of both the government and the country to the deteriorating financial and economic circumstances. The political forces ranged against the farm workers were simply overwhelming.

VII

The lurch in 1921 away from the careful control of agriculture, in favour of complete *laissez-faire*, has since been hailed by Whetham as 'the great betrayal'.[92] This view suggests that those concerned with farming were betrayed by a government panicked into an unnecessary policy reversal. The view also supports a straightforward link between the government's decisions and the subsequent decline of agriculture: 'During 1921 ... came the thunderbolt of the repeal of the Corn Production Act and ... land prices fell ... Farmers were frightened by the signs of the coming depression' and this 'began a disastrous period' for agriculture which did not recover until the mid-1930s.[93]

[89] *Norfolk Chronicle*, Letter from Walker, 1 or 2 July 1921.
[90] *Preston Guardian*, 23 July 1921.
[91] *Ibid.*
[92] Whetham, 'The Agricultural Act 1920', pp 36–49.
[93] Thompson, *Landed Society*, p 331; J Stevenson, *British Society 1914–45*, 1984, p 333.



LABOURER: "Give us the core!"
FARMER: "Garn There ain't going to be no core!"

FIGURE 3
Fair play: a cartoon from the *Land Worker*, May 1922. (Note the corn bonus in the farmer's pocket.)

Whetham supports her contention of betrayal with quotations from modern farmers' views that the chronic depression of the 1920s and 1930s was caused by the government's decision in 1921.

Writing a decade later Robinson continues this theme: 'This Great Betrayal of British farming ... led to a difficult decade for farmers'.[94] Cooper, however, begins to question this 'myth' by reinforcing the point that farmers met the announcement of the abolition of controls in 1921 with 'a sigh of relief'[95] as they saw greater opportunities for maximizing their returns from agriculture within free markets, despite all their gains from controls in wartime and the immediate post-war period. A mere six months later, of course, the same farmers were far less happy, when these markets had turned further against them, and it is from this situation that the betrayal myth was disingenuously initiated.

Moreover, what we see from the more detailed analysis of the evidence from all sides presented in this paper is that not only did the farmers welcome the settlement (with much bad grace in public) but they had actually engineered it in the first place. If anyone was betrayed it was the farm workers. They were not paid the £19 million given to the farmers for the 1921 crops that they would have grown in any case (Fig 3).[96] The grants for education and research largely went to farming interests and their sons, to encourage agricultural restructuring, rather than to the farm labourers, who got nothing. The farmers' union gained enormously from the deal it delivered (dressed up in the rhetoric of betrayal), in terms of the place it then took in the

[94] Robinson, *Agricultural Change*, pp 146–7.
[95] Cooper, 'The transformation of agricultural policy', ch 3; *idem*, 'Another look at the "Great Betrayal",' *AH*, 60, 1986, pp 80–104; *idem*, *British Agricultural Policy*, p 43.
[96] Perren, *Agriculture in Depression*, p 39.

modern political world, whereas the farm workers' union suffered the reverse effect. The workers were out-manoeuvred by a conspiracy between the government and the farmers which gave the latter their 'deal' and the former their majority in Parliament.

But the farm workers were almost certainly naive in thinking that the continuation of a Wages Board would have given them the same kind of protection in the falling markets of 1921 and 1922 as it had apparently given them in the boom times of 1919 and 1920. In the event the rhetoric of the farm workers' opposition to the repeal was hollow since they lacked the power to convince others of their case, owing to the worsening macro-economic conditions and the political alarm that this caused. The farmers won because they held the power over production that the government knew it needed to support.

That there was a return to *laissez-faire* was not because the government necessarily believed that this was right for agriculture, as the events in 1918 and 1931 show, but because the government was so frightened by the economic and political circumstances that it faced in the country as a whole that even a compromise was rejected: they thought they had no alternative and acted accordingly. What we shall never know is whether the continuation of some form of reconstructionist approach might not have alleviated the decade of dislocation and depression that followed. What we do know is that it took an even greater economic depression, coupled with the threat of another war, to make the government reverse its position once again in the 1930s, and begin to implement the beginnings of today's policy of widespread agricultural support.

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Conference Report: Spring Conference 1997

By RICHARD PERREN

THE society's annual residential Spring Conference for 1997 was held at the Langstone Campus, University of Portsmouth, between 7 and 9 April. There were fifty-six persons on the conference list, including conference organizer Dr John Chapman, assisted by Ms Sylvia Seeliger and Mr Chris Ellis, all from the University of Portsmouth.

The society tries to ensure the first paper of this conference is given by an eminent person in the subject; and the aim was undoubtedly achieved when Emeritus Professor Paul Harvey, of Durham, began his lecture on 'Demesne crops and tenant crops in medieval England' at 5.15 pm. The speaker explained that he had begun to collect data for this paper some ten years ago using a miscellany of demesne and tithe accounts, lay subsidies, and multure accounts, to investigate whether the mix of crops varied with the size of holdings and whether peasant farming produced larger or smaller yields than demesne agriculture. In the 1980s he had been unable to collect sufficient high quality data over long periods to answer these questions, so the audience eagerly awaited to hear how successful his search had been since then. Listeners were inevitably disappointed when he confessed he had made no additions to his set of data in the intervening decade, as it meant that answers to these questions were inevitably still unforthcoming. Instead, they had to content themselves with a rather familiar and pedestrian recital of the problems of collecting medieval data. The second paper of the first day was given by Professor Robert Malcomson of Queen's University Kingston on 'The cottage pig: a social history', delivered after dinner at 8.15 pm. This lively and interesting paper discussed the various aspects of the animal's importance to English rural labourers from the seventeenth to the nineteenth century. In addition to the important contribution which the pig made to the diet and income of the household, it also formed the focus for a significant part of the network of social relations between fellow pig-keeping cottagers within the village. In the lively discussion after the paper, it was revealed that cottage pigs were kept as late as the 1950s, which provided an opportunity for some of the audience to supplement the usual comments and questions with personal reminiscences.

Since 1990 the society has made provision for new researchers to present short papers detailing their research, and on Tuesday morning two researchers were allowed to take advantage of this offer. Miss Helena Lim from the University of Bath gave a presentation on 'Agricultural societies and the premium system' and Miss Helen Speechley from the University of Exeter gave hers on 'Involvement of women and children in agriculture *c* 1750–1850, with special reference to Somerset'. During two highly professional deliveries, each lasting twenty minutes, the audience was given clear and interesting expositions of these two PhD topics, as well as an opportunity to ask questions and make suggestions that might possibly help. The whole exercise was extremely successful and it is hoped that other new researchers will come forward to make this a permanent feature of future conferences. They were followed by Dr Steve Hindle of the University of Warwick with a paper on 'Power, poor relief and social relations in Holland Fen, *c* 1600–1800'. He argued that concern over local power relationships should be extended into the study of poor relief and explained, using evidence of local vestry minute books, how the politics of poor relief were the politics of exclusion. As poor relief was the major item of parish expenditure and represented a transfer of resources from vestrymen, who were the more prosperous members of the parish, this body did all it could to prevent the parish being infiltrated by 'poor strangers'. In addition Dr Hindle provided a great wealth of statistical material to support his analysis, the most impressive of which was a time series of poor law expenditure covering a substantial part of two centuries. In the last of Tuesday morning's papers Mr Andrew Hann of the University of Exeter covered 'The impact of the market on an estate economy: Ditchley, 1680–1750'. On this estate in north-west Oxfordshire Mr Hann claimed to discern rents being paid by deliveries of grain, as well as wage labourers being paid in kind. But such payments were always mixed in with monetary payments, and money constituted the overwhelming proportion of transactions, thus undermining E P

Thompson's assertion of an overwhelming reliance on the moral economy in the early eighteenth century. In the discussion that followed there was some questioning as to how far the non-monetary transactions really were payments in kind, as grain delivered as rent was always ascribed some sort of cash value in the Ditchley rentals. Indeed, Mr Hann had produced a graph showing that these values tracked very closely the prices of grain delivered to Bear Quay, which was the main London grain market at that time. Also, payments of wages in kind were only significant around the years 1709–13 and these were years of short harvests and high prices, thus suggesting the estate was actively protecting certain workers from the rigours of the market.

After lunch there were two loosely related papers. Dr Tom Williamson of the University of East Anglia spoke on 'The "Agricultural Revolution" and the transformation of regional landscapes, 1700–1850'. In a wide-ranging paper, difficult to summarize but always willing to challenge both orthodox and novel interpretations, he emphasized the complementary nature of the process of technical change, drawing on examples mostly from East Anglia, but also stressing that agricultural regions are not single homogeneous zones. He was followed by Dr John Walton of the University of Wales, Aberystwyth, with 'The innovation and diffusion of improved cereal varieties before hybridization'. This examined the motives behind the early improvers, their backgrounds and their relative successes with different varieties of wheat, barley, and oats. He also pointed out that the way grain markets operated in the United Kingdom gave farmers and seedsmen very little incentive to replace inferior varieties of light-weight grain with better quality varieties of heavier weights. Both papers provoked a spirited discussion from a wide variety of participants. The AGM of the society was held after tea, followed by a reception at 7.00 pm and an excellent conference dinner from 8.00 pm onwards.

The conference ended with two papers on Wednesday morning. In the first of these Professor John Sheail of the NERC Institute of Terrestrial Ecology examined '"Custodians of the rural workshop": post-war agriculture and the countryside'. This paper provided a fascinating insight into recent agricultural politics by detailing the shift in thinking over the twenty-five years before the Countryside Act of 1968. At the start of the period both the Ministry of Agriculture and the Nature Conservancy believed that the improvement of agricultural productivity and rural conservation could be taken together, and had no reason to believe there could ever be conflict between the two aims. However, after the introduction of ploughing grants in 1952, conflicts began to emerge when attempts were made to plough up Sites of Special Scientific Interest (SSSIs). After a number of celebrated cases during the 1950s and 1960s, including Cavenham Heath and Waddingham Common together with anxieties about the environmental effect of the uncontrolled use of agro-chemicals, an attempt was made to strike a balance between what had become two basically conflicting objectives. Thereafter the Ministry of Agriculture adopted a more accommodating attitude towards other interests in the countryside besides those of 'improvement'. The final paper by Dr Alastair Pearson of the University of Portsmouth on 'The use of GIS (geographical information systems) in investigations in rural history' was really a most impressive *tour de force*. For many of the audience this was their first encounter with this extremely powerful tool, designed to use disparate sources to study the process of historical geographical evolution. Although based on a particular case study, namely the parish of Newport in Pembrokeshire, Dr Pearson ably demonstrated how such a technique, which relies on the computer to analyse large volumes of data, can not only be applied to the study of other regions but also to a wide variety of historical problems. The questions and discussion that he provoked soon overran their allotted time, principally because the audience was eager to discover more about multi-level modelling.

At the conclusion of the questions to Dr Pearson's paper, Professor John Chartres, the new chairman of the executive committee, warmly thanked Dr Chapman and his assistants, as well as the staff of the Langstone Campus, for their friendly hospitality and for arranging what had been an extremely enjoyable and highly instructive conference. After lunch a number of attendees decided to take advantage of the fine weather that had been a feature of the entire conference and accepted the organizers' offer of a conducted visit to the Weald and Downland Museum at Singleton near Chichester.

Book Reviews

RONALD HUTTON, *The Stations of the Sun. A History of the Ritual Year in Britain*, OUP, 1996. xx + 542 pp. Illus. £19.99.

Ronald Hutton has become well known in the last few years for his often controversial treatments of folk lore and traditional pastimes and customs in the late Middle Ages and the early modern period. At one level this new book is a continuation of that work bringing some aspects of those accounts up to the twentieth century. However, it also, as Hutton says in his preface, builds on his earlier work in *The Pagan Religions of the Ancient British Isles* and *The Rise and Fall of Merry England*, in some cases using material, especially from the latter 'wholesale' (his description). If that is one genealogy there are others. He himself places the work within accounts of 'calendar customs' but (correctly) points out that since the work done for the Folk-Lore Society in 1936–40 no serious study has looked at this material – although there are innumerable, more or less awful, popular versions. I would add, in respect not in mischief, the great eighteenth- and nineteenth-century 'books of days', most notably Hone's as even earlier ancestors of this fine work.

To describe the book's contents is deceptively simple. It is an account of the 'calendar customs' of the British Isles, albeit with a slight English bias from the earliest recorded references until their demise, if that point has been reached. In that sense it is very simple, and in that way *Stations of the Sun* will probably avoid some of the controversy which has surrounded his earlier books. Yet some, especially the more traditional folklorists, and especially practitioners of folk custom and ritual, will find its general drive unsettling. The core to this is in the subtitle of the book 'A *history* of the Ritual Year in Britain'. History is, by its nature, almost inimical to tradition – it charts things over time finding change as often as continuity. The central argument through his meticulous accounts of the calendar customs of these islands is of their constant change and, their often recent origin – or at least revival. In this he follows much recent folk-lore scholarship which has stressed the constant invention and re-invention within many customs – an inventiveness matched only by those defending the antiquity of some customs. What is important here is not each individual account, stressing for instance the seventeenth-century origins of many Whit Festivals; the nineteenth-century origins of May Day or the eighteenth-century creation of the Haxey Hood, rather it is the cumulative effect of these examples, one on another, until little of medieval let alone pagan origin is left.

What Hutton argues is not that there are no continuities observable in customary practice – indeed he goes out of his way in his conclusions to stress that there are – rather that these continuities are expressed through changing forms over time. These changing forms have certain common characteristic which can be observed in the long term and grouped together. In these he stresses two great periods of the 'proliferation' of calendar customs, the late Middle Ages and the eighteenth century. The former was based on élite patronage through the church and the civitas, the latter based on a more plebeian moment and related to the rise of 'begging' customs, where older forms were often taken by the poor, modified, and used to 'earn' money for the wealthy and great. Between these there were periods when communal calendar customs went into decline, or were under attack, and many observances moved into the private sphere. This is especially true of the privatization of celebration in the last 150 years.

Much of this makes good sense, and the wealth of material Hutton uses from primary sources and from a prodigious reading of secondary writing, gives it strong support. Yet, that is not what I have taken from this book. His conclusions, as he himself says, are more personal reflections on his material then the conventional bullet points of current academic discourse, and so I allow myself a loose rein. First, and this is a compliment, this will stand beside Brand, Hone and Chambers on my shelf, and when I want a way into customs, I will go to it with them. It has the added advantage of being up-to-date and having read lots of things they could not! Second, it is a testimony to the sheer inventiveness and adaptability of human kind. When a couple of years ago Linda Merricks and I wrote that the plough-play might not have its origins in a Celtic fertility cult but in the (literal) horse play of young farm servants at the end of the eighteenth century, we received a number of letters. None was complimentary. All insisted we were 'destroying' an ancient ritual and its significance. What none of those who wrote to us seemed to see was that we believed that inventiveness and change within a custom was more important than any dreary and meaningless continuity. A living custom grows and changes, and Hutton's book is a celebration of that.

ALUN HOWKINS

ALAN CROSSLEY, ed, *The Victoria History of the Counties of England. A History of the County of Oxford, XIII, Bampton Hundred*, part one, OUP for the Institute of Historical Research, 1996. xxiv + 234 pp. Maps; illus. £70.

This volume covers ten places in southwestern Oxfordshire comprised within the ancient hundred and *parochia* of Bampton, a small town lying about twelve miles west of Oxford and close to the Thames. It is the only urban settlement in the area, nearly all of which lies on low-lying, and floodable alluvium in the south along the Thames, rising slightly onto Oxford clays, partly overlain with gravels to the north, where it nearly touches Witney. The region has always been predominantly agricultural, with quite good soils, but has suffered from isolation caused by its relatively poor communications with Oxford, where the great bend of the Thames around the Wytham hills impedes direct routes. As a result Witney has expanded at Bampton's expense, and Bampton market, already established by 1086, declined throughout the Middle Ages, with its market house described as ruinous in 1669. The population of Bampton and its adjacent township of Weald was largely engaged in farming, crafts and retail trade, and remained remarkably stable until the 1960s; being only 1003 in 1801 and 1104 in 1921: but by 1991 it had risen to 2459, partly due to an influx of suburban commuters. Bampton was originally an important royal manor and a very large parish, comprising six of the places covered in this volume. These were the small and largely depopulated townships of Chimney, Lower Haddon, Lew and Shifford, and the larger township of Aston and Cote, comprising two settlements which shared a three-field common arable system from 1239, and probably earlier. The remaining villages in this volume are Ducklington, Standlake, and Northmoor (a detached part of Chadlington Hundred) and the shrunken settlement of Yelford.

From an agricultural history viewpoint the region is interesting because of the long survival of its open-field arable, much of which continued into the mid-nineteenth century. Remoteness and backwardness are possible explanations, but the excellent maps of the field systems which this volume includes, indicate that a judicious balance of partial enclosure (usually of meadows and pasture) and re-organization of the field systems into six or more fields, implying less fallow and more complex crop rotations, may have been an important contributory cause. For instance at Aston and Cote, where enclosure was delayed till 1855, the old three-course rotation was changed to a four-course one between 1650 and 1678, and the field system was re-organized. New crops like sainfoin and hops had been introduced by the early eighteenth century, and farming in the parish was dominated by a number of wealthy yeomen. At Ducklington, on the river Windrush just south of Witney, the old open fields had been re-organized into five well before enclosure in 1839, and at Standlake the old two-course rotation had been expanded to four courses before 1636, when the rotation was (1) wheat, maslin or rye, (2) pulses, (3) barley, and (4) fallow. Thus the fallow area had been halved and pulses made more predominant, as befitted a region where livestock production was notable.

In contrast to the larger villages, the smaller settlements seem to have shrunk, mostly in the post Black Death period, *c* 1350–1450, and to have been early enclosed. At Yelford where a copy of a map of 1625 shows the whole parish enclosed, this probably occurred before 1400; and similarly at Lower Haddon where there were only three inhabitants *c* 1490. The township of Chimney, near the Thames, was all enclosed by 1789, but had had three open-fields in 1681, while Shifford was privately enclosed by the Harcourt family *c* 1757. A short review cannot do justice to all that is of interest in this well produced volume which maintains the high scholarly standard of the *VCH*. There are detailed discussions of population, occupations and domestic architecture as well as manorial descents, local government and religion. The numerous illustrations, based on photographs and old drawings as well as the excellent maps are specially to be commended.

MICHAEL HAVINDEN

MARK PAGE, ed, *The Pipe Roll of the Bishopric of Winchester 1301–2*, Hampshire Record Series, XIV, 1996. xxviii + 470 pp. £15.

This volume is the first publication arising from the Winchester Pipe Roll project. A complete translation of the Pipe Roll for 1301–2 is accompanied by a useful introduction, a reliable index, and microfiche copies of the original. At its inception, the project aimed to make the Pipe Rolls more accessible to specialist and non-specialist alike and, to judge by this publication, Mark Page and his colleagues are to be warmly applauded for having more than achieved this.

In a wide-ranging introduction Page describes the Pipe Roll before proceeding to examine its illustration of aspects of the bishopric's estate and its administrative machinery. This is followed by a discussion of the income and expenditure of the estate for the year, including brief analyses of the main sources of revenue and the regionality of demesne produce. The main text, a translation of the Pipe Roll and not a transcription, is clear and, as the editor notes, for the most part, literal.

This means that ambiguities are, generally speaking, avoided. Where the meaning is open to dispute, the editor has followed his translation with the Latin in round brackets; this is also important where a literal translation would be unwieldy but where the chosen translation can only serve as a substitute for the fuller meaning (for instance, *companagium*, that element of the payment in kind made to harvest workers and literally translatable as 'that which goes with bread', a catch-all phrase for milk, meat, and fish, has been translated throughout as 'relish'). Clarity is further served by the inclusion of a glossary, where the editor can expand upon such words whilst leaving the text uncluttered. Although there is clearly a delicate balance to be achieved between making a translation accessible and maintaining its accuracy, the editor has managed it here, especially by providing sufficient information to allow the specialist to double-check his version.

The volume follows the precedent of other recent editions of medieval estate records in providing microfiche copies of the actual document. As well as allowing the reader to test the translation against the Latin of the document, the microfiche are also valuable as a means of making medieval documents less daunting to those unfamiliar with material from the period. That said, as with microfiche in general, it is not always easy to find the way around the microfiche in order to locate the original and compare it with the text. Closer labelling of membranes would certainly be of help here, especially for the non-specialist, but this is more a quibble than a criticism; the microfiche and the detailed and well-structured index are the icing on a rich cake.

For those who do not work directly upon Winchester material, part of the joy of this volume will be in being able to approach the work of historians such as Postan and Titow with an eminently affordable and usable example of one of their most important archives to hand; although most of the research of these historians has involved the exploitation of long series of such material, the publication of this single roll will offer future researchers a sense of the wealth of the source and should encourage them to demand new questions of it. An early start has been made by Page who suggests, for example, that merchet or marriage fine payments, which often detail where the marriage took place, may illuminate female marriage patterns and migration. In fact, in addition to the mass of material on estate management contained in the rolls, the fines and pequisites sections of the receipts will probably justify a good deal of close analysis and could shed further light on the condition and experience of the Winchester tenantry. This edition of the 1301–2 Pipe Roll can take its place beside previously published editions of early thirteenth-century Winchester Pipe Rolls; the early fourteenth-century roll, with its detailed entries, will provide an illuminating contrast to those earlier ones and, consequently, one of its many worths will be as an exemplar of the development of accounting practice over the thirteenth century.

PHILLIPP SCHOFIELD

WILLIAM CHESTER JORDAN, *The Great Famine. Northern Europe in the Early Fourteenth Century*, Princeton University Press, 1996. 317 pp. 3 maps. £25.

This book is the first full length study of an episode which certainly deserves such extended treatment, as it must rank as the most disastrous European famine for which we have detailed records. The famine began in 1315, and a series of wet and cold summers which damaged cereal crops were followed by outbreaks of disease among animals, which did not end until 1322. The famine has loomed large in the thinking of historians of the medieval economy, because it fell near to the critical point when the expansion in population and production of the twelfth and thirteenth centuries ended, and the decline of the fourteenth and fifteenth centuries began. Indeed it has a claim to have been the pivot in the economic and social history of the whole period 1000–1500. In the view of Postan's school the Great Famine was the culmination of the medieval crisis and the ultimate Malthusian check, demonstrating the weakness of the agrarian economy, and the debilitated and vulnerable state of the population. To others it might be seen as an exogenous shock, a dreadful accident which, like the Black Death, helped to change the course of history through the unpredictable forces of nature.

Jordan's new study embraces the whole of northern Europe, and makes use of historical literature from all of the countries affected, from the British Isles through the Low Countries and northern France, to Germany, Scandinavia and Poland. He provides a wide ranging synthesis on the causes, course and effects of the crop failures, which is not based on deep analyses of primary sources, but surveys a formidable array of published work, some of it in local journals, and in many languages. It will interest specialists who will not be conversant with all of the literature, and is accessibly written so that it should appeal to students and general readers.

In addition to information hitherto unavailable in English, the book contains some novel ideas and new emphases in interpretation. Firstly, Jordan argues for the 'long chronology' of the famine, and

so will help to remove the 'famine of 1315–17' from our thinking and replace it with seven lean years from 1315 to 1322. Secondly, he accepts that the chief result of the bad weather was to damage the cereal crops on which the population depended, but he also notes the poor wine harvests of those years in northern France and Germany, and the difficulties in hay making, as well as the cattle disease which was first highlighted by Kershaw. A scarcity of salt disrupted dairying and the curing of meat, so that people were unable to obtain adequate quantities of cheese and bacon as well as bread and pottage. Thirdly, as well as documenting the sufferings of the mass of the population, Jordan devotes a chapter to the effects of the famine on the landlords, and shows how some, notably in Germany, were driven into debt. And finally, he has explored the response of governments to the food crises. The price fixing, bans on grain exports, and encouragement for imports are entirely predictable, but less obvious measures were also adopted, such as controls on the expansion of deer parks in France.

Jordan discusses riots, and although he seems unaware of Thompson's work on the 'moral economy' of the crowd, and the debate on modern food riots, he provides information which sheds valuable new light on the subject. In England a great upsurge in crime, especially small-scale theft, was recorded in the famine years, but very little concerted mass action. Jordan however tells us of a demonstration in Magdeburg, and provides details of disturbances in Douai in 1322 which seem to share characteristics with an eighteenth-century food riot: women led crowds who opened granaries and searched for hoarded grain in merchants' houses. There was a rather mysterious episode in England also, in 1316 (not noticed by Jordan) when grain was taken from an Italian ship at Sandwich. If the idea was current in 1315–22 that crowds could intervene to bring more corn on to the market, why does it seem to have happened so rarely? If we follow the logic of Thompson's argument, the authorities could have been deemed to be defending the consumer against profiteers in the fourteenth century in a way that they were not four centuries later, so that popular action was not necessary. If this was the case, the effectiveness of market regulation, and the degree of popular trust of those in authority, was much greater than is usually supposed.

Jordan might be expected, having chosen to write a book about the famine, to argue for its devastating effects and great importance. In fact he tends to back away from making too sensational claims. For example, in assessing mortality he is rather sceptical of some of the higher estimates, and points out that the oft-quoted death toll of 3000 at Ypres could well have included many temporary immigrants, and should not be taken as indicative of a very high mortality among the townspeople. He also takes a rather optimistic view of the recovery after 1322. He reflects the controversy on the long-term significance of the famine, but does not come down heavily on one side or the other. Surely the miseries of the period should not be underestimated? After all, if the relatively conservative figure of 10 per cent mortality is accepted, that means that a half-million English people died, and the majority of local studies of the period 1322–48 suggest that demographic and agrarian troubles persisted after the immediate effects of the famine had passed. Jordan, rather surprisingly in view of his earlier work on credit, could have devoted more space to the social disruption caused by debt, petty crime and signs of a breakdown in normal neighbourly and familial relations. The famine was perhaps more important than its historian is prepared to admit. But he has done the subject great service by extending the English-speaking world's knowledge of the subject, and raising new issues for debate.

CHRISTOPHER DYER

RICHARD BRITNELL and JOHN HATCHER, eds, *Progress and Problems in Medieval England: Essays in Honour of Edward Miller*, CUP, 1996. xv + 317 pp. £35.

Agricultural historians will probably know Edward Miller's work best from his monograph, *The Abbey and Bishopric of Ely: The Social History of an Ecclesiastical Estate from the Tenth Century to the Early Fourteenth Century* (1951), his survey of *Medieval England: Rural Society and Economic Change* (1978) written jointly with John Hatcher, and his editorship of (and contributions to) the *Agrarian History of England and Wales vol III: 1348–1500*. The fourteen essays collected together in this volume do justice to the full breadth of his work and interests, covering the social and economic history of rural life, towns, trade and finance in the period between the early twelfth century and the mid-sixteenth century. All are newly published pieces of detailed research by established experts in their fields. A comprehensive bibliography of Edward Miller's published work is also provided. The book has no general index or bibliography, although the essays are arranged in roughly chronological order, and most have self-evident titles.

Six of the essays are strongly relevant to those interested in rural history. Edmund King's essay on 'Economic development in the early twelfth century' is concerned largely with how lords managed their estates, using the sparse documentary evidence of lords' income from rural and urban property, fairs and tolls, to provide an outline of the economy

at the period. In 'Peasant deer poachers in the medieval forest,' Jean Birrell uses records of the forest eyre to illustrate peasant hunting practices and to examine what peasant poachers did with the venison once it had been illegally acquired. The resulting study has implications beyond the history of hunting: for instance, accounts of how peasants acquired the meat in the first place (by deliberate hunting or by chancing upon deer, dead or alive, in the forest), of peasants sharing the meat within their local community, and of the differences between peasant and aristocratic hunting practices all have wider social implications. Christopher Dyer in 'Taxation and communities in late medieval England' undertakes a much needed investigation of the details of tax assessment and collection in the period from the 1320s to the 1520s. He asks some questions which have too often been glossed over by those who have used the tax returns as source material. In what sense did the collection of taxation on a community basis strengthen the ties within that community, or alternatively cause social tensions? Did wealthy villagers help poorer villagers by paying more of tax quota, or did they exploit their position of power and shift payments onto their poorer neighbours? Dyer's exploration of these questions allows us both to extend our knowledge of medieval social relations and to interpret the taxation returns themselves in a more sensitive way. David Farmer's essay on 'The *famuli* in the later Middle Ages' deals with another under-investigated subject, the *famuli* or agricultural servants hired by manorial lords to work on demesne land. Following on from Postan's work on the earlier period, Farmer looks at the numbers of these workers, the types of work they undertook, and the nature of the wages paid, in the period from roughly 1300 to 1420. While it perhaps regrettable that these data are not related to the existing literature on the prosecution of agricultural servants under the Statute of Labourers and on service more generally, this essay nevertheless represent an important contribution to our knowledge of hired labour in this period. John Hatcher's 'The great slump in the mid-fifteenth century' reassesses the evidence of economic depression in the fifteenth century examining all the major sectors of the economy in the light of recent research on the subject. He draws the important conclusion that there was indeed a severe depression in the years between approximately 1440 and 1470, and that previously work on the fifteenth-century depression has been confused by a failure to distinguish different sub-periods within the century. The only (not insubstantial) section of the population who were unscathed, and may even have profited from the depression, were smallholders and labourers, who benefited from the ready availability of land, low rents and prices and high wages. However as Hatcher points out, while the economic trends favoured these people, the potential for them to rise up the social scale was at the same time limited by precisely the same trends: 'the period has more flavour of comfortable bucolic sufficiency than of rampant rising prosperity' (p 262). The only essay in the book of disappointing quality is Ambrose Raftis's 'Peasants and the collapse of the manorial economy on some Ramsey Abbey estates,' in which he investigates the context of 'the collapse of some Ramsey manorial economies around 1400' (p 191) or what is usually understood as the end of serfdom. The essay includes some interesting ideas, and is based on original research, but its shortcomings mean the value of the arguments presented are hard to assess. It reads like a rough draft and is difficult to follow at times; it contains no document references, and very few references to the extensive existing literature on the subject. We are given no information about the location, wider economies or background on the three manors discussed.

By concentrating on the essays with rural relevance this review has neglected other important contributions to this volume, which includes the work of Ian Blanchard, Richard Britnell, Pamela Nightingale, Edmund Fryde, Wendy Childs, Anthony Tuck, George Holmes and Jenny Kermode. Together these essays make a significant contribution to the field, and while readers unfamiliar with the debates and methods of medieval social and economic history may find some the essays in this volume rather hard going, it is certainly a book that no serious student or researcher in the field can afford to ignore.

JANE WHITTLE

MICHAEL J BRADDICK, *The Nerves of State: Taxation and the Financing of the English State, 1558–1714*, Manchester University Press: New Frontiers in History, 1996. xi+244 pp. 11 tabs; 6 figs. £12.99.

By drawing both upon his earlier monograph on *Parliamentary Taxation* and on his pioneering attempt to rethink the relationship of the state and social change (see *Social History*, 1991), Braddick provides a first-rate analysis of the replacement of the demesne state by the tax state in early modern England. The guiding concept here is drawn from Schumpeter's seminal (1954) essay on 'The crisis of the tax state', and Braddick develops it to illustrate the varying economic and political costs of seventeenth-century attempts to overcome the difficulties associated with earlier parliamentary taxes. Central to his account is the 'dramatic fall' in the yield of the subsidy, principally caused by the increasing

inaccuracy of assessments: 'if this repeated voluntary evaluation of the wealth of the nation is seen as a political test of commitment, we can fairly say that the late Tudor and Stuart state failed' (p 94). It was the mid-seventeenth-century crisis which saw the most substantial increases in the tax burden in a relatively under-taxed nation: in Cheshire the burden of taxation in the 1660s (including the hearth tax) was nineteen times as great as it had been in the 1620s. Indirect taxation, especially the excise, was overwhelmingly responsible for this development. Although in its earliest stages the employment of excise men as salaried revenue agents caused considerable suspicion, the long-term success of the excises was 'a bureaucratic achievement beyond the capacity of most European states' (p 101). Overall, therefore, the transformation of finances thus changed the nature of the authority of the a state which 'may have been mobilising consent more effectively, not just securing resources through political and administrative reform' (p 186).

This analysis is both clear and accessible, moving sure-footedly through the complexities of the early modern fiscal system, and providing scholars and students alike with a much needed synthesis of a literature which to a very large extent still relies on the work of F C Dietz. Braddick also helpfully provides an appendix of thirty-nine selected documents, skilfully chosen to illustrate contemporary concern with the difficulty of transforming the tax base of the nation. Along the way he emphasizes the limitations of using exchequer expenditure as an index of the activities of the early modern state: 'although there was clearly a fiscal military state there was also a state with other purposes whose activities are not revealed by an analysis of exchequer spending' (p 34). Braddick is thus fully conscious of the extent to which his account omits such local taxation as that co-ordinated by the Elizabethan poor law which 'imposed considerable costs on the localities but which was no charge at all to the exchequer' (p 22). In a book teeming with insight perhaps the most refreshing approach lies in the analysis of the legal test cases of the early seventeenth century. Braddick firmly locates himself in the post-revisionist camp in the engagement over the existence of the constitutional 'mode of opposition' to the Caroline state: 'these cases tested the legality of particular powers rather than the legitimacy of the regime but such questions may have been implicit for some observers' (p 144). His elegant, and self-consciously schematic, discussion of tax resistance is similarly nuanced, especially in its conclusion that 'tax rioting was not necessarily more damaging to the long term prospects of a particular levy than legal challenge' (p 174).

Perhaps the only significant drawback of this fine study is its rather peculiar chronology. Given the burgeoning literature on war, taxation and rebellion in early Tudor England, it is unfortunate that Braddick should have chosen to begin his analysis in 1558, thus precluding comparisons over the whole early modern period. Nonetheless, it is clear that *The Nerves of State* will be indispensable for all students of Elizabethan and Stuart governance for some considerable time to come.

STEVE HINDLE

M J BRADDICK, *Parliamentary Taxation in Seventeenth-Century England*, Royal Historical Society, Studies in History, 70, 1994. xii+353 pp. £35.00.

Braddick's book is the first modern attempt to survey the development of taxation in England and Wales in the early modern period. There are a number of taxes to consider: the Fifteenth, the Subsidy, the Assessment, the Excise and the Hearth and Poll Taxes. The Ship Tax, as a prerogative tax, is excluded. This has the benefit of making an already long book no longer, but in an account of the development of taxation systems, the omission is probably a mistake.

The historical visibility of each of these taxes rests largely on the quality and quantity of the records they left. Economic historians have been consumers of taxation records where they give lists of names (the Subsidy, the Hearth Tax) but they have generally remained ignorant of the processes which produced them. This work is now the standard account of the processes of assessment, collection and payment. By the way, Braddick shows how directly assessed taxes were less significant contributors to taxation incomes than might be thought: he focuses attention on the Fifteenth rather than the Subsidy and points out how little revenue was generated by the Hearth Tax compared to the Land Tax.

At one level Braddick may be read as offering an administrative history of the processes of assessment, collection and accounting and the ways in which each of the three developed over the seventeenth century. But overall, Braddick is preoccupied with two models. The first is the switch from demesne to tax state first outlined by Schumpter. The second is the notion of mediation and brokership between locality and centre developed by Dr Clive Holmes in his study of *Seventeenth-Century Lincolnshire* (1980). To have written the book around the second would have been ideal: to try and encompass both brings problems. Because these ideas span central and local government, Braddick does too, not always integrating the two terribly well. Buried within the book are case studies of Cheshire and Norfolk, but information is also gath-

ered from wherever it may be found, especially from within the Exchequer Equity pleadings. The drift over time was to remove the possibilities for local mediation or intervention from the administration of taxation. The gentry were progressively sidelined by the appointment of salaried officials or, for periods, farmers. (These steps also had the advantage of bypassing the Exchequer.) But the other side of this was the abandonment of direct taxes on possessions (the characteristic form of taxation in the 'long sixteenth century') in favour of indirect taxes on economic activity and taxes on lands.

Braddick's concern is to identify the removal of mediatory individuals as an important element in the success of the new taxation regime. This is doubtless correct. From a sixteenth-century standpoint I would add that part of the reason for the failure of the subsidy was in the character of what it taxed – goods – and the very high percentage rate at which it taxed them. Cutting the gentry out of the process of assessment was but one of the steps which might have been taken to make it work. Why, given the problems of mobilizing the subsidy commissioners, was the subsidy never farmed? And, perhaps most interestingly, why was it impossible to switch to a taxation system based on rates on lands in 1610 but possible after 1660?

The area which falls outside Braddick's book but which needs further consideration is the question of the economic consequences of taxation. As his figures show (they are conveniently summarized on pp 274–5), the burden of taxation post 1660 was extremely heavy compared to that pre-1660, and yet we have not built this truth into our discussions of seventeenth-century agricultural change. Houghton's comments on royalist indebtedness serving to prompt agricultural improvement are oft-cited, but surely taxation was a greater and more long-lived stimulus? Braddick offers no analysis along these lines. This is not to complain, for the book is a novel and welcome addition to the very limited literature on early modern taxation systems and state formation. Those not committed to these questions will find the book a hard slog (the material occasionally overwhelms the direction of Braddick's prose), but all early modernists should read at least the first and last chapters.

R W HOYLE

DAVID E VASSBERG, *The Village and the Outside World in Golden Age Castile: Mobility and Migration in Everyday Rural Life*, CUP, 1996. xvii+253 pp. no price given.

It is now more than a decade since David Vassberg confirmed his reputation as a leading authority on Spanish agricultural history with a detailed and informative study of early modern Castilian property ownership *Land and Society in Golden Age Castile* (1984). While this splendid account has in general withstood the tests of time, notwithstanding a few minor rectifications by a younger generation of Spanish scholars, Vassberg himself has indulged in a fair amount of soul searching. Not least, as he informs us in the introduction to this tidily-written monograph, he is now less than happy with his previously-held position on the vexed question of the interrelationship between the village and the wider world. His stated objective in this companion volume to *Land and Society*, is to dispell once and for all the persistent myth, common among historians of pre-industrial Europe – himself hitherto included – of 'the immobile village' whose inhabitants rarely ventured beyond their own territory. Maybe, Vassberg asserts, some of this stereotyping reflects the influence of Marxist ideology which portrays peasants as hopelessly reactionary. In addition, historians have manifestly failed to keep abreast with important developments in the social sciences. Anthropologists and economists, he informs us, have long since defined peasants as rural people integrated into the structures of the state and surrounding society, and partially engaged in the marketplace. If only writers on medieval Europe had paid greater attention to R H Hilton's *The English Peasantry in the Later Middle Ages* (1975), such outmoded ideas might long since have disappeared! Put succinctly, Vassberg's thesis is that the early modern village community, far from being static, was surprisingly dynamic, continually transformed by inward and outward migration, as well as by changes taking place within its confines. Hence, the notion of stable rural community at this time is seriously flawed. The rural inhabitants of early-modern Spain were no exception to the rule. Far from being 'glued to his piece of land', in the words of Manuel Fernández Alvarez (*La sociedad española en el Siglo de Oro*, Madrid, 1989), the Castilian peasant displayed great ingenuity and flexibility enjoying a substantial degree of geographical mobility. Vassberg, who gently berates Spanish historians for being overly concerned with impersonal economic forces, institutions and social structures, chooses to concentrate on showing what he terms the *human* element. Writing with considerable elegance and showing a keen eye for detail, he serves up a rich feast of the everyday lives of hundreds of ordinary rural people who made up the vast bulk of the Castilian population. His multidisciplinary approach not only displays a remarkable familiarity with the minutest piece of information contained in thousands of notarial records but also demonstrates the author's profound understanding of the secondary literature, not least the latest

findings of Spain's new breed of historical demographers. Through the experiences of those inveterate literary wanderers Don Quixote and Lazarillo de Tormes, in addition to those of the more mundane vine growers of Zamora, the shoe makers of Valladolid or the migrant workers of Extremadura, notorious for their gambling, thieving and violent behaviour, Vassberg examines the multifarious forms of contact between villagers and the outside world from the fifteenth century to the first half of the seventeenth century. For sure, one important characteristic of Hispanic society in both the Old World and the Americas was a deep sense of loyalty to the community Outsiders, dubbed *forasteros* (foreigners) by the indigenous population, invariably suffered stiffer fines than local inhabitants for breaking local ordinances. Homeless vagrants were perennially viewed with alarm, while inter-village squabbles over such matters as stubble grazing remained forever commonplace. Yet, despite its customs of local solidarity and of hostility towards outsiders, clearly set out by Vassberg in his first chapter, the rest of his book offers abundant evidence of a myriad of significant relationships between the village and the outside world. These take the form of producers, carters and muleteers transporting goods of every imaginable kind to a host of local and distant markets, short- and long-distance migration in and out of the village, contacts with a variety of travellers and assorted 'aliens' (especially *moriscos* and gypsies), and relations with the military, the Court and the judicial system. In disproving the concept of village immobility, Vassberg reinforces the thesis of the demographer David Sven Reher (*Town and Country in Pre-Industrial Spain: Cuenca, 1550–1870*, 1990) that Golden-Age Castile should be characterized in terms of 'the Culture of Mobility'. I am happy to predict that David Vassberg's highly readable and carefully illustrated reinterpretation will finally set aside the cliché of early modern villages as stagnant pools of humanity isolated from the mainstream of Castilian society.

JOSEPH HARRISON

GUY DE LA BEDOYERE, ed, *The Writings of John Evelyn*, Boydell Press, 1995. 435 pp. £39.50.

John Evelyn had multifarious interests, extending far beyond agriculture and horticulture, and his effervescent energies, wide reading, and wide circle of friends encouraged his pen to flow. His literary style did not flow so smoothly, and, as this editor shows, he did not bother much about giving accurate references. He seems often to have cited authorities at second hand, and so earned himself a not altogether well-deserved reputation for learning.

Still, agrarian historians will be grateful for this volume of Evelyn's writings, giving them the chance to own copies of two of his influential works in their field of interest, *Sylva* and *Kalendarium Hortense*.

Sylva encouraged the planting and better management of woodlands, and, appearing at exactly the right moment after decades of neglect, it was enormously influential. In 1690 Evelyn claimed that it had resulted in the propagation of 'many millions of useful timber-trees throughout this nation'. While this may sound exaggerated, the fact remains that 1000 copies of *Sylva* were published in 1664, a second edition followed in 1669, and a third in 1679. The *Kalendarium Hortense*, or *Gard'ners Almanac* was a set of month-by-month instructions on gardening tasks, published in 1664, which proved equally, if not more popular, and had reached its tenth edition by 1706.

Guy de la Bédoyère sets these works briefly in context, but his main purpose is to make a very mixed collection of Evelyn's writings more readily available, so another seven treatises are printed as well, including a belated (in 1659) *Apologie for the Royal Party*, and *Fumifugium* (1661), fulminating against London's smoky air. Regrettably for the agricultural historian, the editor chooses to omit *Pomona*, which was annexed to the first edition of *Sylva*, and sheds a brilliant light on contemporary care to improve fruit growing and the quality of cider.

Evelyn's work is attracting increasing interest at present, perhaps in part because of the publicity given to the purchase of the Evelyn archive by the British Library (*see* Guy de la Bédoyère's article in *The Times Literary Supplement*, 8 September, 1995). *Acetaria*, on salads, and a book of Evelyn's food recipes (*John Evelyn, Cook*, ed, Christopher Driver, 1997) have been published by Prospect Books. Both *Sylva* and *Kalendarium Hortense* were part of a much larger work on horticulture, *Elysium Britannicum*, which Evelyn never published, and of which part has been lost. In 1977 the surviving part was being prepared for publication. Will it now appear?

JOAN THIRSK

MARGARET SPUFFORD, *Poverty Portrayed: Gregory King and Eccleshall in Staffordshire in the 1690s; Staffordshire Studies*, vol 7, 1995, Dept of History, University of Keele. iv + 150 pp. £11.99.

Volume seven of *Staffordshire Studies* is enterprisingly devoted to a single late seventeenth-century theme: the parish of Eccleshall. It comprises a long piece by Margaret Spufford about the ordinary people of that large pastoral parish, complemented by a full print-out of James Went's database covering some 2000 names of heads of households. The latter was compiled from a family reconstitution of the parish

registers, and a range of listings, tax returns and rate rolls from the 1690s, together with information culled from Bishop Lloyd's survey of 1693–7. Lloyd was bishop of Lichfield, resided at the bishop's seat in Eccleshall and was lord of the manor. His survey detailed the virtues and vices of the middling and poorer sorts in the parish. The database will provide a vital starting point for anyone wishing to investigate Eccleshall at the level of family and holding, and is a fitting tribute to the labours of an adult education class begun by the Spuffords over thirty years ago.

Margaret Spufford's introduction is an expansion of her 1993 Earl Lecture at Keele University and runs to some 70 pages of delightfully eclectic thoughts on a whole range of topics linked to her views of late seventeenth-century Eccleshall. Her enthusiasms for van Heemskerk's contemporary paintings of ordinary Englishmen and women in vernacular settings, based on Dr H T Mount's work, provide some fine illustrations. Her researches on Gregory King's Staffordshire activities and local knowledge of Eccleshall, his possible links to the Compton census transcription at Stafford, and to Bishop Lloyd, illuminate links between Staffordshire raw material and King's pioneering national statistics. Later delightful digressions into music, literacy, and the oral tradition, into schooling, horn books, and women teachers, draw heavily on her earlier researches into chapbooks and dissenting communities.

However, the core of the work is an analysis of the ordinary folk of Eccleshall in the later seventeenth century. The groundwork for this is a detailed consideration of the Hearth Tax returns for 1673, together with a sample of 200 probate inventories covering the period 1660–1700. Professor Spufford's conclusion that Eccleshall's pasture and woodland community was amongst the poorest in England is based on the high percentage (83 per cent) of one-hearth households in the parish, but she is unable to cross-check this with poor law and charity records which have not survived. The issue is a complex one, particularly as the proportion of exempt households – a rather more mundane 53 per cent – is based on only part of the parish and excludes some of the poorest waste settlements. It is also difficult to evaluate when there are no references to the original documents consulted. Useful comparisons with different types of parish nationally support the general outline of the case, but there are no local comparisons apart from Needwood, even though figures are available for another large Staffordshire parish much more closely integrated into the growing prosperity of the West Midlands: Walsall.

When this groundwork has been laid discussion moves on to the different occupational groups in Eccleshall by cleverly integrating findings from inventories and listings with Bishop Lloyd's comments. The result is a delightful patchwork which makes good use of Professor Spufford's wider expertise. Some of the quilt is highly coloured with tales of pedlars settling in barns and setting up as dealers in skins, living off the natural world and turning it to commercial profit. Alehouse keepers supported music and country games, but also sexual licence and gaming, and so came into Bishop Lloyd's disfavour in the early years of the Society for the Reformation of Manners which is conjectured as an important influence on the bishop's note-keeping. Some of the more successful craftsmen and traders can be shown to have sent their sons to university, and to have provided settlements and dowries for their children, but a majority of the inventory-makers left extremely small sums by national standards. One of the most interesting sections is that following female occupations (pp 63–6) where Bishop Lloyd's remarks make it possible to contextualize the household and working arrangement of working women, and which highlights the role of women as unsung purveyors of basic educational skills.

Overall, this piece is excellent demonstration of the scholarly use of a fascinating but difficult source to bring to life the realities of economic and social life in rural Midland England of the time. However, this reader found himself pining for both a fuller structural background to the landholding, landscape and economy of Eccleshall and its surrounding *pays*, but also some sense of the dynamic of the society. When had the poor squatters come to fill the woods and heaths with their shacks and convert barns to tenements, and where had they come from? Were they settlers carving holdings from an under-used stretch of countryside, or were they competing with other parishioners for the ever-diminishing resources of the common lands? Some of this might be available to a reader who had to hand the Spuffords' earlier study of the parish (Keele, 1963) but some more detailed exposition, particularly of the teeming township of Croxton would have enriched the piece immensely.

JOHN BROAD

MARK BRAYSHAY, ed, *Topographical Writers in South-West England*, University of Exeter Press, 1996. xiv + 200 pp. 17 illus. £12.95.

This attractive little volume comprises seven chapters by different authors and a most useful list of historical works on the topography of the south-west counties, defined as Cornwall, Devon, Somerset and Dorset. Most of the chapters are based on papers delivered at the annual symposium

of Exeter University's Centre for Southwestern Historical Studies in 1993. The chapters are as follows: 'Introduction: the development of topographical writing in the South-West' by Mark Brayshay; 'John Leland in the West Country' by John Chandler; 'Some early topographers of Devon and Cornwall' by Joyce Youings; 'Somerset topographical writing, 1600–1900' by Robert Dunning; 'Early topographers, antiquarians and travellers in Dorset' by Joseph Bettey; 'From romanticism to archaeology; Richard Colt Hoare, Samuel Lysons and antiquity' by Malcolm Todd; 'The scientific gaze: agricultural improvers and the topography of south-west England' by Sarah Wilmor; and 'Aids to research: a list of historical works on the topography of the south-west Counties' by Ian Maxted and Mark Brayshay. This valuable list is sub-divided into four sections: (1) The works of major county historians; (2) Accounts of travel and agricultural surveys; (3) Bibliographies and guides to research; and (4) General catalogues and listings. It will be a boon to researchers.

The scope of the volume is quite broad, and although there is a little over-lapping, the authors are all acknowledged authorities on their subjects and regions, and taken together they present a comprehensive and detailed picture of the topographical descriptions of south-west England from about 1539 (Leland's first tour) to the late nineteenth century. The agricultural content is of course variable. Leland was primarily concerned with inspecting monastic libraries, and Chandler does not dwell much on Leland's agricultural comments, but he does emphasize that Leland was a conscientious researcher who often tried to verify, and if necessary correct, the information he received. Joyce Youings discusses Richard Carew's admirable *Survey of Cornwall* (1602) and notes the work of Thomas Westcote and Tristram Risdon, both of whom commented on Devon farming in the early seventeenth century. Quite a number of Somerset and Dorset topographers are discussed by Dunning and Bettey amongst whom Thomas Gerard wrote a discerning 'Particular Description' of Somerset in 1633, and a similar work on Dorset in the 1620s. There he commented on the newly-drained water meadows in the Frome valley 'manie of which of late Yeares have beene by Industry soe made of barren Bogges'. The role of Richard Colt Hoare and Samuel Lysons as precursers of modern archaeology is perceptively argued by Malcolm Todd, and his speculation that the upheaval caused by enclosures in the late eighteenth century stimulated the desire to record and understand the ancient landscape deserves further research.

For the agricultural historian Sarah Wilmot's full and detailed discussion of the work of the agricultural writers of the late eighteenth and nineteenth centuries will probably be the most useful part of the volume. Early writers like Fraser (1794) and Vancouver (1808) on Devon; Fraser (1794) and Worgan (1811) on Cornwall; Billingsly (1794 and 1797) on Somerset; and Claridge (1793) and Stevenson (1812) on Dorset are assessed in relation to later writers in the nineteenth century, providing a valuable introduction to a wide range of topographers. She points out that agricultural improvement was not their only interest. Writers like Pusey believed that agricultural improvement could be combined with the need to arrange the landscape carefully so that it would form a pleasing prospect. This volume deserves to be on the shelf of all those who are interested in the history of southwestern England, and its moderate price is a further recommendation.

MICHAEL HAVINDEN

DORIAN GERHOLD, *Road Transport before the Railways: Russell's London Flying Waggons*, CUP, 1993. xvii + 316 pp. 24 tables; 5 figures; 6 maps; 19 plates. £35.

The centrepiece of Dorian Gerhold's important study of the waggon trade is the Russell business and its uniquely detailed records, covering their activities from 1816 to the mid-1830s. It is of much wider significance, since these are set with great skill into a wide-ranging analysis of West Country carrying and the links of the regional economy and its products with London over the period from the later seventeenth century to the arrival of the railway and beyond. No more important monograph on pre-modern transport history has yet appeared, and the intimate relationship of the transport business with agriculture, the source of much of its demand, its fuel, and its prime-movers is a central theme of its analysis.

Provided with detailed records of costings and the structure of revenue receipts, this book is able to correct many assumptions about the nature of road carrying, and to sustain the intuitions of earlier studies with hard evidence. These are too numerous to recount here in detail, but cost structures are among the most important of its findings. Gerhold demonstrates the very high degree of inflexibility in these, with direct costs accounting for a very large proportion of total, with many overheads, like inns, provided from outside. In consequence, horse and provender costs predominated, absorbing at least half of the total, with the variable element of feed the principal component: Russell's hard worked horses on the London route ate 14 pecks of oats, 3.7 of beans, and 1.5 cwt of hay per head per week in 1818, as against 8 pecks of oats peck of beans and the same quantity of hay fed to the

best kept farm horses. Heavy road work required very heavy feeding, and correspondingly magnified the demands placed on the farm supplier.

The other side of the account, pricing policy, is equally interesting, and showed clearly that the ruling principle was 'what the market would bear', varied somewhat within the tight constraints of cost structures by competitive pressures, locality, and the nature of goods carried. Carriage rates tapered relatively little by distance, as would be expected with the structure of costs dominated by the variable element of 'fuel'. Local carriage, with lower load factors and economies to scale, charged a substantially greater rate per ton mile, of the order of 70 per cent in the carriage of butter, clearly indicating both the limited impact of easy entry from the farm carrier on prices, and the implicit revenue flow to the smallholders and others who provided local carriage on a part-time basis. The other great distinction lay in that between the 'trade' and the 'Gents'' price, which could place a premium of up to 50 per cent on the latter, a sound country principle.

Russell and his partners failed in the testing circumstances of the mid-1830s, when increased competition and falling load factors were compounded by disagreements, leading to the firm's dissolution in 1837, happily, for the author, in circumstances of sufficient acrimony to enter Chancery. It was effectively continued by successors, while retaining the valuable name, before bankruptcy erased the core firm as a regional carrier in 1852, after final dislocation by the GWR and the declining West Country economy. As an essay in transport and regional history this is a book of outstanding interest and importance, and one providing many insights into the wider rural economy of the eighteenth and early nineteenth centuries.

J A CHARTRES

MALCOLM & FREDA HEYWOOD and BERNARD JENNINGS, *A History of Todmorden*, Otley, 1996. viii + 258 pp. Illus: Hbk £16.95; Pbk £12.75.

The basis of this publication, the preface informs the reader, is a collection of 'left overs' which could not be fitted into the earlier volume *Pennine Valley: A History of Upper Calderdale* which was published in 1992. However, this book is certainly more than a usual offering of left overs, it is a densely-packed work offering the reader a comprehensive view of the history of Todmorden from the earliest times to the present. Once again Bernard Jennings has had oversight of the enterprise and the book will rightfully take its place with others such as ... *Nidderdale* and ...*Swaledale*. Typical of the best of these local publications, the book is generally well written with research of a high quality. However, also typically, only a limited broader context is provided with virtually no historiography, and there is a shortage of quality analysis of the material. Essentially the reader is presented with the material and is left to analyse and draw conclusions. An example of this is the listing of information on the seventeenth- and eighteenth-century inventories. Little is made of the material which could have provided a fascinating analysis of farming and industry at that date. This study does include a little more national context surrounding local events than some of the earlier publications, for example, there is a brief but detailed discussion of price inflation. There are also some useful sections which have been subject to some interesting analysis and conclusions on the turnpike system and on the 1851 educational and religious censuses.

The strength of the study lies in the material on the industrializing process, and particularly the development of the cotton mills in the area. The Fieldens were one of the major families in the district and, as might be expected, fascinating insights are given on many aspects of industrialization. This is particularly true in relation to the implementation of the 1834 Poor Law Act and the relationship between the Anti-Poor Law Movement and Chartism. Given the Fielden involvement it is perhaps not surprising that the community was radical in its outlook and strongly resisted the imposition of external authority. For several decades after 1834 there was great difficulty in persuading respectable members of the community to serve as Guardians and it was not until 1879 that the Todmorden Union workhouse was eventually built.

The acute problems of the depressions of 1838–43 and 1862–64 are carefully constructed and the fraught but symbiotic relationships between employers and workers on the one hand and the supply and demand of cotton on the other, is succinctly presented.

There are some notable imbalances in the study. The changing patterns of agriculture, while given reasonable attention pre-1800, are given short shrift after that date. In the section on co-operation, while there are obviously sources available, friendly societies and related clubs are given only the briefest of mention.

Some of the value of the work lies in its recognition that many of its readers are not specialists and, therefore, explanations for obscure terms and events are frequently offered. As with earlier publications, although endnotes are usefully provided, the annoying system of not providing brief title and date is still retained. Further, full reference of the sources does not appear in a bibliography, the reader has to scour the endnotes to discover such information.

The style is flowing though it is somewhat variable, perhaps due to the different contributors and types of sources, and occasionally it sinks to a rather irritating familiarity: '... the late Mr Harry Stansfield had a wonderful collection ....' The book is well presented with maps, photographs and paintings, though the latter tend to be rather garish and do not really enhance the work. The approach of dealing with the topic chronologically generally works well though there are some shortcomings. Probably due to the chronological structure, there is a tendency to compartmentalize events, for example the sections on government and religion are presented separately with very little indication of any connection between the two topics.

There is no doubt, however, that the advantages and wealth of information provided in the book on the subject of Todmorden far outweigh the disadvantages listed above. This book is an invaluable tool both for scholars researching topics covered in the study and for people with a more general interest in the history of the locality. It is a commendable achievement and is strongly recommended.

CHRISTINE HALLAS

NEGLEY HARTE and ROLAND QUINAULT, eds, *Land and Society in Britain, 1700–1914: Essays in Honour of F M L Thompson*, Manchester University Press, 1996. xvi + 255 pp. Hbk £45.00.

A *festschrift* for F M L Thompson was almost bound to be an eclectic volume, and readers will not be disappointed. *Land and Society in Britain* includes contributions on Professor Thompson's well known interests, aristocrats and gentlemen, but broadens the spectrum to include servants and agricultural labourers. The essays range from agricultural tools to taxation, from farming lessons learned abroad to death duties paid at home, and from golf playing to aeroplane flying. Horses, one of Michael Thompson's other interests, feature only in their declining usefulness, but we learn how trains, cars and aeroplanes replaced them as means of transport and objects of sporting interest. And, unusually for a *festschrift*, one contributor, W D Rubinstein, uses his contribution to take Thompson to task over his views on the transfer of business wealth into landownership during the nineteenth century. Since Thompson could hardly respond, given the nature of the book, we must look out for his reply in another place.

In a volume of this nature, where the contributors seem to have been left more or less to decide their own parameters, the essays inevitably vary in subject matter and quality. Penelope Corfield, in a polished piece discussing the concept of a gentleman, moves easily across three centuries and a broad swathe of literature. E J T Collins writes informatively about edge tool making in the Birmingham and Sheffield areas – although he claims also to have done fieldwork in Turkey to enhance his knowledge of the subject. The relationship between land and politics is discussed in P F Clarke's essay on the impact of the third Reform Act on agricultural labourers in Suffolk, Martin Daunton's study of Liberal thinking behind the introduction of death duties in 1894 and, in more light-hearted vein, Roland Quinault's discussion of the complex relationships forged among Edwardian politicians on the golf course. Less satisfactory is John Chartres' contribution on the Servants Tax, which depends almost entirely on a single document in the Public Record Office and even then is described as reaching only preliminary conclusions, and David Spring's short essay on the activities of two Tory politicians over three years prior to World War I which he admits is partly derived from previously published work.

Despite these reservations the range of essays is surely appropriate to the recipient, as are the very pleasant appreciations by Corfield and Quinault. There are some extraordinary examples, which must have elicited from Michael Thompson – himself very able at choosing apt examples to illustrate his carefully crafted text – a round of what Corfield calls his 'long, infectious, whooping and rumbling laugh'. To select just two: Quinault raises the mind-boggling vision of Lloyd George and Winston Churchill playing a foursome at Criccieth with, respectively, the village draper and village cobbler as their partners; while David Cannadine paints a delightful picture of the exotic Mrs Victor Bruce who, bedecked always in a string of pearls, drove to the Arctic Circle and back, won the Ladies' Cup in the Monte Carlo Rally, and in 1929 established a new world record for greatest non-stop run by a single-handed driver.

A few points jar. The picture of Michael Thompson omits half his face but includes the once ubiquitous but now abandoned pipe. Negley Harte appears to have been editor *in absentia*, at least after the title page, and John Chartres, as a former editor of the *Agricultural History Review* should know that Lowther is (or at least was) in Westmorland. Yet to end on a downbeat note would be unfair: this is a collection of essays which are a credit to the historian they suitably honour.

J V BECKETT

ELSPETH MONCRIEFF with STEPHEN and IONA JOSEPH, *Farm Animal Portraits*, Antique Collectors' Club, 1996. 304 pp., 326 colour illus, 111 black and white. £35.00.

Livestock portraits – often showing enormously fat cattle, sheep, and pigs – have become very fashion-

able in recent years. A naive painting of *A Fat Hog*, painted in 1842 by an obscure artist, T Glasscock, sold for £33,000 in 1988, a world record for paintings of this type. It offers little in the way of artistic skill or originality: but it is undeniably charming and amusing, a document of an important strand of British social history. Lovers of such paintings will find this book delightful: there are over 400 good quality illustrations, most of them in full colour. Prints are covered as well as paintings, and Elspeth Moncrieff generally includes the inscriptions to these, which make fascinating reading, listing the exact measurements of the beasts along with details of their pedigrees and owners. The book has been written in association with Stephen and Iona Joseph, art dealers who have played a leading role in fostering and satisfying the taste for livestock portraits over the last twenty-five years. Alongside the naive paintings are works by some of the great names of British art, George Stubbs, James Ward, Thomas Bewick, or Edwin Landseer, but Elspeth Moncrieff's sympathies lie with the less sophisticated painters, who, she claims (somewhat unconvincingly) can tell us more about the nineteenth-century farm than many of the academic artists.

The paintings and prints illustrated date from the mid-eighteenth to the late-nineteenth century, a period when developments in agriculture aroused local and national pride, and farmers and landowners were keen to have their improved breeds exhibited and recorded for posterity. Many of the illustrations in this book demonstrate the advances in breeding made by Robert Bakewell and his successors; others, however, show animals that were bred, and fattened, more as fairground curiosities than as proof of the progress of agriculture. An example of the latter was the Lincolnshire Ox (painted by George Stubbs) which was exhibited at the Lyceum on the Strand along with a rhinoceros and three ostriches in the 1790s. There were big profits to be made: on one day in 1802 the Durham Ox, exhibited in London, raised £97 in admission fees, and 2000 copies of the print, after a painting by John Boultbee, were apparently sold in its first year. Elspeth Moncrieff shows that there were also major financial rewards for the artists, who could make a good living from animal portraiture.

The first three chapters are devoted to an overview of the historical circumstances which gave rise to these paintings, followed by biographical accounts of those artists whose lives are documented. In the second part, chapters are devoted in turn to developments in cattle, sheep, pig, heavy horse and poultry breeding, with the illustrations providing 'a unique record of the now rare or extinct animals which once grazed these lands' (p 13). The chapters on heavy horses and poultry (particularly the former, which is mostly illustrations) seem to be something of an afterthought, since there is little discussion of them in the earlier part of the book.

For the agricultural historian, there are both benefits and dangers in the study of livestock portraiture. The visual evidence is essential to any understanding of breeding developments in the eighteenth and nineteenth centuries; but it would be unwise to assume that these paintings are totally reliable indications of the actual appearance of the beasts they represent. Artists might be asked by their patrons to exaggerate proportions, or else artistic tradition and effective picture-making might gain the upper hand over scientific accuracy. In addition, as Elspeth Moncrieff acknowledges, many of the artists were simply too incompetent to produce an objective likeness. Probably the most useful images, from the historian's point of view, are the series of engravings and models made by George Garrard between 1795 and 1810, James Ward's unfinished commission from Boydell for depictions of all the breeds of domestic livestock in the British Isles in the same period, and the portraits made by William Shiels for David Low, Professor of Agriculture at Edinburgh University, in the 1840s. Elspeth Moncrieff discusses and illustrates these, but tends to dismiss such informative depictions as 'accurate but dull': her preference for the naive, the charming and the idiosyncratic means that both illustrations and text are slanted towards monstrosities and curiosities, rather than the images that might be sought out by the historian of agriculture.

Of course, the history of these exaggerated images is fascinating in itself, and raises many questions about attitudes to art and to animals in the period under review. This book, however, is one which collects information rather than analysing it in any depth. It seems to have been designed for dipping into, rather than reading right through. Material contained in one chapter is repeated in another without cross-referencing (the Durham Ox is just one of the animals which keeps popping up as if it had not been mentioned already). Illustrations are inserted in a rather haphazard manner, suggesting that the author had a large number of pictures to include and was not always able to do justice to them in the text. There is no overall argument or conclusion, the book ending almost in mid-sentence with the changes in turkey breeding in the 1960s. Recent searching books on British art, by authors such as John Barrell and Stephen Deuchar, are cited in the bibliography but have apparently made little impact on the author's approach. However, it would be ungenerous to criticize the book too

much from academic perspectives. Both in her text and in her illustrations, Elspeth Moncrieff has gathered together useful material from a wide range of sources. In the end, her book is a celebration of a distinctive genre in British painting, written for the enthusiast and the collector, and as such it fulfils its aims admirably.

CHRISTIANA PAYNE

T R GOURVISH and R G WILSON, *The British Brewing Industry, 1830–1980*, CUP, 1994. xxv + 690 pp. 94 tables; 10 figures; 83 plates. £60.

With the publication of this outstanding volume, brewing has acquired a fitting companion to the classic (1959) study by Peter Mathias of the years to 1830, making in all over 1200 pages. Consistently readable and firmly analytical, Terry Gourvish and Richard Wilson have provided a benchmark modern industrial history that significantly alters perceptions of UK brewing history, raises many new issues for follow-up local, regional, and case-study research, and provides a much-needed unitary vision of its development to replace the existing patchwork of dated monographs and business histories of varying quality.

Each author took primary responsibility for one part of the book, which is divided at 1914, and each covers the regulatory context, production, consumption, and elusive issues of taste, structure, location, and performance, distribution, and provides an analysis of management issues of unusual depth and interest. Necessarily, with around 70 per cent of UK barley consumed by the brewers in 1878, creating employment for nearly 100,000 persons, it is the first part of the book that most directly touches upon agriculture; increasingly, from the 1880s, other materials fed our brewing stocks, and imports invaded the redoubt of the British farmer. Barley remained the critical crop for light-land arable farming and withstood international competition more successfully than wheat before 1914, and English hops, highly concentrated into Kent, paralleled this experience to around 1880, before imports combined with home harvest failures and changing tastes to reduce their market share, and acreages had reduced by 1909 to less than half their peak level. Hops were purchased almost wholly through factors, still based on the Southwark market for much of the pre-1914 period, and while most breweries outside London and the largest cities integrated malting with brewing, many also purchased from agents, and the bulk of supplies continued to be made on traditional floors.

The focus of this study is brewing, and with the distancing of the industry nationally from its traditional small-scale processing of the product of domestic agriculture, farming too disappears from its coverage, appearing only in the industry's propaganda. The countryside recurred as an element in advertising from Guinness's use of golf and cricket in its first national press campaign in 1929; beyond the Second World War brewing was a massive user of horses for urban cartage; and landownership appeared in the proprietors of the Tadcaster Tower Brewery, known as 'Nobs' because of its genteel board, and in the land purchases of the more successful members of the beerocracy, but for the bulk of the period covered here, brewing was increasingly a scientific biotechnology and property business. The narrowly agricultural historian will therefore find relatively little of this book of direct concern.

That said, its principal findings are exciting and challenging to existing orthodoxy. The impact of the Beer Act of 1830 is shown here to have been more limited than once thought, inducing less structural change than anticipated; the growth of the tied house began in mid-century, and cannot be related directly to its repeal; and the quest for property is shown to have been generally damaging to the brewers' fortunes after 1900. Post-1914, new perspectives are provided on conservative management, technical changes, and the growth in branding and advertising, before the hectic structural changes that began in the mid-1950s, and the onset of the processes creating the modern industry. All are set in the wider context of analysis of UK economic performance, and evaluation of managerial strategies, providing a breadth of vision and analysis that establishes this as a book of major significance.

Until very recently, except for its raw material base, British brewing has enjoyed a high degree of insulation from world markets; as the 'Postscript' makes clear, this is changing, while leaving a high degree of local and regional diversity in brews and pubs, and the industry will remain an enticing object for continuing historical analysis. It is to be hoped that its future historians match up to the exacting standards set by the present authors.

J A CHARTRES

IAN ROSS ROBERTSON, *The Tenant League of Prince Edward Island 1864–1867: Leasehold Tenure in the New World*, University of Toronto Press, 1996. xxi + 397 pp. 7 tables; 10 maps; 23 illus. Pbk £18.50.

A great deal of research has gone into the making of this carefully-presented book. Its starting point is the predominance of leasehold tenure in Prince Edward Island (which lies off Nova Scotia in the Gulf of St Lawrence), in contrast to freehold tenure which was the rule over part of the Island and, of course, the greater part of North America.

The farmers of Prince Edward Island who were not proprietors of the land they worked paid rent to large landowners, numbers of them absentees like Sir Samuel Cunard, owner of the largest estate on the island. The author draws some parallels and contrasts with contemporary Scotland and Ireland. The major differences were that in P E I leasehold tenure was combined with representative institutions based on broad male franchise, while recent experience of pioneering was associated with New World expectations of freeholder status.

The Tenant League, founded in 1864, led the movement to overturn the leasehold system, which had been imposed almost a century before. Its strategy involved refusal to pay rent and provision of support for those who defied the landlords. Numerous incidents followed, some of them violent, and tenants countered assertions of landlords' rights by offering to purchase their holdings. The dimensions of the problem are interesting: over the whole island a little more than 39 per cent of the land occupiers of 1861 were freeholders (owning some 35 per cent of the land), and nearly 53 per cent were tenants; squatters accounted for the remainder of the 11,241 occupiers. No doubt the Leaguers' hostility towards their landlords was inflamed by the large number of neighbouring freeholders, two to every three tenants and squatters. There is uncertainty over the numbers of those supporting the League but no doubt about the large number of incidents which flared up when attempts were made to collect rents and arrears.

The importation of troops brought about the collapse of the League as a formal organization but by no means ended the demand for freehold tenure. When the troops withdrew in 1867 fresh outbursts of resistance occurred. In the meanwhile, however, the League's objective was being achieved: the government purchased the nearly 213,000 acres owned by Cunard, and a number of smaller estates, totalling nearly 27,500 acres, had been sold to their occupiers. The Tenant League did not revive after the withdrawal of the troops because by then conversion to freehold was developing rapidly. By 1871 the acreage occupied by freeholders had risen to nearly 68 per cent, an increase of over 20 percentage points as compared with the 1861 figures. Contrary to the view of earlier historians, the author believes that the League was crucial in bringing about this dramatic change, and it subsequently remained a force in the politics of the island.

This is a highly detailed study, and in its close examination of the role of individual characters and incidents of resistance is really a large-scale local history, which the illustrations help bring to life. On its own merits this is an interesting story, and the author always has in view its relevance to events elsewhere, and particularly to the broader history of Canada.

G E MINGAY

MICHAEL TURNER, *After the Famine: Irish Agriculture, 1850–1914*. CUP, 1996. xv+313 pp. £35.

This is a labour of love, clad in a jacket showing a roofless, deserted, croft on Achill Island, Co Mayo, described in a tautologous rush of pride as 'the maternal birthplace of the author's mother'. Does this mean simply the birthplace of the author's mother, or is it a reference to a special kind of birthplace? No matter; as she looked back on her abandoned home the author's mother is unlikely to have foreseen that she in turn would give birth to an agricultural historian. This is also an important agricultural history, a statistical account of Irish agriculture which in places is as tough going as scratching a living on Achill Island must have been. Ireland has one of the best sets of agricultural statistics in the world, collected annually from 1847, antedating the British series by nearly twenty years and long remaining superior to them in quality and range of information. Not the least value of this book is that Turner reproduces in an Appendix the annual figures from 1847 to 1914 of the national totals for the main categories of crops and livestock; although these figures are available elsewhere, for instance in Mitchell's *European Historical Statistics*, it is useful to have another source. The Irish statistics have long been used by historians and geographers, and indeed one of the features of this book is the gentle but firm criticism which Turner hands out to earlier, and recent, users such as Mokyr, Ó Gráda, Solar, Solow, or Vaughan, and indeed his earlier self. No previous work, however, has made such systematic, thorough, and dedicated use of the series, and it is chiefly as a fruit of his thoroughness in handling the entire time series and avoiding the pitfalls of measuring trends from peaks to troughs or vice versa that he is able to point out the errors of his predecessors in the field.

A new orthodoxy has been emerging in nineteenth-century Irish agrarian history, that the Land War of the end of the 1870s and early 1880s came after three decades of growing agricultural prosperity when tenants had been gaining at the expense of the landlords, and was in effect an attempt by them, incited by unscrupulous agitators, to ensure that rents remained a permanently lower proportion of total agricultural income, standing the received view pretty much on its head. Turner is just about in time to nip this in the bud. In his first essay on Irish agricultural output and productivity, in 1991, he swept aside the three decades of post-Famine prosperity and in their place installed three decades

from the early 1850s to the late 1870s of almost unchanged total output, if measured in current prices, or of falling output measured in constant prices, with a sharp fall in real farming profits which reinstated a clear economic justification for the Land War. Such is the versatility of statistics, however, that the newly calculated series in this book, with modified assumptions about product prices and marketed proportions, offer a much less emphatic picture. The revised estimates, backed by detailed explanations of the estimating procedures and thorough discussion of the grounds for each choice and each guess, are definitely to be preferred. What they show is increasing prosperity, but a moderate 30 per cent growth in output rather than the 70 per cent claimed by some revisionists, a virtually flat trend in real output, and a slight rise in the farmers' share, as the 30-year background to the Land War. The economic environment has now become one of rising expectations in the 1870s which were rudely dashed by the disastrous year 1879, the falling prices of that and the next few years, and the failure of landlords to reduce rents fast and far enough to suit the tenants' wishes. This is plausible, but unconvincing as a complete explanation of the willingness of Irish farmers to resort to the violence of the Land War.

Wisely, the economic explanation of essentially political behaviour has not been made a central concern. The book is about the exploitation of statistics, not the exploitation of tenants. The continuous annual output series, expressed in current prices, constant prices, starch equivalents, and calories, are the major achievement. One of the curiosities of technical jargon is that the fluctuations in the real value, or volume, of total output measured by constant prices are referred to as the 'constant volume index', but the wide year to year variations between 1850 and 1880 and the broad stability thereafter until real growth got under way in the early 1900s are unmistakeable. The large oscillations of the decades before 1880 were to a great extent the product of the dramatic shift from arable crops to livestock products which characterized the adjustment to the disasters of the Famine and the opportunities of the British market. Irish agriculture led the way in this shift towards livestock, ahead of Britain and the way ahead of anywhere else in Europe; there is a sense, however, since Ireland and Britain were parts of a single UK market, in which the Irish region might be regarded as simply that part of the UK agricultural economy best suited to livestock production. The arable sector continued to dwindle in importance after 1880, but inevitably at a much slower rate since it had already shrunk to less than a quarter of total output, by value. The limited scope for further relative expansion of the livestock sector may have been one reason why the performance of Irish agriculture, which Turner argues was the best in Europe in the third quarter of the century, fell behind that of Denmark and the Netherlands between 1880 and 1914 (while remaining much better than that of Britain); though it should be remembered that Denmark's high showing was not achieved by any switch from arable to livestock, since her agriculture made productivity gains in both sectors.

At this point social and tenurial arguments are invoked, the thesis being that the essential difference between Denmark and Ireland was that Danish farmers were owner-occupiers and the Irish were tenants. Only when the magic of ownership spurred on the Irish farmer – 3 per cent of holdings were owner-occupied in 1870, 46 per cent by 1908, over 60 per cent by 1914 – did his performance improve significantly. This is plausible, and there are figures of output per head of the agricultural workforce showing a sharp rise from the early 1900s to support it. From the landlords' point of view, however, the three F's of 1881 gave their tenants a species of virtual ownership, or dual ownership, of their holdings, since they became irremoveable and their rents became unalterable except downwards, and yet this tenurial change apparently had little effect on economic performance. Moreover, the period when Ireland was said to be in the van in Europe, the third quarter of the century, was also the period when Irish tenant farmers were least secure. Again, a further set of figures indicates that real agricultural output per head in Ireland actually fell between the early 1850s and the late 1870s. It is all a trifle confusing, and tends to feed the old prejudice that statistics can be made to prove anything.

There is much else in this book besides output measurements. Labour productivity, and the labour inputs into different crops and livestock products, are taken to new levels of sophistication, although it has proved impossible to put a reliable value on the labour input of farmers and members of their families, which is a particular drawback in the Irish context of small farms and little hired labour. The size of holdings, and changes in their distribution over time, are indeed meticulously analysed in the early part of the book, in which the headlong collapse in the number of minute holdings of less than one acre is highlighted as the most dramatic consequence of the Famine. From the early 1850s to 1914 the stability of the pattern of the distribution of holdings between different sizes is its most striking feature, with more than 60 per cent of the holdings throughout the period lying between 1 and 30 acres. Curiously, Turner omits to tell us how significant holdings of different sizes were to the national economy in terms of their contri-

butions to farming activity, although he provides the data from which rough estimates can be made. These show that the holdings of 1 to 30 acres occupied 23 to 25 per cent of the land area of Ireland, holdings of 30 to 100 acres some 34 to 36 per cent of the area, and holdings of over 100 acres 42 to 43 per cent, with little change over time. The typical Irish farm, indeed, in terms of the area occupied, was over 50 acres, making it perhaps closer to British than to other western European models. Somewhat confusingly in analysing the number of holdings in different size groups Turner slips into calling this 'an analysis of the larger landownership groups' (p 87), since it has earlier been established that in 1870 only 3 per cent of holdings were owner-occupied (rising to 46 per cent by 1908) (p 72). He has been let down by his proof reader over the random transposition of the headings for the four graphs (pp 19–20) setting out changes in the acreages of crops, 1847–1914. But this can hardly explain the statement (p 21) that 'in 1861 there were 195.5 acres of potatoes per head of population, but by 1881 this had fallen to 165 acres per head and thence to 160, 143 and 135 acres per head in 1891, 1901 and 1911'. Homer has indeed nodded and sorely misplaced his decimal points. With potato yields veering between two and four tons an acre, such figures would put consumption at somewhere between 270 and nearly 800 tons per head per year, quantities, even allowing that more than half the crop was eaten by the pigs, far beyond even the legendary capacity of the Irish stomach. As all of us become more reliant on calculators and computers there is something to be said for periodic rough visual checks, rather as shop assistants in Russia still check their cash registers against an abacus. No one is likely to be seriously misled by the potato blight, and Turner's heroic engagement with a monumental mass of statistics will be widely appreciated as a big step towards a more precise and accurate assessment of what happened in Irish agriculture after the Famine.

F M L THOMPSON

ANDREW HUMPHRIES, *Seeds of Change: 100 Years* [sic] *Contribution to Rural Economy, Society and the Environment*, Newton Rigg College, 1996. vi+131 pp. nps.

In 1908 the report of the Reay Committee on Agricultural Education in England and Wales recognized that agricultural education as it existed at the time was failing to provide for the needs of the less well off farmers and the farm workers, who might not need and certainly could not afford the courses then offered by the universities and colleges. Reay therefore suggested that each county council should set up a farm institute to provide the appropriate training. Newton Rigg, in Cumbria, of which this book is the centenary history, claims to be the first of these.

Agricultural education first arrived in Cumberland in the form of Aspatria College, an initiative of local farmers and landowners which opened in 1874. Its courses and fees were specifically aimed at the sons of small farmers, and it achieved national recognition after the remarkable Dr Henry J Webb, writer of agricultural textbooks and record-breaking tricyclist, became principal in 1886. Humphries provides, in chapter 3, the only modern account of the rise and (in 1914) demise of Aspatria. From the 1890s the county councils of Cumberland and Westmorland were also involved in the provision of agricultural lectures at various centres, and travelling dairy schools. Shortly after they had agreed on the desirability of establishing a fixed dairy school and farm as a joint venture, the Newton Rigg estate on the borders of the two counties became available. It was acquired, and in 1896 enrolled its first students. Thus it was in being when the Reay Committee met, and its example, and the evidence given by its staff, were undoubtedly influential in the committee's eventual recommendation that counties should establish farm institutes as local centres of practical education and advisory work.

Most of the first three-quarters of the book is concerned with telling the story of the establishment of Newton Rigg and its development up to the end of the Second World War. There were problems of small student numbers and cash shortages, and one of the principals had to be, in effect, sacked, but the place survived. Andrew Humphries has delved extensively in its annual reports, in county council minutes, and in the archives of the local newspapers, (all sometimes rather idiosyncratically referenced) to produce a detailed account of its origin and growth, set against the agricultural and educational background, and well illustrated with photographs from what is clearly an impressive college collection. It should be noted, however, that some points escaped the proof-reader: surely yarrow would have been a safer component of the Clifton Park seeds mixture than yew (p 40)?

The Newton Rigg story after 1945 was in some ways typical of the farm institute sector: the separation from the advisory services, the expansion in teaching, both intra- and extra-mural, matched by the physical expansion in the buildings, for example. But not all farm institutes did as much research, or as much pioneering radio and television work, or had principals of the prominence of Jim Hall.

Typical, too, was the process of diversification after the heady days of agricultural expansion in the 1950s, '60s, and '70s came to an end. Newton Rigg

College, like other former farm institutes, is now an independent corporate body, with a range of subjects extending from farming and forestry to nursery nursing and floristry, at anything from first degree to National Certificate level. The university and college sectors have gone through the same kind of process since 1980. Perhaps the most interesting point to remember is that the changes appear to have just happened, without any great process of official thought. Few developments in agricultural education in supposedly *laissez-faire* Victorian England came about without at least one and sometimes several committees taking evidence and deliberating upon their significance. Equally, post-war developments in agricultural education were carefully considered by the Luxmoore Committee in 1943, and further changes by the Bosanquet Committee in 1964. But the post-1980 changes, the most dramatic of all, have been brought about by market forces, without any official evidence-taking or deliberation on the national interest. There are differing views on the desirability of the process. Should Newton Rigg's GNVQ courses on health and social care, and hospitality and catering, be seen as educational sensitivity to local demand in a rural area with significant retirement and tourism interests, or are they evidence of an institution faced with the decline of its major client industry, desperately scratching around for anything that will put bottoms on seats in times of tight funding? Should Newton Rigg and places like it be engaged in education in an academic atmosphere or training in a commercial environment? Is this book, indeed, a justifiable celebration of well-merited institutional pride, or a rather sophisticated exercise in business image creation? Perhaps we need a new Reay Committee to think about it.

PAUL BRASSLEY

MICHAEL WINTER, *Rural Politics: Policies for Agriculture, Forestry and the Environment*, Routledge, 1996. xiv+341 pp. £47.50 (hbk); £15.99 (pbk).

There are good economic and social arguments, involving strategic considerations, the balance of payments, and the maintenance of rural communities, *inter alia*, for supporting farm incomes; many of them would apply with equal force to small shopkeepers and the coal and steel industries, yet while agriculture is supported these other industries are not. Most of the arguments for farm income support currently advanced might also have been put forward between 1875 and the 1930s, but agriculture then was left at the mercy of world markets. At different periods, against much the same economic and social background, some governments have decided in favour of support for the agricultural industry while others have decided against: farm income support is not an economic but a political issue. In which case one might expect that when a large proportion of the labour force was involved in farming, and the country was largely run by landowners, farm incomes would be supported. Equally, when farmers and farm workers form less than 2 per cent of the labour force and large landowners are a small minority in the Cabinet, one might expect farming to be left to its own devices. In practice, of course, the outcome has been exactly the reverse. The resolution of these paradoxes rests on the political power of the farming lobby; but if it is now so powerful, how can we account for the rise of the farm animal welfare and environmental lobbies over the last twenty years?

Professor Winter attempts to unravel these complexities. His book's claim to be noticed in this *Review* rests principally upon four of its twelve chapters, in which he has set his analysis of rural politics in its historical context. He does this, he explains, from necessity as well as inclination: 'My aim is to show how contemporary debates are shaped by forces deeply rooted in political, cultural, social and economic history' (p 2). For example, he argues, how can the influential legislation of the late 1940s be understood in isolation from pre-war developments and debates?

The first of the three parts into which the book is divided provides a concise and intelligible introduction to the -isms (formalism, élitism, marxism, pluralism and corporatism) used by various policy analysts, together with an account of the institutional framework within which policy now evolves. In the second part, the two chapters dealing with the history of agricultural politics before 1973 are pivoted round the Second World War. The first covers the shift of the agricultural policy debate from landlords in Westminster to the National Farmers Union, ministers and civil servants in Whitehall. Winter follows Cooper's work on inter-war Conservative politics in identifying Walter Elliot's years at the Ministry of Agriculture between 1932 and 1936 as 'a turning point in the relations between the state and the government' (p 99). From then onwards the corporatist model, he argues, provides the best explanation of the evolution of agricultural policy. In logical fashion, therefore, the following chapter deals with the dominant post-war role of the NFU in policy formulation and implementation. This dominance was largely founded, in Winter's view, on the NFU's monopoly of representation, although he mentions, in the following chapter on agricultural policy in Europe, the supporting pressures from the agrochemical and machinery industries. It is tantalizing to find that this alternative aspect of corporatism, once briefly recognized (on p 166), is not explored further.

The other facets of rural politics covered here are the environment and forestry. Again, current issues are set in their historical background, with a chapter tracing the origins of environmental concerns back to the nineteenth century and sometimes earlier, and part of one on forestry policy exploring its development before the establishment of the Forestry Commission in 1919. Clearly these are *national* concerns, and the surprising omission from this book, given its title, the controversial nature of rural housing, the impact of rural recreation, the curious history of the relationship between the planning system and agriculture, and even Winter's own experience as a long-standing member of his own parish council, is any mention of *local* politics in the countryside. This book is about the politics of survival of British agriculture, the disappearance of which, confidently predicted at various points in time between the Repeal of the Corn Laws in 1846 and the reform of the Common Agricultural Policy in 1992, and *pace* BSE, has yet to occur.

PAUL BRASSLEY

ELIZABETH STANBROOK, *Dartmoor Forest Farms: A Social History from Enclosure to Abandonment*, Devon Books, 1994. 129 pp. Illus. £8.95.

Writing about the dwelling place where a nineteenth-century stone waller lived, Elizabeth Stanbrook expresses the hope that 'John Bishop's house will not be allowed to fall into total decay but will continue to be maintained so that future generations can see where one of Dartmoor's best known dry-stone wall builders lived'. This structure, and similar ruins, may survive through the deliberate intervention of arrested decay, but what of the stories of the people associated with them? Will these survive? Are the stories known? In this book Stanbrook has drawn on an extensive range of sources to reconstruct the histories of nine farmsteads that were created within the Forest of Dartmoor during the last three hundred years and of the people who lived in them.

The content of Stanbrook's book is well-researched and original. Evidence has been gathered from a wide range of sources: lease books, parish registers, private papers, farm and tenancy documents, newspapers, court rolls, census returns, company files, Duchy of Cornwall records, minute books, tenancy documents, wills, sale catalogues, and land tax assessments. The eighteenth to the early twentieth century was a period of great change with the arrival of 'improvers' and their attempts to tame and enclose vast tracts of moorland. As the Duchy of Cornwall is the major landowner, written records abound, but they are not easily accessible to the public.

Above all, the author's use of oral history enables the reader to acquire a sense of place and offers an insight into the day-to-day lives of the people involved. She provides stories of native people and of incomers from Ireland, Middlesex, Gloucestershire and Dorset, and explores themes such as the nature of agricultural improvement, waxing and waning interests and ambitions, the complexities of leases, sub-leases and short tenancies, bankruptcies, neighbour disputes, battles against the odds, daily routines and the lives of children.

Precise details of agricultural history range from the date (27 May 1877) when Scottish Black Face sheep were introduced to Dartmoor to the derivation of place-names such as Rails from timber poles on upright granite pillars erected to prevent livestock from wandering off enclosed land on to the open moor. The chapter on Huntingdon Warren – one of the last rabbit warrens on Dartmoor – is particularly informative.

The bibliography, index and references are comprehensive. Defects include the poor quality of the paper, the lack of a conclusion or personal overview, and the failure to capture the physical remoteness of the farmsteads. The one map that is provided merely shows approximate locations; large-scale maps of each farmstead would have been useful. Nevertheless, this is a sympathetic and scholarly account.

JOHN WEIR

Notes on Contributors

JEREMY BURCHARDT is a Lecturer in Rural History at the Rural History Centre in the University of Reading. After completing his PhD thesis on the allotment movement in nineteenth-century England, he was principal research officer of the Hampshire Transport Research Programme. He is currently writing a book about allotments in nineteenth- and twentieth-century England, and is also working on the contribution made by other forms of small-scaled landholding to the rural economy and society. His other research interests include urban perceptions of the countryside in twentieth-century Britain and the changing place of farmers within village society since 1945.

RICHARD MOORE-COLYER is Professor of Agrarian History in the University of Wales. He has published extensively on a variety of subjects relating to the history of agriculture and rural society from the eighteenth to the twentieth century. Current interests range from the prehistory of Welsh agriculture through the rural history of Northamptonshire to the more recent history of the rural environment in Wales and the West Midlands of England.

MICHAEL FREEMAN has taught geography at the University of Oxford since 1975. Among his recent publications are *Atlas of Nazi Germany: A Political, Economic and Social Anatomy of the Third Reich*, Longman, 2nd edition, 1995; and 'Plebs or predators: deer-stealing in Whichwood Forest, Oxfordshire, in the eighteenth and nineteenth centuries', *Social History* 21, 1996, pp 1–21. He is presently writing a book for Yale University Press on railways and the Victorian imagination.

P D A HARVEY has been Professor Emeritus of Medieval History at the University of Durham since 1985. Before becoming a lecturer at the University of Southampton in 1966 he had been employed in the Warwick County Record Office and the Department of Manuscripts at the British Museum, and he has a continuing interest in archives and records preservation; he is currently Chairman of the British Records Association. His work on the medieval records of Cuxham, Oxfordshire, begun in 1953, resulted in a book on the village (1965) and an edition of its records (1976). He continues research and publication on the agrarian and social history of medieval England, as well as on the history of cartography.

EDWARD I NEWMAN is at the School of Biological Sciences, University of Bristol, where he has been based for nearly thirty years. His teaching has been mainly on ecology. He is the author of a text-book, *Applied Ecology* (Blackwell Science, 1993). His research interests centre around relations between plants and soil, including nutrient cycling, nutrien acquisition by plants, and the role of soil fungi. In the past this research has involved laboratory and field experiments; his move into historical ecology is fairly new.

EDMUND PENNING-ROWSELL is Professor of Geography and Pro Vice-Chancellor at Middlesex University. His initial research interests at University College London were concerned with hydrology. More recently he has been examining the role of government in agricultural change in Britain, 1917–22.

THE AGRICULTURAL HISTORY REVIEW

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CONTENTS

Did Soil Fertility Decline in Medieval English Farms? Evidence from Cuxham, Oxfordshire, 1320–1340
E I NEWMAN and P D A HARVEY

Whichwood Forest, Oxfordshire: An Episode in its Recent Environmental History
MICHAEL FREEMAN

Land and People in Northamptonshire: Great Oakley, *c* 1750–1850
RICHARD MOORE-COLYER

Rural Social Relations, 1830–50: Opposition to Allotments for Labourers
JEREMY BURCHARDT

Who 'Betrayed' Whom? Power and Politics in the 1920/21 Agricultural Crisis
EDMUND C PENNING-ROWSELL

List of Books and Pamphlets on Agrarian History, 1996
V J MORRIS

Conference Report

Book Reviews

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