

**ESSEX AGRICULTURE:
LANDOWNERS' AND FARMERS' RESPONSES
TO ECONOMIC CHANGE, 1850 - 1914**

Thesis submitted for the degree of Ph. D., University of London.

Stephen John Pam

L.S.E.

(2004)

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Essex Agriculture: Landowners' and Farmers' Responses to Economic Change, 1850-1914.

Abstract

This thesis responds to the perennial quest for regional and local investigations into agricultural history, a theme reiterated in the recently published volume of the *Agrarian History of England and Wales*. It examines landownership and farming in Essex c.1850 and 1914, a large county with a variety of soils and market accessibility enabling investigation of the broader debate on agriculture. It has made use of official sources and returns, newspapers, oral evidence and, in particular, Essex estate papers, many of which have not been used before.

Existing interpretations of 'golden age' agriculture are challenged. The period, it is suggested, saw but modest prosperity and was characterised by continuity rather than change. Rents rose only modestly, investment levels were far lower than most previous accounts have suggested, there is evidence of a retreat from leadership by landowners, increased reliance on wheat, and only a limited movement towards livestock and 'high farming'. Yet such continuity and apparent conservatism was rational given the constraints and opportunities available to Essex landowners and farmers.

This work also disputes the oft-made claims that south-eastern agriculturalists were in the vanguard of managerial and entrepreneurial failure in the subsequent depression, that structural change in the face of collapsing cereal prices was inadequate and insufficient attention paid to the example set by Scottish migrant farmers. In fact, analysis shows that despite far from clear market signals, most Essex farmers and landowners responded rationally, adequately and appropriately. Essex evidence

affords little support to Avner Offer's attack on the tripartite system. Most landlords were good managers and supported tenants, but the evidence does suggest some entrepreneurial shortcomings. This thesis, therefore, contributes not only to debates about Victorian and Edwardian agriculture, but also to the wider debate on British managerial and entrepreneurial performance in the period.

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I wish to thank a number of people who have helped me as I worked to produce this thesis. First, Dr. P.J.Perry, who suggested the idea of this topic for research. Professor A.H.John and Dr. E.H.Hunt have given invaluable help, suggestions and support as supervisors. Dr. E.J.T.Collins provided several ideas for further research that have proved useful. Oral evidence was kindly given by the late Sir Richard Barrett-Lennard, Hugh Gemmill, Dr. Kenchington and J.A.Matthews, and I wish to thank all of these for hospitality as well as their time. A.E.Johnson of the Institute of Arable Crops Research (I.A.C.R.), Rothampstead gave me useful information on growing grasses on clayland and Audrey Lyons on Scottish families farming in Essex.

Special thanks are due to the staff of the Essex County Record Office, where most of the research was done, for their kindness and support, and the staff of the library at I.A.C.R. Rothampstead, who have allowed me to use their facilities. Other acknowledgements are made, where, appropriate, in footnotes. To all the above I am most grateful.

Whilst acknowledging the above help, I confirm that the work presented in this thesis is my own work.

A handwritten signature in black ink, appearing to read "Stephen John Pam". The signature is fluid and cursive, with a long horizontal line extending from the end of the "n" in "John".

Stephen John Pam

Work published jointly with my supervisor

Together with my supervisor, Dr. E.H.Hunt, I have published four articles and one LSE working paper on agricultural history, 1850 to 1896 with special reference to Essex, the subject of this thesis.¹ These papers were produced jointly, arising out of our shared interest in agricultural history and from working together for several years. The greater part of the original research they contain was undertaken by me in the course of preparing this doctoral thesis, and the first article was based closely on the early chapters of this thesis. Some of the prices and some of the parish land-use evidence used in the *Economic History Review* articles were collected and analysed by Dr. Hunt, Lesley Stringer assisting in the collection and in getting evidence from contemporary newspapers and journals. Dr. Hunt was responsible for the original drafts of all the publications, the final drafts being produced jointly. The papers do not form an integral part of this thesis, are not being submitted in support of the thesis, no extensive passages from them are reproduced herein, and all references to findings that did not originate in the preparation of this thesis are acknowledged in the footnotes.

¹ E.H.Hunt and S.J.Pam, 'Essex Men Vindicated: Output, Incomes and Investment in Agriculture, 1850-73', L.S.E. Working Paper, no. 15, (1993), *idem.*, 'Essex Agriculture in the 'Golden Age', 1850-73', *Ag.H.R.*, xlivi, pt. 2, (1995), pp.160-177, *idem.*, 'Prices and Structural Response in English Agriculture, 1873-1896', *Ec.H.R.*, I, no. 3, (August 1997), pp.477-505, *idem.*, 'Managerial Failure in Late Victorian Britain?: Land Use and English Agriculture', *Ec.H.R.*, liv, no. 2, (May 2001), pp.240-266, *idem.*, 'Responding to Agricultural Depression, 1873-96: Managerial Success, Entrepreneurial Failure?', *Ag.H.R.*, I, pt. 2, (2002), pp.225-252.

Statement

I confirm that the statement presented on the previous page by Stephen Pam on jointly published work is correct, and that the work presented in this thesis is his own.

Dr. E.H. Hunt
London School of Economics

A Ploughman, Rochford c. 1902, .



E.R.O., Photograph Collection

Abbreviations used for journals

Agricultural History	Ag.H.
Agricultural History Review	Ag.H.R.
Country Life	C.L.
Economic History Review	Ec.H.R.
Essex Farmers' Journal	E.F.J.
Journal of the Board of Agriculture	J.B.Ag.
Journal of the Royal Agricultural Society of England	J.R.A.S.E.
Journal of the Royal Statistical Society	J.R.S.S.

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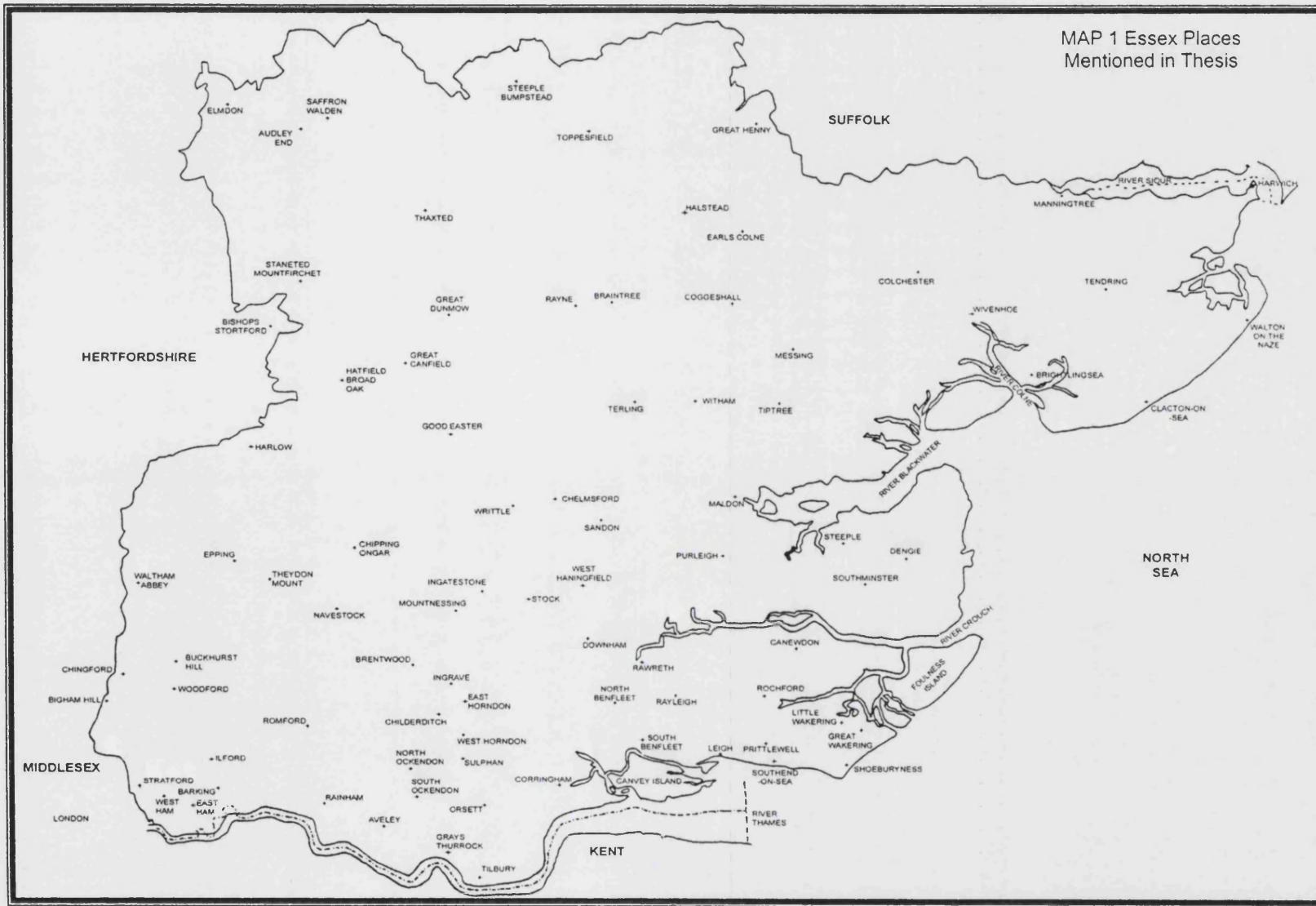
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MAP 1 Essex Places
Mentioned in Thesis



Chapter 1

Introduction

1. English Agriculture and Essex Agriculture: Historiography and Problems

The well-worn phrases "high farming", "great depression" and "recovery" have been used to describe the changing state of English agriculture from the mid nineteenth century to the eve of the first world war. This tripartite division is derived from the writings of Lord Ernle,¹ who believed that the 1850s and 1860s were decades of agricultural prosperity which "rapidly ebbed" after 1874. He described the last quarter of the nineteenth century as a period of widespread agricultural depression, followed by modest recovery to 1914. Ernle's interpretation, backed by the proceedings of the two *Royal Commissions* of 1879-1882 and 1894-1897,² and by statistical evidence based on cereal prices and on rent levels, remained unchallenged until the late 1950s, despite the appearance of two works estimating agricultural output and one analysing rent movement during the depression.³

In 1959 and the early 1960s, a number of general and regional studies were published challenging the accepted view and giving a substantially different picture of English agriculture between 1850 and 1914.⁴ The 'depression' years received particular attention. Fletcher's work stressed the regional and sectoral nature of the post 1873

¹ R.E. Prothero (First Baron Ernle), *English Farming Past and Present*, (6th ed., 1961), chapter 18, (original edition 1912).

² *Report of the Royal Commission on the Depressed Condition of the Agricultural Interests*, (B.P.P., 1881 xv, xvi, xvii; 1882 xiv, xv); *Report of the Royal Commission on Agricultural Depression*, (B.P.P., 1894 xvi pts. 1, 2, 3; 1895 xvii; 1896 xvi, xvii; 1897 xv).

³ E.M. Ojala, *Agriculture and Economic Progress*, (Oxford, 1952), J.R. Bellerby, *Agriculture and Industry Relative Income*, (1956), H.A. Rhee, *The Rent of Agricultural Land in England and Wales, 1870 - 1914*, (1946).

⁴ T.W. Fletcher, 'The Great Depression of English Agriculture, 1873-96', *Ec.H.R.*, 2nd. Ser., xiii, no.4, (1960-1), pp.417-432; *idem.*, 'Lancashire Livestock Farming during the Great Depression', *Ag.H.R.*, ix, pt. 1, (1961), pp.17-42; J.T. Coppock, 'Agricultural Changes in the Chilterns, 1875-1900', *Ag.H.R.*, ix, pt. 1, (1961), pp.1-16; F.M.L. Thompson, 'Agriculture since 1870', in E.Critall (ed.), *V.C.H. Wiltshire*, iv, (Oxford, 1959), pp.92-114.

'depression'. He showed that alongside decline in some sectors of the agricultural economy, there was change, restructuring and expansion in others, and that 'depression' was mainly a crisis in the cereal growing south and east of England, a thesis confirmed by the writings of Coppock and Thompson. Revisionism went so far as to claim that depression in cereal growing areas was due to landowner and farmer incompetence.

Subsequent research on rents, output and productivity,¹ whilst recognising Fletcher's views to be an oversimplification, has generally supported the view that 'depression' was in the main a cereal growing problem,² but debate has ensued over the response of farmers to falling cereal prices. Perry, Kindleberger and Offer³ have followed Fletcher's lead in asserting that the 'depression' was primarily the result of farmers failing to respond sufficiently to market signals and in clinging to wheat rather than further diversifying into more profitable products. Such authors assert that structural change was inadequate, and see a continued commitment to wheat, reduced gross output and the extension of 'low farming' as indicators that agriculture, especially in the south east of England, 'failed'. Landowners and farmers are accused of failing to sufficiently exploit high yielding alternatives to cereals such as dairying, eggs, bacon,

¹ M.E.Turner, J.V.Beckett and B.Afton, *Agricultural Rent in England, 1690-1914*, (Cambridge, 1997); F.M.L.Thompson, 'The Anatomy of English Agriculture, 1870-1914', in B.A.Holderness and M.Turner (eds.), *Land, Labour and Agriculture, 1700-1920: Essays for Gordon Mingay*, (1991), pp.211-240; C.O'Grada, 'British Agriculture, 1860-1914', in R.Flood and D.McCloskey (eds.), *The Economic History of Britain since 1700*, ii, (2nd ed., Cambridge, 1994), pp.145-172; M.E.Turner, 'Output and Prices in UK Agriculture 1867-1914 and the Great Agricultural Depression Reconsidered', *Ag.H.R.*, xl, pt. 1, (1992), pp.38-51; *idem.*, 'Agricultural Output, Income and Productivity', in E.J.T. Collins (ed.), *The Agrarian History of England and Wales*, vii, 1850-1914, (Cambridge, 2000), pp.224-320.

² As shown, for example, in R.Perren, *Agriculture in Depression, 1870-1940*, (Cambridge, 1995).

³ P.J.Perry, 'Where was the Great Agricultural Depression? A Geography of Agricultural Bankruptcy in Late Victorian England and Wales', *Ag.H.R.*, xx, pt.1, (1972), pp.30-45; *idem.*, *British Farming in the Great Depression, 1870-1914: An Historical Geography*, (Newton Abbot, 1974); *idem.*, (ed.), *British Agriculture 1875-1914*, (1973); C.P.Kindleberger, *Economic Growth in France and Britain 1851-1950*, (Cambridge, Massachusetts, 1964); A.Offer, *The First World War: An Agrarian Interpretation*, (Oxford, 1989). Danish agricultural transformation is described in M.Tracy, *Government and Agriculture in Western Europe, 1880-1988*, (Hemel Hempstead, 1989).

pork and horticulture. In particular, Van Zanden and Offer have criticised them for failing to transform English agriculture along Dutch and Danish lines,¹ arguing that lack of co-operation and small farms, farmer aversion to manual labour and the tripartite system itself hindered such a transformation. Naturally there have been detractors from the above views: both O'Grada and Thompson have questioned how far landowners and farmers 'failed', the latter providing evidence of successful management.² Textbook accounts, however, still tend to accept Fletcher's analysis and accuse arable farmers and, to a lesser extent, landowners of poor management.³ The apparent success in East Anglia of innovating Scottish, Lancastrian and West Country migrant farmers is thought to provide further evidence to support this thesis. Interestingly, most of the above works focus on the 'great depression' era, the period 1896 to 1914 remaining relatively under-investigated, even in the recent volume of the *Agrarian History of England and Wales*.

For the earlier period, the high farming 'golden age', Kain and others exploited the tithe files to advance understanding of agriculture prior to mid century,⁴ and Thompson argued that the high levels of investment by owners and farmers justified regarding these years as part of the 'second agricultural revolution',⁵ whilst Jones questioned the basis of agricultural prosperity and, using mainly price evidence,

¹ J.L. Van Zanden, 'The First Green Revolution: The Growth of Production and Productivity in European Agriculture, 1870 – 1914', *Ec.H.R.*, xliv, no. 2, (May 1991), pp.215–239; Offer, *First World War*, chs. 7, 8.

² O'Grada, 'British Agriculture'; Thompson, *Anatomy*; *idem.*, in P. Mathias and J.A. Davis (eds.), *The Nature of Industrialization, iv, Agriculture and Industrialization from the Eighteenth Century to the Present Day*, (Oxford, 1996), ch. 2.

³ e.g. F. Crouzet, *The Victorian Economy*, (1982), pp.171, 173; P. Mathias, *The First Industrial Nation*, 2nd ed., (1983), p.318.

⁴ R.J.P. Kain, 'Compiling An Atlas of Agriculture in England and Wales from the 1840 Tithe Surveys', *Geographical Journal*, (1979), cxlv, no.2, p.225-234; *idem.*, *An Atlas and Index of the Tithe Files of Mid-Nineteenth Century England and Wales*, (Cambridge, 1986).

⁵ F.M.L. Thompson, 'The Second Agricultural Revolution, 1815-1880', *Ec.H.R.*, 2nd ser. xxi, no. 1, (1968), pp.62-78.

argued that increased output and prosperity was generated by an intensification of the livestock element within mixed farming, an interpretation compatible with Howell's description of improvements in Welsh livestock rearing.¹ Looking at arable farming, Fairlie and Wilkes discussed whether the wheat acreage grew or declined at this time,² and Sturgess, Collins, Jones and Phillips debated the extent and significance of drainage improvements.³ Research has questioned the amount of agricultural investment, its usefulness and profitability, and also growth rates and the level of prosperity in the 'golden age'. Textbooks tend to assume that limited change on south-east arable farms is evidence that farmer 'failure' existed before the depression commenced.

For both the 'golden age' and the years up to 1914 a number of specialised works have been published. Whetham, Taylor and Atkins examined trends in dairying, Olson and Harris those in wheat production, Perren, Thompson and Spring the role of the landowner and estate management, whilst Cannadine published essays on mortgages and bankruptcies.⁴ Wilmot has shown that the application of science to

¹ E.L.Jones, 'The Changing Basis of Agricultural Prosperity, 1853-1873', *Ag.H.R.*, x, pt.2, pp.102-19; *idem.*, *Agriculture and the Industrial Revolution*, (Oxford, 1974); *idem.*, *The Development of English Agriculture, 1815-1873*, (1968); D.W.Howell, *Land and People in Nineteenth Century Wales*, (1977).

² S.Fairlie, 'The Corn Laws and British Wheat Production, 1829-1876', *Ec.H.R.*, 2nd Ser., xxii, No. 1, (1969), pp.101-109, 114-115; A.R.Wilkes, 'Adjustments in Arable Farming After the Napoleonic Wars', *Ag.H.R.*, xxviii, (1980), pp.90-103. On this theme see also J.D.Chambers and G.E.Mingay, *The Agricultural Revolution, 1750 - 1880*, (1966), p.183; L.Drescher, 'The Development of Agricultural Produce in Great Britain and Ireland from the Early Nineteenth Century', *Manchester School of Economics and Social Studies*, xxiii, (1955), pp.153-175; M.Olsen and C.C.Harris, 'Free Trade in Corn: A Statistical Study of the prices and Production of Wheat in great Britain from 1873 to 1914', *Quarterly Journal of Economics*, lxxiii, (1959), pp.145-168.

³ R.W.Sturgess, 'The Agricultural Revolution on the English Clays', *Ag.H.R.*, xiv, pt. 2, (1966), pp. 104-121; *idem.*, 'The Agricultural Revolution on the English Clays: A Rejoinder', *Ag.H.R.*, xv, pt.2, (1967), pp.82-87; E.J. T.Collins and E.L.Jones, 'Sectoral Advance in English Agriculture, 1850-1880', *Ag.H.R.*, xv, pt. 2, (1967), pp.65-81; A.D.M.Phillips, *The Underdraining of Farmland in England During the Nineteenth Century*, (Cambridge, 1989).

⁴ E.H.Whetham, 'The Changing Cattle Enterprises of England and Wales, 1870-1910', *Geographical Journal*, cxxix, pt.3, (1963), pp.378-80; *idem.*, 'The London Milk Trade, 1860-1900', *Ec.H.R.*, 2nd. Ser., xvii, no.2, (1964-5), pp.369-80; D.Taylor, 'The English Dairy Industry, 1860-1930: the Need for a Reassessment', *Ag.H.R.*, xxii, pt. 2 , (1974), pp.153-159; *idem.*, 'London's Milk Supply, 1850-1900': A Reinterpretation', *Ag.H.*, xlvi, (1971), pp.33-38; *idem.*, 'Growth and Structural Change in the English Dairy Industry, c. 1860-1930', *Ag.H.R.*, xxxv, pt. 1, (1987), pp.47-64; P.J.Atkins, 'London's Intra-Urban Milk Supply, c. 1790-1914', *Transactions of the Institute of British Geographers*, new ser., ii,

farming was limited, Thirsk has written on the development of alternative farming,¹ and there have been a number of, as yet, highly tentative attempts to measure total factor productivity.² Some more general works on Victorian country life have also appeared which examine various aspects of economic, social and political life, including the condition of farm labourers.³ In particular, the long awaited volume 7 of the *Agrarian History of England and Wales* has recently been published. This encyclopaedic work gives a wealth of detail and examines numerous debates, and although critics have suggested that it leaves some questions unanswered, it sets out a clear agenda for future research.⁴

An important consequence of recent scholarship has been greater recognition of the extent and importance of regional variations: Collins notes the lack of detailed local and regional studies which are needed to better understand the agrarian history of the

no. 2, (1977), pp.383-399; Olsen and Harris, 'Free Trade in Corn'; R.Perren, 'The Landlord and Agricultural Transformation 1870-1900', *Ag.H.R.*, xviii, pt. 1, (1970), pp. 36-51; *idem.*, 'The Landlord and Agricultural Transformation, 1870 – 1900, A Rejoinder', *Ag.H.R.*, xxvii, pt 1, (1979), pp.43–46, F.M.L.Thompson, *English Landed Society in the Nineteenth Century*, (1963); D.Spring, *The English Landed Estate in the Nineteenth Century: Its Administration*, (Baltimore, 1963); D.Cannadine, 'Aristocratic Indebtedness in the Nineteenth Century: The Case Reopened', *Ec.H.R.*, 2nd. ser. xxx, no. 4, (1977), pp.624-650; *idem.*, 'The Landowner as Millionaire: The Finances of the Dukes of Devonshire c.1800-c.1926', *Ag.H.R.*, xxv, pt. 2, (1977), pp.77–97.

¹ S.Wilmot, 'The Business of Improvement': *Agriculture and Scientific Culture in Britain c. 1700–1870*, (Bristol, 1990); J.Thirsk, *Alternative Agriculture: A History from the Black Death to the Present Day*, (Oxford, 1997).

² Estimates of total factor productivity cited in the *Agrarian History of England and Wales* range between 0.19 and 0.56 per cent per annum, Collins (ed.), *Agrarian History*, pp.139, 319. On total factor productivity see Hunt and Pam, 'Responding to Agricultural Depression', p.237, n. 44.

³ e.g. P.Horn, *The Rural World, 1780-1850: Social Change in the English Countryside*, (1980); *idem.*, *The Changing Countryside in Victorian and Edwardian England and Wales*, (1984); *idem.*, *Labouring Life in the Victorian Countryside*, (Dublin, 1976); G.E.Mingay (ed.), *The Victorian Countryside*, 2 vols., (1981); *idem.*, *Rural Life in Victorian England*, (1976); *idem.*, *The Gentry: The Rise and Fall of a Ruling Class*, (1976); A.Armstrong, *Farmworkers: A Social and Economic History, 1770-1980*, (1988); K.D.M.Snell, *Annals of the Labouring Poor: Social Change and Agrarian England, 1660-1900*, (Cambridge, 1985); R.J.Colyer, 'Farmer and Labour Force in the Nineteenth Century', *J.R.A.S.E.*, cxlviii, (1987), pp.120-129. Space constraints preclude a detailed investigation on Essex agricultural labourers in this thesis.

⁴ Collins (ed.), *Agrarian History*. For a review of this work see C.O'Grada, 'Farming High and Low, 1850-1914', *Ag.H.R.*, il, pt.2, (2001), pp.210–218.

period.¹ Although economic and political boundary lines did not always coincide, the county has commonly been used as a convenient unit for analysis. It provides suitable scale for the consideration of a variety of farming issues, whilst much of the evidence available to the historian, both quantitative and qualitative, is presented county by county. The county of Essex, the subject of the present work, appears particularly likely to repay investigation being one of the most prosperous agricultural counties in the early 1840s, yet becoming one of the most depressed by the 1890s, commonly portrayed even in the recent *Agrarian History of England and Wales*, for example, as one characterised by untenanted farms, derelict land and steeply falling rents.² Not all parts of Essex were afflicted in this way of course, and the variety of soils and varying degrees of market accessibility within the county enables a comprehensive study of landowner and farmer response to the changing market conditions of the second half of the nineteenth century.

Essex examples are frequently cited in the literature on agricultural depression, but there has been little detailed recent work on mid- or late nineteenth century agriculture in the county.³ The work that has been produced - two doctoral theses (one on the Petre estate, the other on south east Essex) and masters' theses on land use at the time of the tithe awards, on farming on the Dengie peninsula during the depression, and on landownership and social change from the late eighteenth to the early twentieth century - was written some years ago.⁴

¹ Collins (ed.), *Agrarian History*, p. 2152.

² *ibid.*, pp.162–163.

³ Articles co-authored by this writer are noted above, page 7.

⁴ R.Coles, 'An Historical Geography of South East Essex', unpublished Ph.D. thesis, University of London (1934); J.G.Minton, 'The Petre Lands in the Wid Basin, 1539-1939', unpublished Ph.D. thesis, University of London (1959); E.A.Cox, 'An Agricultural Geography of Essex c. 1840', unpublished M.A. thesis, University of London (1963); K.W.Smith, 'Some aspects of agricultural change 1870-95 with special reference to the Dengie area of Essex', unpublished M.Sc. thesis, University of London (1974); J.G.Kingsbury, 'Landed Interests and the Land Question in Essex in the Nineteenth and Early Twentieth Centuries', unpublished M.Litt. thesis, University of Cambridge (1982). Interestingly, more work has been done on the years before 1850.

A number of issues have been highlighted which this work seeks to address. Fundamentally, how accurate are the epithets 'golden age', 'depression', and 'recovery' when applied to Essex agriculture, and why did Essex apparently fail to extract more advantage from proximity to the London market? Another topic requiring investigation concerns the role of landowners and farmers. Did Essex landowners show an active and intelligent interest in their estates, or were their shortcomings, as frequently alleged, among the causes of depression? The conventional view is that they were enterprising in the 'golden age', showing dynamic agricultural leadership and investing heavily in their farms to facilitate changes in farming technique and land use and to improve the economic potential of their estates, particularly by outlays on drainage and associated new buildings.¹ It is possible, however, that their more positive leadership came later in response to falling agricultural prices, and that the extent and value of their investment in the 'golden age' has been exaggerated. Furthermore, although there is no lack of claims that landowners were ineffective managers and entrepreneurs during the depression, questions remain to be answered on whether they failed to encourage structural change, and how far the estate system discouraged such change.

Similar questions arise concerning the performance of Essex farmers. Were they, as often alleged, slow to innovate, blind to market signals and resistant to change? Did they too 'fail' in the depression, and was 'low farming' an indication of this failure? The extent and nature of high farming, the degree of change that was possible and that was achieved on the county's farms, and attitudes to marketing and to farmer co-operation each need to be analysed to confirm or refute such claims. The well-known tales of migrant farmer success - particularly those of Scottish farmers - and of Essex farmers' failure on the same soils is another issue requiring further

¹ See chapter 2 below.

investigation. These are the main issues addressed in this thesis. The findings, in certain respects, indicate the need to revise the accepted view of the agricultural history of Essex between 1850 and 1914 and, if Essex is at all typical, that of south-eastern agriculture, and possibly even that of English farming as a whole.

2. Essex Sources

Published sources for the study of Essex agriculture in the second half of the nineteenth century are varied but, in total, surprisingly thin. The chapters on economic history in the *Victoria County History of Essex*, written at the turn of the century, are of limited value except as a source of contemporary comment.¹ More recent volumes contain little agricultural history. More useful is Baker's prize essay of 1845 which presents an account of Essex agriculture in the early 1840s.² Baker, leader of the movement of farmers against the Anti-Corn Law League, farmed at Writtle, near Chelmsford. His detailed article sets out to show the progressive nature of Essex agriculture, and so his account is a partial one.³ Caird's book poses similar problems.⁴ His brief and generally negative account of Essex farming produced during depressed years focuses on a few examples of farming methods and does not give a comprehensive picture.

There is certainly no shortage of contemporary writing on agriculture, including practical articles on farming methods in the *Journal of the Royal Agricultural Society* which sometimes give Essex examples. After 1878, a number of these writings sought to explain the causes and impact of the depression, and to suggest courses of action that farmers and others might take. Many were written by experts, some by practising farmers, although other works are apparently less well informed and even speculative.

¹ N.E. MacNunn, 'Social and Economic History', *V.C.H. of Essex*, ii, (1907), pp.313-354.

² R. Baker, 'On the Farming of Essex', *J.R.A.S.E.*, v, (1845), pp.1-43.

³ Furthermore, Baker's analysis of soil type is both inaccurate and over-generalised.

⁴ J. Caird, *English Agriculture in 1850-1*, (1852), pp.133-144.

A number contain information on Essex farming, although it is generally anecdotal. Particular use has been made of articles by Price and Steele illustrating the impact of declining agricultural rentals on institutions, works by E.A.Pratt and P.A.Anderson, and McConnell's account of the early migration of Scottish farmers into Essex.¹ Use has also been made of published agricultural tours of England.² These give useful nuggets of information, but by their nature tend to be sketchy.

Material on agricultural change in local histories published in the last three decades is, in the main, limited and, naturally, localised.³ Among the more useful published sources is Collins' work on the Orsett estate, which not only examines the fortunes of the estate, its owners and tenants, but also discusses farming in south Essex between the late 18th century and 1914. For the Terling estate and particularly for Strutt's farming and management methods, Gavin's work has been used, and Oxley-Parker's book gives a thorough insight into the landagent John Oxley Parker's papers.⁴

Two Essex newspaper series have survived from this period: the *Essex County Standard* (*Essex Standard* until 1892) and the *Essex Weekly News*. The former circulated in north Essex, based on Colchester, the latter in central Essex. They contain

¹ L.L.Price, 'The Recent Depression in Agriculture as shown in the accounts of an Oxford College 1876-90', *J.R.S.S.*, iv, (1892), pp.2-36; *idem*, 'The Accounts of the Colleges of Oxford 1893-1903 with Special Reference to their Agricultural Revenues', *J.R.S.S.*, lxvii, (December 1904), pp.585-652; J.C.Steele, 'The Agricultural Depression and its Effects on a Leading London Hospital', *J.R.S.S.*, iv, (1892), pp.48-55; E.A.Pratt, *The Transition in Agriculture*, (1906); P.A.Graham, *The Revival of English Agriculture*, (1899); P.McConnell, 'Experiences of a Scotsman on the Essex Clays', *J.R.A.S.E.*, 3rd. ser., ii, (1891), pp.311-325.

² e.g. H.Rider Haggard, *Rural England, Being an Account of Agricultural and Social Researches Carried out in the Years 1901 and 1902*, (1902), vol. 1, pp. 436-508; A.D.Hall, *A Pilgrimage of British Farming, 1910-1912*, (1914), pp.63-69; A.Greenland, *Professional Excursions by an Auctioneer*, (1843), pp.33-49.

³ J.Robin, *Elmdon: Continuity and Change in a North West Essex Village, 1861-1964*, (Cambridge, 1980); A.F.J.Brown, *Colchester, 1815-1914*, (1980); C.I.Cherry, *Berden and its Neighbours Recorded*, (Buntingford, 1981); *idem*, *History of Berden*, (Bishops Stortford, 1980).

⁴ E.J.T.Collins, *The History of the Orsett Estate, 1743-1914*, (Thurrock, 1978); W.Gavin, *Ninety Years of Family Farming: The Story of Lord Rayleigh's and Strutt and Parker Farms*, (1967); J.Oxley-Parker, *The Oxley-Parker Papers*, (Colchester, 1964).

a wealth of detail on local market prices and agricultural meetings, as well as local politics. The bulk of the newspapers material, however, is of limited value for analysing agricultural change in the county, meetings being reported in excessive detail whereas the fluctuating fortunes of agriculture, and changes in farming methods are only lightly covered. Neither newspaper devoted much attention to south-east Essex, whilst few articles give a wide or longer term perspective.

Official reports in the Parliamentary Papers contain much information on Essex agriculture, especially for the 'depression' years. The two *Royal Commissions* which investigated agriculture in this period are particularly rich in detail on Essex farming. The first, the *Royal Commission on the Depressed Condition of Agricultural Interests*,¹ met between 1879 and 1882. The Commissioners appointed Assistant Commissioners to collect evidence and write reports, S.L.B.Druce reporting on Essex. The Commission published a preliminary report in 1881 and a final report in 1882, together with the reports of the Assistant Commissioners and several volumes of 'Minutes of Evidence' gathered at formal interviews held by the Commissioners. The second of these major government enquiries, the *Royal Commission on the Agricultural Depression*, met between 1893 and 1897. Again itinerant Assistant Commissioners were appointed to collect evidence on the state of agriculture, but rather than whole counties, they covered areas which were considered best to show the state of agriculture at the time. R.H.C. Pringle, a noted agricultural expert and writer, was appointed to report on the Ongar, Chelmsford, Maldon and Braintree districts of Essex. The Commissioners also held formal interviews in London to gather more evidence. Again a series of general reports, reports of Assistant Commissioners and several volumes of verbal evidence and statistics were published.

Other Parliamentary enquiries contain information on Essex agriculture. The

¹ Often, and hereinafter, called the *Richmond Commission* after its Chairman.

Commission on the Employment of Children, Young Persons and Women in Agriculture included a report on the Witham and Halstead areas of Essex,¹ and the *Royal Commission on Labour* produced reports between 1892 and 1894, some of which contained evidence on Essex farming and agricultural labour.² Official enquiries on more technical issues, such as agricultural wages, housing, the decline of the rural population, and co-operative societies, again contained some Essex evidence. Naturally, all such sources need to be used with caution as witnesses were neither necessarily typical of their peers nor reliable.³ Similarly, statistical evidence from official returns has certain problems of interpretation and accuracy,⁴ but is of great value and has been used extensively in this study. Of particular use have been the tithe files (compiled in the main between 1836 and 1842), tax returns, the parish agricultural statistics (which were collected annually from 1866 and which are regarded as reliable from the early 1870s), the official agricultural returns, and land company drainage records. All of these are housed in the Public Record Office save the agricultural returns, which are published as parliamentary papers. For details on aspects of agricultural marketing, use has been made of railway bills, housed in the House of Lords Record Office.

Estate papers have been used extensively as they remain the most valuable source for an understanding of Essex agriculture in this period at the local level. They contain rent rolls, leases, account books, estate correspondence, and even some diaries.⁵

¹ *Report of the Commission on the Employment of Children, Young Persons and Women in Agriculture*, (B.P.P., 1867-8 xvii), *Report by Rev. James Fraser M.A. on Norfolk, Essex, Sussex, Gloucestershire and Two Detached Districts in Suffolk*, Appendix, Pt. 1, pp.3-51, *Evidence*, Appendix Pt.2, pp.3, 66-76, 200-202.

² *Royal Commission on Labour, Report on the Agricultural Labourer*, vol. 1, *England, Report of A.J. Spencer on the Poor Law Union of Maldon*, vol. 1, pt., 5, (B.P.P., 1893-4 xxxv).

³ Comparisons with estate papers reveal some inaccuracies in the information given to official enquiries.

⁴ Details of these problems will be found in chapters 2 and 3 below.

⁵ Details of the location of MSSs. are given both in footnotes and in the bibliography. Map 2 shows the locations of the major estates in Essex.

These sources provide detailed information on a variety of farming matters including rents, land management, and land use. Unfortunately, among the great volume of surviving estate papers, there are few estate archives which span the whole period, and the exceptions tend to be those of corporate owners or the larger, more successful landlords, who may not have been typical.

The most useful papers of a privately owned estate are those of Lord Petre's Thorndon estate (c. 18,000 acres) which include accounts, tenancy lists, leases up to the 1880s and other relevant material. The Thorndon estate was situated on a variety of soils in central and south-central Essex, with some farms close to, and others distant from, railways, enabling analysis of changes in agriculture and land management over time and the impact on these of soil type and railways without attempting simultaneously to distinguish the varying entrepreneurial skills of different landowners. Other useful estate papers include those of the Benyons in south Essex, which again cover the whole period, and those of their neighbours at Orsett.¹ The former are detailed on rents, tenant names, sales and investment levels, whilst the latter have accounts and details of sales and leases, of estate management, and correspondence with tenants, mostly pertaining to the years after 1890. Two large estates retain no papers: the bulk of the Great Easton estate archive perished in flames some years ago, the Terling estate's detailed accounts, mentioned by Gavin, apparently no longer exist.²

Smaller estates which have useful papers include that of the Bonnell family in east Essex, Bower Hall and Maryon Wilson in central Essex, and the Tower estate based on South Weald. All four contain rentals, the first two give lease details, and

¹ Although most of the Benyon's Essex estate records are held in the E.R.O., some are held in the Berkshire C.R.O., and others in the Greater London R.O. Many of the Orsett estate business records are kept at Reading University library.

² Gavin, *Ninety Years*; Response to written enquiry to Terling.

landowner investment is detailed for the Bonnell estate, but the last two sets of estate papers finish in the late 1880s. Other estate papers contain useful but more limited and patchy information. The more valuable of these are the papers of the Waldegrave family who owned land in both north east and in south west Essex, the Earl of Essex's Rayne estate, the Barrett-Lennard estate in south Essex, and the Oxley Parker Papers. There are few surviving farm accounts, but the more useful of these include those of Braybrooke's home farm, Cooke at Great Henny in north Essex, and the Tabors of Bocking and Gosfield (north-central Essex). Most of these estate and farm records are deposited at the Essex County Record Office.¹ Regrettably, there appear to be no surviving accounts of owner-occupiers, who between them owned some 20 per cent of Essex. All the private estate papers and farm accounts deposited at the Essex Record Office of potential use in this enquiry have been scrutinised. Some of these estate papers, particularly those of the smaller estates, have been little used previously.

Corporate owners kept full records of rentals, expenditure and farm visits in the period under investigation. Some institutions owned large acreages in Essex, others only a few hundred acres. For this enquiry the records of St. Thomas' Hospital, St. Bartholomew's Hospital, Guy's Hospital, the Ecclesiastical Commissioners and St. John's College, Cambridge, some little used in previous research, were examined in detail.² Use has also been made of oral history: the late Sir Richard and Lady Barratt Lennard (sometime owners of the Belhus estate), the late Mr J. Archie. Matthews (grandson of Christopher Matthews who was a witness at the *Royal Commission* in 1896), the late Mr Hugh Gemmill (son of a Scottish migrant into Essex), Dr. F.E. Kenchington (sometime lecturer at Writtle Agricultural College), and Mrs A. Lyon (descendent of a Scottish migrant) have all been interviewed. Each provided useful

¹ The Earl of Essex's papers are held in the Hertfordshire C.R.O.

² Some of these are deposited in the Essex C.R.O., some at the Greater London C.R.O., others are still held by the institutions. Details are given in footnotes below.

and hitherto untapped information.

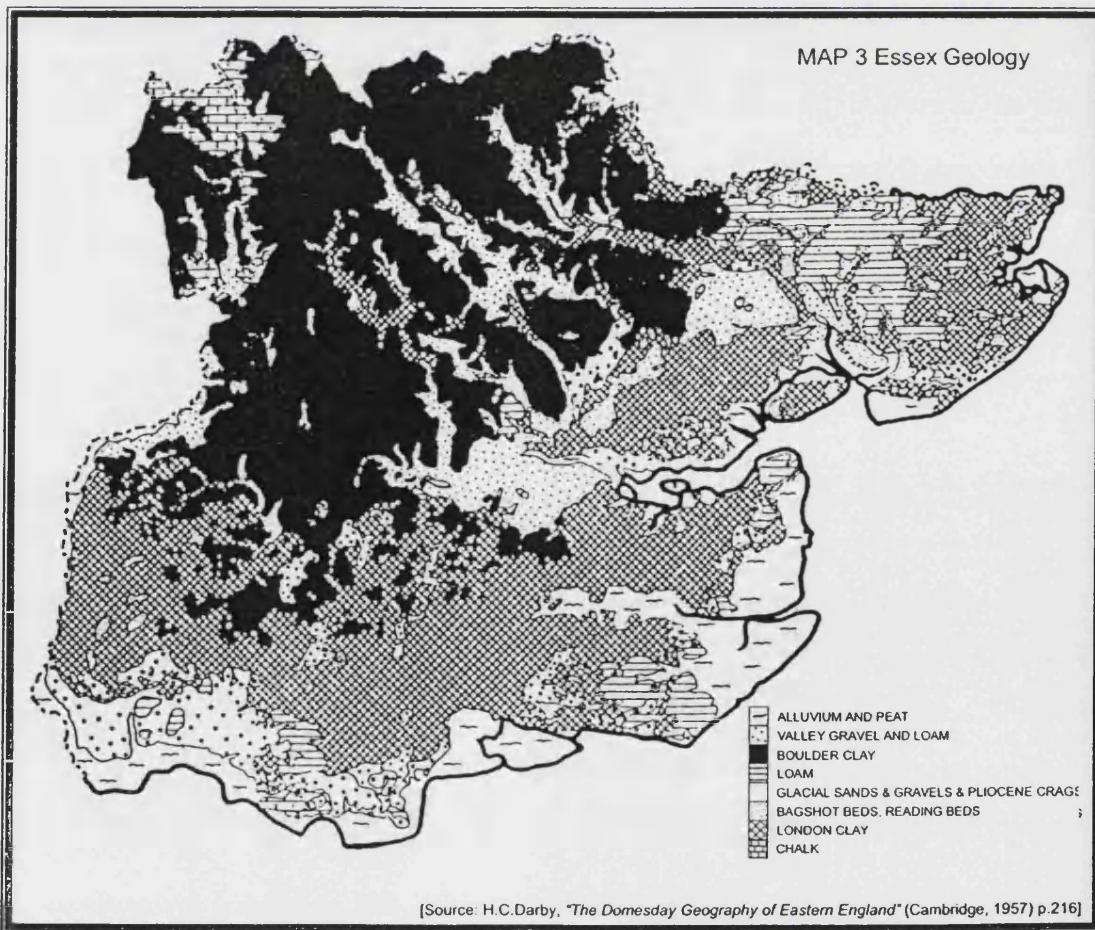
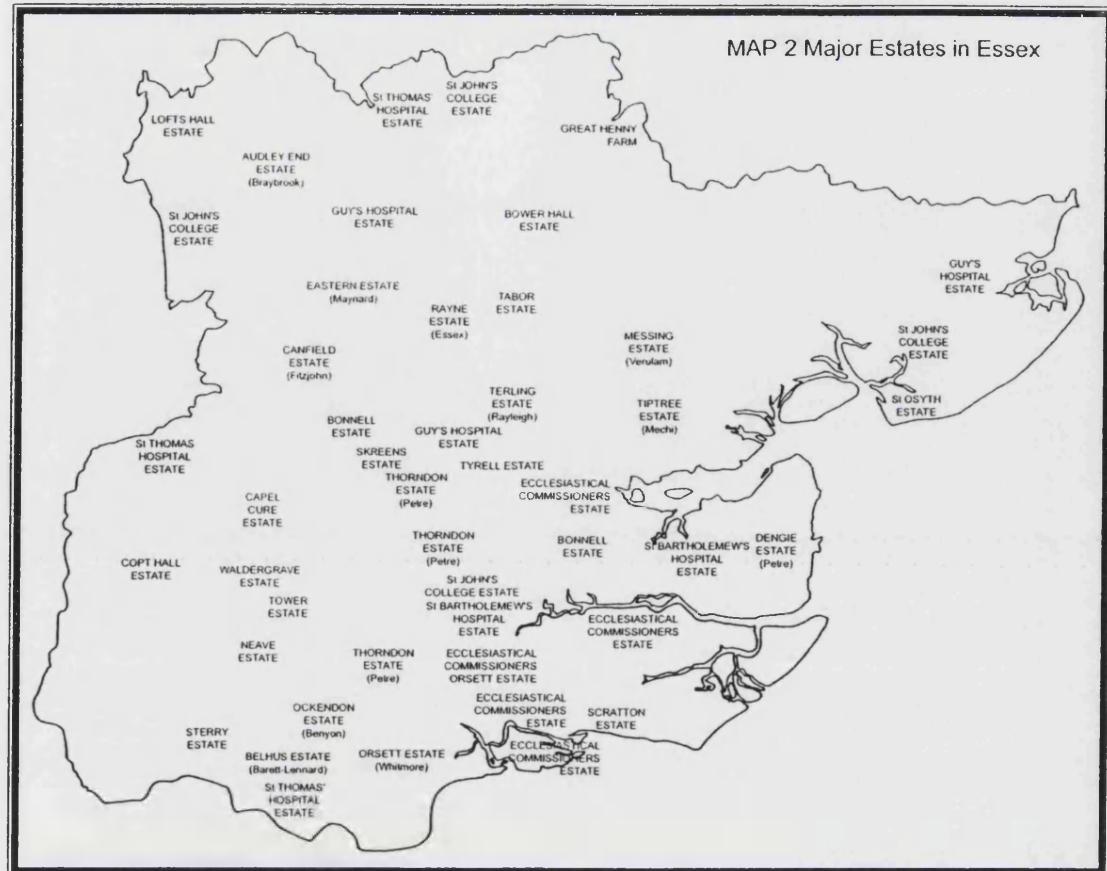
3. Essex: Land, Soil and Climate

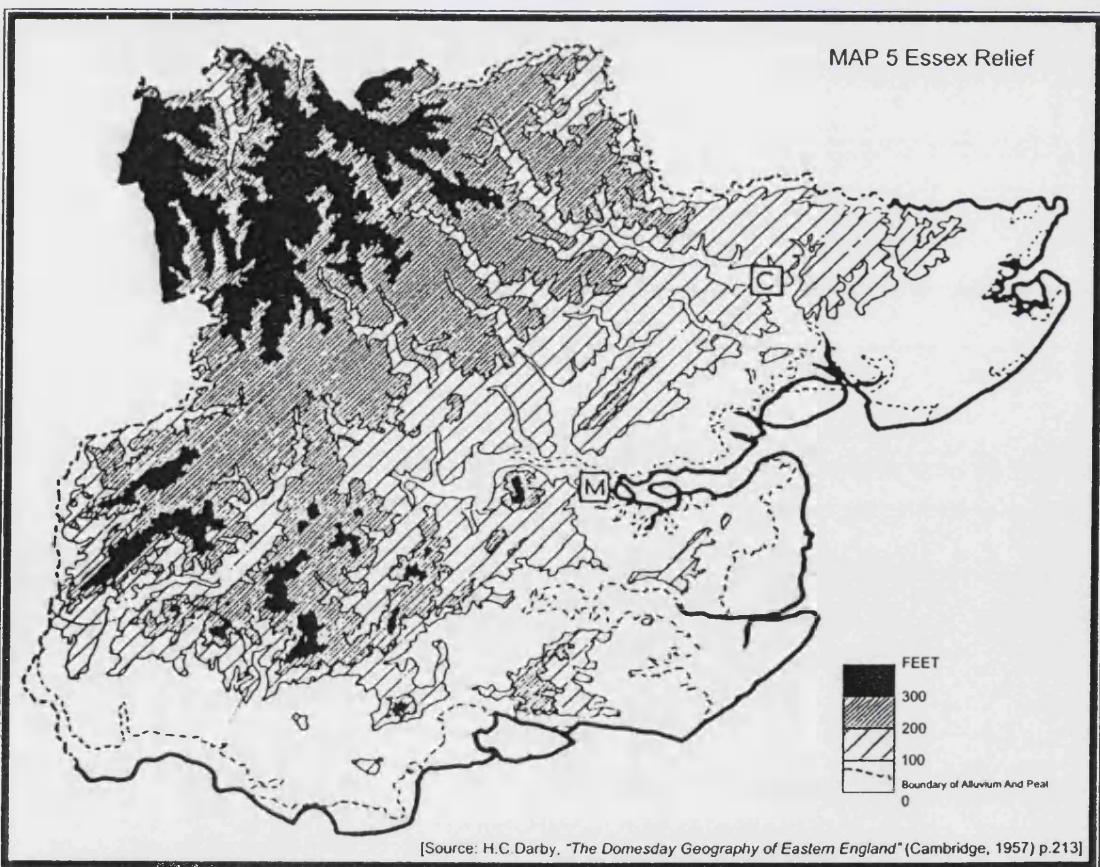
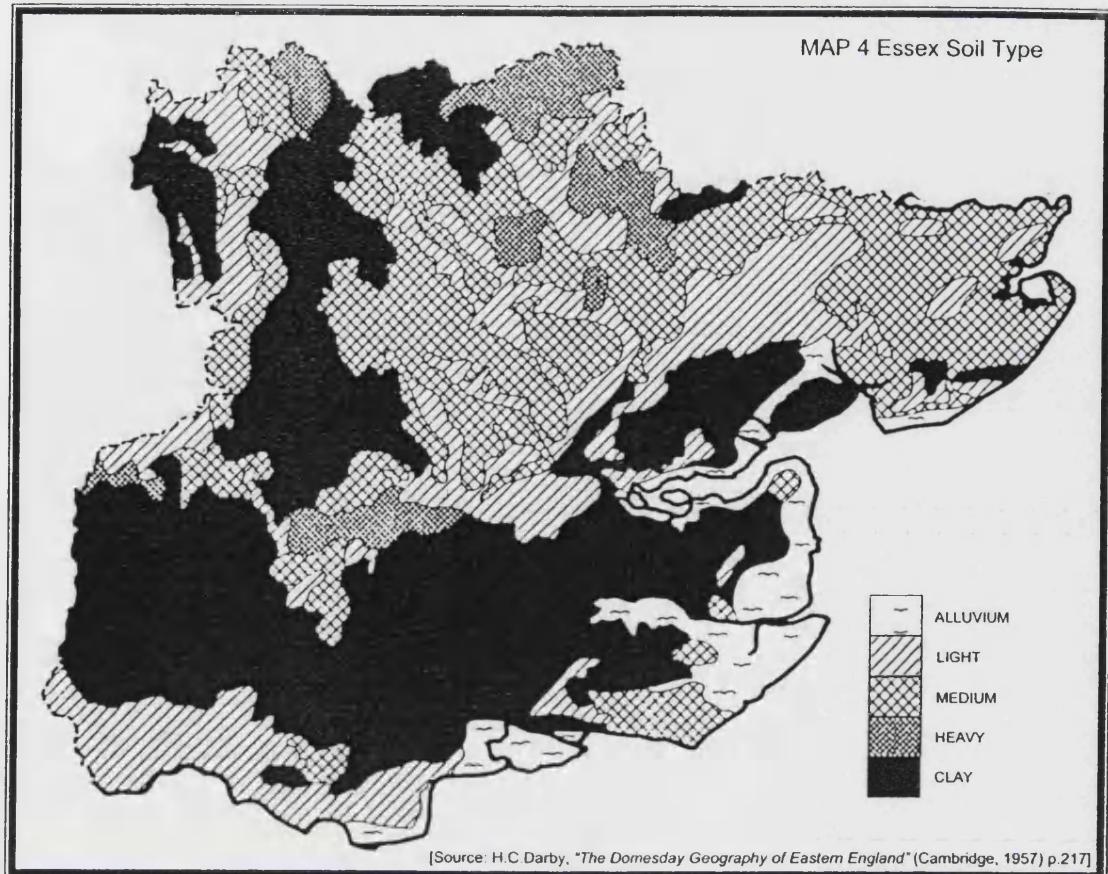
Individual landowners and farmers respond with different answers to the problems presented by economic change. Among the factors determining their response are soil type, climate and terrain. Light soils warm-up quickly, drain well and are easy to work, whereas heavy soils are expensive to cultivate and drain, but are richer in mineral foods and less liable to dry out in times of drought. Other things being equal, farmers would choose to cultivate the crops for which the soil of their farm was best suited. The agricultural significance of different soils, moreover, is also related to climate. The regularity and amount of rainfall is of great importance in affecting the level of water infiltration and retention, whilst humidity, amount of sunshine, prevailing wind direction, and the range of temperature are other important variables. Relief affects ease of cultivation and use of machines, as well as drainage and water supply, and is another factor in determining how the land is used and its returns.

Essex comprises a low plateau of almost a million acres (c. 404,685 hectares), sloping from the uplands of the north west to the south east coastline, dissected by numerous rivers and bounded to the east by the North Sea, and to the south by the River Thames.¹ There are chalk outcrops in the extreme north west of the county and in the south near Grays Thurrock, but most of the bedrock is of a later geological period. Much of Essex is low lying, standing on London Clay, but glacial boulder clay has been deposited over much of north and north west Essex creating a plateau where the land is mostly over two hundred feet above sea level.² A line of hills running from Brentwood to Manningtree and consisting of London Clay, in places capped by Bagshot sands, marks the limit of this plateau.

¹ See N.V.Scarfe, *Essex*, (1942).

² See map 3.





Essex soils vary considerably, although in the main Essex is a heavy or clayey soiled county.¹ The clay soils, however, differ considerably in their nature. Resting on the boulder clay plateau is a large area of calcareous clayey soil, high in lime content, mostly of the Hanslope Association but, in the Rodings area, of the Streatham Association. Together these soils account for about a quarter of the county's soils. In most of the area, these soils are a stiff clay loam with heavy texture and, although not impervious, drainage is poor. Some of these soils are more loamy than clayey, and in the north of the county are considered 'heavy' rather than 'clay' soils. These soils, together with heavy and medium soils, which are also present on the plateau, are very fertile and, owing to their richness and to their moisture holding capacity in a relatively dry county, provide some of the finest cereal growing land in England. The clay soils are not, however, well adapted for grassland or potatoes owing in part to climate, but also because they are liable to 'poach'.² They require careful management, especially in wet weather and cannot be grazed or worked by machines from November until April.

Very different from the boulder clays are the soils derived from the London clay bedrock, which constitute over a third of the county's soils. The most common London clay derived soils are those of the Windsor Association, which cover much of south and south-east Essex. These are very strong clay loams over a tenacious blue-grey or yellowish clay. They are exceptionally stiff and moisture retentive, and have

¹ Most of the information on soils in this thesis has come from various publications of the Soil Survey of England and Wales. The most useful have been the regional bulletin C.A.H.Hodge, R.G.O.Burton, W.M.Corbett, R.Evans and R.S.Seale, *Soils and their Use in Eastern England*, (Harpden, 1984); the district surveys: A.J.Thomasson, *Soils of the Saffron Walden District: A Reconnaissance Survey*, (Harpden, 1969); R.G.Sturdy, *Soil Survey Record No. 7: Soils in Essex 1 (Sheet TQ59, Harold Hill)*, (Harpden, 1971); *idem.*, *Soil Survey Record No. 40: Soils in Essex 2 (Sheet TQ99, Burnham on Crouch)*, (Harpden, 1976); R.H.Allen and R.G.Sturdy, *Soil Survey Record No. 62: Soils in Essex 3 (Sheet TL 71, Little Waltham)*, (Harpden, 1980); *idem.*, *Soil Survey Record No. 67: Soils in Essex 4 (Sheet TM12, Weeley)*, (Harpden, 1981); *idem.*, *Soil Survey Record No. 95: Soils in Essex 5 (Sheet TL83, Halstead)*, (Harpden, 1986); and the *Soil Map of England and Wales (1:250,000 scale), sheet 4, Eastern England with National Soil Legend booklet*, (Harpden, 1983).

² 'Poaching', a common problem on clay and other heavy soils, is the compacting of the soil which destroys its natural honeycomb structure, preventing crop roots from growing.

poor drainage. The topsoil is readily compacted when wet, but can become dry and friable in dry summers. When waterlogged they are cold and unproductive owing to surface evaporation and become very 'plastic' in texture, and they cannot be worked from late autumn until late spring. They require drainage to prevent seasonal waterlogging, but recent commentators, noting the expense of drainage and the fact that improvements in the soil take years to come to fruition, have concluded that the nature of these soils "precludes a substantial improvement".¹ Furthermore, until post war developments, drainage was difficult on these soils. Farmers tended to lay the land in ridges to drain off surplus water. Other heavy and clayey soils are present in south Essex on London clay bedrock. These include the Wickham, Ratsborough, Oak, Essendon and Althorne series. Together with the Windsor soils, these constitute the London clay soils. Several nineteenth century farmers commented on the difficulty and expense of cultivating London Clay soils, which commonly required three horses to pull the plough and which were liable to develop soil acidity. Primrose McConnell, an Essex farmer and noted publicist and geologist, wrote that it was sticky and tenacious when wet, and "is pushed before the breast of the plough and falls from it in large lumps". In dry weather, he noted, it dried and cracked into hard masses which "obdurately resist the action of any implements".² A Dengie farmer commented, "Our sub-soil is stiff, tough, numb, dumb and impervious, so that during heavy rains the vegetable mould and manures are washed off the surface The plants are at once mud and waterlogged and starved".³ London clay soils are not

¹ Allen and Sturdy, *Soil Survey Record* 67, p.91.

² P. McConnell, *Elements of Agricultural Geology: A Scientific Aid to Practical Farming*, (1902), p.218.

³ R.C. *Agricultural Depression, Report by R.H. Pringle on the Isle of Axholme (a part of Lincolnshire), and the Ongar, Chelmsford, Maldon and Braintree districts of Essex*, (B.P.P., 1894 xvi, pt.1), p.37.

suitable for roots or potatoes but when well managed can take good temporary grass, and are most suitable for winter cereal and pulse crops. Of all the soils in Essex, the London clays with their high traction costs, unsuitability for most fodder crops, and the need for regular fallowing,¹ probably gave the lowest margin of profit during the nineteenth century, especially in wet seasons.

Although clays and other heavy soils cover much of Essex, almost 75 per cent to judge from soil maps, other soil types are found. The medium and lighter soils of north west Essex, both derived from the chalk and boulder clay drift, drain freely and are extremely fertile. Parts of the eastern area of the Tendring Hundred in north east Essex has clay soils, but much of the Hundred and the area around Colchester is medium and light land. Tendring Association soils, which are common in these areas, are very fertile freely-draining medium loams, as are the Wix Association soils (also common in north east Essex). Both soils can take cereals, grass and horticultural crops. Lighter soils appear on the chalk in the north west of the county, in central Essex (where there are fine loams derived from glaciofluvial drift), along river valleys in north and central Essex, and on the Thames bank - particularly in the area running from Purfleet to Stamford-le-Hope and including much of the Ockendon and Aveley area. Much of the light soil is on glacial sands and London clay and is not particularly fertile owing, in part, to climate, but the light soils of south Essex are more fertile and are derived from river terrace drift. Close to the river they rest on an alluvial sub-soil producing fine marshland pasture, but away from the river the sub-soil is gravelly, giving the area a well drained 'hot' soil peculiarly suited to the growth

¹ In the nineteenth century clays required fallowing to restore fertility and clean the land. The heaviest London clays needed fallowing with six to eight clean ploughings to destroy the weeds. In the 1840s six ploughings alone cost £3 to £3-12-0d. as acre, and income per acre was often only £3-10-0d., Sturgess, 'Agricultural Revolution', p.117.

of 'early' vegetables. Hurst, Shabbington and Hucklesbrook Association soils predominate in these areas. Deposits of brick earth in the south-east, and alluvial soils along the Thames and the east coast (mostly deep, stoneless, clayey soils of the Wallasea Association derived from marine alluvium) provide further variety in the county's soil types. Although generalisations can be made about Essex soils, it is important to remember that differences exist in detail: Baker noted that the major characteristic of Essex soils was their great variety.¹ As a result, in this work Essex soils have been divided into nine categories for the purpose of analysing changes in land use.

Essex has a much drier climate than most English counties, the wettest part, around Epping, having a mean annual rainfall of 27 inches, the driest part, around Shoeburyness, has an average of under 19 inches.² Rainfall is slightly higher in winter than in the spring and summer months. Essex is also warmer and sunnier than most counties, although winter and early spring can be very cold owing to the east wind. These conditions cause drying-out of the soil by evaporation, enabling earlier preparation of seed beds than in most counties.³ The comparatively warm and dry Essex climate allows for a longer growing season than is common in most of England and, together with the greater amount of sunshine, favours cereal production.

¹ Baker, *Farming of Essex*, p.1.

² Scarfe, *Essex*, pp.412-413; E.G.Bilham, *The Climate of the British Isles, Being an Introductory Study of the Official Records for Students and General Readers*, (1938), p.79. Between 1868 and 1937 England averaged 34 inches of rain per annum, but Essex only 23.7 inches, H.M.S.O., *Britain 1973: An Official Handbook*, (1973), p.5.

³ J.Young, *Farming in East Anglia*, (1967), p.10.

Chapter 2

Landownership in the ‘golden age’, 1850-74 : holdings, income, management and society

1. Introduction

Textbook agricultural histories suggest that the years 1850–1874 were a ‘golden age’ for landowners and for farming in general.¹ It is claimed that rents rose substantially, that restructuring occurred, and that agriculture experienced very high levels of landowner investment.² There has, however, been argument over the extent of this investment and on how far it was misdirected and led to overcapitalisation of cereal farms.³ This chapter, relying heavily on Essex estate archive evidence, particularly estate accounts, rent books, tenant ledgers, and leases, as well as tax returns and the papers of the land drainage companies, examines the pattern of landownership in Essex and course of rents. It also assesses landowner enterprise and leadership, in particular examining the size, nature and appropriateness of agricultural investment, and the degree to which landlords encouraged movement towards ‘high farming’ and an intensification of the livestock element within a mixed farming system. Finally, the economic, social and political role of Essex landowners is examined.

2. Landownership

Essex was not a county of great landowners in the nineteenth century, although the larger estates provide most evidence of nineteenth century Essex farming and estate management. Great private landowners such as the Petres, Braybrookes and Viscount Maynard held land in Essex, but in the early 1870s it was estimated that estates of

¹ See above p.17.

² e.g. Thompson, *Landed Society*, pp.246–247, 253; Chambers and Mingay, *Agricultural Revolution*, p.163.

³e.g., Thompson, *Landed Society*, p.246.

over 3,000 acres accounted for 28.3 per cent and 41.2 per cent of land in Essex and England respectively.¹ The proportion of Essex land owned by the church, colleges, hospitals and other institutions, however, was well above average at almost eight per cent of the total. There was little waste land in the county by 1850. Little change to this pattern of land ownership occurred in the 'golden age'. A comparison of the number of Essex landowners owning over 1,000 acres in the early 1840s, based on information in the tithe awards,² and the early 1870s, taken from the 'New Domesday Survey',³ shows remarkable stability.⁴ There was a slight increase in the proportion of land in estates of over 1,000 acres but this had only a marginal effect upon the overall structure of ownership.⁵

A change in the purpose of land sales and purchases appears to explain the comparative stability of the landownership pattern. Whereas before 1850 Essex landowners were eager to buy scattered and detached properties to increase their estate acreage, as typified by Lord Petre's purchase of 1,400 acres in the Dengie area, and by purchases made on the Orsett estate between 1826 and 1850,⁶ the 'golden age' was characterised more by the consolidation of existing properties. This involved shedding distant farms, which were expensive and difficult to manage, in favour of

¹J.Bateman, *The Great Landowners of Great Britain and Ireland*, (4th ed., 1883), p.515; Thompson, *Landed Society*, pp.32, 114. 24 per cent of England (excluding waste), but only 9 per cent of Essex, was occupied by estates of over 10,000 acres. The proportion occupied by estates between 3,000 and 10,000 acres in Essex was similar to the average for England.

²About 97.5 per cent of the county is covered by these awards.

³*Return of the Owners of Land, England and Wales, 1872-1873.* (B.P.P., 1874 lxxii, pt.1). This return contained numerous errors, the more serious being corrected in Bateman, *Great Landowners*.

⁴Thompson, *Landed Society*, pp.122-127.

⁵ *ibid.* Although both numbers and ownership pattern remained fairly constant, the identity of owners and size of some individual estates changed, in part as proximity to the metropolis and availability of small estates attracted richer Londoners.

⁶E.R.O., Petre MSS., D/DP E11, 15, 45 Reports, valuations and papers on the Asheldham and Dengie estates; Whitmore MSS., 'A particular description and valuation of the estates of Richard Baker Esq.' (1823); 'Will of Richard Baker Esq.'; 'Accounts of William Wingfield as executor of the late Richard Baker Esq.'. These documents have now been deposited in the E.R.O., D/DWt T/B 357/3, A4, F5.

more compact estates. A few large estates did come onto the market,¹ but most land sales were of small properties.

Table 1

Landownership in Essex c. 1872

[Percentage of total land owned by estate size]

	<u>England and</u> <u>Wales</u>	<u>Essex</u>
	<u>per cent</u>	<u>per cent</u>
Private Estates of Peers:	16.59	7.14
Private Estates:		
Estates of over 3,000 acres (not Peers):	24.61	21.15
Estates of 1,000 - 3,000 acres:	12.51	15.45
Estates of 300 - 1,000 acres:	13.85	20.21
Estates of 100 - 300 acres:	12.00	16.92
Estates of 1 - 100 acres:	11.39	10.04
Estates of 1 acre or less:	0.44	0.42
Estates of Public or Corporate Bodies:	4.20	7.94
Waste Land	4.40	0.72

Source: Based on Bateman, *Great Landowners*.

Examples of the changed pattern of land transactions are numerous. In contrast to the pattern before mid-century, the bulk of purchases on the Orsett estate between 1850

¹ e.g. the Gurney estate in south Essex following the collapse of the family banking interests in 1869.

and 1872 were in the Orsett and Horndon areas, whilst in 1861 Sir Thomas Barrett-Lennard, who rarely entered the land market, sold property in distant Westmoreland to buy Moor Hall near his Belhus seat.¹ The exchange of farms by Lord Petre and Arthur Pryor in 1869 to consolidate estate boundaries north west of Chelmsford provides another example,² and the Benyon estate doubled in acreage between 1839 and 1876, at the same time becoming more compact as detached properties were sold off.³

The 'golden age' witnessed some enclosure. Although most of Essex had been enclosed well before the nineteenth century, there were still in 1850 notable areas of open fields in the north and north west of the county (comprising about 1.5 per cent of total Essex acreage), as well as large areas of common. By the 1870s, however, this had mostly gone, some 4,780 acres being enclosed between 1855 and 1871.⁴ Some of this enclosure was promoted by larger landowners who were keen to extend and consolidate their properties. Guy's Hospital, for example, pressed for two greens adjacent to their Thaxted farm to be enclosed in 1861, and Col. Bramston pushed for the Loughton enclosure of 1864/65, but Kingsbury has shown that it was not always the larger owners who initiated enclosure, and at times smaller owners were equally interested.⁵

3. Rent, Rent Movements and Landowner Income

Despite the nineteenth century expansion of London, the income of most Essex

¹Collins, *Orsett Estate*, pp.21-22; E.R.O., Barrett-Lennard MSS., Correspondence D/DL C68.

²E.R.O., Petre MSS., D/DP A365 p.30, Thorndon estate tenant ledger, ii.

³E.R.O., Benyon MSS., D/DBe E9, schedule of estate of H.Meynell, E46, estate valuation, 1843; E34, Benyon purchases, 1839; E61, estate rates and assessments; T28, Newbury farm valuation and sale, 181; T30, property purchases and sales, Cranham, 1867-76; G.L.R.O., Benyon MSS., E/BVR/432 Essex rents books; E.R.O., sale catalogue B998, Broxted.

⁴Kingsbury, 'Landed Interests', pp.243-8, 286.

⁵ *ibid.*, pp. 133-136.

landowners depended heavily on agricultural rents rather than urban ground rents. Individual farm rents were determined by a number of factors including fertility, situation, investment levels, agricultural prosperity, and acreage. What then was the effect of these influences on rents in Essex, how did Essex rents and rent movements compare with rents elsewhere, and is there sufficient evidence of rising landowner income to justify the description of this period as the 'golden age'?

Essex estate records show a great variation in rent levels and movement between individual farms in the county due to a range of geographical and economic factors. Soil type was an important factor affecting rent. Farms with soils that were difficult to work, less fertile or expensive to cultivate, commanded lower rents. Caird showed the effect of soil-type on Essex rent levels in 1851, citing average rentals of 20s.-30s. per acre in fertile north east Essex compared to 15s.-20s. in the Rodings, and only 10s.-15s. on the stiff clays of south east Essex.¹ Similarly, on the Benyon's Ockendon estate in the late 1870s there was a difference of over 10s. an acre between the rent of the fertile North Ockendon Hall farm, and that of a heavy soiled Bulphan farm.²

To illustrate the impact of soil type on rent movement it is possible to test a sample of twelve farms on the Thorndon estate where both rent per acre and soil quality were known.³ Using Spearman's rank correlation formula, a figure of 0.60 is produced. It is difficult to quantify exactly the effect of soil type on rent movement on this estate as farms on better soils tended both to be close to railways and to attract higher investment,⁴ but the general position is known. Table 2 looks at specific farms.

¹Caird, *English Agriculture*, p.136.

²E.R.O., Benyon MSS., D/DBe E68, rental.

³ A degree of caution should be observed as farm soil quality was determined from parish entries in Kelly's, *Directory for Essex*, from the Thorndon Estate agent's comments in his 1893 report (E.R.O., Petre MSS., D/DP E17, Report of F.J.Coverdale upon the agricultural depression as affecting the Thorndon estate (1893), pp. 8-11) and from discussions with members of the Brentwood Branch of the Essex Young Farmers' Club, several of whom lived on farms in these areas.

⁴See below p.44.

Table 2**Thorndon estate farms, movement of rent per acre, 1859-1874****[Typical farms differentiated by soil type and proximity to railways]****A. Good mixed soils near railways: Mountnessing and Ingatestone**

FARM	RENT 1859	RENT 1874	CHANGE
Bacons and Dagness Farms	27s. 10d.	34s. 6d.	23.95 %
Mountnessing Hall Farm	19s. 4d.	28s. 9d.	48.71 %
Westlands	19s. 11d.	24s. 6d.	23.01 %

B. Strong London clay soils distant from railways: East Horndon

FARM	RENT 1859	RENT 1874	CHANGE
Blankets Farm	18s. 3d.	18s. 3d.	no change
East Horndon Hall Farm	21s. 9d.	21s. 4d.	- 1.95 %
Tillingham Hall Farm	17s. 10d.	19s. 6d.	9.35 %

Source: E.R.O., Petre MSS., D/DP A364-366, Thorndon estate tenants' ledgers, i-iii.

Essex evidence also illustrates the ability of land amenable to a variety of agricultural uses to command higher rent. Whereas most Essex estates experienced rent increases of about 25 per cent between the mid 1850s and 1870s, the Belhus estate rental increased by almost 90 per cent at this time as market gardening became established in the area.¹ The Belhus estate, centred near Aveley in south Essex, had many of its farms situated on light, fertile, well - drained 'hot' soils by the Thames bank, very suited to market gardening. Transport costs and market accessibility were clearly other influences upon Essex rents. Proximity to London gave an advantage to farmers in south-west Essex who were able to supply this growing market with perishables that travelled badly and with bulky, low value produce. Rents,

¹ E.R.O., Barrett-Lennard MSS., D/DL C68, letter from Evelyn Wood to Sir Thomas Barrett-Lennard, 25.4.1877.

accordingly, were relatively high in this area. Farms in Eastbury (near Barking) and Dagenham on the Sterry estate, for example, were let at between 64s. and 68s. an acre in 1862 when rents in the Rodings were typically only about 20s. an acre.¹

Railways affected rent by opening up distant markets to farmers and by cheapening the cost of farm inputs such as seeds, fertilisers, machinery and coal as transport costs fell. In some cases they enabled a change in land use. Not surprisingly most landowners supported railway construction near their estates, if not too close to their mansions and land agents recognised the value of railways. Cluttons, for example, advised the Ecclesiastical Commissioners in 1852 that the projected line from London to Tilbury would enhance the value of property in the Chadwell and Little Thurrock area.² In the same year, Oxley Parker suggested to the trustees of the Hall Dare estate that in view of the building of the same railway, leases granted to tenants should be made determinable after a year, to enable rents to be increased when the railway was completed, whilst in 1863 a report of a *Select Committee* stated that "the letting and selling value of land is in general greatly increased by its having the advantage of easy access to a railway".³ An example of the effect of rail proximity upon rents on one estate can be gleaned from the Thorndon tenant ledgers where, in the 1870s, the rent of a 270 acre Ingatestone farm close to the railway was 43s. per acre and other local farms commanded rents of about 36s., whereas similar-soiled farms at Writtle, more distant from the line, were generally rented at only 20s.-27s. an acre.⁴

¹E.R.O., Sterry MSS., D/DSt E29, estate farms, 1862.

²Church Commissioners, Ecclesiastical Commissioners MSS. [hereinafter C.C., E.C.E.], Surveys London Cathedral, S1, Biggins Manor estate.

³E.R.O., Oxley Parker MSS., D/DOp B72, Valuations of Rainham and Wennington farms; *S.C. to the House of Lords on the Charging of Entailed Estates*, (B.P.P., 1863 vii), quoted Thompson, *Landed Society*, p.256.

⁴E.R.O., D/DP A365, 366. It is not possible to quantify exactly the impact of railways on Essex rents as other factors were present in determining rent levels.

A combination of soil type and proximity to railways also helps to explain differences in the rates at which rents were raised or lowered. On the Thorndon estate (table 2), for example, farms at the southern end of the estate were on the heaviest London clays, described later by the agent as “good but heavy land” and “strong, heavy land”,¹ and were also at some distance from railway lines. These farms experienced a much smaller increase in rent between 1850 and 1874 than farms on the more easily worked and fertile soils around Mountnessing and Ingatestone which were close to the main railway line from Chelmsford to London.²

Capital investment also affected rent and rent movements: a well-equipped farm obviously gave better returns to land and labour. Investment took many forms. Some was in new buildings and other fixed farming stock, perhaps to accommodate beef cattle or to enable conversion to dairying. Other investment went into drainage, for grass seed to assist in the conversion of arable to pasture, or merely for the repair and maintenance of existing buildings. That the various factors affecting rent were inter-related is demonstrated by evidence from the Thorndon estate ledgers which shows investment being attracted to farms on good soils near to railways. Investment levels, and thus rents, also in part reflected the attitude of landowners towards their estates: some owners and their agents took far more interest in their estates than others.³

Whilst above influences were important, by far the greatest influence upon rents was agricultural prosperity. Population rose rapidly and London grew especially fast at

¹ E.R.O., D/DP E17, pp.10–11.

² Another example of soil type influencing rent movement in Essex is provided by the Waldegrave estate where rent increases were made in 1868. In south Essex these averaged 15–16 per cent but in more fertile north Essex they averaged 32 per cent. E.R.O., Waldegrave MSS., D/DWg E3, rentals 1864–75.

³ Landlords with political ambitions kept their rents low to encourage their tenants to vote for them. This was probably the case on both the Orsett and Belhus estates, Collins, *Orsett Estate*, p.25; E.R.O., Barrett-Lennard MSS., D/DL C67, 68, various letters. The increase in rents on the latter estate shortly after the accession of the second baronet in 1857 may be partly due to the fact that his predecessor, a local M.P. kept rents low whereas the new baronet never stood for Parliament.

this time, increasing both the demand for food and fodder for the capital's many working horses. Concomitant with population increase, real wages rose. Farmers, therefore, were producing for a rapidly expanding market, but greater demand did not necessarily lead to greater prosperity for all farmers. The relatively low income elasticity of demand for food implied that a more than proportionate part of the increase in real wages was spent on non-food items. Secondly, a switch from cereals to proteins occurred, since the population could now afford the dearer and more attractive foods.¹ Thus the market for grain grew more slowly, and the market for meat more swiftly, than population figures might suggest.

Rents could be affected by sharp changes in yield brought about by adverse weather conditions which caused financial problems to farmers. Many landowners granted temporary remissions when wet years in the early 1850s, early 1860s and 1872-3 saw yields reduced, resulting in poor harvests, and increased cost of ploughing as the land became more difficult to work. Abatements were also granted when diseases affected farmers' livestock. Sheep disease was rampant in Essex, as elsewhere, during the early 1850s, early 1860s and early 1870s, whilst pleuro-pneumonia and rinderpest in cattle reached epidemic proportions in the mid and late 1860s.²

The greatest factor affecting Essex farmers' prosperity, and thus rents, was the growth in both domestic and overseas competition. Railways opened the London market to distant counties, ending the semi-monopoly in milk, meat and some other perishables previously enjoyed by home counties farmers. Overseas competition increased substantially with free trade, falling freight rates, and growing agricultural output as new areas overseas were settled and cultivated. Wheat imports, for example, trebled

¹Ojala, *Agriculture*, pp.88, 100-105.

²E.L.Jones, *Seasons and Prices: The Role of Weather in English Agricultural History*, (1964), pp. 169-179.

between 1850 and the 1870s, and were particularly heavy in years of bad harvests.¹ Meat imports, although rising even faster, remained, by contrast, comparatively insignificant until the 1880s.

The result of these changes in demand and supply was that whereas retail prices rose by somewhere between 26 per cent (Rousseaux index) and 32 per cent (Sauerbeck - *Statist* index) between 1850/2 and 1870/2,² farm prices rose more. Essex grain prices followed the national pattern with wheat prices rising by 34 per cent and other grain prices between 31.5 per cent (oats) and 40.8 per cent (barley).³ Meat prices also rose. Market information from the *Essex Standard* shows the price of prime beef increasing by 55 per cent and mutton by 35 per cent, and Whetham's statistics show a rise in prices in London with prime beef increasing by 58 per cent (67 per cent for middling beef) and 43 per cent for prime mutton (51 per cent for middling mutton) at this time. Wool prices rose by some 64 per cent.⁴ With agricultural prices rising by more than average retail prices, improving cereal yields on Essex farms and a reduction in the unit costs of wheat production,⁵ Essex farmers made acceptable profits, and the years 1850-74 were considered to be ones of sufficient general prosperity to encourage rent increases in all parts of Essex.

¹Thompson, *Landed Society*, p.242.

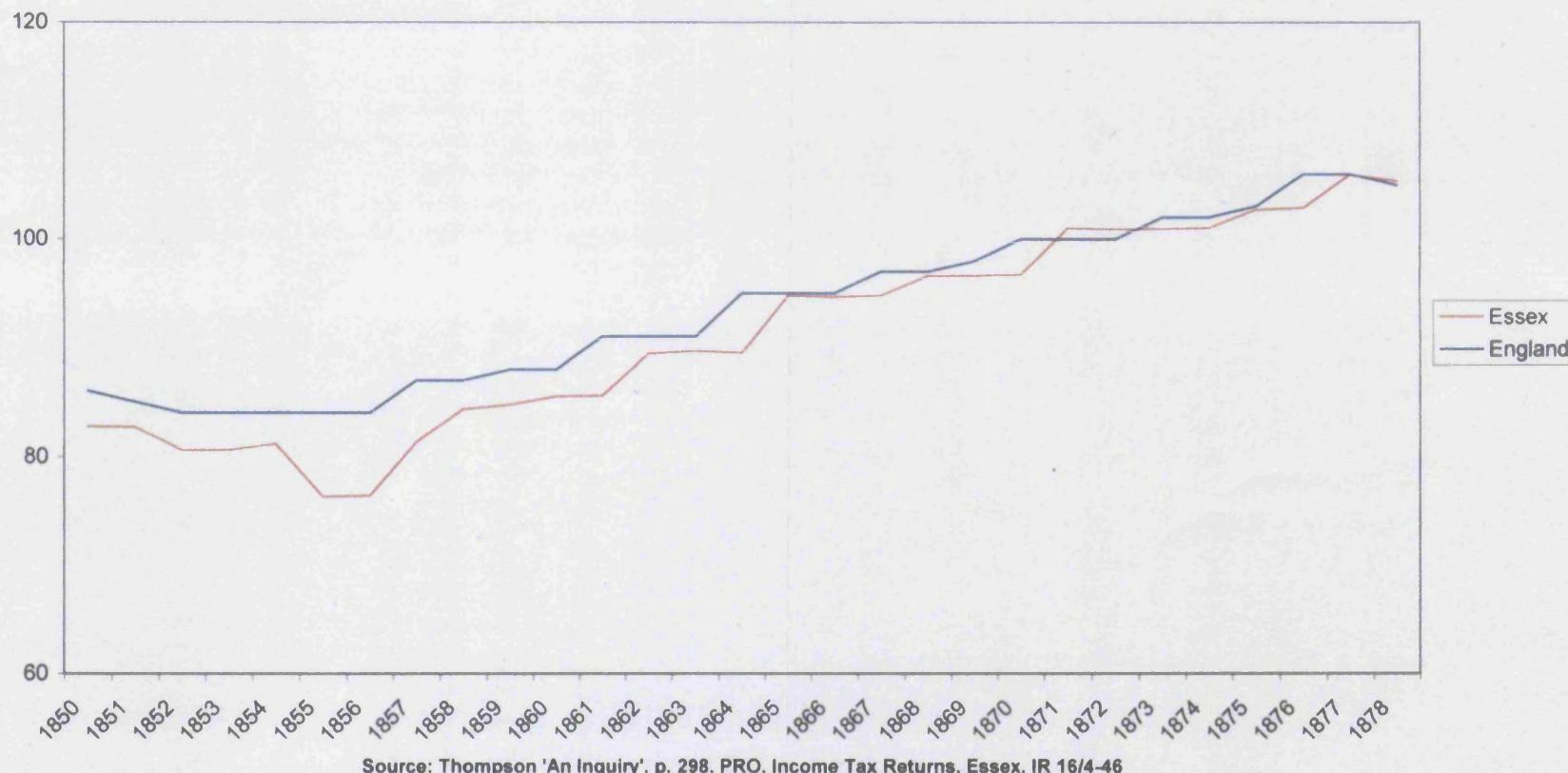
²B.R.Mitchell and P.Deane, *Abstract of British Historical Statistics*, (Cambridge, 1962), pp.472-475. For charts on price movements see below charts 4, 7, 8, 9.

³*ibid.*, pp. 488-489. The returns from the Romford, Colchester, Chelmsford, Braintree, Saffron Walden and London markets show a marked similarity to national price levels and trends.

⁴E.H.Whetham, 'Livestock Prices in Britain, 1851 - 93', *Ag.H.R.*, xi, pt. 1, (1963), p.34.

⁵See below chapter 3.

Chart 1
Rent movement in England and Wales, and in Essex as shown by Income Tax Schedule 'A' (lands only) returns, 1850-1878
[Ave. 1867-77=100]



Source: Thompson 'An Inquiry', p. 298, PRO, Income Tax Returns, Essex, IR 16/4-46

Table 3**Imports of grain and meat into the U.K., 1850-1875**

(thousands of cwts.)

	<u>Wheat and</u> <u>Wheat Flour</u>	<u>Other Grains</u>	<u>Meat</u>
1850	20,021	12,348	699
1855	13,464	9,299	679
1860	30,570	21,782	783
1865	24,867	22,628	1,192
1870	35,705	34,805	1,159
1875	58,013	43,923	3,437

Source: Mitchell and Deane, *Abstract*, pp.98-99.

Income Tax Schedule 'A' (Lands Only) Assessments illustrate the extent by which rents rose. Caution is needed when using this source since parks, ornamental grounds and large gardens were included in the tax, whilst improved administration in the mid 1860s increased the amount collected.¹ Furthermore, assessments did not take temporary rent remission or abatement into consideration, and tended to lag behind true rent levels. The assessments remain, however, a useful statistical guide. They demonstrate that rents in England and Wales fell slightly in the early 1850s - years of depression caused by poor harvests - and then rose steadily by 26 per cent, between 1855 and their peak in 1876.

Tax returns show Essex rents following the same pattern (chart 1), although overall they rose by rather more than the national average. Whereas English rents as a whole rose by 18 per cent between 1850/52 and 1870/72, Essex rents increased on average by 24 per cent between these dates, suggesting that cereal farming in Essex was

¹J.C. Stamp, *British Incomes and Property: The Application of Official Statistics to Economic Problems*, (1916), discusses the method of assessment of taxation.

sufficiently profitable to encourage an above average rise in rents.¹ Tax returns also show that, although Essex owners suffered a greater rent fall than was common nationally in the early 1850s (reflected in low Schedule 'A' tax returns in 1854 and 1855), the recovery was swift, and that assessments rose until 1876 when they stood over 28 per cent above the 1850 level.²

Naturally there were variations in rent movements within Essex, in part due to region and to soil type. Such variations are difficult to trace from the Schedule 'A' returns because several changes in taxation districts prevent long term comparisons. Estate rent rolls, which give both rents and farm acreages, provide an alternative measure, although differences in the years covered and accountancy format between estates and over time are shortcomings.³ On the Thorndon estate, the rent increase was slightly below the increase in total Essex rents, perhaps as much of the estate was on London clay soils. Gross rent rose by 37 per cent between 1850 and 1874, and by almost 43 per cent between 1850 and 1877. Some the rent increase was due to extension of estate acreage, but using the estate tenant ledgers⁴ it is possible to go some way to remove this distortion. By taking the twenty two farms which have their acreage recorded both in 1859 (when the ledgers begin) and in 1874 a sample of over 5,600 acres (almost 30 per cent of the estate) is produced, comprising farms situated

¹ Whereas English rents rose by 19 per cent between 1854/5 and 1870/2, Essex rents rose by 31.6 per cent. Rents in predominantly cereal and mixed farming areas of England rose more swiftly than in pastoral and dairying areas suggesting that cereal farms made greater profits than pastoral farms. See Collins (ed.), *Agrarian History*, pp.122-123.

² See chart 1. Although agricultural prosperity declined after 1874, tax assessments, lagged behind actual rent changes.

³ Sometimes distortion was caused by examining gross rent rather than rent per acre. In an article on the Guy's Hospital Essex estate, the writer claimed an increase in rent of 23 per cent took place between 1856 and 1872. Figures before the 1894-6 *Royal Commission* show that rent per acre rose by only 13 per cent in this period, J.C. Steele, 'The Agricultural Depression and its Effects on a Leading London Hospital', *J.R.S.S.*, iv, (1892), p.39; *Agricultural Depression*, (B.P.P., 1894 xvi, pt 1), *Appendix*, p.425.

⁴ E.R.O., D/DP A364, 365. The ledgers record the names of tenant, holding, rent payable and received and, occasionally, farm acreage.

across the estate. On these farms, average rent per acre rose by 16.25 per cent. between 1859 and 1874. The size of the sample is sufficiently large to allow us to assume the results typical of the whole estate. The upward movement of rent per acre on the Thorndon estate, therefore, was probably about 16-17 per cent between 1859 and 1874 and possibly about 23 per cent for the period 1850-1874.¹

Table 4 gives an impression of rent movement in the third quarter of the century derived from information on individual farms on twelve Essex estates.² Despite the shortcomings of the evidence, some tentative conclusions can be made. First, rents increased on all estates - even those on poorer soils typified by some of the Bonnell, St. Bartholomew's Hospital, and Ecclesiastical Commissioners' farms. Furthermore, whilst the variety of soils and farm management produced differences in the extent of rent increase, rent-roll evidence confirms a similar pattern to the Schedule 'A' assessments. Overall, Income Tax and estate evidence suggests an average increase in Essex rents of rather more than 25 per cent in the years 1850 to the mid 1870s. Finally, corporate owners seem less inclined than individual owners to raise rents as market conditions eased, although discontinuation of the beneficial lease system³ did see substantial increases in some farm rents farms going to landowners, a situation shown in the St. John's College, Cambridge rentals in chart 2.⁴

¹ Assuming a rate of increase similar to the County tax returns for the 1850s.

² For a list of the estates see table 4.

³ See below pp.78-79.

⁴ Charts 2 and 3 show the movement of rent per acre at this time on five Essex estates.

Table 4**Increase of rent per acre on Essex estates, 1850-1874 (unless otherwise stated)**

	Increase	Increase p. a.
Benyon (1860-1874)	18 per cent	1.28 per cent
Belhus (1857-1874)	90 per cent	5.29 per cent
Bonnell (1853-1874)	31 per cent	1.48 per cent
Bower Hall	24 per cent	1.00 per cent
Ecclesiastical Commissioners (N.Benfleet only) (1857-1874)	10 per cent	0.59 per cent
Guys Hospital	20 per cent	0.83 per cent
Neave (1855-1876)	20 per cent	0.95 per cent
St. Bartholomew's Hospital	24 per cent	1.00 per cent
St. John's College, Cambridge	67 per cent	4.78 per cent
St. Thomas' Hospital	3 per cent	0.13 per cent
Thorndon (1859-1874)	16 per cent	1.07 per cent
Tower (1866-1874)	20 per cent	2.50 per cent

Source: Estate Archives for Benyon estate, ERO, D/DBe E68, 55, Barrett-Lennard estate at Belhus, ERO, D/DL C68, Bonnell estate, ERO, D/DHn E4, D/DU 28/57, Bower Hall estate, ERO, D/DHf E13, 19-32, Ecclesiastical Commissioners of England and Wales farms in North Benfleet, C.C., E.C.E. File 46754, Guys Hospital estate, ERO, D/DGh E7, *Agricultural Depression*, (B.P.P., 1894 xvi, Pt.1), *Appendix*, p.425, Neave estate at Dagnams, ERO, D/Dne E13, F31, St. Bartholemew's Hospital estate, Rentals, EO 16, St. John's College, Cambridge estate, Rentals, SB4, St. Thomas' Hospital estate, Greater London Record Office, H1/ST/E30/7-31, Petre estate at Thorndon, ERO, D/DP A364-366, Tower estate at South Weald, ERO, D/DTw A5-7.

Farm rent income, of course, could be and was augmented in various ways. On some estates, for example, timber sales were important, wood sales annually averaging 10 per cent of Thorndon estate income.¹ South Essex, however, had little timber and, typically, wood sales added only 4 per cent to the Belhus estate income between 1866 and 1876.² Rents from public houses, shops, cottages and large houses were another

¹E.R.O., Petre MSS., D/DP A309-326, 341-360, Thorndon estate accounts.

²E.R.O., D/DL C68, 25.4.1877.

modest but useful addition to agricultural rents, typically providing 5.5 per cent on both the Dagnam estate of Sir Thomas Neave and on Sir John Tyrell's estate, and just over 3 per cent on the Bower Hall estate in the 'golden age'.¹ Few Essex landowning families enjoyed much non-agricultural income. The exceptions to this generalisation included Richard Benyon and Sir Thomas Maryon-Wilson, both of whom owned urban estates (the former in Hackney and the West End, the latter in Blackheath and Hampstead), Lady Waldegrave with her collieries at Radstock near Bath, and Samuel Whitbread with his breweries.² A few such as Samuel Gurney, Lord Ashburton, Joseph Mechi, Lord Petre³ and Maryon-Wilson maintained interests in the City. Surviving wills show that most other landowners had some non-agricultural investments, but few were for large sums. For most Essex owners, agricultural rents provided the bulk of their income. From the evidence available, it is tempting to believe that the lack of investment in Essex discussed below may, on some estates, have been due, in part, but most certainly not in the main, to landowners simply not having the funds available.

To obtain additional cash when required, mortgages might be taken out on the value of the estate. Caird claimed that in 1851 Essex land had mortgage debts and other liabilities to the extent of half its value, and that mortgages had become an accepted feature of estate management.⁴ The accuracy of Caird's assessment, and of his statement in 1878 that there were few English landowners who had not created or

¹E.R.O., Neave MSS., D/DNe E13, property of D.Neave, 1855, D/DNe F31, appointment of new trustees to the will of Thomas Neave, 1876; Tyrell MSS., D/DKe A9, county rent book, 1854-56; Bower Hall MSS., D/DHf E13, rentals, 1845-1862.

²G.L.R.O., Benyon MSS., E/BVR.191, 192, De Beauvoir Town rental, E/BVR/359-399 Haymarket rental; Thompson. *Landed Society*, p.131; E.R.O., Waldegrave MSS., D/DWg E28, letter from Murtrie to Wilkinson, 9.4.81. Rents on the Benyon's urban estates in Hackney remained fairly constant at c. £12,400 p.a. 1850-1900.

³£120,000 won from the Eastern Counties Railway Company in the early 1850s was invested, E.R.O., Petre MSS., D/DP E51/3, 8, papers relating to finances.

⁴Caird, *English Agriculture*, p.134.

inherited mortgage debts,¹ is open to conjecture, but there is no question that numerous Essex estates were burdened with mortgage debt in the 1850s and 1860s. High living was one cause. As social leaders, the gentry were expected to live in a comfortable and well staffed house, and to be present at major social events: hunt and subscription balls, dinners and private dances. This alone was expensive. Several Essex landlords had London houses and were members of both local and London clubs. Most devoted substantial time to leisure pursuits: the diaries of Sir Thomas Barrett-Lennard, for example, show a life spent at the theatre, seaside, dinners, balls and hunts, with regular trips to London and abroad.² Naturally, few Essex landowners had overseas holidays, but the need by so many Essex landowning families to raise money combined with the lack of estate investment suggests that expensive high living was common. Some Essex landowners could afford such a lifestyle from their rents, but not all, and estate income, was further eroded by other expenses. Some landlords had heirs or close relatives who were spendthrifts and gamblers and needed constant financial help. Others, themselves, like the Honeywood family, were addicted to gambling and horse racing.³ It also appears that many were weighed down with jointures and annuities, providing an income for the dowager, brothers and unmarried sisters: indeed, Bateman believed that in the county as a whole such expenditure accounted for 42 per cent of outgoings and represented almost one third of gross income of the average landowner.⁴ The laws of Strict Settlement acted to keep the estate intact and so prevented impecunious owners from piecemeal sales at the expense of future owners and relatives.

¹J.Caird, *The Landed Interest and the Supply of Food*, (1878), pp.105-6.

²E.R.O., Barrett-Lennard MSS., D/DL F179, 219, 230, diaries, 1848, 1872, 1878.

³Collins, *Orsett Estate*, p.28; Shrimpton, The Landed Society and the farming Community of Essex in the late 18th and 19th Centuries, unpublished Ph.D. thesis, Cambridge University, 1965, p.62. Shrimpton lists a number of Essex owners whose lifestyle led to financial problems from the early nineteenth century which includes the Tylney, Rigby, Houlton and Honeywood families. The last spent heavily on politics and horseracing, and experienced financial problems from 1815 until they went bankrupt in 1895, *ibid.*, pp.38-39, 62-63, 110-111, 137-140.

⁴Bateman, *Great landowners*, p. xxiv.

The Orsett and Belhus estates provide two examples of Essex estates which became indebted in the 'golden age'. The former, unencumbered in 1848, had mortgages of £84,500 representing 19 per cent of its asset value by the mid 1870s. Further mortgages taken out in the 1870s raised the debt, by 1886, to £201,000 or 94 per cent of the estate's (reduced) asset value.¹ Some of this money was raised for land purchases, to buy annuities settled on relatives, and to pay for field drainage, but most was to cover debts caused by the Wingfields living above their income and possibly gambling debts.² The Belhus estate was free of debt in the early nineteenth century, and mortgages secured against the estate totalled only £55,000 in 1857, but by the 1860s had reached £160,000.³ Some was spent on estate improvements but it seems probable that again mortgages were a consequence of personal extravagance, political ambition and sporting expenses.⁴ Without realising money from non-agricultural sources, or selling portions of the estate, it was difficult to reduce such mortgages, but so long as land values and rents rose, at least in money terms, the debts could be serviced.⁵

¹E.R.O., Whitmore MSS., D/DWt T1, Schedule of mortgages; R.U.L., Whitmore MSS. ESS 17/9/112-115, contracts; *idem.*, Drivers' Report on the Orsett estate (1886) now in E.R.O.

²Collins, *Orsett Estate*, pp.23-25, 28.

³E.R.O., Barrett-Lennard MSS., D/DL C67, 68 various letters; Whitehall Securities Corporation Ltd., West Thurrock Estate MSS., conveyance of freehold land in Aveley and other sales, (1919). I wish to thank Messrs. Pledger and Smylie for their kindness in making these documents available to me.

⁴In the 1820s and 1830s Thomas Barrett-Lennard created huge debts through politics (in the 1820 Maldon election he spent over £12,000) and took out mortgages on his future inheritance. His son, a leading county figure, spent heavily on sport and in breeding dogs and horses (losing £1,000 in 1876 on the latter alone), had houses in London and Brighton, enjoyed long holidays, and paid large sums to support his brother, a drunkard and gambler who spent £18,000 in five years, and three free-spending sons. Mortgage debts in 1876 represented over 90 per cent of the Essex estate on which they were secured. E.R.O., D/DL C58, 67, 68, correspondence, especially letter from Charles Wood to Thomas Barrett-Lennard, 25.4.1877; T.Barrett-Lennard, *An Account of the Families of Lennard and Barrett*, (1908), pp.637-638.

⁵Other families with large mortgages included the Mildmays, Maryon-Wilsons, Essex (Capel) and Honeywood families. Few records have survived to show the situation amongst smaller owners. E.R.O., Mildmay MSS., D/DM T115, deeds and mortgages; G.L.R.O., Maryon-Wilson MSS., E/MW/H/212, schedule of mortgages, 1864; Hertfordshire C.R.O., Essex (Capel) MSS., D/ECp E12, valuations and mortgages; Shrimpton, 'Landed Society', pp.62-63.

Two important points emerge from this study of rent movement. First, a comparison of retail prices and rentals shows that most Essex landowners - and indeed in England - did not experience rising real incomes between mid century and 1870/2. In Essex rents rose by about 24 per cent and retail prices by about 26 per cent: thus in real terms Essex landowners, on average, received approximately constant returns from their land during the 'golden age', (although this disguises a serious loss in the early 1850s and a substantial gain thereafter) and nationally landlords fared worse.¹ Judging by returns secured by most Essex landowners, therefore, the epithet 'golden age' seems inappropriate for the years 1850-1873. Naturally, experiences varied, as table 4 shows: the exceptional increase on the Belhus estate due to market gardening was mentioned above, and above average increases on the Tower estates were due in great measure to the creation of large model dairy farms.² By the same token, however, there were areas of Essex, and probably other areas of England, where the landowners' real income was falling throughout much of the 'golden age'. Secondly, the slightly greater rise in rentals in Essex than in England as a whole, suggesting increasing comparative profitability on cereal farms, must be taken into consideration as a factor influencing Essex landowners' decision to encourage traditional Essex farming practices rather than to invest to change farming systems at this time.

¹Even allowing for the lag in rental information affecting tax figures, this remains the case. Comparing tax movement between 1854/5 and 1876/7 with prices between 1850/2 and 1872/4, Essex farms show a rent increase of 38.2 per cent, England 26.2 per cent, whilst prices rose between 34.3 per cent (Rousseaux) and 40 per cent (Sauerbeck-*Statist*). Thus the most optimistic generalisation is of a quite modest increase.

²See above table 4. Also E.R.O., Tower MSS., D/DTw A5, 6, estate accounts and letters.

Chart 2
Movement of rent per acre on three corporate estates in Essex, 1850 - 1878

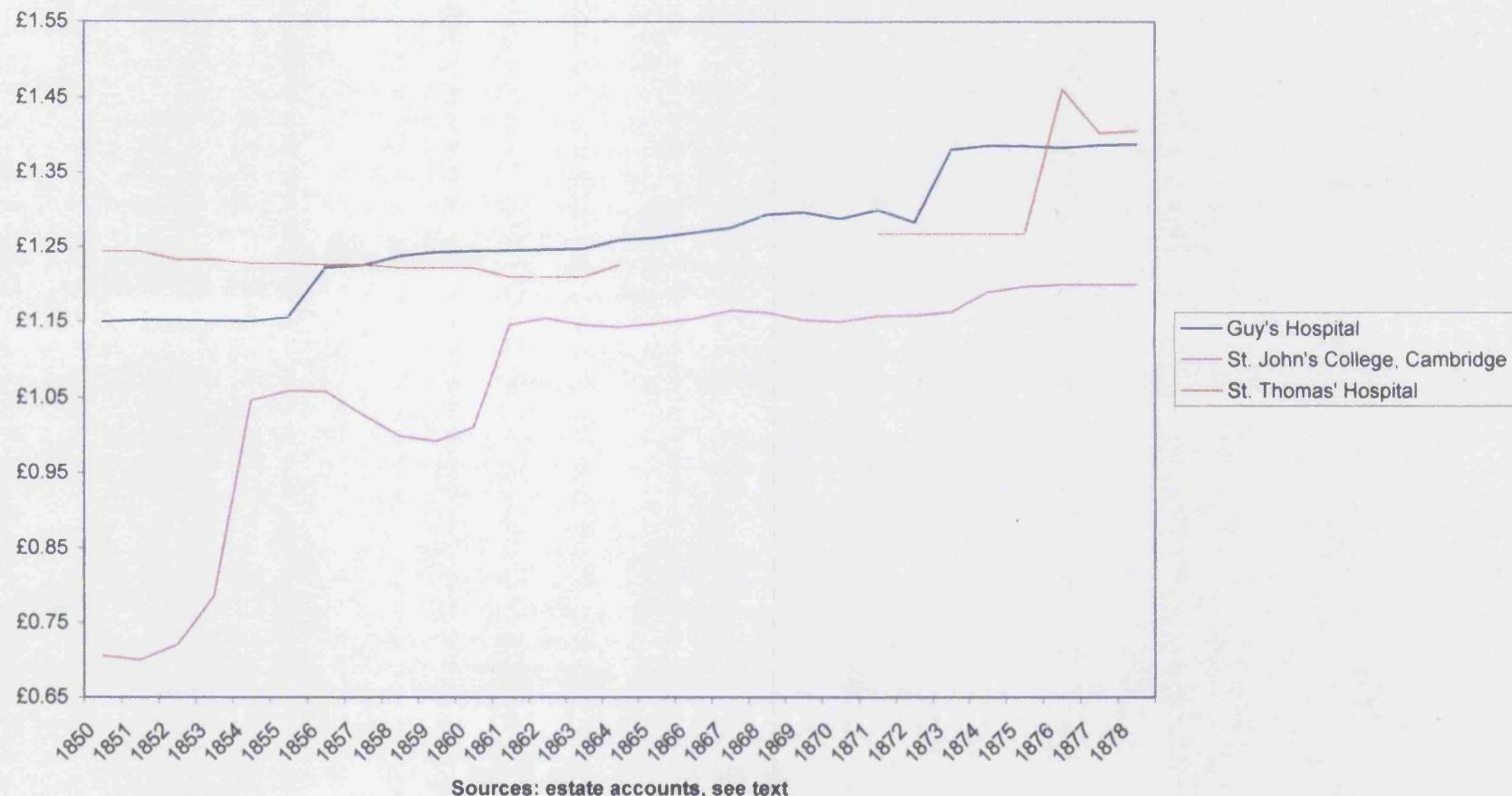
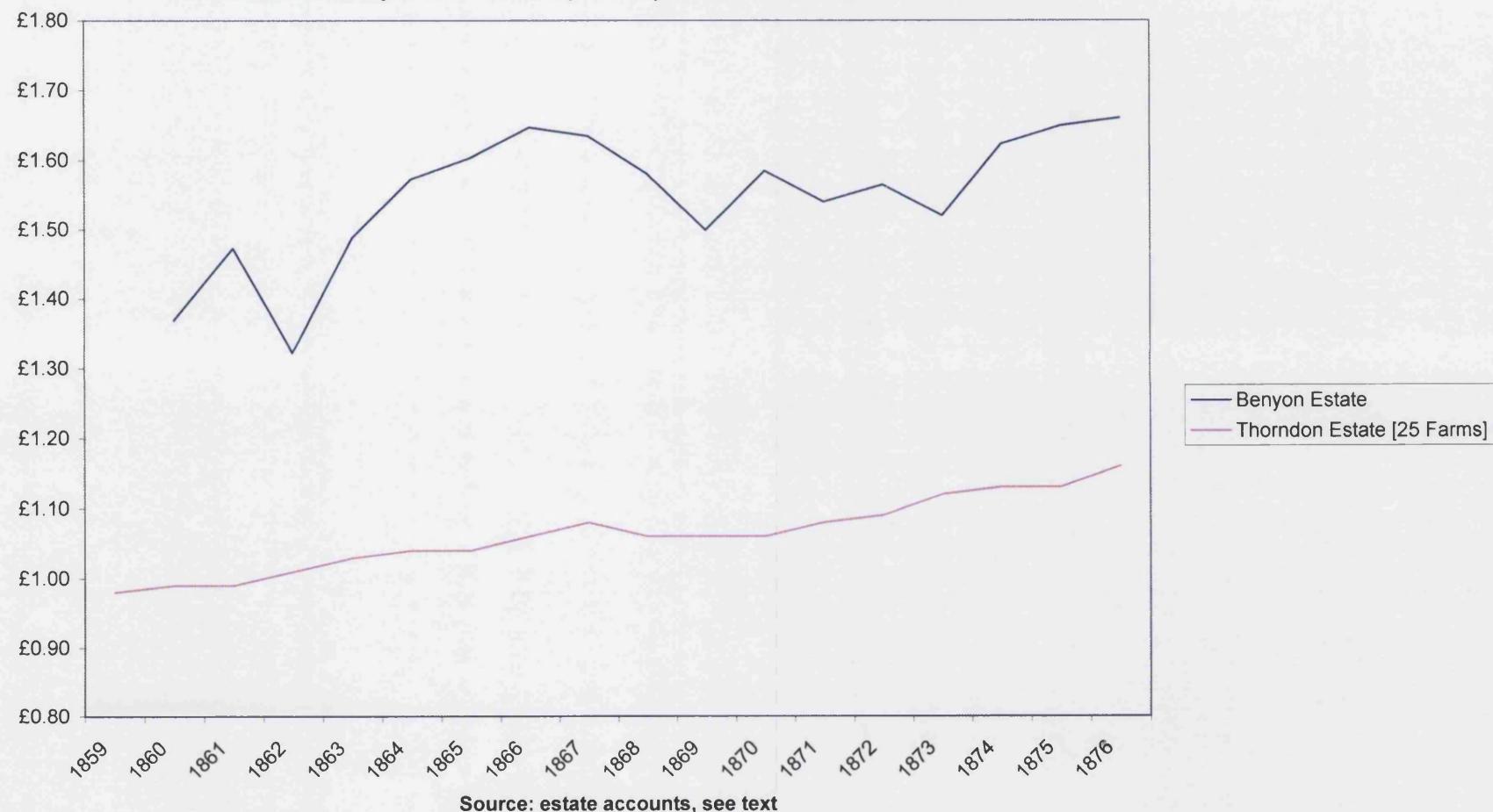
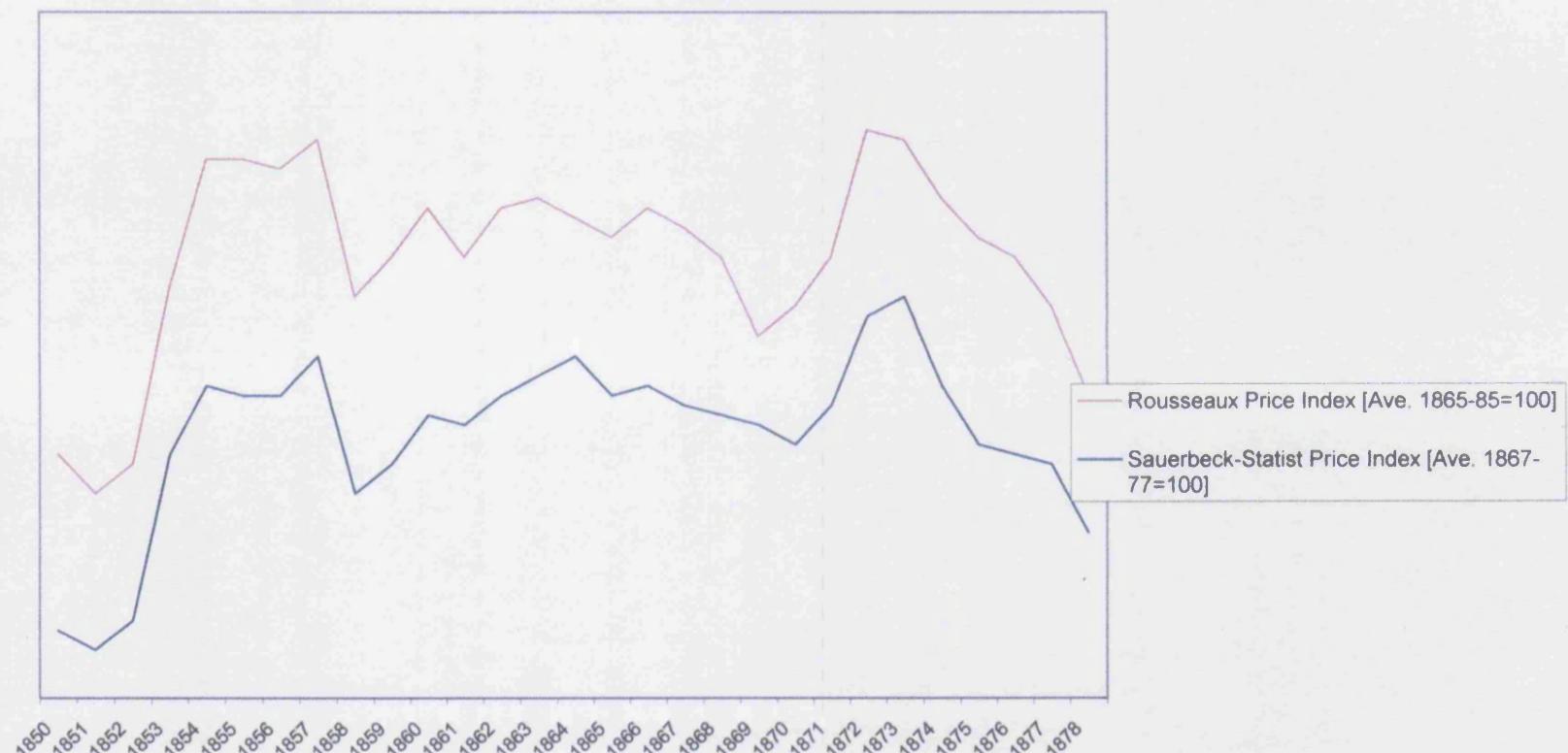


Chart 3
Movement of rent per acre on two privately owned Essex estates, 1859 - 1876



Source: estate accounts, see text

Chart 4
Price indices, 1850-1878



Source: Mitchell and Deane, *Abstract*, pp. 472 - 475

4. Investment in the 'Golden Age' : A Modest "Homage to King Corn"

Textbook accounts suggest that more capital was invested in agricultural land in the third quarter of the nineteenth century than at any previous period. Thompson, for example, wrote of "great schemes of agricultural investment ... launched by many landowners" and of "a great new age of agricultural improvement ... in the half-dozen years after Repeal",¹ Chambers and Mingay argued that "there was probably much more landlord's capital sunk in farm improvements in the middle years of the nineteenth century than in any comparable period" and mention in particular the "heavy expenditure on drainage",² whilst Mathias wrote that after 1846 "tile drainage developed into an East Anglian boom on the heavy clays".³ Encouraged by tracts detailing the benefits of land drainage and 'High Farming',⁴ and by the availability of loans for land improvement, landowners supposedly invested enthusiastically in roads, buildings, and drainage, even on clayland farms, in the hope that pipe drainage would facilitate the spread of more profitable farming on difficult soils.

Many owners borrowed from the Inclosure Commissioners under the Lands Improvement Acts or from private land loan companies; others relied on private resources. As few private accounts survive, it is impossible to measure total investment with great accuracy. A knowledgeable contemporary believed that £25,000,000 was invested in land (mostly farm buildings and drainage) in England and Wales between 1846 and 1878, £12,000,000 being borrowed from land companies,⁵ but recent work by Phillips has suggested that in England itself as much as £23,400,000 was invested in underdraining alone between 1847 and 1879, of

¹Thompson, *Landed Society*, pp.246–247.

²Chambers and Mingay, *Agricultural Revolution*, pp.163, 175.

³Mathias, *First Industrial Nation*, p.311.

⁴e.g. J. Caird, *High Farming Under Liberal Covenants: The Best Substitute for Protection*, 6th ed., (1849); J.J. Mechi, *Agricultural Improvement*, (1845).

⁵Caird. *Landed Interest*, p.82.

which only £4,700,000 was borrowed.¹ If such estimates are accurate, and with expenditure on buildings added, farm investment in the 'golden age' was even higher than contemporaries imagined. Essex evidence, however, presents a very different picture.

On the national stage, the larger landowners certainly invested heavily. The Duke of Northumberland spent over half his agricultural rental on improving his English estates between 1848 and 1854, and other great landowners matched this outlay.² The lesser gentry probably invested a lower proportion of their income although Thompson cites one who spent nearly 20 per cent of his rental on repairs in the 1860s.³ Some Essex owners followed this pattern of high investment levels. Richard Benyon, for example, who had invested heavily to restore his exhausted 1,565 acre Ockendon estate before 1850, spent a further £8,000 on underdraining in the 1850s and 1860s and provided cottages and new farm buildings.⁴ Lord Petre spent 15 per cent of the annual Thorndon rents on improvements throughout the 'golden age',⁵ whilst C.J. Tower at South Weald, W. Bower-Smyth at Theydon and the Earl of Essex at Rayne were other Essex landowners who invested heavily in their estates.⁶ Of the corporate owners, the governors of both St. Thomas' Hospital and St. Bartholomew's Hospital were big investors, the latter spending 15 per cent per annum

¹Figures calculated from Phillips, *Underdraining*., pp.117, 125.

²Thompson, *Landed Society*, pp.246-250.

³*ibid.*, p.252.

⁴E.R.O., Benyon MSS., D/DBe E42 Essex estate 1829; E46, valuation 1843; E15, Talbot's estimates for repairs; E44, North Ockendon estate repairs; E55, 57, 66, 68, rentals; Berkshire C.R.O., Benyon MSS., D/Eby A135, Mr.Turner's account for the Essex estate. Benyon also spent heavily in the early 1870s.

⁵E.R.O., D/DP A 309-326, 341-360.

⁶E.R.O., D/DTw A6, correspondence; P.R.O., MAF 66/1, 2, 3, 11, drainage loan ledgers, *idem.*, I.R. 3/3, register of advances under the drainage Acts.

of received rents in the 1860s on farm improvement.¹

Essex estate accounts suggest that the properties attracting most investment were, in the main, run down properties which urgently required new buildings and underdraining, and farms where soil type and rail accessibility to urban markets enabled a greater emphasis on grass and livestock farming.² The latter suggests that Thompson's description of 'golden age' investment as "a last expensive homage to King Corn"³ requires qualification. The St. Bartholomew's properties were in the former category, most investment being directed into newly purchased farms that required extensive restoration.⁴ Owners who invested to encourage tenants to keep more stock included C.J. Tower, who spent £2,000 between 1868 and 1873 to convert one large property into a model dairy farm, and Lord Petre, the greater part of whose investment was directed into land suitable for mixed farming.⁵ The best known Essex farmer of the time was Joseph Mechi, owner-occupier of Tiptree Hall in central east Essex. Mechi, a businessman turned farmer and publicist, advocated and practised deep drainage for poor heavy soils. His 130 acre farm was open to inspection and he

¹G.L.R.O., St. Thomas' Hospital MSS., HI/ST/E18, County Estates Log Book; *idem.*, HI/ST/E30/7-20, 27 [numbers 21 to 26 were unavailable due to damage], Clerks Rental; *idem.*, HI/ST/E60/17, 'Notes on Estate Improvement 1800-1840'; St. Bartholomew's Hospital MSS., EO 8/6, Almoner's Reports 1869-1887; *idem.*, Ha/1/20-23, Minutes of the Board of Governors; *idem.*, EO 16, Rentals; *idem.*, FD1, General Account (1850-1870).

²*ibid.*, E.R.O., Benyon MSS., D/DBe E42 Essex estate 1829; E46, valuation 1843; E15, Talbot's estimates for repairs; E44, North Ockendon estate repairs; E55, 57, 66, 68, rentals; Berkshire C.R.O., Benyon MSS., D/Eby A135, Mr.Turner's account for the Essex estate. Benyon also spent heavily in the early 1870s; E.R.O., D/DP A 309-326, 341-360.

³Thompson, *Landed Society*, p. 246. It could be argued, however, that extensive 'land ditching' (ditches filled with brushwood and then covered over to form hollow drains) in the Rodings and north west of the county mentioned by Baker in Pusey's 1843 article, and the number of parishes subject to drainage rentcharge in this cereal farming area both suggest the use of drainage as a means of increasing wheat and barley output. P.Pusey (ed.). 'Evidence on the Antiquity, Cheapness and Efficacy of Thorough Draining or Land Ditching as Practised throughout the Counties of Suffolk, Hertford, Essex and Norfolk', *J.R.A.S.E.*, iv, (1843), pp.40-41; Phillips, *Underdraining*, figures 3.4A-3.7, pp.64-70 show the areas where drainage was undertaken.

⁴St. Bartholomew's Hospital MSS., EO 8/6, Almoner's reports 1869-1887; *idem.*, Ha/1/20-23, minutes of the Board of Governors; *idem.*, EO 16, Rentals; *idem.*, FD1, general account (1850-1870).

⁵E.R.O., D/DTw A6, letter 16.1 1886; *idem.*, D/DP A309-326, 341-357.

regularly published his balance sheet to illustrate the success of his methods.¹ Mechi, who ran the farm as a mixed livestock and arable enterprise with 200 stall-fed sheep, pigs, and 30-40 bullocks, claimed that his investment in drainage and his heavy use of manure enabled his poor soils to produce 5-6 quarters of wheat and 7 quarters of barley an acre (well over a third higher than average Essex yields at that time) and that he made about 18 per cent on his farming capital.²

These examples of substantial investment in Essex, however, were not typical. Essex estate evidence and material from surviving land company ledgers suggests something that previous studies have hinted at but never made explicit: the level of capital investment in farms in this area of England between 1850 and the early 1870s has been exaggerated.³ Few Essex landowners (or tenants) are listed as borrowers in the surviving land company ledgers or in the records of loans made under the Public Drainage and Improvement of Land Acts, and the amounts they borrowed were small, amounting to only £55,433 between 1847 and 1874. The amount borrowed for drainage alone in this period was a mere £29,000.⁴ Recent work by Phillips has suggested that in a cross-section of counties loan capital commonly constituted one-fifth of total drainage outlay, which implies that in the 'golden age' Essex owners and tenants probably spent of the order of £150,000 on drainage. Assuming a cost of £6

¹J.J.Mechi, *How to Farm Profitably or the Sayings and Doings of Alderman Mechi*, (1859); R. Brigden, *Victorian Farms*, (Malborough, 1986), pp.190-193.

²Mingay, *Rural Life*, p.56. Many Essex farmers opposed Meki's methods, maintaining their impracticability on the London Clay soils. They also challenged his balance sheets, and argued that despite high expenditure on hedge removal, very deep drainage, road and homestead buildings, etc., his fields were ill drained, his crops poor, and his animals squalid. Such arguments were common in the columns of the *Essex Standard*, e.g. 1.8.1851, 19.12.1851, 26.12.1851, 30.3.1860. See also E.R.O., T/Z 20/35, 114/1-2. Meki was bankrupted when his City interests failed in 1881.

³ See for example Thompson, *Landed Society*, pp.252-253

⁴P.R.O., MAF 66 series, drainage loan ledgers; *idem.*, IR 3/3-4, register of advances under the drainage Acts. The above figures differ slightly from those of Phillips who maintains that 56 per cent of £53,907 (£30,188) was borrowed for drainage by Essex owners between 1847 and 1869, Phillips, *Underdraining*, table 4.2, p.125.

an acre - an assumption based on several contemporary estimates¹ - a mere 25,000 acres were drained between 1847 and 1874, constituting little more than 3 per cent of the county's farmed land.² Loans for new buildings and cottages by Essex men were also modest: about £27,550 between 1847 and 1874, equivalent to only £0.034 per acre.³ If loans here also, constituted one fifth of total investment it would mean that only £0.17 was invested on buildings and cottages for each acre of Essex farmland.

Estate accounts confirm, in the main, the low level of investment on many Essex farms. At Belhus (3,700 acres), a mere 3 per cent p.a. of rents received were reinvested in the estate between 1867 and 1876, the figure was even lower on the Bonnell estates (1,945 acres) and investment appears to have been a mere 0.9 per cent of rent between 1850 and 1862 on the Bower Hall estate (1,158 acres).⁴ Further, a survey of 1879 for the large Eastern Lodge estate (8,617 acres) details ten farms, comprising 20 per cent of the estate, requiring urgent repairs: several buildings were described as "dilapidated" and it was estimated that £4.3 per acre was required to make up for previous neglect, £4.8 per acre if necessary cottages were to be built.⁵

Yet other evidence of low investment on large estates in the 'golden age' comes from Orsett, Messing and St. Osyth. Despite capital inputs in 1876 and 1882, the 1886 report on the Orsett estate condemned the majority of farm buildings as old fashioned and in poor repair, and claimed that the provision of new buildings and drainage

¹e.g. A.Thompson (quoted in Phillips, *Underdraining*, p.86), James Caird (in evidence to the S.C. *Improvement of Lands*, (B.P.P., 1873 xvi), QQ. 4127-28.

² Phillips claims that investment in drainage in the 'golden age' was neglected on most Essex soils excepting the boulder clays, Phillips, *Underdraining*, pp.70-72, 246.

³P.R.O., MAF 66 series; IR 3/3-4.

⁴E.R.O., D/DL C68, 25.4.1877; *idem.*, Bonnell MSS., D/DHn E4, 'Particulars of old leases and present leases and money spent in repairs on Essex farms'; *idem.*, Bower Hall estate MSS., D/DHf E13, 19-31, rentals.

⁵E.R.O., Maynard MSS., D/DMg E27-36, Eastern Lodge, surveys and suggestions on repairs (1879).

"should not be neglected any longer".¹ Similarly, an 1869 report on the Earl of Verulam's 1,120 acre Messing estate described the farm buildings as "old and considerably out of repair", "inconveniently placed", and indicated a "considerable acreage requires drainage".² The St. Osyth estate accounts show under 4 per cent of rents being spent on repairs and improvements in the early and mid 1850s.³ Evidence from smaller estates also shows little being spent on improvements. Examples include a mere 2.1 per cent spent on Rettendon farms by Rev. A.W.Bullen in the 1850s, and 2.3 per cent on combined repairs and improvements on the Tyrell's Boreham estate between 1854 and 1856,⁴ whilst surveys carried out between 1852 and 1877 by the Ecclesiastical Commissioners on farms held by beneficial lease holders commonly complained of inadequate and poorly repaired buildings.⁵ The run down condition of the Essex farms bought by St. Bartholomew's Hospital in the 1860s, is likewise inconsistent with claims of heavy investment in Essex agriculture.⁶

It was not only on private estates that owners were parsimonious. Essex estate accounts of corporate owners indicate a similar picture. An analysis of estate income and expenditure made by Guy's Hospital's governors for the *Royal Commission* of the 1890s reveals a very low level of investment⁷ with the governors making no improvements to their farms in the 1850s and investing a mere 2 per cent of received

¹E.R.O., Drivers' Report (1886), p.4.

²Hertfordshire C.R.O., Earl of Verulam MSS., xi.122, Box 64, p. 659, Messing estate valuation, 1869.

³E.R.O., St. Osyth Estate MSS., D/DCr A31-32, tenants' accounts.

⁴E.R.O., D/DSw A1, cash book of Rettendon property; *idem.*, D/DKe A9.

⁵C.C., E.C.E. MSS., London Cathedral, London Bishopric and London Chapter Surveys, S1, pp.294-315; S3, pp.357-415; S4, pp.231-275.

⁶St. Bartholemew's Hospital MSS., EO 8/1, Surveyors' reports, EO 8/6, Almoners' reports, 1850-1870, FD1, general account.

⁷*Agricultural Depression*, (B.P.P., 1894 xvi pt. 1), Appendix A-ix-2, p.425. The Receiver's reports for Guy's Hospital's Essex properties, which exist for the years 1853 to 1873 show both occasional underdraining and farm and cottage building taking place, and a sum equivalent to a mere nine per cent of received rents being used in this way.

rent in the 1860s, of which almost half was for land reclamation. Guy's Hospital was not atypical. The Fellows of St. John's College, Cambridge, for example, invested a mere 1.64 per cent of received rent from Essex farms in improvements and only 1.96 per cent in repairs in the 1850s, and 3.25 per cent and 1.71 per cent respectively in the 1860s, prompting a later Senior Bursar to bemoan that when beneficial leases ended, insufficient had been spent by the college on repairs or new buildings.¹

In all, the evidence of land drainage company, estate records and of existing buildings², supports the thesis that while most Essex landowners invested on their estates in the 'golden age', and a minority invested heavily, the overall level was modest. Sometime after this period, one expert blamed low levels of investment between 1860 and 1875 for deficiencies of Essex farm buildings in the 1890s,³ and Primrose McConnell, migrant farmer, claimed that Essex landowners had found it necessary to lay out a considerable sum to repair buildings in order to attract Scottish farmers in the 1880s and 1890s.⁴

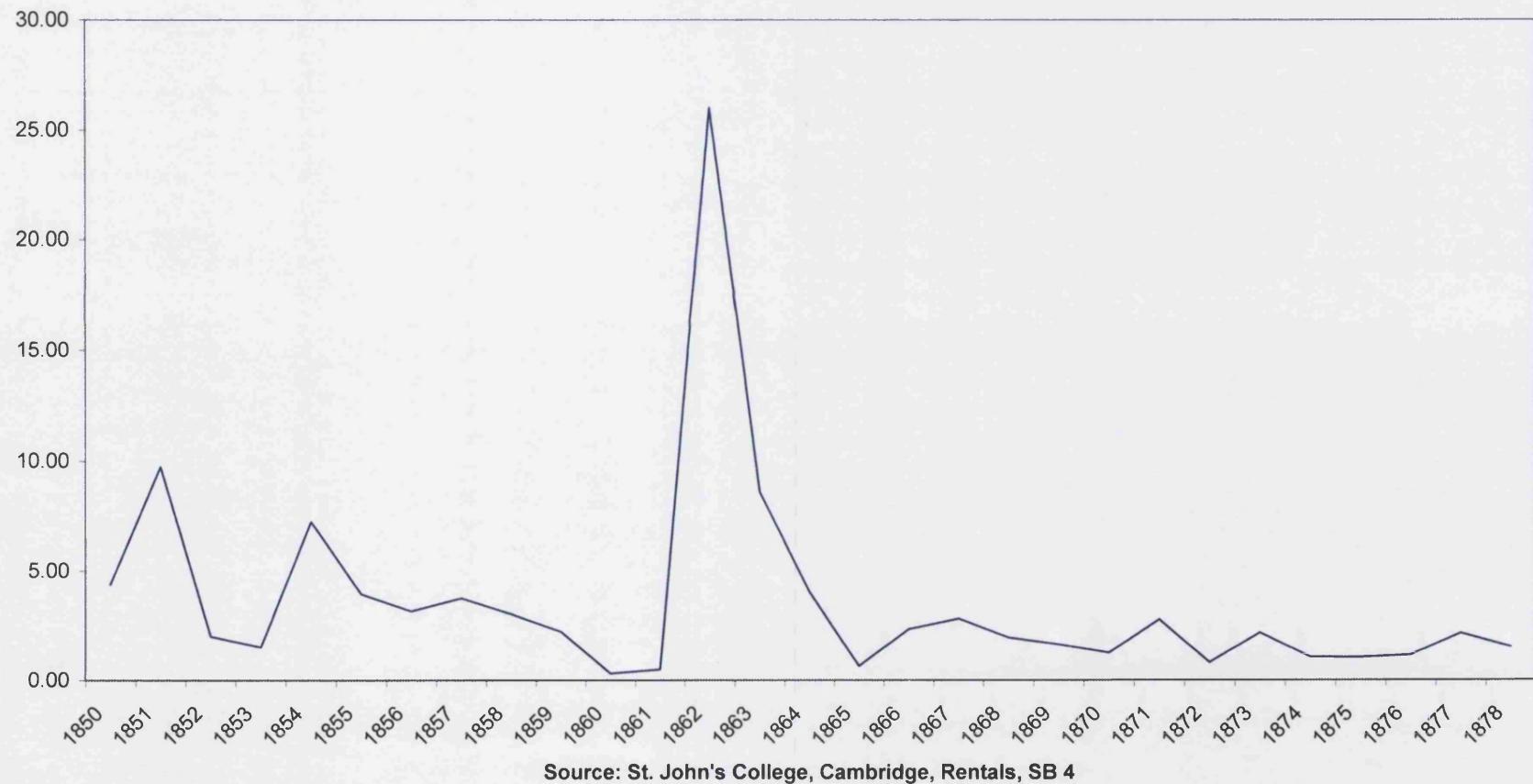
¹St. John's College, Cambridge MSS., SB 4, rentals, 1850–70; *idem.*, D100.70, Senior Bursar's statement on the final audit, 1893. The percentage of received rents spent on the Essex estate is shown in chart 5. There was a brief surge in repairing farm buildings in 1861–63 on two new cattle sheds and a stable following a survey in 1860.

²Whilst surviving Essex farm buildings date from a variety of years, many more date from the late eighteenth century and early nineteenth century, than from the period 1850–1870s, giving some support to Holderness' thesis (based on East Anglian evidence) that a greater proportion of rents was spent on buildings between 1806 and 1820 than in the 'golden age'. B.A. Holderness, 'Landlords' Capital Formation in East Anglia, 1750–1870', *Ec.H.R.*, 2nd. Ser., xxv, no. 3, (1972), table 2, p.439.

³*Agricultural Depression, Report of Pringle*, (B.P.P., 1894 xvi, pt.1), pp.39, 58–59, QQ. 8765–66.

⁴P. McConnell, 'Experiences of a Scotsman on the Essex Clays', *J.R.A.S.E.*, 3 ser., iii, (1891), p.312.

Chart 5
Sums spent on investments and repairs as a percentage of rent received on the Essex estate of St. John's College, Cambridge, 1850 - 1878



Source: St. John's College, Cambridge, Rentals, SB 4

If the investment patterns of Essex landowners are representative of corn county landowners generally, it is possible that the whole concept of over-investment in high farming in England between 1850 and 1873 needs revision.¹ There may be significance in later complaints (1893) by the Senior Bursar of St. John's College, Cambridge, of insufficient investment in the 1850s and 1860s not just on those Essex farms mentioned above but on all the college estates: St. John's held land in Bedfordshire, Berkshire, Cambridgeshire, Cumberland, Derbyshire, Essex, Hertfordshire, Huntingdonshire, Kent, Lancashire, Leicestershire, Lincolnshire, London, Nottinghamshire, Suffolk, Wiltshire and Yorkshire.² Phillips' recent work on drainage has shown that although a higher proportion of rent was devoted to drainage between 1840 and 1869 than previously, only 2.7 per cent of gross rents was reinvested for this purpose on typical Northamptonshire estates.³ Furthermore he suggests that over the whole period 1847-1899, a mere 7 per cent of the land requiring drainage in England was underdrained using drainage loans, and some 4.5 million acres were drained in total.⁴ This, he claimed, represented just over 19 per cent of English farmland and 35 per cent of farmland which had soil with impeded drainage.⁵ Accordingly, only a third of the land requiring drainage in 1847 was drained by 1899, and some of this took place after 1874.⁶

County figures show variations in drainage investment and that Essex owners were more parsimonious than those of most other counties. Land drainage ledgers and

¹Interestingly, in the literature of mid century and the 1860s there is an implied criticism of existing landlord conduct regarding the inadequacy of farm buildings, Wilmot, *Business*, p.61.

²H.F. Howard, *An Account of the Finances of the College of St. John the Evangelist in the University of Cambridge 1511-1926*, (Cambridge, 1935), pp.286-293.

³Phillips, *Underdraining*, p.154.

⁴*ibid.*, pp.86, 120.

⁵*ibid.*, pp.120, 242.

⁶Low investment in all kinds of land improvement is suggested by the findings of the S.C. *Improvement of Land*, (B.P.P., 1873 xvi), pp.iii-iv.

Inland Revenue figures suggest in Oxfordshire, for example, that some 16 to 17 per cent of the county's farmland was drained between 1847 and 1874, compared to a mere 3.2 per cent of Essex farmland.¹ Essex figures were, however, similar to those in Norfolk, Suffolk, Sussex and Hampshire. Investment in farm improvements of all sorts was low in Essex: in building as well as drainage, and so it seems possible that there was a comparative lack of landlord capital investment in agricultural improvement in East Anglia and the south east. At the very least, the long established generalisations about heavy investment in the corn counties in the 'golden age' seems in need of verification by further research at county level.²

A number of reasons could explain the lack of investment which appears to typify many Essex estates in the 'golden age'. Obviously there were shortsighted and illiberal landowners who were reluctant to invest, and Essex probably had a high proportion of indebted landowners, unable to afford heavy investment without raising further loans and forced to restrict expenditure to essentials and to projects where returns were highest, certain and not long delayed. Caird, at mid century, claimed that many Essex owners had insufficient capital to invest in land improvement.³ Many had to service large mortgage debts,⁴ and the modest rise in Essex rents in real terms during the 'golden age' provided little additional means to invest.

Estate size may have played a role in low investment levels. Essex had a high proportion of its land in small estates (over 70 per cent of land was held in estates of under 3,000 acres) and national evidence marshalled by Phillips suggests that small

¹Phillips, *Underdraining*, p.81.

²Lending some support to the traditional view, Holderness, working on records for large estates in Norfolk and Suffolk claims that farm investment on repairs and new work fell in these counties after the 1820s, but remained at c. 7 per cent of gross rentals in the 'golden age'. His figures include repairs, yet even so are surprisingly higher than Essex estates, Holderness, 'Landlords' Capital', pp. 439, 442.

³Caird, *English Agriculture*, pp.134-135.

⁴See above p.51 ff.

owners, who were less likely to have available capital, invested less in their estates. In particular, few owners of estates under 1,000 acres took out drainage loans.¹ Essex figures support this view as a mere 0.1 per cent of owners of 'estates' under 100 acres and 1.2 per cent of owners of estates of 100-1,000 acres used drainage loans, compared with 8 per cent of owners of estates of 1,000-3,000 acres, and 15.8 per cent of owners of estates of 3,000-10,000 acres.² Size of acreage owned was one factor, but alone does not explain investment levels. Certainly, counties with many larger landowners, such as Wiltshire, Northumberland, Shropshire and Dorset, invested more than counties where smaller landowners predominated, such as Essex, Surrey, Westmoreland and Middlesex,³ but a comparison of expenditure per acre of cultivated soil with impeded drainage and the percentage of each county owned by owners of over 3,000 acres using Spearman's rank correlation gives a figure of only 0.282, and of over 1,000 acres of 0.302, suggesting low correlation. Furthermore, the three counties which invested less per acre in drainage than Essex - Norfolk, Suffolk and Cornwall - all had over 40 per cent of their land in estates of over 3,000 acres.

It is possible, of course, that low levels of investment by Essex landlords were partly compensated by high levels of tenant investment. Traditionally, drainage and repair work were a tenant's responsibility, landlords providing materials.⁴ Essex 'golden age' estate accounts frequently mention grants of drainage tiles to tenants, suggesting landowners were willing to provide the material for underdraining individual fields, perhaps on application from the tenant, rather than finance a major draining programme. Similarly, repairs were sometimes a joint venture, and Corporate estate accounts and some private estate accounts mention farms 'improved' by the tenant.

¹Phillips, *Underdraining*, pp.177, 185.

²Calculated from figures in Phillips, *ibid.*, pp.178-79.

³Calculated from figures in Phillips, *ibid.*, p.81.

⁴ Round felt that it was "quite reasonable" for tenants to have to cart repair materials up to ten miles: E.R.O., Round MSS., D/DR E15, correspondence, June 1857.

The Receivers reports for the Guy's Hospital estates between 1853 and 1870s, for example, show that most of the drainage on the heavy soiled farms was financed by the tenants, even on large farms, and note that tenants had made considerable improvements on their farms by altering hedges, straightening fences, enclosing waste, carrying out repairs and in drainage.¹ Other examples include tenant farmer James Laver whose Cressing farm (108 acres) on the Misses Porter estate was, by 1850, "much improved by the tenant", farmers Walford (Layer Hall farm) and Samuel Dennis (Layer Barns farm) on the Birch estate who, in 1852, improved and drained their farms (the latter spending £227. 2s. 6d. above the amount given for tiles by landlord Round), Giblin (Ridgewell) on the St John's College estate who in the late 1850s drained most of his 280 acre farm, and the tenants of Bovington Hall and Ongar Park farms who dug drains in 1867, the landowner (G. Capel Cure) supplying pipes and tiles.² Possibly tenant investment of this nature was more common generally, or more common in some counties, including Essex, than has previously been assumed.

It may be that in the relatively prosperous years (prosperous for tenants if not for landlords) of the 'golden age', tenants did not insist on the landlord fulfilling his duty to assist in repairs and improvements.³ It is, perhaps, to the point that farmer Hutley, a noted improving farmer, claimed in 1847 that in Essex there was "hardly a tenant in the county who dared to ask his landlord to build him anything".⁴ Holderness suggests between 1820-80, tenants in Norfolk and Suffolk increased their investment levels in fixed capital formation encouraging landowners to invest declining

¹E.R.O., Guys Hospital MSS., Receivers reports for the Essex estate, D/D Gh 7.

²E.R.O., Porter MSS., D/DPo E11, report of Misses Porter's Essex estate; *idem.*, Round MSS., D/DR E16, letters from John Oxley-Parker to Round 28.1.1852, 13.10.1852; *idem.*, Capel Cure MSS., D/DCc E5, farm book 1868-72; St John's Cambridge MSS., Senior Bursar's diary, SB1.7.

³A point made by A.H.H. Matthews in 1907, Thompson, *Landed Society*, p.252.

⁴S.C. *Agricultural Customs, Evidence of W. Hutley*, (B.P.P., 1847-8 vii), p.141.

proportions of their income in this way.¹ Unfortunately, it is not possible to estimate the amount spent on either drainage or new buildings by Essex tenants since the rudimentary farm accounts which survive make no mention of fixed capital investment. It does seem, however, that part of the explanation for low landowner investment in Essex was a modest shift in investment initiatives from landowner to tenant during the 'golden age'.

It was not that Essex soils needed little investment in drainage. Phillips suggests that a third of Essex land was "intermediate" in quality, the Dengie area was poor quality, and the rest of 'good quality'.² Using figures derived from the 1975 soil survey maps and an assumption that whereas all clays with impeded drainage required draining, only 10 per cent of "mixed" soils did, he felt that 38.4 per cent of Essex required drainage.³ In Essex, however, this "mixed" area includes much of the boulder clay soils, and the heavy soils of central, north and west Essex - soils where most drainage was carried out between 1847 and 1900, and Phillips' estimate that only 10 per cent of such land required drainage seems far too low. Recent soil survey publications note that Oak, Windsor, Lawford and Wickham association soils "need effective drainage" and that Faulkbourne, Hanslope and other boulder clay soils require drainage to prevent seasonal waterlogging.⁴ As these soils together represent some 70 per cent of Essex land,⁵ well over 50 per cent and perhaps as much as 70 per cent of Essex soils probably required draining.

It is theoretically possible that investment was limited in Essex because most farms

¹Holderness, 'Landlords' Capital', pp.439, 441.

²Phillips, *Underdraining*, table 2.3, pp.38-39, figure 2.3, p.36.

³*ibid.*

⁴Hodge, et al, *Soils*, p.360. For a full list of soil survey books, see chapter 1 above.

⁵It is noted that Darby classified 57.7 per cent of Essex soils as clay, H.C.Darby, 'The Draining of the English Clay-lands', *Geographische Zeitschrift*, lii, no. 3, (1964), p.191.

already had satisfactory buildings and drainage, but considerable evidence has been cited already of buildings in poor condition and of later loans needed to remedy neglect. There is, however, evidence of existing drains in Essex, and so the county may have required less investment than some others. As early as 1843, Baker confirmed that underdraining using hollow drains ('land ditching') had been practised in Essex for about a century, particularly in the Rodings and in the north west of the county, and he believed that two thirds of the county was drained using this method.¹ Such drains, together with mole drains, were durable, cheap enough for tenants to afford, successful and better than tile or pipe drains which "do not answer well"² unless covered with gravel and cockle shells. It may be that, as Thirsk and Imray claimed of Suffolk,³ hollow draining continued in the county long after the invention of tile drainage, in part because of cost, but more as on London clay soils, with the unresolved problem of surface water drainage, tile drainage was not advantageous.⁴

Tithe file evidence adds weight to this theory. It shows that much drainage (not necessarily pipe drainage) had been carried out on the boulder clays in the 1830s, and that only 39 Essex parishes were considered to require drainage.⁵ Indeed, as late as

¹Baker in Pusey (ed.), *Thorough Draining*, pp.35-41. His evidence is supported by Oxley-Parker, E.R.O., D/DOp B123/976. Ernle (*English Farming*, pp.359, 366) also noted the extent and effectiveness of drainage in Essex before mid century.

²Baker in Pusey (ed.), *Thorough Draining*, p. 37. Indeed, somewhat later one commentator noted that on the clays surface drainage remained essential and that pipe drainage often lasted a mere twelve years, R.H.Pringle, 'The Future of Clay Land', *Agricultural Gazette*, new series, xxv, 20.6.1887, p. 589. A mole drain is created by a mole plough drawn through clay soils. Whereas tile drainage costs were between £5 and £6 an acre on clay loams, £8 and £9 on heavy clays during the 'golden age', the cost of mole drainage (the figure comes from 1910) could be as low as 15 s. an acre, Collins (ed.), *Agrarian History*, pp.516, 519.

³J.Thirsk and J.Imray, *Suffolk Farming in the Nineteenth Century*, (Ipswich, 1958), p.21.

⁴From the 1860s until 1904, Farmer Smith of West Hanningfield dug land drains filled with cockle shells to drain his heavy London clay soils, thereafter using cheap but durable mole drainage, D.Smith, *No Rain in those Clouds: Being an Account of my Father John Smith's Life and Farming from 1862 to the Present Day*, (1943), pp. 43-44, 91, and Mrs. A.Lyon of North Benfleet Hall farm remembers her father doing likewise at Fanton Hall farm, North Benfleet in the late 1920s. It is to the point that most drainage loans were taken out for heavy soiled or boulder clay farms, rather than for fields on the London clays.

⁵P.R.O., IR 18/2187-2604, Tithe Files.

1894 Pringle believed that the "larger portion of the County is drained".¹ If it is true that much of the county was already drained by 'land ditching' and mole drains, there was less need for a high level of investment on drainage in Essex, or for that matter in Norfolk or Suffolk. Evidence that Essex landowners with farms outside Essex directed investment into farms in other counties but not in Essex - Lord Ashburton in Wiltshire, the Barrett-Lennards in Norfolk,² for example - seems to support this contention. This can only be a partial explanation of low investment levels, however - it explains neither the increase in drainage loans taken out, presumably to remedy past neglect, in the 1870s and 1880s, nor the lack of investment in farm buildings.

The main reason for low investment levels in Essex was probably high costs and the expectation of low returns. Landowners invested in farms that would give a reasonable return. They invested in drainage to improve cereal land, boost yields make the soil easier to work and so save time and horses,³ and were unlikely to drain land which would not give sufficient increased returns to at least cover interest payments. Only good growing land that was impeded by surplus water was worth draining, and much Essex farmland fell outside this category.

Late twentieth soil scientists commenting on the nineteenth century support the view of nineteenth century Essex landowners. They write that on the Hanslope association soils (boulder clays) "tile drainage of large areas was expensive and difficult to justify unless productivity was high" and that improvement by drainage on the heavy Windsor series soils (London clays) was particularly expensive.⁴ Moreover, other

¹*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt. 1), p.38.

²P.R.O., MAF 66/1-4; E.R.O., Barrett-Lennard MSS., D/DL C68, letters 7.3.1877, 25.4.1877.

³Phillips found in Northumberland and elsewhere that drained arable remained arable and was not converted to pasture, and the same seems to have been true of drained fields in Essex in the 'golden age', Phillips, *Underdraining*, p.235.

⁴Thomasson, *Saffron Walden.*, pp.15,28.

soil scientists have written that, even with modern drainage techniques, on London clay soils "it seems unlikely that significant changes may occur for a long time" and the "slowly permeable London clay precludes a substantial improvement".¹ It is, therefore, no wonder that in 1870 one Essex farmer went so far as to claim that all the Essex land worth draining had been drained: the remaining land was not worth the expense, whilst another commentator wrote in 1879 that "there is much clay land which does not answer for draining" and suggested that thorough drainage on the poorest and impervious clays did not pay the outlay.² Indeed, Sturgess admitted that the Essex clays were "not worth the cost of drainage".³ Undoubtedly, mole drainage and land ditches - both cheaper but almost as effective as tile or pipe drainage - were more attractive investments.

The same concern for a reasonable return applied to investment in new buildings. On suitable farms owners invested in farm buildings to enable more stock to be kept, but some Essex clayland was not suitable for growing fodder crops or for pasture and there appeared little point in high expenditure on buildings to encourage greater stock farming on traditional 'wheat and bean' land whilst such farms made profits. This in part explains why, on the Thorndon estate, farms on the better soils near railways, which were amenable to stock farming, attracted more investment than those on the heavy London clays in the south of the estate. Even on the better loams and lighter clays, however, low returns on investment in land improvements probably

¹Sturdy, *Soil Survey* 7, p.153; Sturdy and Allen, *Soil Survey* 67, p.91.

²Sturgess, 'Agricultural Revolution', pp. 112-113; W.T.Carrington, 'The Advantage of Converting Cold Clay Arable Land into Permanent Pasture and the Best Method of Doing It', *J.R.A.S.E.*, 2nd. Ser., xv, (1879), p.496. Sturgess noted that conversion costs in other areas were far lower; in Staffordshire, for example, it cost only £3 an acre to convert land to pasture and only a year for it to be suitable for grazing, compared to £8-9 an acre for clayland fields, Sturgess, 'Agricultural Revolution', p.112.

³Sturgess, 'Agricultural Revolution', p. 112. Collins and Jones further note that on clayland farms the cost of drainage almost doubled between the 1840s and 1870s, although Caird suggested an average increase on all soils of 40 per cent. Either way such increases were sufficiently high to deter investment: Collins and Jones, *loc. cit.*, p.73; *S.C.Improvement of Land, Caird*, (B.P.P., 1873 xvi), QQ.4127-28.

discouraged Essex landowners from a policy of improvement; after all, returns on agricultural investment were poor even in more favoured counties.¹ The Duke of Northumberland, for example, received a mere 2.5 per cent return on his capital (£992,000), which was not uncommon in agricultural investment at this time, whereas the return obtainable on commercial or industrial investments commonly varied from 3.5 per cent to 7.5 per cent.² Drainage was the only capital investment on which tenants customarily paid interest direct to the landowner rather than in rising rents. If the owner had to borrow from a land company, the principal and interest came to 6.75 per cent p.a. Some landowners charged tenants 6.75 per cent on the outlay, others 5 per cent. In the former case landlords reaped no return on their capital until the charges were paid (generally 25 years), in the latter they lost money unless rents rose.³ Even if investment did lead to returns in rising rents, there was a delay as rents could only be increased on the expiration of a lease. In 1861, one land agent advised a small Essex owner against agricultural improvements, there being no probability of a reasonable return on the outlay.⁴

The few surviving Essex estate papers that contain evidence on agricultural investment show similar, sometimes slightly higher, returns than the Duke of Northumberland's investments. Lord Petre, for example, received 8 per cent on his capital from rising rents having spent £42,413 between 1850 and 1870⁵, but other

¹*S.C. Improvement of Land*, (B.P.P., 1873 xvi), pp.iii-iv.

²Thompson, *Landed Society*, pp.250-251.

³*S.C. Improvement of Land*, (B.P.P., 1873 xvi), pp.iii-v. This report noted that land improvement was "not sufficiently lucrative to offer much attraction to capital".

⁴Thompson, *Landed Society*, p.253. Given that tenant farmers could expect a return of 10 per cent on their capital [see below chapter 3], the 'golden age' was a period when tenants rather than landowners reaped the benefit of investment. Investing landowners were making financial sacrifices in terms of opportunity cost, although a degree of investment was needed to maintain existing returns. Landowners with farms on heavy clays or with sea walls to maintain received lower returns on agricultural investment than other landlords.

⁵E.R.O., D/DP A309-326, 341-360. This level of investment represents £2.3 per acre.

factors were present in the cause of rent increase, and it is not possible to isolate the effect of investment from those other influences¹. Evidence of other Essex estate investment suggests that returns obtained rarely exceeded 5 per cent. The governors of St. Thomas' Hospital, for example, charged tenants 5 per cent on new building, but their returns on farm investment varied between 3 per cent and 4 per cent owing to high maintenance and replacement costs.² The Benyons similarly charged tenants 5 per cent on drainage costs, but otherwise rents were not increased between 1859 and 1870, so new buildings and cottages erected in this period merely kept existing returns constant.³ G. Capel Cure only charged tenants 3.5 per cent on cattle sheds erected in 1867.⁴ It is possible to isolate the effect of investment on the rent of an Essex farm belonging to St. John's College, Cambridge where £2,000 was spent.⁵ Calculations show that a return of 4.25 per cent was expected. The slightly higher return on agricultural investment in Essex suggested by this evidence compared to that secured by the larger landowners in the rest of England is probably due to a policy of more selective investment, and smaller outlays per acre.

It would seem that a variety of factors made Essex landowners reluctant to spent money on land improvement during the 'golden age'. Undoubtedly high costs and low returns, together with existing 'land ditching' that made most Essex soils

¹ Some farms on the Thorndon estate which had received new buildings showed large increases in rent. Between 1859 and 1878, for example, the rent per acre of the 433 acre Mountnessing Hall farm (£1,384 spent on buildings and improvements, etc.) rose 48.5 per cent and of 336 acre Horsefrith Park (£1,051 spent) 37 per cent. Yet rent per acre of 345 acre Crondon Park (£606 spent) rose 48.5 per cent and 236 acre Bluntswall farm (no improvements) rose 20 per cent. Testing the correlation for a random 25 farms on the Thorndon estate by calculating Spearman's rank correlation coefficient between expenditure on investments as a percentage of rents received between 1860 and 1879, and the increase in rent per acre between 1860-2 and 1878-80, a figure of only 0.18 is obtained. Obviously landowners could not make rents rise simply by investing.

² G.L.R.O., HI/ST/E18. One of their farms showed a return of 0.73 per cent on £13,140 spent on improvements between 1843 and 1870.

³ E.R.O., D/DBe E68, 55, 57.

⁴ E.R.O., D/DCc E5

⁵ St. John's College, Cambridge MSS., D110/229, valuation of Thorrington Hall farm, 1860.

profitable, made large scale investment in pipe drainage unattractive for both owners and tenants. Such attitudes were neither short-sighted nor parsimonious, and were perhaps more common amongst smaller owners and tenant farmers nationwide than has hitherto been suggested. More difficult to defend is the low level of investment in farm buildings and repairs which implies that Essex landlords were underinvesting and abandoning part of their agricultural leadership role in the 'golden age'. Indeed, tenants may have initiated decisions on investment. On the corporate estates improvements were, in the main, made at the request of individual tenants and on the advice of the receiver or agent, a system common on private estates in other counties, for example those of the Duke of Northumberland.¹ No firm evidence of such practice has survived for Essex private estates in the 'golden age', but estate vouchers and accounts showing amounts paid retrospectively for drainage pipes in the 1850s² suggest that a similar policy may have been followed. Landowners were perhaps happy to leave such decisions to tenants as long as rents rose or did not fall in real terms,³ especially as many had high mortgage debts. Most tenants made sufficient returns on their capital between the early 1850s and mid 1870s and possibly did not wish to pay interest on additional fixed capital investment that they feared would not lead to higher returns. The outcome was that the stock of farm buildings in Essex was in decidedly poor repair by the late 1870s.

Low levels of investment, therefore, suggest a lack of agricultural leadership by Essex landowners in the 'golden age'. Pringle was later to claim (1894) that inadequate investment in the 'golden age' was a cause of the collapse of agriculture in

¹Thompson, *Landed Society*, p.255.

²e.g. on the Capel Cure and Waldegrave Essex estates, E.R.O., D/DCc E5; *idem.*, Waldegrave MSS., D/DWg E4, estate accounts and vouchers.

³Landowner investment was probably stimulated not by technical or market considerations but by the need to retain tenants, and there was sufficient prosperity in the 1850s and 1860s for this not to be a problem for landowners.

Essex in the 1880s and accused landowners of parsimony and short-sightedness.¹ In part their poor investment record on encouraging livestock farming is defensible because arable farming suited Essex soils and climate and remained economically sound despite long term price trends,² a point made in chapter 3 below. Again, however, the conservative approach to estate management challenges traditional views of landlord dynamism and enterprise in the 'golden age', and suggests that, in this county at least, they had shown indifferent leadership and lack of entrepreneurship.

5. Estate Management: Landlords as Entrepreneurs

Caird accused Essex landlords of poor management not only because he considered they invested insufficiently but also because they enforced "restrictive" and "ill-considered" lease covenants.³ The evidence of surviving leases appears to support Caird's attack. Throughout the period Essex leases were strict, containing clauses to protect soil fertility by preventing over-cropping, the breaking up of pasture, and off-sales of fodder crops. The last encouraged tenants to keep animal feed to increase their stock, which produced more dung to enrich the fields. Cropping clauses included details on fallowing and on forbidden crops such as mustard. Thorndon leases even stipulated the proportion of the farm to be under different crops each year or in the last few years of the lease, whilst on the Round estate the tenant was told which fields to farm on which 'course'.⁴ In keeping restrictive leases landowners were being safe but hardly entrepreneurial as the best farmers needed to be flexible and geared to the market, amending their cropping in ways that were not possible

¹*Agricultural Depression, Report, Pringle*, (B.P.P. xvi, pt.1), pp.39, 58-59.

²For a full discussion of this, see chapter 3.

³Caird, *English Agriculture*, p.134.

⁴E.R.O., Petre MSS. D/DP T182/14, lease of Crondon Hall farm (1845); D/DP T182/3, lease of Handley Barns farm (1841); D/DP T 182/3, lease of Woodbarns farm (1858); *idem.*, Round MSS., D/DR E15. The Bonnell leases stipulated the cropping for the last few years of the lease, *idem.*, Bonnell MSS., D/DHn T23, lease of Purleigh Hall farm, (1867).

under a restrictive lease. There was incremental change, and by the 1870s leases generally allowed tenants to "sell off" hay or fodder crops if an agreed proportion of the proceeds was spent on cattle feed, cake, or artificial fertilisers, although as late as 1869 the Earl of Verulam was recommended not to allow any "offsales" in leases on his Messing estate.¹

It is possible, however, that lease clauses were enforced less strictly than Caird's strictures imply. Essex estate archive evidence suggests that cropping and sale clauses were strictly enforced but such evidence refers mainly to poor tenants. Good tenants were not investigated and so left no records, and may have had relative freedom of cropping. Certainly, comments made by Assistant Commissioner Druce in 1882 suggest that by the early 1880s lease clauses were only enforced on Essex farms to protect the land from a poor tenant, and that good tenants were allowed greater freedom.² This also appears to be the case elsewhere: in Wiltshire, for example, where leases remained, the clauses were generally disregarded.³ There may, therefore, have been greater flexibility than leases suggest, but the issuing of strict leases itself suggests a conservative approach to Essex estate management.

Until the 1870s there was no statutory control over landowner-tenant relationships and to encourage good farming practices, county customs grew up allowing compensation to outgoing tenants for unexhausted improvements. Surveys in 1848, 1853, 1866 and 1868⁴ suggest that in Essex these included only the cost of labour

¹ Hertfordshire C.R.O., p.659, xi, 122, box 64

² *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.29. He noted that on market gardens, lease clauses which contained the usual farming and sale covenants were disregarded.

³ Chambers and Mingay, *Agricultural Revolution*, p.185; R. Molland, 'Agriculture c. 1793-1870', in Critall (ed.), *V.C.H. Wiltshire*, p.75.

⁴ *S.C. Agricultural Customs*, (B.P.P., 1847/8 vii); A.Cox, *The Landlord and Tenant's Guide*, (1853); *S.C. Agricultural Customs*, (B.P.P., 1866 vi); C.Cadle, 'The Farming Customs and Covenants of England', *J.R.A.S.E.*, 2nd ser. iv, (1868), p.152.

employed on the previous year's fallows and the value of the manure, fodder crops and seed left on the farm. Accordingly, tenants were not actively encouraged to invest in the farm or take entrepreneurial risks.

Further evidence of conservative management comes from retention of long leases. At mid century most Essex tenants leased farms for 14 years, and in some cases for 21 years. Long leases gave owners and tenants security but prevented quick rent rises in prosperous years. Despite rising prosperity in the 'golden age', most Essex landowners preferred the stability offered by long leases to short-term financial gain. Corporate owners did change their method of leasing, showing more business acumen. In the first half of the nineteenth century, they had used the beneficial lease system¹ by which land was let at a low rent for three lives' duration, guaranteeing a steady if low income whilst the lessee, who commonly sublet to a tenant farmer at market rate, was responsible for maintenance of the property. With rising prices, Corporate owners increased their income by replacing expired beneficial leases with ordinary leases and some even bought out beneficial lease holders to implement the change more quickly. Begun by the Ecclesiastical Commissioners when they took over the management of various church estates in the 1840s, other corporate owners in Essex followed suit.² The University Commission of 1852 recommended the same course of action, and on the Essex estates of St. John's College, Cambridge, the switch was accomplished in the mid 1860s.³

¹The Beneficial Lease system entailed letting land on a long lease (21 years or three lives) at a low rent, a substantial 'fine' being paid on entry. The lease was renewable after seven years or one life, a further 'fine' being paid. The Lessee was responsible for repairs and the usual functions of the landowner and so released the owners from the burden of direct management whilst guaranteeing them a fixed 'reserved' rent together with entry 'fines'. The drawbacks included lack of control by owners over estate management, and their inability to increase rents as land values rose. Most lessees sublet to undertenants who farmed the land.

²G.F.A.Best, *Temporal Pillars: Queen Anne's Bounty, The Ecclesiastical Commissioners, and the Church of England*, (Cambridge, 1964), pp 374, 459.

³Howard, *Finances*, p.179.

The ending of the beneficial leasing system led to substantial rent increases. Whereas Fanton Hall farm (641 acres), North Benfleet, for example, had brought in an income of £28 and two capons a year, purchase of the lease gave the Ecclesiastical Commissioners an immediate income of £750 p.a., and they were able to raise the rent a further 10 per cent on the expiration of the undertenant's lease, thus taking advantage of rising prices.¹ The disappearance of the beneficial lease made corporate owners directly responsible for their properties and more active in estate management.

An indication of Essex landowners' retreat from leading agriculture and encouraging innovative farming among their tenants is how few were directly active in estate management. Admittedly, some took a close interest in estate business. Despite employing John Oxley Parker as part-time agent, Col. Bramston of Skreens (a small estate west of Chelmsford) inspected estate farms personally, whilst G. Capel Cure had no agent on his Ongar estate until 1870, and thereafter still personally presided at audit day and decided the level of expenditure on repairs, using his agent, William Beadel, for advice and assistance only.² Examples of this kind, however, are not common in Essex, and for the most part Essex landowners did not take a close personal interest in the development and economic efficiency of their estates during the 'golden age'.³

With a full social life, and the duties of local and county administration,⁴ few

¹C.C., E.C.E. MSS., London Bishopric Surveys S3, pp.395-415, and File 46754.

²E.R.O., Oxley Parker MSS., D/DOp B11/3, Skreens estate surveys; *idem.*, D/DCc E5.

³Thompson, *Landed Society*, p. 178 explains how the growth of local firms of land agents provided agency facilities which relieved the owners of the need for personal supervision. Caird was critical of the lack of training for English landowners, Collins (ed.), *Agrarian History*, pp.728-731.

⁴See below, this chapter, section 6.

landowners had the time, training, or inclination to immerse themselves in their estates, and estate agents were commonly employed. Larger Essex owners employed a full time agent, but smaller and non-resident owners in most cases employed a local agent like Oxley Parker to do this job part-time. The ability and training of Essex agents varied enormously. A few were career men, trained in the estate offices of other landowners, others were themselves tenants. In some cases the family solicitor acted as agent, and in others a friend or relative filled this role, respectable men of unimpeachable character who might or might not have much agricultural knowledge.¹ The agent's duties were diverse. In most cases he acted as a rent collector, bailiff, and representative of the landowner in the day to day running of the estate. Other duties might include attracting new tenants, checking that lease covenants were kept, encouraging good farming, paying for necessary repairs and new buildings, and advising on major estate investment and on rent levels.

Moreover, few Essex landowners encouraged agricultural improvement by direct example. In the late eighteenth century, by contrast, several Essex landlords had been pioneers of new farming methods. Both T. Lennard and T. Neave introduced better crop rotations, and T.C.B. Western, experimented with stock breeding, ploughing and new machines.² They and others did this to encourage better farming amongst their tenantry: as a Coopersale (near Epping) clergyman wrote, "when neighbouring farmers see some useful practices . . . succeeding well, they will naturally have a wish to attempt the same methods".³ This pioneering spirit was much less evident after 1850 and, despite the work of a few individuals - Lord Braybrooke's interest in

¹Examples (albeit of a later period) include the Orsett estate, where the family solicitor in Market Harborough, Leicestershire, assisted both owner and full time agent in the 1880s and 1890s, the Bonnell properties where solicitor F.Smoothy Esq., acted as agent, and the Belhus estate where the owner relied on his brother-in-law to analyse the estate accounts in the 1870s.

²A.F.J.Brown, *Essex at Work, 1700-1815*, (Chelmsford, 1969), p.33.

³*ibid.*

pedigree bulls and the pig and horse breeding of Fisher Hobbs, for example, agricultural improvement in 'golden age' Essex owed little to the direct, practical example of contemporary landowners.¹

On the other hand, it could be argued that Essex landowners showed some leadership in their support of agricultural improvement societies. Many were members of the Essex Agricultural Society, and of local agricultural improvement societies set up in the mid 1830s.² Similar initiatives continued after 1850: evidence from local newspapers shows that landowners were active members of both the Essex Agricultural Association (founded in the wake of the Royal Agricultural Society's show at Chelmsford in 1856)³ and the Essex Chamber of Agriculture (founded 1867). The minute book for the latter's early years has survived, and shows that, whilst not dominating the Chamber, landowners regularly attended meetings.⁴ Landowners also commonly presided at local agricultural associations - Lords Rayleigh at Witham and Braybrooke at Saffron Walden providing examples - and local agricultural labourers' Friendly Societies near the heartland of their estates, and in other ways gave these organisations active support. In 1851, for example, C.J. Tower was president of the Brentwood Labourers' Friendly Society, Wingfield Baker was president of the Orsett Agricultural and Labourers' Friendly Society, whilst Lord Maynard presided at Dunmow and W.B. Smith at the Roothings Society.⁵

¹W.Fisher Hobbs was a founder member of the Royal Agricultural Society, R.G.E.Wood, *Sear 7: Agriculture in Essex 1840-1900*, E.R.O. Publications, (Chelmsford, 1975), no. 12.

²Brown, *Essex at Work*, p.33.

³It was a committee of leading landowners which had negotiated for the privilege of acting as host to this annual show. Wood, *Sear*, no. 9.

⁴Writtle Agricultural College: Historical Collection. Essex Chamber of Agriculture minute book, 1869-1880. I wish to thank the librarians at the college for making this evidence available to me.

⁵Of the five agricultural labourers and Friendly Societies and four local agricultural societies which were reported holding annual meetings in October 1851, for example, all were presided over by a local substantial landowner, *Essex Standard*, 3.10.1851, 10.10.1851, 17.10.1851, 24.10.1851, 31.10.1851.

Support for agricultural societies, however, is not necessarily evidence of entrepreneurial attitudes or of a desire to improve farming: some landowners were members more for political and social reasons. Although agricultural societies encouraged better agricultural practice, their chief role was to protect the agricultural interest. The Essex Chamber of Agriculture, affiliated to the national Chamber, acted as a forum for the discussion of a variety of issues relating to agriculture and its finances, including land taxation, rural education, the poor law, and agricultural returns. The Chamber claimed to be a non political body but was in fact a pressure group, communicating the wishes of its members to the local M.P.s and to parliament. Indeed, Round, President in 1872 and a local Conservative MP, objected that it was "principally attended by farmers of radical opinions".¹ Some local societies also had political significance. Crosby has shown that the agricultural societies which sprang up in Essex between 1833 and 1839 were primarily associations to attract and maintain support for the Conservative party.² The societies also demonstrated that common interests bound tenant and landlord together, and through ploughing matches and prizes for long service and sobriety, encouraged industry and loyalty amongst labourers. Landowner leadership of agricultural societies helped to maintain the paternalistic structure of local communities.

Undoubtedly, some landowners did support societies because they benefited farming. Although county and local agricultural societies discussed similar matters to the Chamber, they spent a greater proportion of their time on more practical farming subjects (sometimes involving guest speakers such as Joseph Mechi), in holding stock and implement shows, and in visiting well managed farms. By actively supporting

¹E.R.O., Round MSS., D/DR E25, letter 25.4.1872.

²T.L.Crosby, *English Farmers and the Politics of Protection, 1815-52*, (Hassocks, 1977), pp.99-100. Local clubs included the Hinckford Agricultural and Conservative Club, the Saffron Walden Agricultural Society, the Epping Agricultural Association, the Chelmsford and Essex Agricultural Association, the Winstree and Lexden Hundred Agricultural Association, the Tendring Hundred Agricultural Association, and the East Essex Agricultural Association. Crosby does not list the Halstead Agricultural Society founded in 1833.

these societies, landowners were partly responsible for the spread of new ideas in farming. Indeed, local and county agricultural societies were considered by contemporaries to be of "great service to agricultural progress".¹ How "great a service" might be debated as the number of active members was not large² and many Essex farmers did not attend meetings, although innovations discussed might be adopted by others later. In contrast, local and county shows were well attended by farmers and agricultural machine makers, and must have provided a forum for the dissemination of improved practices. Having a prominent position in these societies that aimed to advance both agricultural practice and the agricultural interest was, therefore, one way in which landowners in 'golden age' Essex maintained their traditional leadership role. They did not, however, display much energy or enterprise in this role, and overall, the evidence suggests that they were indifferent both as estate managers and as entrepreneurs.

6. Landlords in Society

The traditional leadership role of rural landowners also encompassed the political, social and sporting dimensions of county society. At mid century two thirds of Members of Parliament came from landed families, and large landowners had a strong hold on senior appointments in the civil service, army and the established church. At county and local level, the greater and lesser gentry combined to govern and to act as magistrates.³ Essex followed the national pattern and the position of

¹J.C.Morton and G. de Lavergne, *The Rural Economy of England, Scotland and Ireland*, (1855), quoted in H.S.A. Fox, 'Local Farmers' Associations and the Circulation of Agricultural Information in Nineteenth Century England' in H.S.A.Fox and R.A.Butlin (ed.), *Change in the Countryside: Essays on Rural England 1500-1900*, Institute of British Geographers Special Publication No. 10, (1979), p.55.

²The Essex Chamber of Agriculture had an average attendance of 60 to 70 (perhaps 2 per cent of Essex farmers), and in 1860 the Essex Agricultural Society had 839 members, a figure which included landowners: Writtle College of Agriculture, Historical Collection, Essex Chamber of Agriculture Minute Book, 1869-1880; *Essex Standard*, 6.1.1860.

³Thompson, *Landed Society*, pp.276, 136, 287; W.L.Guttsman (ed.), *The English Ruling Class*, (1969), p.11.

landowners remained unchallenged throughout the 'golden age' despite that 1867 Reform Act. Until 1880 all Essex M.P.s, except those sitting for the borough of Harwich, were from landowning families, and, although 'nouveau riche' parvenus were appointed to the bench, the bulk of Essex magistrates in the 1860s were landowners or clerics.¹ Some Essex landowners were elected Poor Law Guardians and a few aspired to become Deputy Lieutenants, whilst others officered the local volunteer force. An example of the range of offices a landowner might hold is provided by Richard Wingfield-Baker who at various times was Liberal M.P. for South Essex, High Sheriff of the County, Chairman of the Essex Quarter Sessions, local magistrate, and Captain Commandant of the Second Essex Volunteers.² The predominance of landowners in county society was due in part to property qualifications which governed access to the bench and to parliament, to the high cost of servicing a parliament seat and other offices, and to the time landowners could devote to public service. Above all, however, it was due to the long established and widely shared assumption that landowners were the natural leaders of society.

The major political issue affecting Essex society at mid century was agricultural protection. Tenants took the initiative on this issue (perhaps another sign that landowners were abdicating some aspects of their traditional leadership). Although when Cobden visited Essex in July 1843 it was larger landowners who debated most fiercely with him,³ tenants believed that insufficient leadership was being shown by their landlords and M.P.s and founded the Essex Agricultural Protection Society in December 1843,⁴ the first of the societies established to oppose the A.C.L.L. in

¹Anon., 'Essex Elections', *Essex Review*, iii , (1894), p.87-92 has a list of all candidates from 1847 to 1880. Men from commercial and industrial backgrounds were not uncommon on the Essex bench, especially in metropolitan districts, where, for example, one magistrate was head of a Stratford drug factory, Thompson, *Landed Society*, p.288.

²Collins, *Orsett Estate*, pp.25-26.

³*Essex Standard*, 14.7.1843.

⁴Crosby, *English Farmers*, pp.127, 130-1.

England. The Society was very much a farmers' society, the first meeting being attended by 49 people, all farmers, and the first open meeting, attended by 1,000, was "organised by farmers for farmers".¹ This tenant initiative spurred landlords into action, and by 1845 they had reasserted their leadership: of the 256 people present at the December 1845 meeting, 55 were landowners or clerics.² Essex landowners also attended meetings of the Central Agricultural Protection Society in 1846.³

Essex owners and tenants, working together, maintained their campaign for protection after the repeal of the Corn Laws. The Essex Agricultural Protection Society met regularly and during the 1851 depression, one meeting was so well attended that "in order to stop the floor falling in, the company had to be requested to divide".⁴ Essex agriculturalists supported national organisations calling for protection. When, in May 1850, the National Association for the Protection of Industry and Capital was set up, demanding the "removal of the oppressive and intolerable burdens" on agriculture,⁵ the 2,000 audience included 107 Essex men, 18 of whom were representatives of the Essex Agricultural Protection Society.⁶ A second meeting held in 1851 saw seven Essex owners and 500 "Essex agriculturalists" (22 from south Essex) amongst a large audience.⁷ With better times

¹*Essex Standard*, 15.12.1843; Crosby, *English Farmers*, p.131. It was Essex farmers led by Baker of Writtle who decided with others to establish a Central Office in London to campaign nationally against the Anti-Corn Law League, *ibid.*, p.133.

²*Essex Standard*, 2.1.1846.

³*ibid.*, 9.1.1846, 16.1.1846.

⁴*ibid.*, 21.2.1851.

⁵*ibid.*, 7.5.1850; Anon., 'Great Protection Meeting in London', *Blackwood's Edinburgh Magazine*, lxvii, (June, 1850), pp.738-782.

⁶P.J. Perry, 'A Note on the Geography of Protectionist Sentiment in 1850', *Journal of Historical Geography*, ii, no.2, (1976), pp.163-4. He further points out that of the 407 listed "mister" delegates from England and Wales, 70 per cent came from the south east, of which a quarter came from Essex.

⁷*Essex Standard*, 2.5.1851.

after 1852, the Essex Agricultural Protection Society ceased to meet. A change in Conservative policy and pressure from Conservative landowners also contributed to its demise. The Essex M.P. and landowner Major Beresford, for example, told a meeting of the Hinckford Agricultural and Conservative Club in 1851 that the Corn Laws "had been fair and wise laws" but "he would not seek to reinstate them",¹ and in 1852 the Conservatives dropped their aim to reinstate agricultural protection. There were few cries for protection thereafter, attention being directed by Essex agriculturalists more on agricultural taxation.²

Despite their indifferent performance as estate managers and entrepreneurs and, initially, as leaders in the Corn Laws debate, Essex landowners remained strong in their role as leaders of local society. Most were village squires, presiding over local societies and meetings, making their family occasions major social gatherings for local people, and giving to local charities, schools, churches, and hospitals. Richard Wingfield-Baker, described as "a generous and considerate landlord",³ was typical of his class. On top of his usual subscriptions, he erected the Orsett Institute in 1860, financed the restoration of two local churches, invited the whole community to a party when his son became 21, and in 1878 gave dinner to both the Volunteers and to the allotment holders.⁴ Similarly, the Strutt family helped set up the reading room library, recreation room, penny bank and sick club in Terling, were patrons of the village co-operative society, and financed the village school.⁵ Another free spending

¹*ibid.*, 17.10.1851.

²Writtle Agricultural Library, Historical Collection, Essex Chamber of Agriculture Minutes.

³Anon., 'Memoirs of E.H. Rowley, Esq.', *Panorama: Thurrock Local History Society Journal*, v, (1960), p.30.

⁴Collins, *Orsett estate*, p.26. Other typical benefactors included C.J.Tower who gave £1,000 for the restoration of South Weald church in 1867, and Sir Thomas Barrett-Lennard, who regularly took tenants to the theatre. T.Gilbey and others, *Essex in the Twentieth Century: Contemporary Biographies*, (1909), p.54; E.R.O., Barrett-Lennard MSS. , Correspondence, D/DL C68.

⁵A.F.J.Brown, *Meagre Harvest: The Essex Farm Workers' Struggle Against Poverty, 1750–1914*, (Chelmsford, 1990), pp.147-148. Another example was Lord Maynard who, when he died in 1865,

local squire was Olney Saville-Olney who gave beef, flannel petticoats and firewood at Christmas Eve to his cottagers at Stisted, and also paid the entry fee for all labourers wishing to join the Olney Lodge of Oddfellows.¹ It would, however, be easy to exaggerate the cost of local philanthropy. Bateman estimated that a typical landowner of a 3,500 acre estate (gross annual value £5,000) would spend £3,718 on outgoings of which £275 (representing a mere 5.5 per cent of income and 7.5 per cent of expenditure) would be for subscriptions and local beneficence, compared to some £1,560 (31 per cent of income, 42 per cent of expenditure) spent on family jointures.² Naturally, some spent far less: Henry Sperling, owner of 3,072 Essex acres, for example, spent only £45-15s.6d. on subscriptions and gifts in 1870, a mere 0.01 per cent of his gross income from rents.³

Sporting activities must have provided welcome diversion from politics. The gentry were the leaders in county sporting circles throughout the 'golden age'. Fox hunting was a major preoccupation of Essex landlords, the county boasting eight active packs which each met two or three days a week in the hunting season. Some owners also went coursing and stag hunting whilst shooting parties were common. Sport was expensive. Costs included not only the subscription for hunting,⁴ but wages for staff employed in the stables and in game keeping, buying game birds, and entertaining shooting parties.⁵ At Orsett, Wingfield-Baker employed three gamekeepers and four grooms, whilst the sporting interests of Sir Thomas Barrett-Lennard which included

was described in the Gentleman's Magazine as "long distinguished for his benevolence and anxiety to promote the good of his tenants", Shrimpton, 'Landed Society', p 41.

¹ *Essex Standard*, 22.5.1874

² Bateman, *Great Landowners*, p. xxiv.

³ E.R.O., Sperling Estate MSS., D/DGd E73, Rental.

⁴ This itself could be expensive, A.W.Ruggles-Brise, *Historical Notes of the Last Century with the East Essex Hounds and Other Memories*, (Chelmsford, 1934), p.18.

⁵ For more detail on costs see Thompson, *Landed Society*, pp.144-148.

breeding, hunting, shooting and keeping the South Essex pack became a cause of financial embarrassment in the 1870s.¹ Although game preservation was considered by a *Select Committee* in 1846 to be the chief cause of conflict between landlord and tenant, it seems to have caused little tension in Essex. Admittedly, one Essex farmer, claimed that rabbits had destroyed his wheat crop in 1841 (an alleged loss of £260),² and the Essex Chamber of Agriculture debated the issue in 1870, but only three complaints from tenants about game causing "very great damage" survive from this period.³

7. Conclusions

Much of the evidence described in this chapter raises questions about the very existence of a 'golden age' in Essex. Most Essex landowners experienced only a modest rise in real income, and some undoubtedly had falling incomes. The concept of a 'golden age' may also be challenged in respect to landowner investment: investment levels in Essex appear to have been much lower than general accounts suggest and there is little evidence of short-sighted over-investment. The direction of investment on Essex estates at this time is also of interest: textbook accounts claim that the main thrust of 'golden age' investment was to improve grain farming, "a last expensive homage to King Corn", but in Essex investment was more varied. Some was to improve arable crop yields, but more was to encourage greater emphasis on livestock and dairy farming within a mixed farming context. Several reasons explain

¹E.R.O., Whitmore MSS., D/DWt/S; suggestions as to reducing expenditure at Orsett Hall (1883); I.Sparkes (ed.), *Belhus and the Barrett-Lennard Family*, (Upminster, 1964), pp.50-52.

²Thompson, *Landed Society*, p.141; S.W. Amos, 'Social Discontent and Agrarian Disturbances in Essex, 1795-1850', unpublished M.A. thesis, Durham University, (1971), p.53.

³Writtle Agricultural College: Historical Collection, Essex Chamber of Agriculture minutes, 3.6.1870; E.R.O., Waldegrave MSS., D/DWg E5 letter 25.9.1877, E28, letter 16.9.1879; *idem.*, Round MSS., D/DR E24, letter from a tenant to Round, May 1870.

the low level of Essex estate investment including the prudent avoidance of over-investment: investment in drainage was limited for the simple, but hitherto little appreciated reason, that much land was already well drained by non-pipe drainage.

There remains the suggestion, however, that moderate investment in Essex was due in part to entrepreneurial limitations. Much investment seems to have been in response to tenant demand rather than arising from landlord initiative, and on many estates it was inadequate as well as low. Furthermore, there is evidence that some landowners invested less because tenants were investing more. The hypothesis that Essex landowners were in part abdicating their leadership role seems further supported by their failure to lead by example in agricultural development, their willingness to relinquish estate management to agents, and their initial failure to organise and lead the mid century agitation over agricultural protection. Another cause of modest investment was, of course, existing debt and lack of finance. Inherited debts and mortgaged estates were often a consequence of high social expenditure as well as relatively inelastic rent income, and this also points to some landowner shortcomings.

Some of these conclusions, including that of increased social spending by landowners, are tentative and require more research. In particular they would benefit from additional evidence of the activities of smaller owners and the owner-occupiers who have left few records. Even so, the overall findings are sufficient to challenge existing interpretations of agricultural history in the third quarter of the nineteenth century. If research in other counties produces similar results and shows that Essex was typical of south east England, or even of the corn counties, then modifications will have to be made to existing ideas on 'golden age' agriculture. Chapter 3

examines farming practice and throws more light on some of these issues.

Chapter 3

Farming in the high farming 'golden age'

1. Introduction

The previous chapter argued that the role of Essex landowners in the 'golden age' was not as textbook accounts of English agriculture have suggested and that the term 'golden' does not appropriately describe Essex landowners' fortunes at this time. This chapter investigates Essex farmers in this period. Obviously, the conventional tripartite structure of landowner, farmer and labourer is a simplification of Essex agricultural society; some landowners were active in farm management, running home farms, and many farmers were owner-occupiers, but the conventional structure was widespread in the county. A further point is that Essex farmers were a diverse class ranging from multi-farm tenants to smallholders, and this has to be taken into consideration when making generalisations on farming and farmer lifestyle.

How Essex farmers worked their land at mid-century and how, why and to what extent this changed during the following quarter century are some of the questions explored in this chapter. Other issues covered include the degree and type of tenant investment and its returns, the size of Essex farms, the marketing of farm produce, and the political and social role of farmers. 'High farming' is an important issue for investigation. It has been defined in several ways, but is generally accepted as being a method of increasing output per acre via increased farm inputs such as drainage, machinery, artificial fertilisers and purchased animal feeding cake. Some accounts associate 'high farming' mainly with attempts to increase cereal output: Thompson's "last expensive homage to King Corn" clearly implies this.¹ More usually, however, it is associated with an increasing emphasis on mixed farming and with enriched feeding of stall fed animals. Following the work of E.L.Jones, many believe that

¹Thompson, *Landed Society*, p.246.

cereal production was both less profitable and had a less important role in 'high farming' than livestock farming; indeed it is claimed that agricultural prosperity in the 'golden age' was based, in the main, on expanding livestock production and rising livestock product prices.¹ The amount and form of 'high farming' in Essex, the degree to which farmers in the county expanded livestock production in response to changing prices, and the extent to which there was a "revolution" on the claylands are important as they contribute to the broader question of how 'high farming' in England as a whole should be perceived and evaluated.

2. Land-use Sources

Knowledge of Essex agricultural land use and farming practice at mid century is derived from two main sources: the parish tithe files and Baker's 1845 article in the *Journal of the Royal Agricultural Society of England*.² The former, compiled between 1836 and 1853, (mostly by 1840), contain a wealth of material including cropping and land-use figures, some with brief comments on yields, soils and the style of farming, for each parish. Unfortunately, only 296 tithe surveys survive from the 418 tithe districts, of which some lack cropping and most lack livestock statistics.³ Furthermore, the accuracy of the available figures may be challenged: some areas were obviously surveyed carefully, but in places acreages and yields were estimated⁴. Despite such problems, the tithe files are a valuable source of quantitative and qualitative data for the period immediately before mid century. Baker's 1845 essay contains useful detail but, as noted in chapter 1 above, must be used with caution as it

¹Jones, *English Agriculture*, p.19.

²Tithe files, P.R.O., IR 18 series; Baker, 'Farming of Essex', pp.1-39 [Appendix pp.40-43].

³Untithed land covered 13 per cent of the county and 17 Essex parishes were entirely tithe free. For a full discussion of the problems and value of the tithe files see R.J.P.Kain and H.C.Prince, *The Tithe Surveys of England and Wales*, (Cambridge, 1985).

⁴The estimation is starkly illustrated in the Saffron Walden tithe file where the Assistant Commissioner wrote: "this estimate will be one of the most conjectural I have ever made". E.A.Cox and B.R.Dittmer, 'The Tithe Files of the Mid Nineteenth Century' *Ag.H.R.*, xiii, pt.1, (1965), p.10. Sometimes it is apparent that the surveyors merely divided the arable acreage by four or six (depending on the rotation used) to estimate crop acreages.

aimed to demonstrate the progressive nature of Essex farming.

For the years after mid century, information on farming and land use is derived from the 1861 County Rate return, and the parish summaries of the annual agricultural returns which were first collected (initially with dubious accuracy) in 1866.¹ The former lists the rateable value of each parish together with the acreage under arable, pasture or woodland computed from surveys (although in many instances the tithe survey was obviously used and not updated). There is no information on cropping or on livestock numbers. The parish agricultural returns give a detailed analysis of both of these. The accuracy of the parish returns improved over time, but as the returns were voluntary (and therefore incomplete) a certain amount of estimation was entailed, whilst problems over the definition of certain types of land use, and changing parish boundaries raise difficulties.² Despite these problems, the parish agricultural returns remain a useful and detailed source on land use and farming practice from 1866, and have been used extensively in this survey.

Estate records, particularly details from rentals and leases, provide additional local information on farming practice. A few farm accounts, providing information on farming methods, cropping, tenant investment, and wage bills, have also been used. Prior to 1914 few farmers kept detailed or methodical records, and for Essex between 1850 and the 1870s less than half a dozen potentially useful farm accounts have survived. Of these, only three span more than a few years, and only one contains a full valuation of farming stock for each year. Others resemble pocket books rather than formal accounts, with labour tasks and payments, purchases and sales

¹E.R.O., Q/FR 19/1, county rates: Overseers returns (1861); P.R.O., MAF 68 series, parish summaries of the agricultural returns.

²For a full discussion on this source see J.T.Coppock, 'The Agricultural Returns as a Source for Local History', *Amateur Historian*, iv, no. 2, (1958-59), pp. 49-55; *idem.*, 'The Statistical Assessment of British Agriculture', *Ag.H.R.*, iv, pt. 1, (1956), pp.4-21, and iv, pt. 2, (1956), pp.66-79.

intermingling with other information.¹ The two most useful farm accounts for the years 1850 to the mid 1870s are those of Lord Braybrooke's home farm at Audley End and Edward Cooke's farm at Great Henny in north Essex.² These and the other surviving accounts are deposited in the Essex County Record Office. Other evidence of farming practice in Essex comes from the land agent John Oxley Parker's papers.³

3. Essex Farming at Mid-Century

At mid century Essex was a mixed farming county where arable farming and animal husbandry were practised side by side but where the former dominated. Some three quarters of the farmland was arable, and on the richer soils of central and north Essex the figure stood at over 80 per cent. The London clay soils had a slightly higher than average proportion of their acreage under grass,⁴ and grassland comprised an even higher proportion of the total acreage farmed on the alluvial and light soils which made up the rich coastal and estuarine marshes, and in the district closest to the metropolis where ease of access to the London markets had encouraged farmers to engage in dairying, veal production and the hay trade. Even so, in only seven out of 418 parishes was the acreage of arable less than that of pasture.⁵

Wheat was the main cash crop covering over 25 per cent of the county's arable⁶ and over 20 per cent of the total farmed acreage (compared with 10.81 per cent in England and Wales as a whole), and the wheat acreage was a higher proportion of

¹The farm account of the Pattisson family (1842-1853, 1876-1886) provides a typical example. It is a note book giving occasional farm payments, but also includes personal expenditure such as the butcher's bill and payment for patent medicines. E.R.O., Pattisson MSS., D/DCf A22, farm account book.

²E.R.O., Braybrooke MSS., D/DBy A 268-270, farm account ; *idem.*, D.DU 41/53, 78, miscellaneous farm accounts, Great Henny.

³E.R.O., Oxley Parker MSS., D/DOp series.

⁴E.R.O., Catalogue of tithe information.

⁵*ibid.*

⁶Kain, *Atlas*, table 3, p.29.

total farm land in Essex than in all other counties except Kent. Malting barley was grown extensively on the calcareous soils of the north-west, but oats were more common on the London clay soils where they were sometimes mixed with peas to produce a fodder crop called "bullimong".¹ Between 20 per cent and 30 per cent of the arable was under barley and oats (a higher figure than for Kent). In all, cereals accounted for almost 40 per cent of Essex farmland (50.34 per cent of the arable). Of all the counties in England, Essex was the most dependent upon cereal crops.²

Although seeds (mostly clovers) were a popular fodder crop in Essex at mid-century, taking almost 18 per cent of the arable acreage, few turnips were grown except on the lighter lands: clays and other heavy soils were unsuitable for turnips, and were liable to 'poach'³ in wet weather if sheep were allowed onto them. Accordingly, bare fallows, requiring up to six ploughings, were essential to clean and rest the heavier land. In some parishes, farmers grew vetches and tares on the fallows to augment their fodder crops.⁴ A crop book has survived for several farms on Lord Petre's Thorndon estate for the years 1857 to 1859.⁵ The area covered comprises some 3,000 acres (16 per cent of the total estate acreage) and gives a detailed picture of cropping shortly after mid-century. 78 per cent of the land was arable, of which half was under grain crops, almost a third of the arable being wheat. Despite the large area covered no turnips and few other root crops were grown. Fallowing was extensively practised.

Caird visited Essex at a time of agricultural depression. Although he found farmers

¹Baker, 'Farming of Essex', p.4.

²Kain, *Atlas*, cropping estimates for all counties.

³See above chapter 1.

⁴Baker, 'Farming of Essex', p.4.

⁵E.R.O., Petre MSS., D/DP E67, Thorndon estate covenants.

to praise - men like Hutley and Mech - he condemned most of the county's farmers for failing to improve.¹ For Caird 'improvement' meant placing a greater emphasis on fodder crops for feeding to stall-fed cattle and certainly there were some parts of Essex where few fodder crops were grown and few cattle kept. In some Rodings clay soiled parishes, for example, farmers relied on a cropping system alternating crop and fallow, and in north Essex some parishes still had open fields and employed a three course rotation.² Yet Caird exaggerated the degree of backwardness: such parishes were in the minority. Tithe file evidence shows that most parishes practised the four course system, or a variant of it. The Tithe Commissioners approved of Essex farming in the main and noted recent improvements on the clays with drainage, liming and chalking, enabling fodder crops to be grown and more sheep to be kept.³ Baker confirmed tithe file evidence when he commented that in much of Essex, tares, vetches and other artificial grasses were "grown to a considerable extent for feed" and that "by alternating the crops, giving frequent ploughings and manurings, a regular succession is kept up of green cattle crops intervening with grain crops, giving the greatest possible return from the land."⁴ On the heaviest London clay soils of south east Essex a six course rotation was used whereby farmers grew an extra crop of wheat and beans, making them particularly reliant on the success of their wheat crop.

Baker, concerned to show Essex farming in the best light, made much of livestock bought in the autumn, yard fed in winter, folded on fallows in summer (where soil permitted), and fattened for sale the following spring or autumn,⁵ and it is possible

¹Caird, *English Agriculture*, pp.138, 141.

²E.R.O., Oxley Parker MSS., D/DOp B11/3, Roothings Surveys,; Greenland, *Excursions*, pp.34-35. Greenland felt that in 1843 over 105,000 acres in the Rodings were farmed on a crop/fallow rotation; Baker, 'Farming of Essex', pp.1-2; P.R.O., IR 18/2202, 2221, 2231, 2284, 2320, 2395, 2444, 2481, 2566, 2580, 2587, tithe files.

³P.R.O., IR 18/2244, 2310, 2532, 2556, tithe files.

⁴Baker, 'Farming of Essex', pp.4, 19-20.

⁵*ibid.*, p.15.

that the number of livestock was increasing at this time with the spread of cropping rotations which enabled more farmers to grow fodder crops. Indeed, the tithe files comment on the increased number of sheep on the clays. Furthermore, dairying to provide milk for London was slowly expanding along railway lines at this time: whereas in 1835 only cowkeepers within some eight miles of London could exploit this market, by 1846 St. Thomas' Hospital was buying its milk from a Romford farmer.¹ Yet at mid-century most Essex farmers probably saw livestock fattening as peripheral to cereal production, and whilst a few tithe files mention store cattle, few, save marshland parishes cite livestock numbers, and even dairying is mentioned in the files of only seven parishes, possibly an indication of relative importance at mid-century. As Caird commented, Essex farmers kept cattle "for manure, but not generally as a source of profit",² and even Michi, well known as an improving farmer, felt that livestock did not "pay market price for their food" but were essential as "providers of the best and cheapest manure".³ Phillips' work on Staffordshire and Nottinghamshire, and the work of Holt and Kain in Suffolk has shown that there too the heavy lands were particularly reliant on wheat and fallows at mid-century.⁴

¹Mr.Main, 'Some Account of the Mode of Fattening Calves in the Neighbourhood of London', *Quarterly Journal of Agriculture*, v, (1835), p.608; G.Dodd, *The Food of London*, (1856), p.122. As late as 1853 only 5 per cent of total milk supply in London came from country districts, but south Essex provided most of this rail-carried milk. P.J.Atkins, 'The Growth of London's Railway Milk Trade, c.1845-1914', *Journal of Transport History*, iv, no.4, (1977-78), p.209.

²Caird, *English Agriculture*, p.142.

³*Chester Courant*, 16.10.1867. This view was probably common amongst arable farmers as Philip Pusey noted that fattening in England was done "not from a view to profit in the sale of meat, but for the production of dung and the consequent increase of the corn crop": P.Pusey, 'On the Progress of Agricultural Knowledge During the Last Four Years', *J.R.A.S.E.*, iii, (1842), p.205.

⁴Kain and Prince, *Tithe Surveys*, pp.222-223.

Table 5**Cropping in Essex as a percentage of the total arable, c. 1836-1853**

Wheat	25.6 per cent	Pulses	8.8 per cent
Barley	18.5 per cent	Turnips	7.3 per cent
Oats	6.2 per cent	Seeds	17.9 per cent
Fallow	15.5 per cent		

Source: Kain, *Atlas*, p. 29.

4. Changes During the 'Golden age'

As is well known, prices encouraged a switch to livestock husbandry during the third quarter of the nineteenth century, and until very recently historians were agreed that considerable expansion took place in the livestock sector.¹ In southern and eastern England, it is usually claimed, there was no wholesale switch from cereal to meat production, but an increased emphasis on fatstock within mixed farming. Jones has argued that this shift of emphasis was sufficient to change English farming significantly between the 1840s and 1870s.² By the 1860s, it is said, cattle and sheep were valued for the profits on meat sales as well as for their dung. Jones' thesis, based largely on price evidence, has, in the main, been accepted by agricultural historians. Essex provides a challenge: the evidence for this county confirms that there was indeed an intensification of livestock farming between the 1840s and early 1870s, but the extent of change was very modest except on soils particularly suitable for mixed farming and in those places able to respond to London's increasing demand for liquid milk, and there is evidence of an increased dependence on wheat at this time.

¹Collins' revision now submits a case for a rather modest expansion in livestock numbers in the 'golden age', Collins (ed.), *Agrarian History*, pp.96 – 97.

²Jones, *English Agriculture*, p.22.

Changes in cattle and sheep numbers are difficult to quantify in a period before reliable statistics were kept. The meagre evidence of the tithe files and of individual farm accounts and estate records each suggests some intensification of the livestock element within the mixed farming system with meat sales becoming more important to Essex farmers, but also that the change was very limited. Evidence in the tithe files exists for too few parishes to allow a statistical comparison of stocking in Essex at c.1840 and at the time of the parish agricultural returns of 1870, but the impression is that meat production played only a small part in the agricultural economy of Essex at both dates. The tithe files mention increased keeping of sheep, particularly on the boulder clays, medium soils and heavier loams commonly associated with underdraining and the spread of the four course system, but a comparison of those detailed figures that are available in the tithe files with parish returns from 1870 show only a modest overall increase. Of the 85 Essex parishes selected to provide a sample of parishes on various Essex soil types, a mere 13 have livestock numbers in the tithe files,¹ and some of these only for certain types of livestock (e.g. pigs alone are enumerated at Good Easter).² Most, but not all of the thirteen parishes were on clay soils. Totalling the cattle numbers given for these parishes and comparing them with the 1870 parish agricultural returns,³ an increase of 14 per cent in calves and bullocks per 100 acres of farmed land is shown. Sheep numbers showed an increase of 48.2 per cent, but of only 13.5 per cent when the two marshland parishes are removed. The figures suggest a modest increase in stocking in these parishes - parishes where the commissioners felt livestock was important enough at the time of the tithe commutation to be commented upon. The sample, however, is small, and the figures are of questionable accuracy: it is inconceivable that pigs were the only livestock kept in Good Easter, or that in four other parishes no sheep or pigs were kept.

¹Barnston, Corringham, Downham, Good Easter, Lambourne, Little Dunmow, South Hanningfield, South Weald, Stow Maries, Theydon Mount, Virley, West Mersey, White Roothing.

²P.R.O., IR 18/2312, tithe file for Good Easter.

³P.R.O., MAF 68/240, parish summaries of the agricultural returns, 1870.

Individual farm accounts provide a more accurate reflection of trends in stocking, and also confirm that the rise in livestock numbers was modest. Although rising returns on stock sales balanced the accounts of both the Audley End Home farm and on the Tabor farms, there was little change in stocking numbers on these farms or indeed on Cooke's farm at Great Henny.¹ On the last named farm, for example, although livestock numbers fluctuated from 322 sheep, 27 bullocks, 3 cows and 89 pigs in 1863-64 to 146 sheep, 25 bullocks, 3 cows and 88 pigs in 1869-70, the overall trend between 1851-2 and 1871-2 was a modest increase in sheep and cattle numbers, most of which occurred in the 1850s. This is illustrated in table 6. Similarly at Audley End there was a slight increase in sheep numbers (three per cent between 1855 and 1867) but here there was a decrease in the cow herd and the numbers of pigs kept. Furthermore, the very low level of landowner investment in Essex farm buildings in the 'Golden age' is consistent with no more than a very modest increase in livestock numbers.² It would seem that Essex farmers in general did not develop their livestock enterprises as much as E.L. Jones claims was the case elsewhere in England.

The parish agricultural returns further show that Essex farms carried less livestock in 1870 than was common even in the other 'corn counties'.³ It might be argued that because the agricultural returns were taken on 25th June each year when the number of animals was at its minimum on fattening farms as were to be found in Essex, they under-represent the importance of livestock in Essex.⁴ The timing of enumeration,

¹E.R.O., D/DBy A268-270; *idem.*, Tabor MSS., D/DTa A77, farm accounts; *idem.*, D/DU 441/54-68.

²See above, chapter 2.

³P.R.O., MAF 68/240, parish summaries of the agricultural returns, Essex, 1870; *Agricultural Returns, 1870*, (B.P.P., 1870 lxviii, octavo ed.), p.363.

⁴J.A.Clarke, 'Practical Agriculture' in 'Memoir on the Agriculture of England and Wales', H.M.Jenkins (ed.), *J.R.A.S.E.*, 2nd. ser., xiv, (1878), pp.464-466. Clarke mentions three Norfolk graziers who had 98 bullocks in June 1878 but 414 the previous December. The impact of the date of compilation on the returns was discussed by the Essex Chamber of Agriculture in 1875, Writtle Agricultural College Library, minutes of the Essex Chamber of Agriculture, 29.10.1875.

however, cannot explain why Essex relied less on cattle and more on cereal sales than other counties where fattening was also common. Moreover, given that most Essex farms carried at least some livestock in the 1840s, the evidence of limited reliance on livestock in the 1870 agricultural returns precludes the possibility of there having been any marked swing towards livestock in the intervening period.

Table 6

Livestock at Great Henny farm, 1851/2 - 1871/2

	1851-52	1858-59	1861-62	1863-64	1868-69	1869-70	1871-72
Sheep & Lambs	273	296	166	322	229	146	291
Cattle, Calves & Cows	20	29	25	30	22	28	14

Source: E.R.O., Miscellaneous Farm Accounts, Great Henny Farm, D/DU 441/ 54-68.

Table 7

Livestock per 100 acres of farmland in 1870 in Essex, England and the Corn Counties.

	Essex	England	Corn Counties
Sheep	51.31	80.91	82.52
Cattle (incl. Cows & Heifers)	8.13	16.05	11.38
Pigs	10.26	7.75	8.17

Source: *Agricultural Returns for 1870*, (B.P.P., 1870 lxviii), pp.363, (octavo).

One area of livestock farming that did witness an increase in stocking was dairying, but only in areas where soil and more importantly transport was suitable. Some accounts claim that the cattle plague of the mid 1860s was the stimulus to dairying in

areas further from London such as Essex.¹ Over half London's 24,000 stall fed cows died or were destroyed, creating a sudden demand for country milk, and this, together with the increasing cost of labour encouraged farmers in suitable parts of Essex to produce milk for London.² This development is illustrated by the Great Eastern Railway's freight figures. The company, which served East Anglia, carried 76,818 imperial gallons of milk to London in January 1865, but 110,048 gallons in January 1867, indicating some 1,200 additional dairy cattle.³ It was at this time that the Tower estate reduced its arable acreage and built model dairies.⁴ By 1870 dairying was well established along the London to Chelmsford Railway, especially in the Romford, South Weald, Brentwood, Mountnessing and Ingatestone areas.⁵

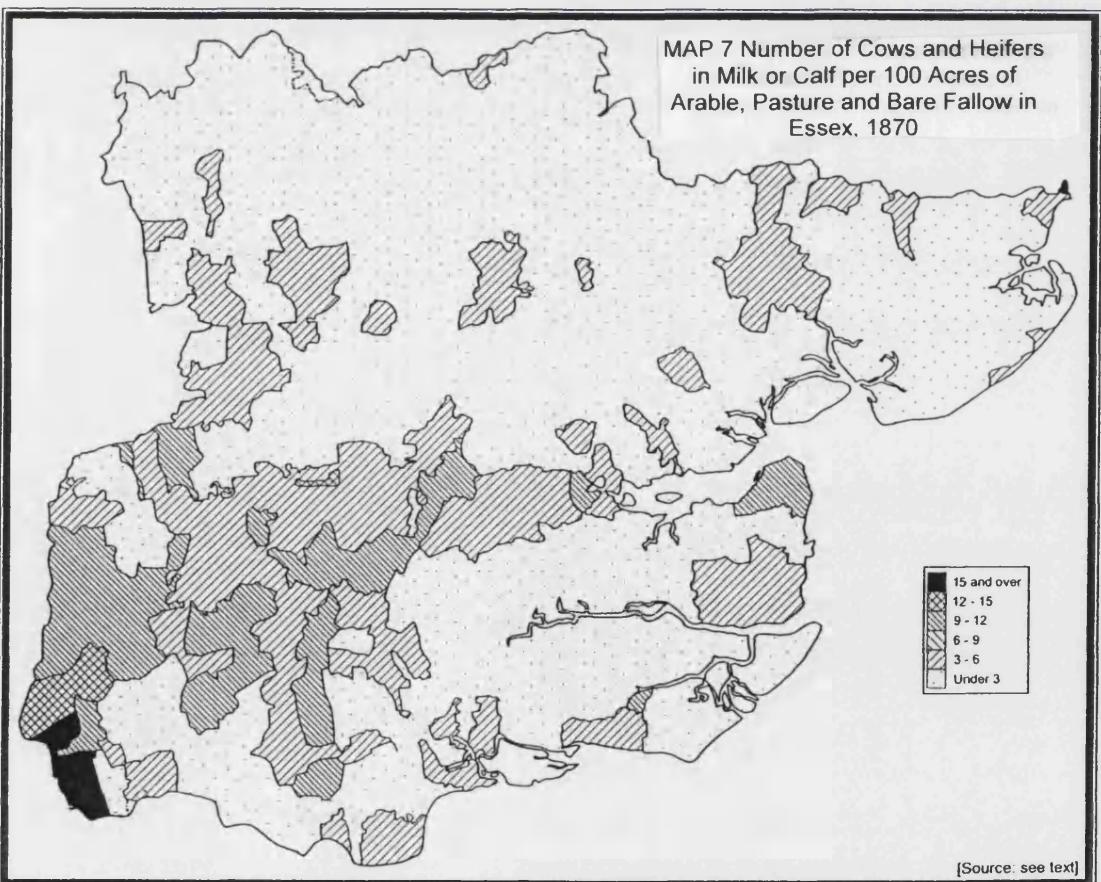
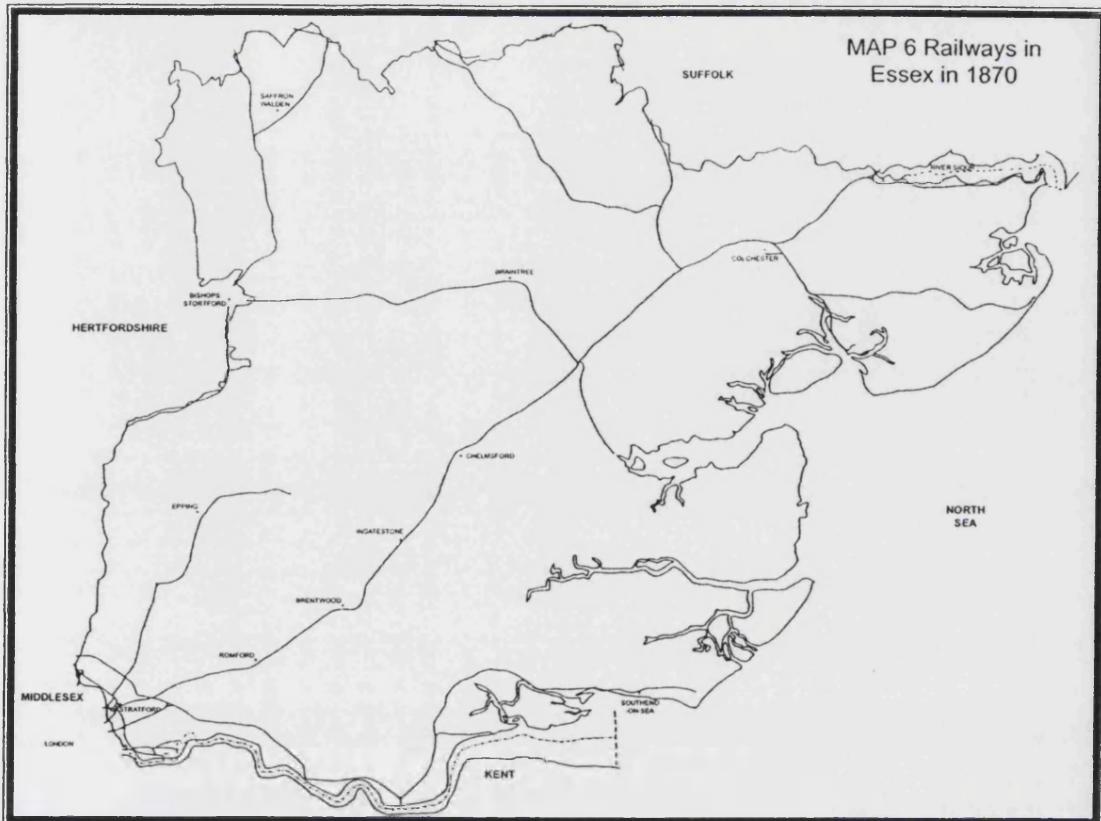
¹Orwin and Whetham, *British Agriculture*, p.148. Certainly the evidence suggests that prior to mid century cows were kept for veal production rather than for dairying in the Epping and Roding Valley areas: Main, 'Fattening Calves', pp.609-610; Baker, 'Farming of Essex', p.14; P.R.O., IR 18 series.

²J.C. Morton, 'Town Milk', *J.R.A.S.E.*, 2nd Ser., iv, (1868), pp.95-96.

³*ibid.*, p.96.

⁴E.R.O., Tower MSS., D/DTw A5, 6, accounts.

⁵Comparison of maps 6 and 7 shows the importance of rail transport to dairying.



It is easy, however, to exaggerate the role of the cattle plague in promoting dairying in Essex. This branch of agriculture had been expanding since the late 1830s, and there were a good number of dairy farmers in Essex before the 1860s. As noted above, by 1846 St. Thomas' Hospital was buying its milk from a Romford farmer as dairying became an expanding enterprise along the railway line,¹ and in 1856 St. Bartholomew's Hospital first bought their milk from Brentwood rather than Islington, this becoming their regular area of supply from 1860.² It is probable that growing demand in the 1860s and 1870s was the main factor encouraging the expansion of dairying in Essex: the plague merely accelerated an already well-established trend. Recent research has shown that the fall in London's cow population in 1866 was temporary: by the 1870s output from London's cowhouses had recovered to 85 per cent of the 1864 level, but also that by the mid 1860s London's demand for milk was greater than existing supplies.³ This evidence of expansion in dairy farming in Essex refutes Brown's assertion that "until the 1870s and the collapse of cereal farming on the heavy clay soils ... dairying was almost entirely neglected in Essex".⁴ Yet, the expansion in dairying in certain parts of the county did not much modify the overall commitment of Essex farmers to cereals: even in 1870/2 dairying contributed only 4.44 per cent to total gross Essex farm output and livestock as a whole contributed only 28.06 per cent, compared to the cereal contribution of 54.51 per cent.⁵

It is evident, therefore, that there was no marked shift from cereals to livestock on most Essex farms during the 'golden age'. Moreover, Essex evidence shows that there was no reduction in arable, and there was an increased reliance on wheat.

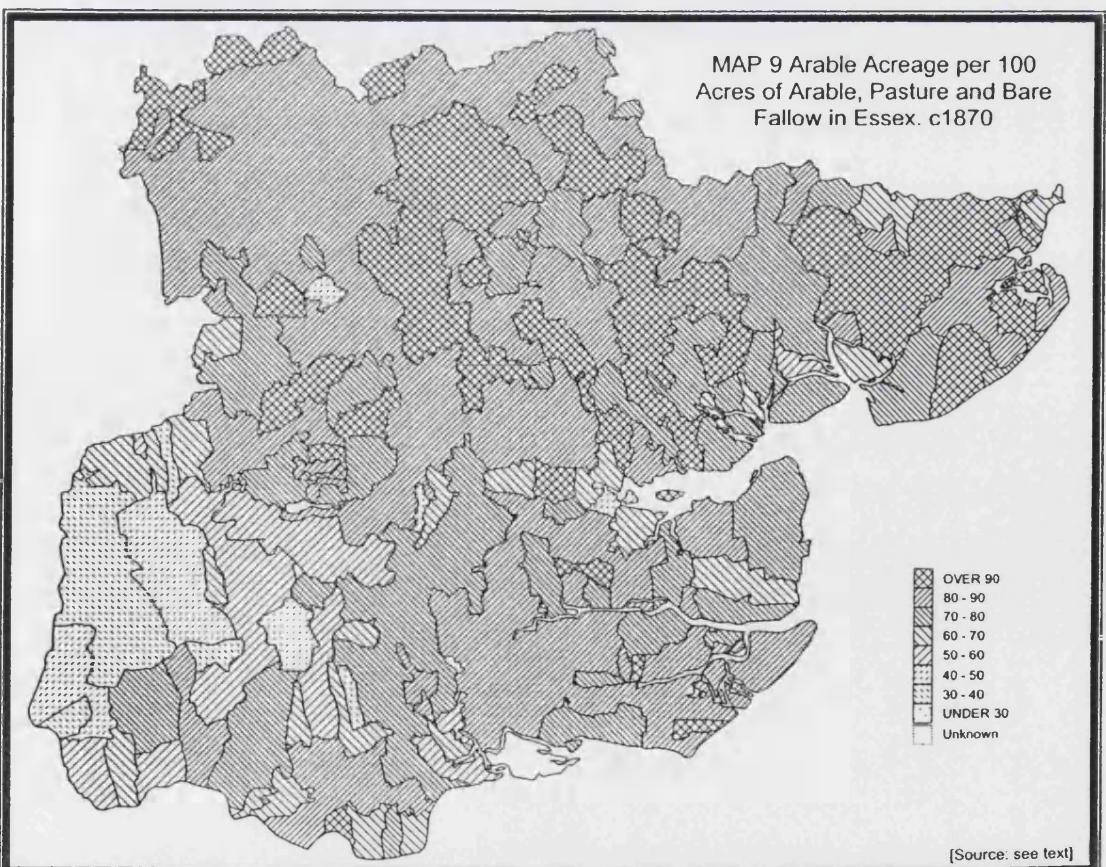
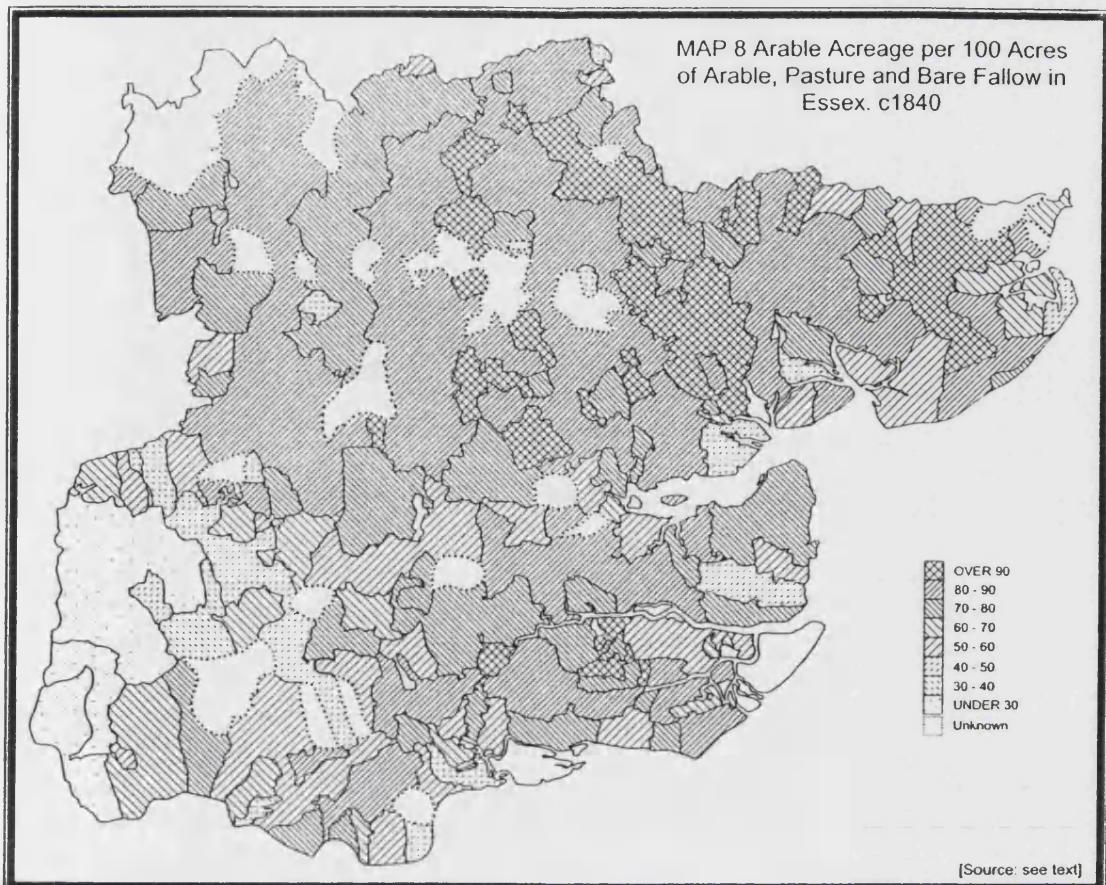
¹Main, 'Fattening Calves', p.608; Dodd, *Food of London*, p.122.

²St. Bartholemew's Hospital MSS., Ha/1/21-23, Governors' minutes.

³Atkins, 'Intra Urban Milk', pp.388, 391; Taylor, 'London's Milk Supply', p.34.

⁴J.Brown, *Agriculture in England: A Survey of Farming, 1870-1947*, (Manchester, 1987), p.49.

⁵Calculated using Ojala's method. For details see appendix 1.



Certainly, as returns on livestock rose, a minority of Essex farmers converted some arable land to pasture. James Youngerson, for example, converted 155 acres on his 403 acre farm near Chelmsford in 1863-66 "on account of the high price of stock and the cost of labour", and some of his neighbours did likewise¹. In Essex generally, however, such conversions were the exception. It is difficult to produce a detailed analysis of change in land use owing to the shortcomings of the tithe figures, but a comparison of the tithe figures with the 1870 agricultural returns suggests certain trends: whereas many English farmers were either maintaining or increasing their grass acreage between 1840 and 1870, Essex farmers overall, and despite supplying more of London's milk and keeping more sheep and bullocks, were actually increasing the proportion of their land under arable.

Table 8 gives the percentage of agricultural land under grass at the time of the tithe awards (c. 1840), in 1861, and in 1870 on the nine main soil types of Essex. It is based on a sample of 86 parishes (about 20 per cent of the county's area) and shows a modest move away from pastoral farming. The 1870 figures may be distorted a little owing to the high cereal prices of 1867 and 1868 which encouraged arable farming - Lawes and Gilbert give figures which suggest that the expansion of arable farming in England at this time masked earlier arable contraction in the late 1850s and the 1860s² - but Essex evidence does not suggest contraction of the arable took place at this time. Although the arable acreage may have declined on the medium soils of central Essex in the 1850s (districts 5 and 6), and to a small extent on farms on the London clays in the 1860s (district 2), elsewhere it seems to have been expanding throughout the 'golden age'.

¹M. Evans and T. Bowstead, 'Report on Laying Down Land to Permanent Pasture', *J.R.A.S.E.*, 2nd Ser., xi, (1875), pp.488-489.

²J.B. Lawes and J.H. Gilbert, 'On the Home Produce, Imports, Consumption and Price of Wheat over 28 (or 27) Harvest Years, 1852-3 to 1879-80', *J.R.A.S.E.*, ser 2, xvi, 1880, Table v, facing p.352.

These parish figures are backed by evidence from a number of Essex farms of grassland being converted to arable in the 1850s and 1860s. Examples include Althorne Hall (174 acres) on the heavy clays of the Dengie peninsula which had 25 acres of arable in 1858 but 117 by 1869, 40 acres of grassland being "broken up" at South Ockendon Hall farm in 1864, and conversion of marsh pasture to arable at Chadwell in 1852.¹ Later (1901), one expert, T.S. Dymond, was to write that "most of the good old grassland on the heavy clay soil of south east Essex . . . was broken up" in the 1850s.² Maps 8 and 9 show the proportion of Essex farms under arable in c. 1840 and 1870 based on tithe statistics and the 1870 parish summaries of the Agricultural Returns.³

The increase in arable was in part for roots, clover and green fodder crops as the four course or six course system, became universal on Essex farms, a process completed during the 'golden age'. Essex evidence, however, shows that it was more to increase the acreage under cereals. A comparison of information from the tithe files and from the agricultural returns of 1870-2 shows that whereas in Essex cereal crops took 50.3 per cent of arable land and 39.6 per cent of farmed land in c.1840, the figures had increased to 52.4 per cent and 43.59 per cent respectively by 1870-2.⁴

¹St. Bartholemew's Hospital MSS., Almoner's reports, 1869, EO8/6; Benyon MSS., rent books 1859-74, E.R.O., D/DBe E68; C.C., E.C.E. MSS., London Cathedral Surveys, S1, Biggins manor estate report, pp. 294-315.

²T.S.Dymond, 'Agricultural and Miscellaneous Notes in the Manuring of Essex Pastures', *Journal of the Board of Agriculture*, viii, no. 1, (June 1901), p.347. See also Collins (ed.), *Agrarian History*, p.84.

³P.R.O., I.R.18 series; *idem.*, MAF 68/240.

⁴P.R.O., IR 18 series; *Agricultural Returns 1870-72*, (B.P.P., 1870 lxviii, p. 363; 1871 lxix, p. 271; 1872 lxiii, p.675). Indeed using Ojala's method of calculating farm output it appears that in Essex the value of gross output of wheat rose by 27 per cent at constant 1910/12 prices between the tithe surveys and the early 1870s.

Table 8**Percentage of agricultural land under grass, 1840-70**

<u>Soil and District</u>	<u>c. 1840</u>	<u>1861</u>	<u>1870</u>
1. London Clay near metropolis	66.00	61.54	61.05
2. London Clay	22.63	20.94	25.10
3. Boulder Clay	15.22	14.32	12.20
4. Heavy Soil (a)	15.35	11.62	10.94
5. Medium Soil	15.06	20.08	12.39
6. Medium Soil – Tendring Hundred	13.66	14.24	12.08
7. Light Soil (b)	14.29	14.43	14.96
8. Light Soil - Thames Valley	33.58	32.88	25.09
9. Alluvial Soil	30.74	32.82	26.54
Essex	27.60	-	20.58

(a) Sample less than 20 per cent as Hadstock parish was tithe free

(b) Sample less than 20 per cent as Colchester not included

The table is based on an approximate 20 per cent sample of parishes on the major soil types of the county. Some soil types are subdivided as geographical location was important.

Source: P.R.O., IR 18 series, tithe files; E.R.O., 1861 County Rate return; P.R.O., MAF 68/240, Parish summaries of the agricultural returns for Essex in 1870.

Greater emphasis on the wheat crop was the cause of this increase: it had risen from 25.6 per cent of the arable and 20.1 per cent of total farmed land to 30.1 per cent of the arable and 23.8 per cent of farmed land, whilst the combined acreage of barley and oats had declined over the same period from 24.7 per cent to 22.1 per cent of the arable (19.4 per cent to 18.8 per cent of total farmland). Farm accounts show a similar pattern of commitment to wheat. At Great Henny (321 acres) there was an increase in wheat acreage from 65 acres in 1847-8 to 73 acres in 1851-2, 85 acres in 1868-9 and 88 acres in 1871-2. Meanwhile this farm's total cereal acreage rose from

124 acres in 1847-8, to 159 acres in 1851-2, 163 acres in 1868-9 (when wheat and barley sales accounted for 59 per cent of total farm income) reaching 184 acres in 1874-5.¹

Further evidence that cereal growing was of paramount importance comes from an account of cropping in 1874-6 (years immediately after the 'golden age') on 16 Essex farms (3,300 acres) on one, mostly clay soiled estate.² 74 per cent of the land was arable and 20 per cent pasture. Cereal crops accounted for 51 per cent of the arable, wheat alone being planted on a third of it. A mere two acres of turnips were grown, and only 20 per cent was under clover, trefoil, mangold, tares and other fodder crops, whilst 13.6 per cent of the land was being fallowed. Another crop account (1869) covering three of the farms in the 1874-6 account, also shows the importance of the wheat acreage.³ Table 9 shows the increase in wheat cropping was common to all Essex soils, but was greatest on the heavy clays and on alluvial soils.

Despite increasing labour costs⁴ and a comparative fall in its profitability, wheat had more than maintained its position as the main cash crop in Essex. Using acreage and yield data from the tithe files (the acreage amended to include non-tithed lands assumed to be cropped in the same proportion as those in the tithe files) it is possible using Ojala's formula to estimate gross output figures for cereals on Essex farms. At the time of the Tithe Commutation, wheat sales probably produced £1,576,814 and other cereals £1,004,566. Similar calculations show that between c.1840 and 1870-2 the value of gross wheat output in Essex rose by 27 per cent. In the early 1870s

¹E.R.O., D/DU 441/54, 55, 59, 64, 66, 68.

²St. Bartholemew's Hospital MSS., EO 8/6, Almoner's reports (1874-6).

³*ibid.*, EO 8/6, (1869).

⁴At Great Henny, for example, the labour bill rose by 38 per cent between 1850 and the mid 1870s; E.R.O., D/DU 441/55-68. It is worth noting, however, that the cost of labour per acre was much higher in root production than in grain growing.

wheat output alone accounted for some 35.81 per cent of total value of gross agricultural output from Essex farms, and cereals as a whole accounted for 54.51 per cent. Barley remained the dominant spring corn crop in Essex, despite a shrinkage in acreage during the 'golden age', although oats were more common on the wetter soils. Only on the light soils of the Thames Valley, and on the clays near London did wheat take up less than 22 per cent of farmed land.¹

There has been some debate over the extent of the wheat acreage in England at this time and whether it increased or decreased during the 'golden age'. Using statistics from inspected markets, Fairlie claimed that the wheat acreage declined from 1845 until the mid 1850s, thereafter remaining constant.² Chambers and Mingay, Drescher and Wilkes also believe that the English wheat acreage contracted in the 'golden age', although they differ on the timing of contraction.³ Olson and Harris, on the other hand, claim that there was no contraction in the English wheat acreage until the 1870s.⁴ Essex evidence firmly supports the latter view.

Table 10 shows the difference in cropping trends over the 'golden age' period between farms in England and Wales and those in Essex alone. The increase in wheat (contrary to the national trend) and in pulses in Essex is notable as is the fall in the proportion of bare fallow from 15.5 to 6.28 per cent of arable land. Despite this considerable reduction in fallowing between c.1840 and 1870 on most soils, it remained essential on Essex clays to clean and reinvigorate the land. It seems likely

¹ Chart 6 shows the gross output from Essex farms in 1870/72 under the main product headings. For comment on the methodology used in the calculations, see appendix.

²S.Fairlie, 'The Corn Laws and British Wheat Production, 1829-1876', *Ec.H.R.*, 2nd ser., xxii, no. 1, (1969), pp.101-109, 114-115.

³Chambers and Mingay, *Agricultural Revolution*, p.183; Drescher, 'Development', pp.155, 167; Wilkes, 'Adjustments in Arable', pp.90-103.

⁴Olsen and Harris in Perry, *British Agriculture*, pp.149-176.

that the reduction of fallows on other soils was a consequence of increased fodder crops mentioned above.¹

Table 9

**Percentage of agricultural land and arable land under wheat
on various soils in Essex, c.1840 and 1870**

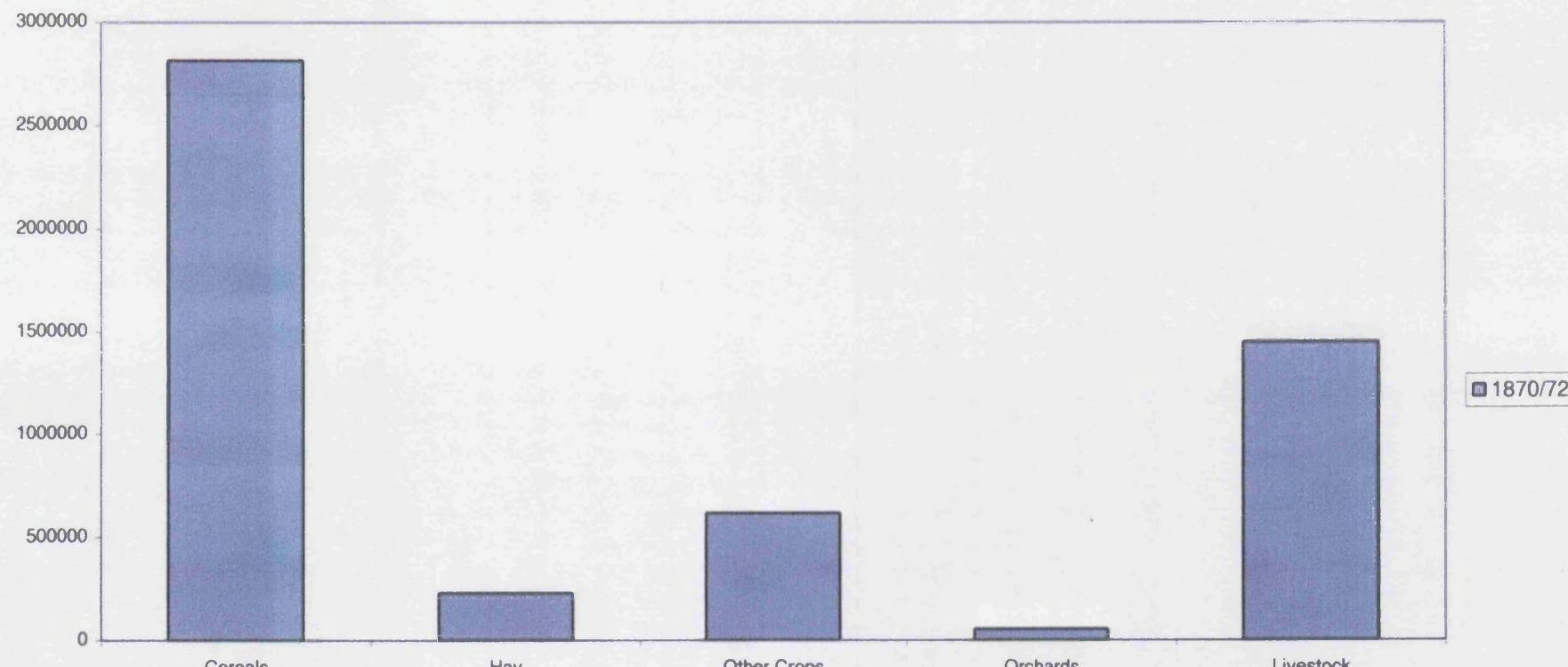
<u>Land</u>	<u>As per cent of Arable</u>		<u>As per cent of Agricultural</u>	
	<u>District</u>	<u>1840</u>	<u>1840</u>	<u>1870</u>
1	18.9	31.15	7.8	12.14
2	25.8	32.07	19.8	24.02
3	24.5	27.63	21.1	24.37
4	25.0	24.84	20.4	22.12
5	23.0	27.55	20.3	24.63
6	25.4	28.35	21.9	24.22
7	22.9	28.56	19.7	23.17
8	25.0a	24.28	13.2a	18.18
9	23.5	35.79	15.0	26.30

a - a very small sample

Source P.R.O., IR 18 series; *idem.*, MAF 68/240. For key to districts see table 8

¹See above, this chapter, section 3.

Chart 6
Essex farms: gross output calculated at current prices, 1870/2



Source: see text and Appendix 1

Table 10**Cropping in c.1840 and 1870 in England and Essex****(Crops as a percentage of arable)**

	England & Wales c. 1840	England & Wales 1870	Essex c. 1840	Essex 1870
Wheat	26.8	22.72	25.6	29.08
Barley	15.5	14.33	18.5	16.83
Oats	12.8	11.74	6.2	7.09
Pulses	5.0	5.91	8.8	11.63
Turnips	11.3	13.68	7.3	4.50
Fallow	10.8	3.95	15.5	6.28
Clover & Seeds	22.4	21.31	17.9	12.67

Source: Kain, *Atlas*, pp.29, 460; Orwin and Whetham, *Agricultural Revolution*, p.121; *Agricultural Returns (GB) 1870*, (B.P.P., 1870 lxviii), p.363. Note: 1870 figure for turnips includes all root crops.

In one respect the tithe files may be misleading; they give a high figure for turnips and seeds (clover) in Essex for c.1840, but little information on other fodder crops, and whilst the decrease in the percentage of the arable land under turnips (and clover) may reflect a move to other fodder crops, it may be a consequence of inaccurate measurement of the root acreage for c.1840 (possibly all fodder crops being enumerated as 'turnips').¹

Essex evidence, therefore, confirms that R.W. Sturgess' revolution on the clays did not occur in this county (as indeed he admitted). Sturgess advanced the thesis that the introduction of pipe drainage led to a major transformation in farming after 1850,²

¹There is, for example, no mention in the tithe files of mangold which took up 4.6 per cent of the arable on Essex farms in 1870.

² Sturgess, 'Agricultural Revolution', pp.104-121; *idem.*, 'Rejoinder', pp.82-87. Collins and Jones, 'Sectoral Advance', pp.65-81, E.H. Whetham, 'Sectoral Advance in English Agriculture 1850-1880: A

with deep drainage enabling the clayland farms to emulate lighter lands and introduce a four course system with heavy stocking, thereby ending the need for costly fallows and reducing dependence on wheat. Certainly, some heavier soils and part of the boulder clays were drained, and the four course system spread in Essex, but on closer scrutiny, the Essex claylands do not fit Sturgess' model. His 'revolution' required major capital investment in drainage and buildings, and in chapter 2 (above) it was argued that investment levels in Essex were generally low, not least on the London clays. Furthermore, Essex farmers became more not less dependent on cereal crops during the period and, despite the spread of the four course system, fallows remained an essential part of clayland farming in Essex. The parish summaries of the agricultural returns for 1870 show that whilst fallows averaged under 5 per cent of farmed land in Essex (6.28 of the arable), the Essex boulder clays had almost 12.5 per cent of their land in fallow (about 14 per cent of the arable); the substantial decrease in fallow on Essex farms at this time had not taken place on the clays.¹ The root crop acreages recorded in 1870 provide further evidence that there had been no 'revolutionary' change on the Essex clays. Whereas turnips and swedes were grown on almost 10 per cent of the farm acreage in light soiled parishes, and 7.5 per cent on the medium loams of north east Essex, a mere 2 per cent of farmed land was devoted to these crops in Essex clayland parishes.² High farming with an extension of pasture, reduced reliance on wheat in favour of livestock husbandry, expanded output of turnips and reduction in fallows was certainly not common in 'golden age' Essex.

Other local studies show that the experience of Essex was not unique. In both Sussex and Derbyshire the extent of the arable in 1875 was greater than in 1840, Caird,

Summary', *Ag.H.R.*, xvi, pt. 1, (1968), pp.46-48; A.D.M.Phillips, 'Underdraining and the English Claylands 1850-1880: A Review', *Ag.H.R.*, xvii, pt. 1, (1969), pp.44-55, are other contributors to this debate.

¹P.R.O., MAF 68/240.

²*ibid.*

mentioned that around Grantham in Lincolnshire, "a great deal of grass was ploughed out when corn growing was profitable",¹ whilst Perren has shown that priority was given to corn growing on the Duke of Bedford's Bedfordshire and Buckinghamshire estates "and the 1850s and 1860s saw an increased emphasis on this crop", tenants being allowed to plough up poorer pasture to extend the arable acreage.² Other examples include farmers near Swindon who continued to plough up old pasture in the mid 1870s and a Northamptonshire estate on which Philips found no evidence of laying clayland to pasture or of any diminution in corn acreage in the 'golden age'.³ The traditional view of a supposed decline in the English cereal acreage after 1855 and a growing emphasis on livestock within a mixed farming system is an oversimplification and, as table 11 shows clearly, must be qualified by recognition of the expansion of arable in certain corn growing districts.⁴ Essex evidence confirms the stability in cultivations and modest expansion in livestock numbers in the 'golden age' recently described by Collins.⁵

¹ Kain and Prince, *Tithe Surveys*, p.173; J.A.Caird, 'Recent Experiences in Laying Down Land to Grass', *J.R.A.S.E.*, 2nd Ser., xxiv, (1888), p.130.

²R.Perren, 'The Landlord and Agricultural Transformation, 1870-1900', in Perry (ed.), *British Agriculture*, p.123.

³F.M.L.Thompson, 'Agriculture since 1870', in Critall (ed.), *V.C.H. Wiltshire*, p. 97; A.D.M.Phillips, 'Agricultural Land Use on a Northamptonshire Estate, 1849-1899, As Revealed by Cropping Books', *East Midlands Geographer*, viii, pt.3, (June 1983), pp.75-78. Caird noted an increase in corn cropping in the Chilterns in 1850 and Collins mentions that poor grasslands were ploughed up in much of Britain after the Crimean War, Collins (ed.), *Agrarian History*, p. 84.

⁴Interestingly, whereas modern writers like Sturgess propose a national reduction in wheat output, several contemporaries claimed that the acreage under grain was increasing at this time (e.g. J.C.Morton, *Handbook of Farm Labour*, (1868), p.72).

⁵Collins (ed.), *Agrarian History*, pp.83, 96-97.

Table 11

**Percentage of titheable agricultural land
(excluding woods, buildings, wastes and commons)
under arable, c. 1840**

<u>District Number</u>	<u>Arable</u>
1	34.00 per cent
2	77.37 per cent
3	84.78 per cent
4	84.65 per cent
5	84.94 per cent
6	86.34 per cent
7	85.71 per cent
8	66.42 per cent
9	69.26 per cent

Source: P.R.O., Tithe Files, I.R. 18 Series. For key to districts see table 8

5. Explaining Land-use, 1850 - 1873.

Why then did most Essex farmers respond in so limited a fashion to price trends that apparently encouraged movement towards livestock husbandry and away from wheat? Between 1850-52 and 1870-72 prime beef and mutton prices rose by 58 per cent and 43 per cent respectively, and middling quality meat rose by even more, whilst wheat prices rose by 34 per cent and barley 41 per cent.¹ Based purely on these price statistics it is not surprising that Kindleberger finds it striking that after 1850 British agriculture "did not respond in the pattern of output to the changed conditions of grain supply abroad and the demand for animal foods at home",² and Thompson felt that agriculturalists such as those in Essex were "held in thrall by corn" which impeded "the proper adjustment of farming to the marketing possibilities

¹Mitchell and Deane, *Abstract*, pp.488-489

²Kindleberger, *Economic Growth*, p.243.

of the 'golden age'.¹

There seem to have been a number of reasons for what has often been assumed to be mere short-sighted conservatism. First, as discussed in chapter one above, Essex soils and climate were better suited to wheat than to pasture; in particular, low rainfall was a major factor discouraging a move from cereals to grass. A good proportion of Essex farms, therefore, were profitable as wheat producing farms whilst cereal prices remained high, a disincentive to change despite the apparently more favourable livestock price trend.² Accordingly, it comes as no surprise to note that in 1869 the Earl of Verulam's agent stated that the Essex estate would get a "better return under tillage than pasture", as the clays were "too grubby for yielding fertile grasses".³ Farms on clays and heavy soils (over two thirds of Essex) had a livestock element in their farming system, but the difficulty of growing sufficient fodder crops or good grass on these soils inhibited a major switch to livestock husbandry except where rail transport encouraged dairying.⁴ Clayland farmers could buy in root feed for their animals (as well as feeding cereals to them) but the expense was a discouragement to keeping a large head of stock, and so light land arable farms in Essex in 1870 carried on average 35 per cent more sheep per acre than arable clayland farms.⁵

¹Thompson, *Landed Society*, p.255.

²Long after this period, Assistant Commissioner Pringle (an advocate of grassing down arable fields) noted that the heavy clays were "suitable for one style of farming" – arable, *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt. 1), p.62. Another commentator wrote of Essex that "on a great deal of the land ... permanent pasture does not flourish on account of the dryness of the climate", W.Bear, 'Advantages in Agricultural Production', *J.R.A.S.E.*, 3rd ser., v, 1894, p.263. Even today, experts note that whilst grass can be grown on all Essex soils, it is not easy to manage grassland on the heavy clays as the soil type and low rainfall make both seedbed preparation and establishing the grass difficult, and yields are low, making grassland farming unremunerative. I wish to thank Mr. A.E.Johnson of the I.A.C.R., Rothampstead, for this information. See also Hodge, et al, *Soils*, pp.45, 361, 399.

³Hertfordshire C.R.O., Earl of Verulam MSS., p. 659, xi.122, Box 64, Messing estate valuation.

⁴Although Essex had a network of railways, Assistant Commissioner Druce felt that as late as 1881 the county was not well served, *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.32.

⁵P.R.O., MAF 68/240.

Even on soils which could produce good grass the high cost of conversion to pasture (necessary expenditure on drainage, buildings, water supplies, seed and fertilisers varied between £10 and £15 an acre¹), initial low returns and reduced output made conversion unattractive whilst cereal farming brought in good returns. No doubt, some Essex landowners and most tenant farmers could not afford this level of investment, but more importantly, the need for it was not pressing while cereal prices were maintained. Furthermore, it took several years for new pastures to mature: writing in 1875, David Christy, a Chelmsford farmer (Patching Hall farm, c.1,000 acres) claimed, "it will scarcely answer the purpose of any tenant farmer to lay down permanent pasture without the landlord's assistance, as after two or three years the produce decreases unless the land is very well treated, and a good pasture until after many years is the exception in this district."² In similar vein, Caird wrote that "there is no possible profit in the proceeding until from six to ten years have elapsed" and claimed that it took "up to 14 years to form a good permanent pasture",³ whilst Sir John Lawes claimed that it might require as much as 30 years to produce grass of really good quality.⁴ Few farmers or owners were prepared to wait so long for a return on their investment. Furthermore, grassland saved on labour costs, but in general was low in nutrition and supported less stock per acre than arable land.⁵ Grassland farmers had to buy in feed, which in the mainly dry 'golden age' – particularly after 1859 – was scarce, and their productivity was lower than that of arable colleagues.⁶ Indeed, rents rose more swiftly in corn and mixed farming

¹Perren, *Agricultural Transformation*, p.126. Mechi costed the expenditure at £25 per acre including chalk and fertiliser, and grasslands took several years of careful management before they became prime pasture. Mechi, *How to Farm*, p.8

²Evans and Bowstead, *Laying Down*, p.488.

³Caird, *Recent Experiences*, pp.153-154.

⁴*ibid.*

⁵ Collins (ed.), *Agrarian History*, pp.101, 112.

⁶ *ibid.*, pp.97-98, 112.

counties than in pastoral areas suggesting a greater profitability on arable farms.¹

Nor did prices necessarily encourage a move from cereals. The long term divergence in livestock and cereal prices occurred only gradually in the 'golden age' and year on year prices, to which farmers responded, were not obviously signalling a move from cereals to meat and milk, and so Essex farmers made little change to their farming system. Wheat prices fluctuated, but between 1850-52 and 1870-72 rose by more than both retail prices and rents, and were satisfactory in most years before 1875.² Each period of low prices was followed by substantial recovery. Admittedly, meat prices rose by more than wheat over the whole period, but until the mid 1860s the rise was modest, and for short periods wheat prices rose more sharply than did those of meat, particularly in the early 1850s.³ There was little attraction in switching to livestock farming, whilst the unusually high incidence of disease amongst stock in the 'golden age' must have reduced any attraction further. There were regular outbreaks of pleuro-pneumonia, liver fluke, foot rot and lung worm, whilst rinderpest and foot and mouth ravaged herds and flocks in 1865-67 and 1867-71 respectively.⁴

Even milk prices did not encourage a switch to dairying. The one new milk price series that this author has found comes from St. Bartholemew's Hospital accounts.⁵ If this series is typical, it shows that despite fluctuations, Essex milk prices did not increase over the 'golden age' but experienced a slight decline. Scraps of price

¹ *ibid.*, pp.122-123.

² See chart 7.

³ See charts 8, 9.

⁴ Collins (ed.), *Agrarian History*, pp.97-98.

⁵ St. Bartholemew's Hospital MSS., Ha/1/20 - 24, Governors' minutes. The suggestion is that Essex milk prices differed from national trends - see Fletcher's chapter on Lancashire farming in Perry (1973), *British Agriculture*, pp.87-89, 104-105. It could be argued that income from calves and cow beef (ex-milkers) were factors in encouraging any move to dairying, but prices for low grade beef did not move upward at a substantially higher rate than for the higher quality meats.

information from the Audley End estate seem to support the St, Bartholemew's series,¹ as do the St. Thomas' Hospital series (which begin in 1855 and indicate a price fall 1855-59 to 1870-74 of 3 per cent).² Furthermore, distance from railways prevented a move to dairying by many Essex farmers. Essex railways affected land use in part by spreading knowledge of new innovations, machines and practices,³ but more by opening up existing markets to once isolated farming localities and by cheapening the carriage of fertilisers. They particularly affected the transport of perishable goods and in this way encouraged the spread of dairying. By 1856 there were three main lines from London, and branch lines were built in the 1860s, but many parts of Essex were still too far from railway lines for dairying, and as late as 1881 Druce cited this as one of the major problems for Essex farmers.⁴

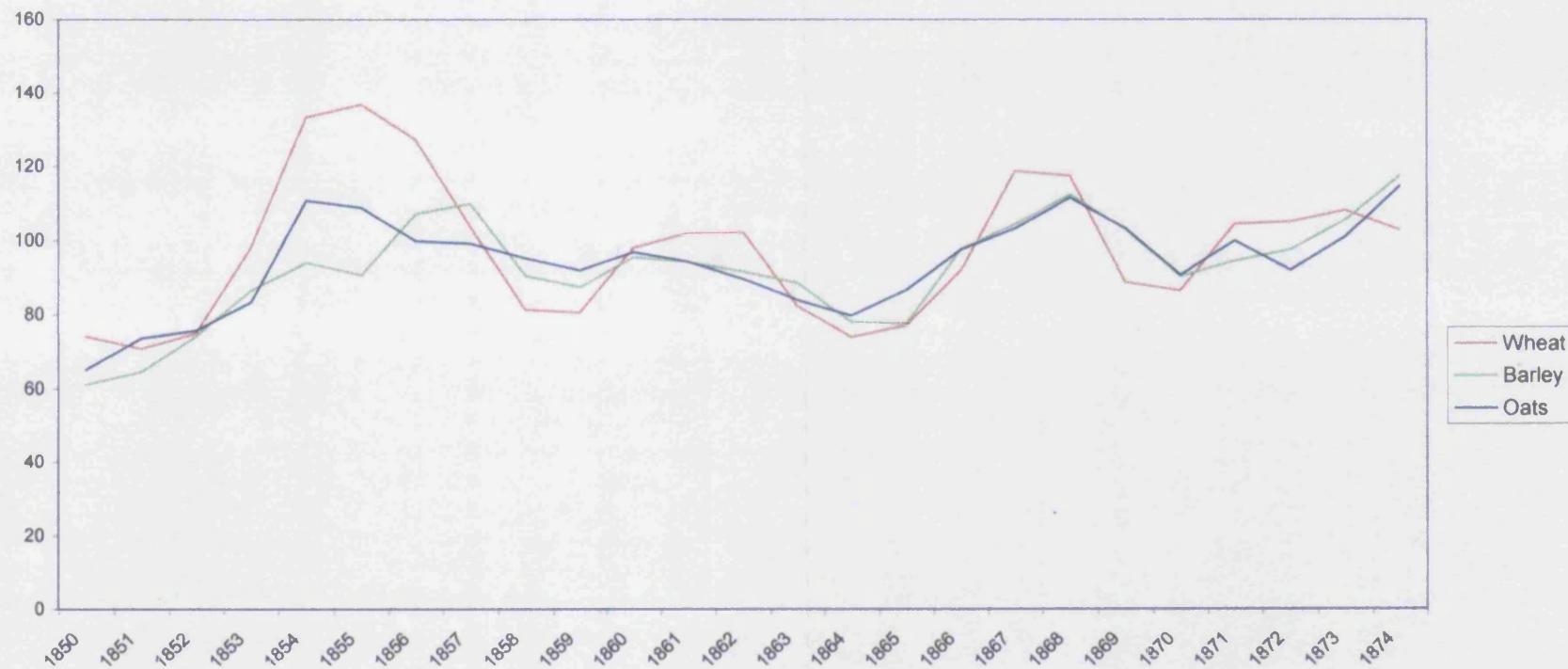
¹E.R.O., D/DBy A 268-270

² *Report on Wholesale and Retail Prices*, (BPP 1903 lxviii), pp.136-7

³H.S.A. Fox, 'Local Farmers' Associations and the Circulation of Agricultural Information in Nineteenth Century England', in Fox and Butlin (ed.), *Change in the Countryside*, pp.49-50.

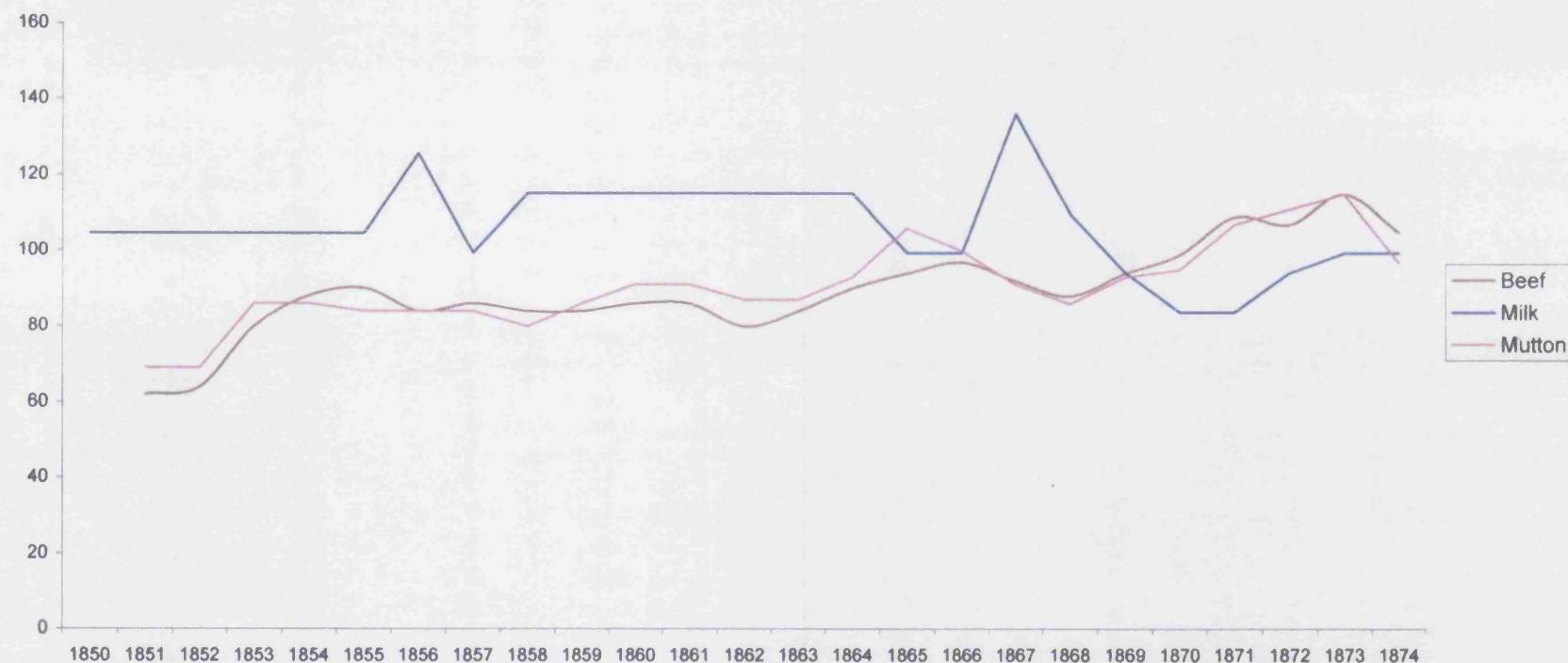
⁴Baker, 'Farming of Essex', p.1; Caird, *English Agriculture*, p.133; *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.32. Gayler has pointed out that the Thames-side railway was single track, ill administered, and lacked both adequate rolling stock and signalling, and so its value to farmers was not as great as might have been expected, H.J. Gayler, 'Land Speculation and Urban Development: Contrasts in South East Essex, 1800-1940.' *Urban Studies*, vii, (Edinburgh, 1970), pp.21-36.

Chart 7
Prices of the main grains, 1850 - 1874
[Ave. 1865-74=100]



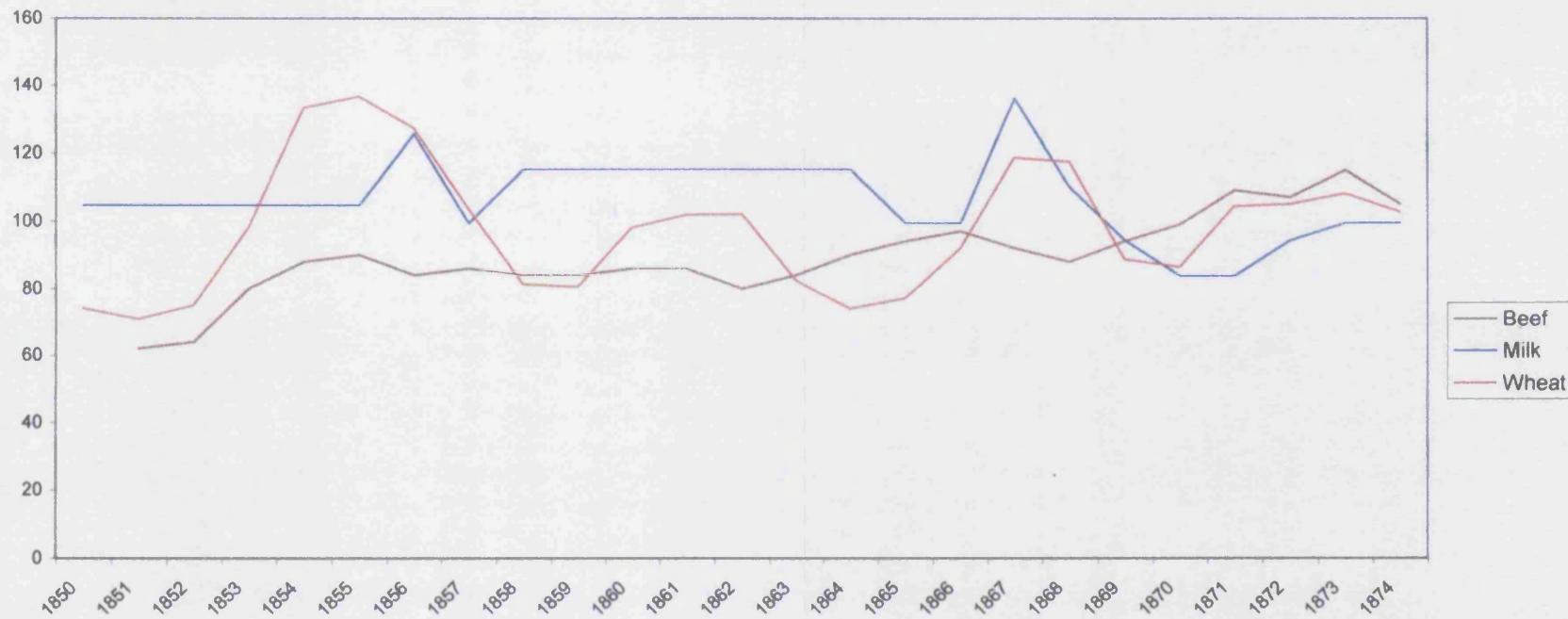
Source: Mitchell and Dean, *Abstract*, pp.488-489

Chart 8
Prices of beef, milk and mutton, 1851 - 1874
[Ave. 1865-74=100]



Source : Source: St. Bartholemew's Hospital MSS., Governors' Minutes, Ha/1/21-29;
Annual Agricultural Returns for England and Wales

Chart 9
Prices of beef, milk, wheat, 1850 - 74
[Ave. 1865-74=100]



Sources: Mitchell and Deane, *Abstract*, pp. 488-9, St. Bartholemew's Hospital MSS., Governors' Minutes, Ha/1/21-29,
Annual Agricultural Returns for England and Wales

The spread of railways in other parts of England served to discourage change in Essex farming as it brought increased competition in fresh meat, milk and vegetables produced for London. Before mid-century, cattle and sheep were sent to London from the breeding and rearing areas of upland Britain 'on the hoof'. They lost weight on the journey making their sale as fatstock economically impossible.¹ As a result they were sold to home counties farmers who fattened them over winter for sale in London. Essex markets, for example, were the chief centres for Welsh sheep and cattle.² Railways enabled farmers far from London to send meat and perishable foods direct to London.³ The easier marketing of milk produced far from London was perhaps a reason why Essex and London milk prices seem to have fallen relative to prices elsewhere. Increased internal competition is an under-appreciated reason why there was little movement away from cereal production in 'golden age' Essex.

Above all, attachment to cereals was due to their increasing comparative profitability. First, Essex wheat yields per acre increased from some 24.6 bushels in the late 1830s to 32 bushels by the 1870s.⁴ Secondly, with the introduction of machinery on farms for land preparation, harvesting and threshing, unit costs fell in cereal production to a greater extent than in livestock or root crop farming,⁵ further encouraging the

¹A 50 stone ox would lose six stone on a journey from Scotland to Norwich, and one Norfolk farmer estimated that his bullocks lost two stone and his sheep half a stone on the 120 mile journey from Norwich to London, R.Perren, *The Meat Trade in Britain 1840-1914* , (1978), p.18: J.D.Chambers, *The Workshop of the World*, (Oxford, 1968), p.37.

²Howell, *Land and People*, p.116.

³*ibid.*, pp.122-123. Some droving continued into the 1880s in part as some upland farmers could not fatten cattle successfully, but also, particularly amongst Welsh farmers, from natural conservatism. Competition with upland regions was slightly mitigated in that upland fatstock (fed on summer pasture) came onto the market in the autumn whereas stall fed animals (fattened in the winter on arable farms such as those in Essex) were sold in the spring. Perren, *Meat trade*, p.22, table 2:2, shows the number of bullocks sold at the Metropolitan cattle market in 1859. Between January and June 4,000 head came from the Northern districts and 67,460 from the Eastern districts. Between July and December, 64,670 came from the former and 3,600 from the latter.

⁴Kain, *Atlas*, p.29; *Richmond Commission, Report, Druce*, (B.P.P., 1881 xvi), pp.366-367. Collins gives a figure of 33 bushels in the 1860s, Collins (ed.), *Agrarian History*, table 2A.5, pp.132-133.

⁵Labour costs were higher for stall-fed cattle and root production than for cereal farming.

continuance of cereal farming. Preliminary calculations by Collins suggest that during the 'golden age', cereal farmers could reduce costs substantially as the unit labour requirements of steam threshing were 80 per cent lower than flail methods, and mechanical harvesters 50 per cent lower than the scythe.¹ By 1880, 80 per cent of threshing and 67 per cent of harvesting in Britain was mechanised, and in Essex this figure may have been higher. Savings of this nature were not possible in other sectors of farming. Thus falling costs kept cereals central in Essex farms, and indeed many English farms throughout the period.

Continuing modest prosperity was a particular discouragement to change. As few Essex farm accounts survive from this period, it is not possible to make meaningful generalisations about the return on the tenant's capital. Obviously returns varied with soil type, size of investment, market accessibility, agricultural prices and farm management, but, as shown below,² surviving accounts suggest that Essex tenants could expect a 10 per cent return on their capital during the 'golden age', and sometimes more. Accordingly, the returns of most Essex farmers gives at least some credibility to descriptions of this period as a 'golden age', and few production managers change product when making reasonable returns. Even outside Essex, these same factors encouraged cereal farming during the 'golden age'. Research into prices and costs in 1850 on the Duke of Northumberland's estates, for example, concluded that arable farmers concentrating on wheat and sheep were likely to fare better than pasture farmers, and even Caird was keen to make clay arable farms more productive rather than to encourage a conversion to grass.³

Undoubtedly, there were also psychological factors that prevented more conversions

¹Collins (ed.), *Agrarian History*, pp.128–129.

²See below this chapter section 6.

³Thompson, *Landed Society*, pp.245-246.

to pasture. Not only did Essex farmers, have little expertise in the sowing or management of pasture, but some may have subscribed to the notion that corn (especially wheat) was 'king', and were convinced that 'good' farming meant the largest possible output per acre, achieved best by mixed farming, as pasture supported less stock per acre than arable and provided no cash crops: indeed as late as 1882 one agricultural correspondent claimed that to lay land to grass was "a tacit confession of failure."¹ Such irrational influences, however, were almost certainly of secondary importance in accounting for the continued commitment to wheat by most Essex farmers. Historians such as Kindleberger and others who have pilloried these farmers² - and those of the other 'corn counties' - for alleged inertia and conservatism display a partial and insensitive understanding of the choices, options, information and constraints that influenced 'corn county' farmers in the 'golden age'.

Essex farmers, therefore, can be exonerated from most of the indictments made about their farming. Larger landowners, however, should have been more aware than farmers of long term trends in agriculture and been concerned that rents did not rise substantially. Perhaps, as entrepreneurs, they should have encouraged a reduced dependency on cereals and considered how far maximising output was economically sound. It is likely, however, that the incentive was insufficient to repay the investment.

6. Tenant Investment and Return

Clearly, tenants were not investing heavily to facilitate increased livestock production. It is therefore of interest to investigate what their main expenditures were during the 'golden age', and what their returns were. Whereas Essex landowners

¹Collins (ed.), *Agrarian History*, p.112; Editorial, *Agricultural Gazette*, new series, xv, 24.4.1882, p.396.

²Kindleberger, *Economic Growth*, pp.240–241, 243. More recently, Turner argued that wheat acreage should have been reduced in the 'golden age', Turner et al, *Agricultural Rent*, p.249.

provided most of the fixed capital to work the farm, the tenant provided the working capital. The latter included livestock, feed, horses, stock, seed for crops, fertilizers, machinery and wages. It was suggested in chapter 2 above that farmers probably shouldered an increasing proportion of total investment over the course of the 'golden age'. As explained in that chapter, some Essex tenants also invested in fixed farming capital at this time. Most were prepared to provide labour for drainage (as agreed in leases), and some invested in land improvements including field drainage.¹ A very few, like William Eve of North Ockendon, even borrowed from land companies to finance this.² Scattered references to such items as guano, chalk, other artificial fertilizers and feed for stock appear in farm accounts, in an official enquiry, and in the records of the Chelmer and Blackwater Navigation Company giving some clues to Essex farmers' investment, and the use of each of these inputs probably increased between mid century and the 1870s as it did in England generally,³ but the paucity of farm accounts prevents any detailed analysis of changes in Essex investment over time.

Essex tenants were also investing in machinery, particularly barn machinery. The introduction of a range of machines to replace hand labour in a variety of farm tasks was one aspect of 'high farming', and the extent of investment in new machinery in Essex at this time is, therefore, an interesting question. Essex foundries had an important place in the mechanization of English agriculture, Wedlakes of Hornchurch and Bentall of Heybridge near Maldon gaining an international reputation. The

¹ E.R.O., Guys Hospital MSS., D/D Gh E7, Receivers reports for the Essex estate.

² P.R.O., MAF 66/1, General Land Drainage Company, ledger 1, (1851-1868).

³ Thompson, 'Second Agricultural Revolution', pp.62-78. Accounts of both canals and railway companies serving Essex indicate increased carriage of such commodities in the 1850s and 1860s: P.Came, 'A History of the Company of Proprietors of the Chelmer and Blackwater Navigation, 1793-1914', Unpublished Thesis, Sussex University, (1972), p. 192. See also *S.C. Agricultural Customs, Evidence of Hutley*, (B.P.P., 1866 vi), QQ.2126-27, 2133, 2140, and Brigden, *Victorian Farms*, pp.231-233 for details on other 'High' farmers.

former produced a cheap and efficient hay turner (tedder), together with various ploughs and seed drills, whilst the latter became famous for its ploughs.¹ Other Essex agricultural machine making firms included Burgess and Key, who improved the McCormick reaper, Reuben Hunt of Earls Colne, and T.C. Darby of Pleshey who invented the steam digger in the 1870s as an alternative to ploughing tackle.² The first practical steam ploughs came in the 1850s, enabling heavy soils to be ploughed much deeper without damaging the soil. Advertisements for them were common in Essex newspapers and journals.

Farm sale catalogues indicate that at least some of the new machinery found its way onto Essex farms. Iron ploughs became more common, (although wooden harrows with iron teeth and wooden ploughs with iron shares continued in use until the twentieth century), as did oilcake breakers, mangold pulpers, other 'barn' machinery, horse hoes, scarifiers, mowers and rollers.³ Examples of investment in farm machinery are also given in one of the farming accounts: at Great Henny a threshing machine (which required the labour of eleven men and four boys) had been bought by 1858 and reaping and mowing machines were bought in 1864-1865.⁴ Just how much greater was the use of machinery by the early 1870s, whether the increase in its use was sufficient to help justify talk of 'high farming' in Essex are, unfortunately, questions that the sources cannot answer unequivocally. Against the evidence of increased mechanization can be set other evidence of much farmwork continuing to

¹The 1841 Goldhanger plough proved most popular, and the 1843 patent broadshare plough gained a gold medal at the Great Exhibition in 1851 and further prizes at the Royal Agricultural Show in 1856.

²E.R.O., D/F 1/4, Bentall catalogues and price lists 1840-1874; Clark, 'Practical Agriculture', pp.636, 642; *Land Agents' Record*, 4.9.1886, p.1.

³Some farmers had their barn machinery driven by steam engines. Collins has argued that the major advance in harvesting tools between 1850 and 1870 was the introduction of the bagging hook and scythe to replace the sickle. Even Mechi had such tools in 1867 alongside his steam powered machinery. E.J.T.Collins, 'Harvest Technology and Labour Supply in Britain, 1790-1870', Unpublished Ph.D. Thesis, Nottingham University, (1970), pp.306, 310.

⁴E.R.O., D/DU 441/58, 61.

be done by hand even when machines could have been purchased. Isaac Mead, for example, claimed that at High Easter in the 1870s, most of the barley crop was thrashed by hand.¹ It may be significant too that there was little steam ploughing in Essex: none of the farm sale catalogues consulted mentions steam tackle. Indeed, it appears that as late as 1866 only two sets of tackle were in use in Essex, although in 1868 four Thurrock farmers bought tackle and more were in use by the mid 1870s.²

The lack of interest by Essex farmers in steam ploughs before the 1870s was probably due to three main factors. First, the cost of engine and tackle was high (c. £645). To this would be added further costs in removing hedges, creating large, regular fields, and flattening field surfaces, without which steam ploughing would be inefficient. In south Essex, for example, Cole and Squier and Messrs. Wagstaffe, removed all their hedges, creating one vast field subdivided by roads into 50 acre plots in order to create an efficient situation for steam ploughs.³ A second factor was that availability of cheap labour made costly mechanization of any kind unattractive. Furthermore, farmers knew that the displacement of labour by machines might result in higher poor rates as well as a lower labour bill. Finally, there was the problem of getting skilled mechanics. On balance the impression is that whilst Essex farmers' investment in machinery increased during the 'golden age' and became extensive in a few districts and on individual farms, overall it did not reach a level that would lend much support

¹I.Meads, *The Story of an Essex Lad Written by Himself*, (Chelmsford, 1923), p.32.

²Collins, *Orsett Estate*, p.55; G.E.Fussell, 'Home Counties Farming, 1840-1880', *Economic Journal*, lvii, (1947), p.324. There may have been further expansion in the 1870s. In south Essex the 1870s saw Messrs. Blythe and Squier set up a peripatetic steam engine business and the tenant of Trenders Farm (275 acres) near Rayleigh owned his own engine. Evidence from the 1894-97 *Royal Commission* maintains a decline in steam cultivation took place on the Essex claylands by the 1890s, suggesting it was not uncommon (if not widespread) in the 1870s and 1880s. Collins, *Orsett Estate*, p.55; R.U.L., Whitmore MSS., ESS 17/4/35, farm sales; *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.57. A similar situation was common in the Newcastle area, *idem.: Evidence of H.Scott*, (B.P.P., 1894 xvi pt.1), QQ30034-35; Clapham, *Economic History*, iii, p.88.

³Collins, *Orsett Estate*, p.55. Similarly, Samuel Jonas in north west Essex (Chrishall Grange farm) had, by 1870, laid his 4,200 acre farm into large (60 acre minimum) square fields to facilitate steam ploughing, Brigden, *Victorian Farms*, p.231.

to claims that 'high farming' was widespread in Essex.

Labour costs on arable farms in Essex (which varied from 17 per cent to 27 per cent of farm inputs on the farms where records have survived) were another item of tenants' expenditure that increased during the 'Golden age'. This pattern can be seen in three surviving accounts from farms in different parts of Essex, and in the accounts of the farm studied by F.C. Danvers in the 1890s.¹ Despite falling unit costs, the total labour bill at Great Henny farm rose by over 38 per cent between 1850 and the mid 1870s (reaching £2.3 per acre in the mid 1870s), a rise greater than the rise in wheat prices (but lower than the rise in most other agricultural prices), and wages increased in importance relative to other farm inputs over this quarter century. On the farm studied by Danvers the rise in the labour bill over the same period for an unchanging acreage was 60 per cent (far greater than the rise in agricultural prices). Although a few examples of this nature do not constitute a representative cross section of Essex farms, it would seem from wage rates and the number of agricultural labourers employed in Essex² that a rise in labour costs greater than a rise in wheat prices and the increase in value of the Essex wheat output was the norm in the county.

Overall, the evidence suggests that the 'golden age' was a time of modest prosperity for most Essex farmers. Between 1850/52 and 1870/72, agricultural prices rose at a faster rate than the cost of living, unit costs fell on arable farms, and average rents rose by rather less than the cost of living. Increasing labour costs eroded some of this gain, and price fluctuations, especially in wheat, would have had a sharp but short-

¹E.R.O., D/DU 441/53-78; *idem.*, A268-270; R.U.L., ESS 18/2/1-46, Doggetts Hall farm accounts; F.C. Danvers, 'Agriculture in Essex During the Past Fifty Years as Exemplified by the Records of One Farm, with Special Reference to the Prices of Corn and the Conditions of labour', *J.R.S.S.*, lx, (1897), p.263.

²An estimate of increasing labour costs between 1851 and 1871 can be made by comparing the sum gained from multiplying the number of labourers enumerated in the census of those years with average wages for that year. This crude method makes no allowance for unemployed or casual labour, for differing wage rates between farms and labourers, or for changes in the value of 'allowances' to labourers. For Essex the figure shows an increase of 33 per cent.

term impact. Farmers probably needed to increase their productivity substantially to enjoy great prosperity,¹ but most enjoyed a degree of prosperity and after the early 1850s estate accounts have very few signs of farmers in distress. Income Tax Schedule B returns give an indication of farmer profits. In Essex these fell in the early 1850s, but then rose 38 per cent from 1855/56 to 1876/77, a rise marginally above that of prices.²

Naturally, the returns made by individual farmers on their working capital varied with their expertise, product, prices, investment and soils. Collins suggests that, on average, English farmers made greater profits in the 1850s than 1860s, with 10 per cent on their capital being the norm in the former decade, somewhere over 8 per cent in the latter.³ Essex evidence confirms this pattern. Lord Braybrooke, who farmed quite 'highly' made 10 per cent on his capital at his Home Farm at mid century and averaged 11.2 per cent p.a. on his working capital in the 1850s, 7.4 per cent in the 1860s and 7.5 per cent in the 1870s.⁴ The Great Henny accounts suffer from lapses in accounting and absence of an annual valuation of machinery and 'deadstock', but the return can be calculated for some years. Although the return varied, it never fell below 6 per cent and seems in the main to have stood at 10 per cent to 12 per cent of capital in the late 1850s, in the 1860s, and early 1870s.⁵ If these farms are typical,

¹It is possible to estimate the increase in gross output of cereals between c.1840 and 1870/72 by using Ojala's methods of calculation and acreage and yield figures from Kain's estimates for the whole county and those given in Parliamentary papers in the 1870s. Using constant 1910/12 prices, the figures show an increase of 6.2 per cent.

²The Rousseau price index gives a 21 per cent rise and the Sauerbeck-*Statist* 25 per cent between 1850/51 and 1876/77, but when amendments in terminal years are made to account for the time lag of Schedule B returns, the rise in prices is only marginally below that of the tax returns, *Twenty-eighth Report of the Commission of the Inland Revenue*, (B.P.P. 1883-4 xxii), *Schedule B Returns*, pp.318-320, Mitchell and Deane, *Abstract*, pp.472-475.

³Collins (ed.), *Agrarian History*, pp.119-120.

⁴E.R.O., A268-269. Calculated by subtracting the start of year valuation and total year's expenses from the total of the end of year valuation and income, then expressing the answer as a percentage of the start of year valuation.

⁵E.R.O., D/DU 441/55-72. Cooke, the farmer, had about £10 per acre capital. Less typically, one Essex farmer allegedly made 20 per cent in the late 1850s and Joseph Mechi claimed to make 18 per

then the return on capital received by Essex tenants compared most favourably with returns on landowner investment. Certainly, therefore, the label 'golden age' is applied more appropriately to the experience of Essex farmers rather than landowners.

Bankruptcy material appears to confirm modest prosperity amongst Essex farmers at this time. The *Essex Standard* gives the name, address and occupation of every Essex bankrupt, although there are limitations as tenants quitting in the face of looming bankruptcy are not enumerated. For this thesis the years 1860/62 and 1870/72 were analysed. The number of Essex farmer bankrupts was only 14 in 1860/62 and a mere seven between 1870/72, years of high cereal prices. The incidence of bankruptcy in the six years was only about 1:1000 p.a.¹ Map 10 shows the spatial distribution of the bankruptcies. Poor soil type and problems of accessibility appear not to have been prime causes of bankruptcy: particularly noticeable is that bankruptcies were more common in the high rented areas of north and north east Essex, and on farms close to London rather than on the London clays of south and south east Essex.²

7. Farm Size and Tenant Turnover

A trend towards larger farms was regarded as one indicator of 'high farming' in the 'golden age', yet Essex statistics show only a modest movement in this direction. In 1911, two publications examining trends in the size of agricultural holdings³

cent at this time, Collins (ed.), *Agrarian History*, p.118; Orwin and Whetham, *British Agriculture*, p.127. The accuracy of Meehi's accounting, however, was constantly questioned by other Essex farmers, *Essex Standard*, 19.12.51, 26.12.51, 30.3.60 to give but three examples

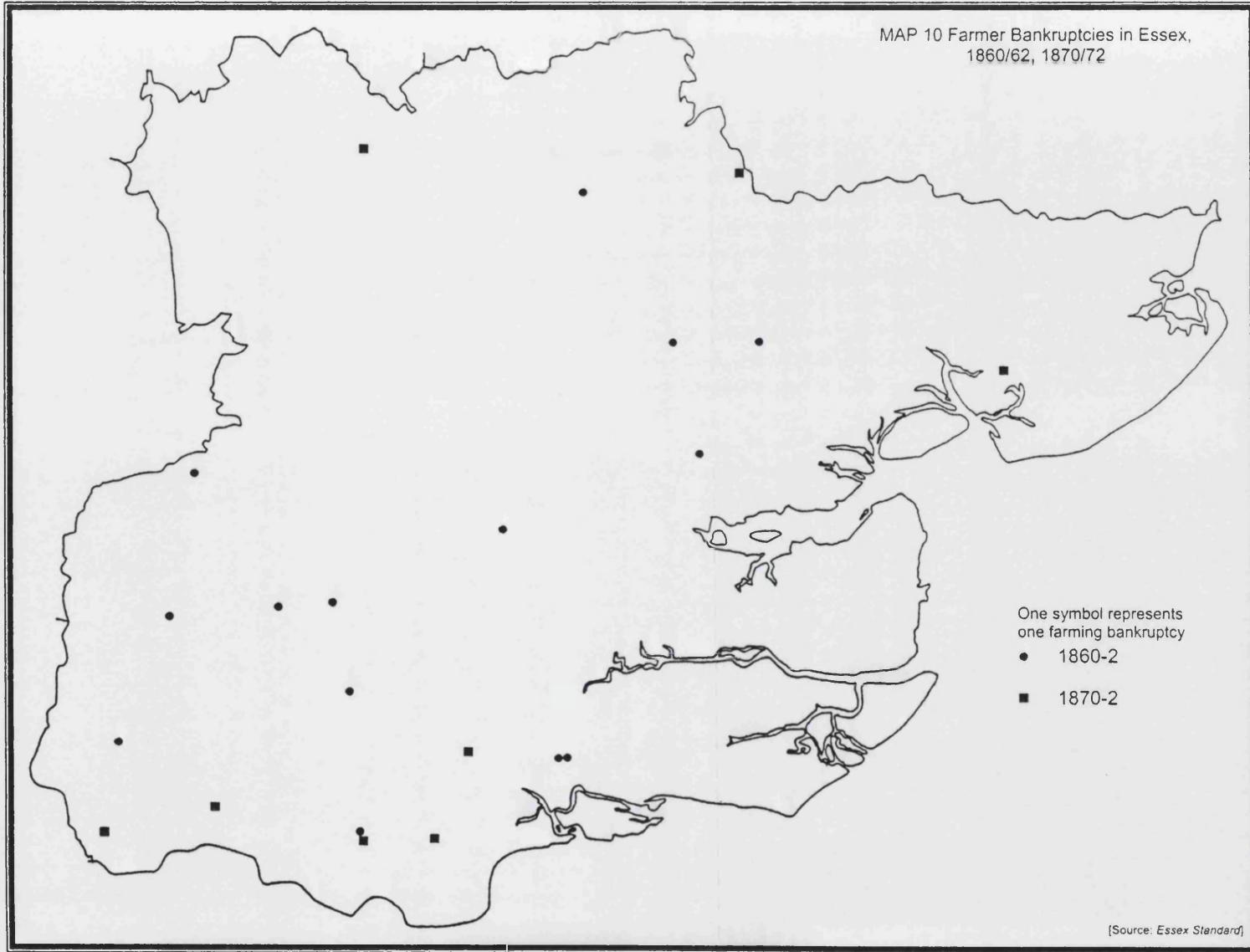
¹Perry, *British Agriculture*, p.133, finds Essex the county most prone to agricultural failure in the early 1870s with an incidence of 1:500. This is due to his sample covering 1873, a year in which clayland farmers had poor returns.

²For a discussion of the merits of bankruptcy material as a source for examining the spatial incidence of depression, see below chapter 5.

³H.Levy, *Large and Small Holdings: a Study of English Agricultural Economics*, (Cambridge, 1911); *Agricultural Statistics (G.B.) for 1910, Part I*, (B.P.P., 1911 c).

MAP 10 Farmer Bankruptcies in Essex,
1860/62, 1870/72

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concluded that, encouraged by landowners, large farms "regarded as furnishing the most characteristic example of British agriculture"¹, had increased at the expense of smaller farms between 1800 and 1880, particularly in the thirty years after mid century. The lack of reliable statistics of agricultural holding size until after 1875, makes it difficult to confirm this conclusion. Farm size is reported in the 1851 census, but the method of collection and tabulation and absence of acreage figures prevent comparison with the figures given in the 1875 agricultural returns. Furthermore, the census recorded only the holdings of farmers, and many smallholders (who did not regard themselves as farmers) did not make returns, whilst multiple holdings were listed as one large holding. In consequence, the percentage of land covered by larger farms is exaggerated, and that by smaller farms diminished. The 1875 return avoided these mistakes and so a superficial scrutiny of the official records would suggest, misleadingly, that the total number of holdings in Essex apparently rose by forty per cent and farm sizes diminished substantially between 1851 and 1875,² a suggestion not supported by any surviving estate records.

Estate records provide an alternative and more reliable method of studying trends in farm size. Of ten Essex estates selected, six showed virtually no change in farm size between 1850 and 1870, and the remainder displayed only a slight trend towards larger farms.³ An example of this trend is the Thorndon estate where the number of tenants with multiple holdings increased. John Offin, for example, came to rent six farms totalling over 900 acres, whilst Messrs. Marriage took a 264 acre farm in 1861,

¹Levy, *Large and Small Holdings*, p.67, *Agricultural Statistics (GB) for 1910*, *idem.*, p.9.

²*Agricultural Returns*, 1875, (B.P.P., 1875 lxxix), pp.6-7

³The estates were those owned by: Benyon, ERO, D/DBe E68, Bonnell, ERO, D/DHn E4, Ecclesiastical Commissioners, Church Commissioners' Files 46754, 50768, 49364, 43037, Neave, ERO, D/DNe E13, F31, Petre, ERO, D/DP A364, 365, 366, St. Bartholomew's Hospital, rentals EO 16, St. John's College Cambridge, rentals SB4, valuations D110/229-232, D100.90, St. Thomas' Hospital, GLRO, H1/ST/E30/7-31, Tower ERO, D/DTw A5,6, and Wingfield Baker, ERO, D/DWt, T1, 6, Reading University Library, ESS 17/3.

added another 397 acre farm to it in 1862, and a 29 acre farm in 1869.¹ Other Essex examples of multiple holdings include George Attenborough who farmed 969 acres (previously two farms) on the St. Bartholomew's Hospital estate, and William Belcham who rented three farms totalling 931 acres from the Ecclesiastical Commissioners, two totalling 323 acres from the Neave family, as well as other farms.² This clear, if limited move towards larger farms is confirmed by the occupation statistics given in the census reports.³ As shown in table 12, the number of enumerated farmers and graziers in Essex decreased by eleven per cent in twenty years, evidence of some increase in farm size, even allowing for the vagaries of the census. Essex farms, 41.3 per cent of which were between 100 and 300 acres in 1851 and 43.9 per cent of this size in 1875, tended to be larger than was common in England, as would be expected in an arable area.⁴ Even so, the modesty of the move towards larger farms in Essex is further evidence of the limited move to 'high farming' practices and, unlike other areas of Britain, Essex landowners were not encouraging a move to larger farms.

¹E.R.O., Petre MSS., D/DP A 364-368, tenant ledgers, i, ii, iii. Other examples on this estate are John Joslin adding a 25 acre farm to his tenancy, George Pool who added a 42 acre farm to his 460 acre holding, and Henry Nicholas who added a 148 acre farm to his 271 acre farm.

²St. Bartholomew's Hospital MSS., Rentals, 1850-1869, EO 16; C.C., E.C.E., MSS., File 50768; E.R.O., Neave MSS., D/DNe F31, appointment of new trustees of the will of the late Thomas Neave. On the Tower estate much consolidation was done in the late 1860s and the 1870s to create model dairy farms, E.R.O., D/DTw A5-6.

³E.R.O., Population Census of England and Wales (1851), Population Tables, 2, vol. 1, Q/CR 2/10/2; *idem.*, Population Census of England and Wales (1861), Population Tables, vol. 2, Q/CR 2/11/2; *Population Census of England and Wales 1871, Population Abstracts*, vol. 3, (B.P.P., 1873 lxxi, pt.1), p.191.

⁴Census (1851), Farmers (acreage and Men), Essex, Table 14, p.312 in E.R.O., Q/CR 2/10/2; *Agricultural returns (GB) for 1875*, (B.P.P., 1875 lxxix), pp.6-7. The latter also shows that in terms of acreage, 29 per cent of English agricultural land was in farms of over 300 acres compared to almost 36 per cent of Essex.

Table 12

**Number of farmers and graziers and percentage rate of change
in Essex, 1851 - 1871**

	<u>Number</u>	<u>Rate of Change</u>
1851	4,421	
1861	4,221	1851-61 - 4.52 per cent
1871	3,925	1861-71 - 7.01 per cent

Source: Census returns.

8. Market Gardening and Fruit Cultivation

A trend contrary to the modest increase in size of average holdings described above, and one excluded in that analysis, was an increased number of smallholdings devoted to market gardening. Between mid century and the mid-1870s there was a substantial increase in market gardening, a particularly labour and capital intensive form of farming. Market gardening remained anchored close to London and the main Essex towns, becoming more widespread in the 1860s, in part as London absorbed surrounding areas, but more in response to rising demand for vegetables. By the 1870s there were extensive 'gardens' not only in south west Essex, but also on the lighter soils along the Thames from Rainham to Stanford-le-Hope and Grays Thurrock, the latter area having over 22 per cent of farmed land under vegetables in 1870.¹ Market gardening was also practised on the light soils near Colchester, and to a lesser extent, around Chelmsford, Southend and other urban markets. The rapidity of the growth of 'gardening' in south Essex was commented upon in an article by Evershed in 1871,² and in the same year the Vicar of Stifford (near Grays Thurrock in south Essex), a parish peculiarly suited by its soil to vegetable growing, wrote:

"If market gardening it to be considered a trade, it

¹P.R.O., MAF 68/240.

²H.Evershed, 'Market Gardening', *J.R.A.S.E.*, 2nd Ser., vii, (1871), p.420.

promises to be, if it be not already, far ahead of all the trade of Stifford and neighbourhood, though only just introduced".¹

Naturally, market gardens varied in size. Evidence from the *Journal of the Royal Society of Agriculture* suggests that in south west Essex small-holdings (defined here as holdings under 60 acres) predominated.² Along the Thames, however, larger scale 'gardens', many as large as ordinary farms, were more common. Frederick Wagstaffe of South Ockendon, for example, had between 600 and 700 acres under garden crops in 1865, and in the same year Thomas Watershaws of Romford had 100 acres growing vegetables.³ In general, the smaller gardens specialized in growing celery, asparagus, radishes, onions and lettuces. Larger gardens concentrated on peas, cabbages, potatoes, cauliflower, carrots and early greens.⁴ Vegetable growing was not confined to market gardens. Increasingly during the 'Golden age' farmers in favourable areas grew vegetables in their rotations, commonly cabbages, onions and carrots, alternating them with cereal cropping.⁵ The costs of market gardening were high. Labour cost £9 an acre (four times that of a cereal farm), vast inputs of manure were required (sometimes costing as much as £20 an acre),⁶ and rents were commonly high owing to the proximity of London or other urban areas.⁷ This meant

¹W.Palin, *Stifford and its Neighbourhood: Past and Present*, (1871), p.27.

²C.Whitehead, 'Report on the Market Garden and Market Garden Farm Competition, 1879', *J.R.A.S.E.*, 2nd Ser., xv, (1879), pp.832-868.

³S.C. on the *Metropolitan Sewage and Essex Reclamation Bill*, (B.P.P., 1865 viii), QQ.1400-01, 1456-1462. Many of these larger 'gardens' had machines similar to those used on ordinary farms and were heavily capitalised.

⁴E.J.T.Collins, 'The Great Agricultural Depression in South Essex', *Panorama: Thurrock Local History Society Journal*, no. 9, (1965), p.18.

⁵Whitehead, 'Market garden', p.852.

⁶*Metropolitan Sewage*, (B.P.P., 1865 viii), Q.1425.

⁷R.Battersby, 'The Development of Market Gardening in England, 1850-1914', unpublished Ph.D. Thesis, London University, (1960), p.23.

that the land had to be continually under crop to be profitable.

Fruit growing also expanded in Essex in the 1860s, and not just as part of the expansion of market gardening. Strawberries and other soft fruits began to be grown at Horndon-on-the-Hill and Stanford le Hope in south Essex,¹ and in 1864 A.C. Wilkin founded the first of his celebrated fruit farms at Tiptree in north east Essex.² Initially, Wilkin faced difficulties. Labourers objected to "that funny work", and the railway officials were unhelpful in arranging carriage of the ripe fruit to London, but gradually his acreage expanded.³ Yet another labour intensive form of farming, agricultural seed growing, was carried out on a local basis on the light soils in the Witham and Coggeshall areas close to the London to Colchester railway.⁴ Vegetable, fruit and seed growing added variety to Essex farming, but was localised and did not modify the county's overall commitment to cereals. There is little other evidence of an interest in 'alternative' farming in 'golden age' Essex, particularly in poultry or pig keeping, possible opportunities missed by Essex farmers.

9. Marketing Farm Products, 1850-1870s

Essex farmers acted more as production managers than as entrepreneurs, and few were actively involved in developments in the marketing and distribution of food which took place in the 'golden age'. The marketing system, which had evolved over several centuries, was, by the 1850s, a conglomeration of diverse outlets, with varying measuring systems, and different rates and tolls. Changes introduced after 1850 had made limited progress in improving the system by the 1870s.

¹Palin, *Stifford*, p.28.

²Essex Agricultural Society, *Diamond Jubilee Show Programme, 1858-1922*, (Colchester, 1922), p.79.

³*ibid.*

⁴*Employment of Children, Report, Fraser*, (B.P.P., 1867-8 xvii), Appendix, Pt.1, p.8.

Most Essex farmers sold their produce either at local markets or in London. Local markets included suitable sites such as Holehaven (where foreign cattle were landed) and West Tilbury as well as general markets in towns¹ where produce was sold direct to customers. The biggest markets were those at Chelmsford, Saffron Walden, Braintree, Colchester and Romford.² The last was the most important in the county due both to size – it covered over 9,000 square yards - and its clientele - it attracted London merchants and butchers. It was considered "the greatest cattle market near London".³ Most markets were privately owned, but legislation in 1847, 1858 and 1875 introduced a degree of cleanliness and of uniformity. Some Essex towns also held an annual fair for the sale and purchase of store cattle.⁴

Local markets fulfilled a necessary function in local needs, but the bulk of Essex agricultural produce went to specialist markets in London. Grain was sold via the Mark Lane Corn Exchange, where the factorage system was employed.⁵ Hay and straw, in great demand from metropolitan stables and cowhouses, were sold at Whitechapel market.⁶ Water transport was preferred for bulky goods such as wheat and hay since it was cheap even if slow.⁷ At mid century, meat was sold at London's

¹W. White, *History and Gazetteer of the County of Essex*, (Sheffield, 1848), p.4. Twenty four market towns are listed.

²These were chosen by the Board of Agriculture to make returns on corn sales.

³H.L.R.O., HC 1883, 42a, Proposed Railway Line from Grays to Romford, evidence to a House of Commons committee of Sir Thomas Barratt-Lennard.

⁴White, *History and Gazetteer*, p.12 .

⁵The factorage system was used at Mark Lane throughout the period 1850-1914. The factor was a commission agent who received a dressed sample of corn from a farmer and a note on the quantity for sale. He found a buyer, arranged the transaction, and received a commission. The rest of the grain, therefore, would be sent directly to the purchaser.

⁶H.L.R.O., H/C 1851, 14, London and Blackwall Railway Bill, evidence of W.Blewett to the House of Commons committee.

⁷It commonly took over a week to sail the 120 miles from Battlesbridge (near Rochford) to London - a 40 mile journey by road - and with unfavourable tides and winds, could take over three weeks. H.L.R.O., H/C 1847, 32, Eastern Counties Railway Bill, evidence of G.Maine and of C.Page to the House of Commons committee; *idem.*, H/C 1852, 2, London, Tilbury and Southern Railway Bill, evidence of G.Maine to the House of Lords committee.

Leadenhall and Newgate markets, but evidence suggest that Essex farmers preferred to sell their fatstock live at either Romford or London's Smithfield market than enter the 'dead meat' trade.¹ Here farmers drove their animals into the market area and sold direct to retailers and other customers, paying a toll for each successful transaction.² An alternative method of marketing was to sell produce to a dealer who collected it from the farm and sent it to London himself.³ Between the 1830s and 1870s this method of sale was employed in the veal trade, and to a lesser extent for poultry, dairy products, eggs and peas. The dealers acted as commission agents, although peripatetic cattle dealers also supplied new calves to veal farmers.⁴ Some dealers attended the larger Essex local markets rather than visiting individual farms, providing a link between local and London markets. Milk was sold direct to retailers,⁵ but already by 1850 some larger dairymen were arranging with farmers to buy all their stock of milk - the first step towards becoming wholesalers.⁶

Excepting milk producers, market gardeners were more dependent on the London markets than other Essex farmers. 'Gardener' witnesses before various committees at mid-century confirmed this, and in 1871 Evershed claimed that the "whole of the produce" of the south Essex gardens was sold in London.⁷ The chief vegetable and fruit markets were Covent Garden and Spitalfields, the latter being the more

¹HLRO, H/L 1852 2, London, Tilbury and Southend Railway Bill, evidence of G.Mayne and S.Baker to the House of Lords committee; *idem.*, H/C 1852, 14, London, Tilbury and Southend Railway Bill, evidence of G.Mayne to the House of Commons committee.

²R.C. *Market Rights and Tolls*, ii, *Evidence of D.Tallerman*, (B.P.P., 1888 liii), QQ.2864 - 2869.

³Dodd, *Food of London*, p.375, Main, 'Fattening Calves', p.610

⁴Main, 'Fattening Calves', p.610.

⁵*ibid.*, pp.608.

⁶G.E. Fussell, *The English Dairy Farmer, 1500-1900*, (1966), p.275.

⁷H.L.R.O., H/C 1847, 32, Eastern Counties Railway Bill, evidence of W.Downes to the House of Commons committee; *idem.*, H/C 1851, 14, London and Blackwall Railway Bill, evidence of W.Blewitt to the House of Commons committee; Evershed, 'Market Gardening', p.421.

convenient for Essex men, but some Essex market garden produce was sold at small markets in the inner suburbs, including the Borough market in Southwark.¹ Throughout the 'golden age', carting, which avoided unnecessary transhipment, was the preferred means of transporting vegetables to London, and most market gardeners sold their vegetables from their carts.

The coming of railways and rising population resulted in a greater flow of agricultural produce through London than existing markets could easily handle, whilst direct contact between farmer and customer became impracticable. As a result, the London markets were improved and enlarged, and a class of wholesale merchants, dealers, commission agents and other middlemen emerged. Smithfield market was considered "too small" and "crowded" in 1847, whilst Leadenhall and Newgate markets were already inadequate by mid century.² Accordingly, livestock was transferred from Smithfield to a larger, better equipped Metropolitan Cattle Market at Islington in 1855, and in the 1860s Leadenhall and Smithfield were redesigned and reopened as wholesale markets, the latter as London's Central Meat Market. Newgate market was closed. Improvements in facilities at the new markets were beneficial, but now there could be as many as three middlemen between farmer and retail butcher, each taking a commission.³ Despite the improvements and the dislocation caused by the 1866-7 cattle plague, Essex farmers generally sold livestock rather than meat, in part because the railway companies charged considerably higher rates for carrying meat, but even more, because there were few industries in Essex which would buy leather, fleeces, bones, offal or other by-products from cattle slaughter.⁴

¹H.L.R.O., H/C 1852, 14, London, Tilbury and Southend Railway Bill, evidence of G.Meeson to the House of Commons committee.

²Perren, *Meat Trade*, p.33.

³Market Rights, *Tallerman*, (B.P.P., 1888 liii), QQ.2790-6; Perren, *Meat Trade*, p.37.

⁴Perren, *Meat Trade*, pp.46-47, 103. A further factor encouraging concentration on livestock sales was that the London livestock markets were improved in 1854 whereas the meat markets were not improved until the late 1860s, *ibid.*, p.42.

Middlemen also emerged in the fruit and vegetable, and milk trades. Some Essex market garden farmers continued to sell their produce at London markets personally, but increasingly those who lived more than 20 miles from the metropolis consigned all their produce to a salesman who acted as a commission agent. Some agents were themselves farmers: A. Kemsley, Thomas Ridgewell of Orsett and Robert Wagstaffe of South Ockendon were Essex market gardeners as well as agents.¹ In the milk trade, retailers, faced with growing urban demand and the difficulties of organising contracts with numerous distant farms and managing fluctuating supplies (there was more milk produced in the spring than winter) turned to milk wholesalers. By the 1860s most of the milk carried to London by the Eastern Counties Railway was handled either by the Essex producer-retailer Collinson Hall, or by the wholesalers Marriage and Impey.²

Whether Essex farmers were harmed by or benefited from the developments in marketing during the 1850s and 1860s is difficult to establish. Obviously, they did not get the full value of their produce if a middleman took commission. On the other hand, they were released from the problem of finding buyers and could concentrate instead on farm management. There are no complaints in Essex newspapers or in the minutes of the Essex Chamber of Agriculture about changes in marketing arrangements, and Essex farmers took no interest in co-operative marketing until the 1890s. Either they were reasonably satisfied with the changes in marketing, or were prepared to tolerate them whilst their profits remained satisfactory. This is by no means an indictment of Essex farmers, who were effective farm managers. Apparent

¹H.L.R.O., H/C 1887, 8, Great Eastern Railway (Stratford Market) Bill, evidence of A.Kernsley to the House of Commons committee; *idem.*, H/C 1883, 42a, London, Tilbury and Southend Railway Bill, evidence of R. Wagstaffe to the House of Commons committee; E.H.Rowley, 'Their Very Lives and Existence', unpublished work, Thurrock Public Library, CR 11730, Doc. Box 4, p.33.

²These two firms handled a combined total of 20,000 gallons of milk a week in 1865, about 15 per cent of London's total consumption of rail carried milk, Atkins, 'London's Railway Milk', p.220.

indifference to change in marketing does, however, raise questions on the entrepreneurial skills of the landowners, and their lack of response further supports the view of a partial retreat from their leadership role.

10. Farmers in Society

There were between 3,000 and 4,500 Essex farmers at any one time in the third quarter of the nineteenth century, most of whom were tenants. They were a diverse class. Multi-farm tenants, farming as much as 1,000 acres with considerable capital and dozens of labourers, lived in a manner similar to the country gentleman and lesser squires. At the other end of the spectrum were tenants of holdings under 50 acres who laboured in their own fields, and led a much simpler lifestyle. The bulk of Essex farmers came between these two extremes.

Larger farmers played a leading role in the local community, especially in the many parishes where there was no resident landowner or squire. Some were elected to school boards, some Poor Law Guardians - in the Romford Union farmers were in a majority on the Board of Guardians at mid century.¹ Few became magistrates, however: an analysis of the 231 magistrates in Essex in the early 1860s shows that only two were tenant farmers (and both also owned land).² Farmers sometimes played a leading role in local affairs, but, as Chapter 2 demonstrated, they allowed the landowners to lead the county community. The repeal of the corn laws had temporarily encouraged farmers to take a lead in political affairs,³ but thereafter they retreated from a position of independence and leadership until the late 1870s.

¹S.J.Pam, 'The Implementation of the 1834 Poor Law Amendment Act and its results on the Romford Union.' Unpublished B.A. dissertation, University of London, (1974), p.7. (Copy in E.R.O. T/Z 75/10).

²Kelly's, *Directory for Essex*, (1863), list of Essex County Magistrates, pp.44-46.

³See above, chapter 2.

Farmers supported local agricultural societies, local and county shows. As explained in the previous chapter, county agricultural societies acted as a forum for ideas, a vehicle for disseminating successful farming practice and as a farmers' pressure group. Visits to model farms, and talks from visiting speakers like Mecchi encouraged better farming, but it seems that whilst local societies were well attended, only larger farmers attended county society meetings.¹ Few Essex farmers could be described as 'scientific agriculturalists', and few showed an interest in agricultural education. An analytical chemist was appointed to the Essex Chamber of Agriculture in 1872, but his contract was ended in 1875.² This adds to the impression that Essex farmers were, as a whole, effective managers, but were not innovative or entrepreneurial.

In the 'golden age', English tenant farmers became notorious for the amount of time they allegedly devoted to pleasure rather than to farm management, and for extravagant expenditure on their homes, family, entertainment and travel. Many farmers, it is claimed, delegated the daily running of the farm to a foreman, enabling more time to be spent on their non-farming interests. There are few detailed Essex sources to illustrate or repudiate such claims, but those available do lend some support to the accepted view. Two diaries have survived from Orsett farming families, one from the late 1850s, the other from 1871.³ The former, written by Fanny Randall, a tenant farmer's (157 acres) daughter, records her attendance at numerous local concerts, dances, parties, picnics, theatricals, meets, tea parties and cricket matches. She regularly visited London for concerts and plays, made trips to the coast, and had her own piano. The second diary belonged to an unidentified tenant farmer. Although covering only eight months, his diary too records a hectic

¹See above, chapter 2.

²Writtle Agricultural College Library, Historical Collection, Essex Chamber of Agriculture Minutes.

³E.H. Rowley, 'Further Extracts from the Memoirs of the Late E.H. Rowley Esq.', *Panorama*, vi, (1961), p.4; *idem.*, 'Very Lives', pp. 18-20; L. Thompson, 'How an Orsett Farmer Enjoyed Himself in 1871', *Essex Countryside*, ix, no. 46, (1960), pp.24-25.

social life of lectures, card parties, dances, concerts, games, hunting and steeple-chasing. E.H. Rowley cites examples of high living by the Farrens, also Orsett farmers in the 1860s and 1870s, and mentions that the local doctor found it impossible to afford the lifestyle of tenant farmers.¹ More fragmentary evidence from newspapers on farmer attendances at hunt meetings, hunt balls, and their socializing on market days, also suggests that the popular impression of farmers' high living at this time has substance.

Rowley did not condemn tenant farmers for their lifestyle. He approved of their culture, their substantial houses and their hunting.² Other observers were less charitable. Richard Jefferies heaped criticism on English pretentious farmers, and whose families employed governesses, had pianos, and avoided farm work.³ *Punch* similarly lampooned such families,⁴ and one land agent was later to allege that it was not poor seasons alone that had led to the bankruptcy of many Essex tenants. Giving evidence to the 1894-7 *Royal Commission* he reported:

"A very great deal of land has been farmed by people who
who know very little about it at all Dozens lived well
and attended Chelmsford and other markets in the course of the
week when they need not have attended one; they have dined well
and enjoyed themselves and gone home comfortable. Well, that is
not farming; that is spending money".⁵

¹Rowley, 'Very Lives', pp.60-62; Rowley, 'Further Extracts', p.4.

²He wrote: "The new generation of farmers were a cultured class They had taste." Rowley, 'Further Extracts', p.4.

³ e.g. R.Jefferies, *Hodge and his Masters*, (1979, 1st. ed. 1880), ch.10, 'Mademoiselle, the Governess', pp.118-126.

⁴e.g. Anon., 'The Farmer's Fortunes', *Punch*, 12.4.1879, p.157.

⁵*Agricultural Depression, Evidence of A.Darby*, (B.P.P., 1896 xvii), QQ.59074, 59251.

The 'cultured' and easy lifestyle which allegedly typified Essex farmers in the 'golden age' and which the available evidence seems to confirm, relied on the price of wheat remaining high. When prices collapsed changes were forced upon the farming community.

11. Conclusions

This chapter has, in the main, confirmed suggestions raised in chapter 2 concerning the relationship between tenant and landowner. Part of the Essex landowners' traditional leadership role was passing to tenants, but Essex farmers took up this role with little enthusiasm. Indeed, they were sufficiently cautious to give grounds for the frequently stated charges of conservatism and short-sightedness. Yet although there is an element of truth in such allegations, Essex farmers can be defended against most such charges. Admittedly, the evidence shows that farming practice changed only very gradually at a time when price trends were apparently signalling that livestock farming was becoming more profitable and when 'high farming' propagandists were urging change. The mid-century tithe files suggests 'high farming' associated with heavy expenditure on manuring, drainage, machinery, artificial fertilizers and farm consolidation was common only in 36 parishes, accounting for less than 10 per cent of farm land, prompting Cox to conclude that in Essex 'high farming' was "the exception rather than the rule".¹ Thereafter, there was some movement towards mixed farming in the county, and in favoured areas towards dairying and market gardening. Yet in 1873 most Essex farmers focussed on cereal production and as such had changed little from mid century. Furthermore, with the exception of farms close to London, the home farms of substantial landowners and the holdings of a few innovative farmers, 'high farming' was confined almost entirely to the county's lighter and medium soils.² The evidence of quite modest landowner investment

¹Cox, 'Agricultural Geography', p.155.

²The ledgers of one steam ploughing firm, admittedly from later in the nineteenth century, show that most of their work was done on the lighter rather than the clay soiled farms, R.U.L., Essex Farm MSS., ESS 12/1/1, steam cultivation accounts.

presented in chapter 2 is likewise compatible with only a modest move towards 'high farming'.

Essex farmers, therefore, continued to farm much as they had in the past.¹ There were, however, a number of good reasons for this. Much of the soil they worked was, in the dry climate of Essex, more suitable for cereal production than for livestock farming at prevailing prices, and distance from railways prevented a move to dairying for milk sales in much of the county. Furthermore, competition intensified in the milk and meat trades as railways opened up the London market to distant areas, and it was not at all clear at the time that prevailing price trends would persist and eventually make cereal farming less attractive on many soils: indeed, in some years cereal prices were more buoyant than meat or milk prices. Furthermore, as conversion was expensive, it required more emphatic price shifts to make it attractive. Above all, cereal prices remained sufficiently high in the 'golden age' to provide acceptable returns from farming which was proven to be well suited to local soils and climate and in which farmers and labourers had accumulated expertise. It might be argued, therefore, that Essex farmers' caution was well founded: greater investment in technically efficient 'high farming', was not necessarily economically efficient. Essex farmers made rational choices, enjoyed modest prosperity, and were sound, if conservative, managers.

The chapter has raised further issues which may well touch on the broader canvas of English agricultural history, particularly if elsewhere the extent of the switch to mixed farming, the intensification of the livestock element on arable farms, and the move towards 'high farming' generally was as modest as it was in Essex.

¹The stability in land use was a national phenomenon, Collins (ed.), *Agrarian History*, p.83.

Chapter 4

Landownership in the great depression and after

1. Introduction.

The years after 1878 saw a fall in Essex rents. How far this damaged the economic position of Essex landowners, to what extent they were able to augment farm rent with income from mineral royalties or urban properties, and the degree of financial recovery after 1896 are all issues requiring examination. There is also the need to investigate estate management to see whether landowners further retreated from their leadership position in the face of declining incomes, or whether they responded positively to the more challenging economic climate by investing in their estates, protecting and supporting tenants, and encouraging them to adapt to the market. Were they successful entrepreneurs, or were their decisions amongst the causes of depression? Indeed, how far did the nature of the English 'estate system' inhibit necessary agricultural change, as Offer avers?¹ These issues are investigated in this chapter as is the impact of falling farm rents on the social and political position of the landowners.

2. The Pattern of Landownership.

There were no major changes in the structure of Essex landholding between the 1870s and 1910. The fall in land prices for much of the period - land had commonly sold at 30 years purchase in 1870, but less than 20 years purchase in 1890 - led to stagnation in the land market.² As well as low prices, which deterred vendors from putting land onto the market, potential purchasers were discouraged by the decline in the political

¹ Offer, *First World War*, chapters 7 and 8.

² In Essex land values and rents, as shown by the Schedule 'A' (lands only) tax returns, fell until 1908.

and social advantages which landholding brought, and by doubts as to the future of agriculture. There were also problems persuading banks to lend money to purchase landed estates on the security of land. As a result, land coming onto the market did not always find a purchaser.¹ The sale of outlying and detached portions of estates was continued, examples being the sale of distant farms on the Bonnell estates in 1880 and 1881, and the sale of outlying farms by Whitmore in the 1890s.²

Between 1910 and 1914, there was a rash of sales, commonly to sitting tenants, due in part to rising land values, to the need by some landowners to raise cash to pay off mortgage debts, and to uncertainty about the future of landownership following the 1909 budget, which introduced heavier death duties and seemed to herald an attack on landowners by the Liberal government. These sales, however, did not alter the general pattern of landownership, which only happened with further sales during the interwar years.

The long-term reduction in the proportion of Essex land owner-occupied was marginal and represented a smaller shift than was the case nationally, but there were sharp differences across the county. Parish statistics³ enable some analysis of the change in owner-occupancy on different soil types (table 13).⁴ Particularly noticeable is the decrease in the proportion of owner-occupied land in parishes on light soils, on the very fertile loams in the Tendring Hundred, and on London Clay, and the increase of holdings of this type in parishes on most medium and alluvial soils. It is difficult to be certain of the reasons for the increase in the proportion of owner-occupied land

¹ Thompson, *Landed Society*, pp.318-320. Whitmore provides one example of an Essex owner who experienced problems in selling.

² E.R.O., Bonnell MSS., D/DHn E4, particulars of old leases, present leases and money spent in repairs on Essex farms; R.U.L., Whitmore MSS., ESS 17/1/11-12, estate correspondence, 17/4/42 and 76, farm sales. See below this chapter, pp.57-58.

³ These began in 1887 and so preclude a study of changes in the early years of the depression.

⁴ The figures are based on an approximate 20 per cent sample of parishes on each soil type.

on medium and alluvial soils, but in the 1890s parishes on alluvial soils contained many in-hand farms, some of which now supported 'low farming' ranching. Perhaps these farms, commonly detached from the estate heartland and giving a low return, were sold off as expensive liabilities.¹

Table 13

Owner-occupancy in Essex as a percentage of total agricultural land, 1891-1911

	1891	1901	1911
Essex : Total	21.58	21.75	19.45
London Clay near Metropolis	13.84	15.13	13.59
London Clay	30.43	26.27	16.51
Boulder Clay	30.48	28.27	25.53
Heavy Soil	25.46	26.87	25.94
Medium Soil	15.99	17.05	24.12
Medium Soil : Tendring Hundred	23.97	18.19	17.15
Light Soil	34.10	17.04	10.32
Light Soil : Thames Valley	12.61	10.27	2.05
Alluvial Soil	16.78	21.02	30.32
England : Total	15.37	13.68	12.41

Source: Agricultural Statistics, (B.P.P., 1892 lxxxviii), table xvi, (1902 cxvi pt1), table v; (B.P.P., 1911 c pt.1), table v; P.R.O., MAF 68/1323, 1893, 2463, parish summaries of the agricultural returns.

On the Thames bank, a decline in owner-occupancy was probably due to industrial expansion taking place at the expense of the smaller rather than larger owner, but elsewhere owner-occupancy statistics reflect the failure of smaller owners on poorer soils when prices fell. They lacked the resources to survive losses on London clay and light soils (the latter in dry seasons). Further confirmation of this thesis is

¹*Agricultural Depression, (B.P.P., 1896 xvii), Appendix J, Visit of Shaw-Lefevre to Essex, pp.611-614; R.U.L., Whitmore MSS., 17/1 series, estate correspondence, especially 17/1/11, letter 17.2.1894.*

provided by Pringle's who claimed that small farmers, in particular owner-occupiers, were faring worse than large farmers, whilst his map showed that the worst hit areas of Essex, associated with 'derelict farms', were in south east Essex¹ where *Kelly's Directories* show smaller landowners predominated.² Better times in the early twentieth century and land sales to tenants after 1910 appear to have done little to maintain the number of small owners, some of whom sold up when land prices rose to pay off debts.

3. The Movement of Rent

As discussed above,³ rents are related to soil and climate, to market accessibility, estate management, and agricultural prosperity, the last being the most important factor. Agricultural prosperity ebbed after 1873, especially for cereal farmers, and there was no sustained recovery until well after 1900. Although the population of Essex almost tripled between 1871 and 1911, the growth of metropolitan Essex being particularly rapid,⁴ and Britain's population rose over fifty six per cent in these years, demand for cereal foods did not rise at a similar rate because real wages rose substantially between 1873 and 1896, encouraging a switch from cereal to protein foods. Between 1880 and 1909-13 the annual per capita consumption of wheat in England actually declined from 280 lbs. to 211 lbs., that of meat rose from 91 lbs. to 131 lbs.⁵

¹*Agriculture, Pringle*, (B.P.P., 1894 xvi pt. 1), QQ. 8636-38 and end map. This evidence obviously gives no support to Offer's thesis that the landlord-tenant system was a major cause of depression and that owner-occupiers would have performed better, Offer, *First World War*, pp.114-115.

² Kelly's, *Directory*, (1894), (1912). Evidence suggests that smaller owners, in particular Eastern Counties owner-occupiers had a greater propensity to fail than larger owners and tenants at this time, *R.C. Agricultural Depression, Read*, (B.P.P., 1894 xvi pt.2), QQ.16009-12, *idem., Final Report*, (B.P.P., 1897 xv), pp.31-33; Collins (ed.), *Agrarian History*, pp.725-727.

³See above, chapter 2.

⁴The population of the West Ham Poor Law Union increased by 610 per cent between 1871 and 1911: *Population Census Returns*, (B.P.P., 1872 lxvi pt.2), table 2, p.165; (B.P.P., 1912-13 cxi), table 3, p.3.

⁵J. Yudkin and J.C. McKenzie, *Changing Food Habits*, (1964), Table 2, p.26.

Changes in supply also gave a comparative advantage to meat farmers. Essex cereal yields were reduced by wet weather in the 1870s, culminating in the disastrous year of 1879 with its cold spring and very wet summer.¹ Farms on water retentive clays were particularly badly hit. Droughts in the early 1890s and 1911, and wet weather in 1903 also reduced yields.² Lower yields were not compensated by higher prices as reduced freight rates and the greater exploitation of the American prairies³ led to an influx of imported wheat which brought down prices in England. From their peak in 1872/73 to the nadir of 1894/95 wheat prices fell by over 60 per cent, barley by 40 per cent and oats by 35 per cent. Thereafter, between 1894/95 and 1912/13 they rose by 44.6 per cent, 24.8 per cent and 28.5 per cent respectively.⁴ Cereal prices in 1912/13 were still below those for 1873/73: wheat prices having fallen by 42.6 per cent, barley by 25.5 per cent and oats by 16.5 per cent. As noted in chapter 2 above, Essex grain prices were similar to national prices. For 1873-1914, they are illustrated in chart 22.⁵

Livestock farmers were affected less by imports: even in the 1890s meat imports accounted for only a third of total British consumption, and refrigerated meat was of inferior quality. Despite competition at the lower end of the market, livestock farmers supplied a buoyant market, whilst falling cereal prices reduced some of their inputs. Market information from the *Essex Standard* suggests that between 1875 and

¹ Druce reported that yields fell dramatically in 1878 and 1879. On an estate near Chelmsford the wheat yield had fallen from an average in the years before 1878 of 4 quarters an acre to 2 quarters in 1878 and 1.5 in 1879. Such falls were typical, *Richmond Commission, Report, Druce*, (B.P.P., 1881 xvi), pp.366-367.

² Jones, *Seasons*, pp.174-78; Smith, *No Rain*, pp.21-103.

³ In the late 1860s it cost 15s. 11d. to transport an imperial quarter of wheat from Chicago to Liverpool: by the early 1900s the cost had fallen to 3s. 11d. , Perry (ed.), *British Agriculture*, p.xiv.

⁴ See below, chapter 5, chart 22.

⁵ Obviously prices did not fall evenly over the period: there were periods of stability and even of slight recovery. Thus farmers and landowners, looking at short term price movements, would have been less aware of price trends – see chapter 5 below.

1890 first class beef prices fell by only 19 per cent and poorer cuts by 30 per cent, although national figures suggest falls of 25-28 per cent for prime and middling beef and of 22-28 per cent for prime and middling mutton between 1873/75 and 1891/93.¹ Pork prices fell by rather less (16-17 per cent).² Prices for liquid milk fell by just under 17 per cent at this time and vegetable prices fell by about 30 per cent.³

Given falling agricultural prices over the period as a whole, it is not surprising that landowners' returns were sharply reduced, especially for those with farms on the arable clays. Although most agricultural rents in Essex (shown in charts 10 and 12) did not immediately fall when prices fell, rent reductions, arrears and abatements were experienced as early as 1873 in some areas, including several clay farms in the Dengie peninsula,⁴ where the land agent Oxley Parker urged landowners to grant rent remissions as "farming is not a very profitable occupation just now".⁵

¹A.Sauerbeck, 'Prices of Commodities and the Precious Metals', *J.R.S.S.*, xl, (1886), pp.581-648, *idem.*, 'Prices of Commodities in 1899', *J.R.S.S.*, lxiii, (1900), pp.92-106, *idem.*, 'Prices of Commodities in 1912', *J.R.S.S.*, lxxvi, (1913), tables, pp.404-409; G.Paish, 'Prices of Commodities in 1913', *J.R.S.S.*, lxxvii, tables, pp. 565-570, *idem.*, 'Prices of Commodities in 1914', *J.R.S.S.*, lxxviii, (1915), tables, pp.290-295. *Essex Standard* figures suggest a much smaller fall for prime mutton and a larger fall of somewhere towards 40 per cent for poorer mutton.

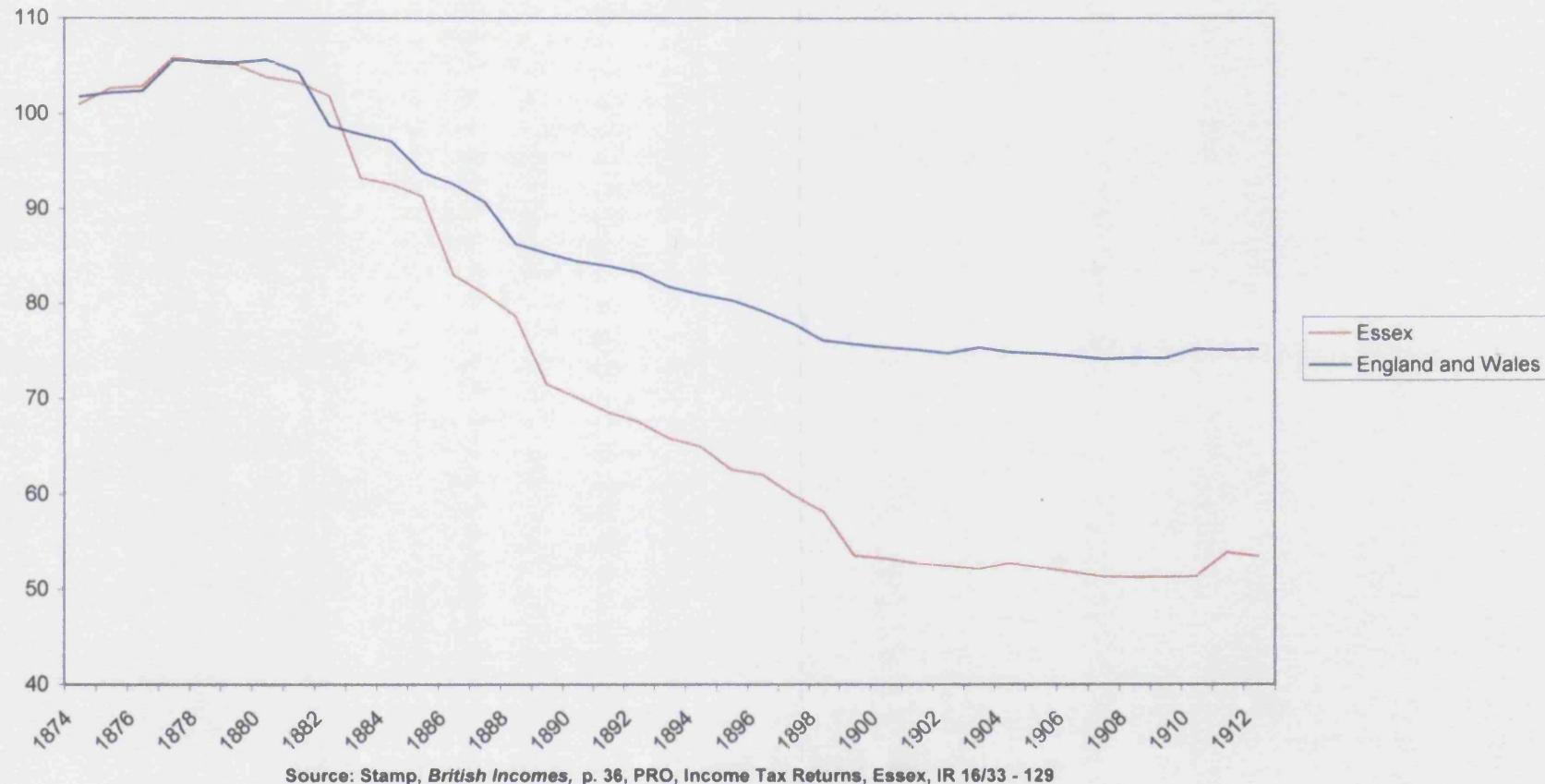
²*ibid.*

³St. Bartholomew's Hospital MSS., Ha/1/21/24-29, Governors' minutes; Ojala, *Agriculture*, p.202, table xi. Trends in agricultural prices, including milk prices, are examined in more detail in Hunt and Pam, 'Prices and Structural Response', pp.477-505.

⁴Oxley Parker (ed.), *Oxley Parker Papers*, chapter 6; E.R.O., Oxley Parker MSS., D/DOp B123/150-152, letters between George Pechell and J.Oxley-Parker, 1872-1873.

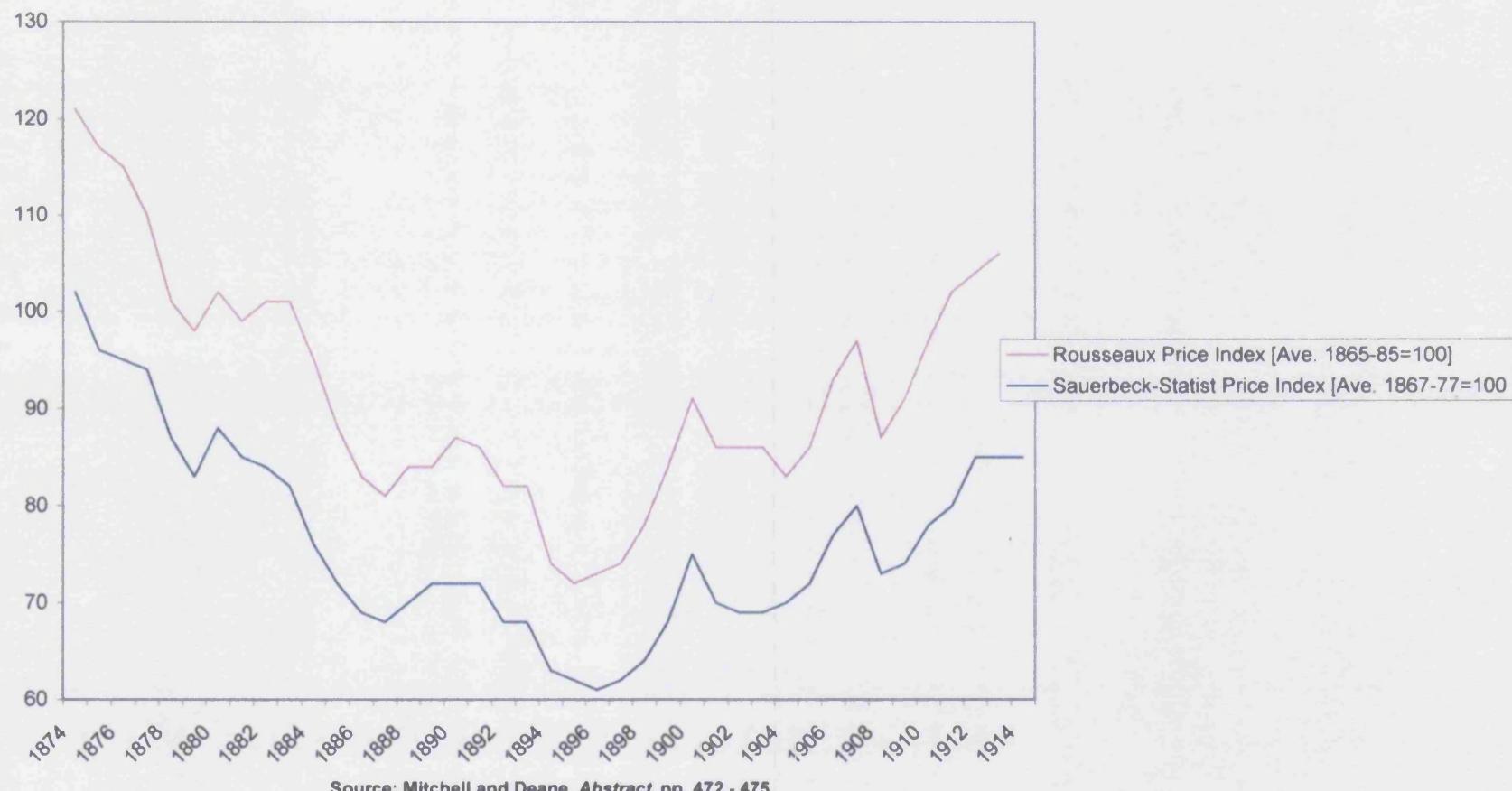
⁵E.R.O., Oxley Parker MSS., D/DOp B123/148, letter between George Pechell and J.Oxley-Parker, 26.8.1873. Oxley-Parker's correspondence is full of examples of unlet farms on heavier lands.

Chart 10
Rent movement in England and Wales, and in Essex as shown by Income Tax Schedule 'A' (Lands
Only) returns, 1874-1912
[Ave. 1867-77=100]



Source: Stamp, *British Incomes*, p. 36, PRO, Income Tax Returns, Essex, IR 16/33 - 129

Chart 11
Price indices, 1874-1914



As hardship became more evident generally, rentals were reduced. Income tax assessments show a fall from 1877. Given that assessments lagged behind actual rent falls, it is evident that rents began to decline from the mid 1870s. Some landowners, however, did not realise the extent of the problem and on good, productive soils, made rent increases even in the late 1870s. On the Benyon estate, for example, rents rose steadily to 1879, and on the Thorndon estate rents for the 25 farms where rent per acre can be established rose by over 7 per cent between 1875 and 1878.¹ Many Essex tenants sought help following the poor harvests of 1878 and 1879, and landowners commonly granted rent reductions to support and keep tenants. Continuing depression resulted in Essex rents continuing to fall for over two and a half decades.

Income tax assessments (Schedule 'A' - lands only) show a fall in agricultural rents of 30 per cent in England and Wales between 1880 to 1900, whilst average prices fell by 35 per cent,² suggesting that English landowners as a whole were not badly harmed financially, but the same source shows that rents fell much more sharply in Essex.³ Between 1876/7 and 1907/8 Essex land values fell by 51.6 per cent (by 49.6 per cent when allowance is made for shrinking agricultural acreage). Furthermore, these figures underestimate the true fall in rents as they take no account of rent abatement or arrears.⁴ It is likely, therefore, that the fall in income from agricultural rents was over 55 per cent. With landowners taking over tithe payments from their tenants, the loss in income was even greater.⁵ Essex landowners thus experienced real and heavy

¹ E.R.O., Benyon MSS., D/DBe E68, rentals; D/DBe E55, rentals and estate summary; *idem.*, Petre MSS., D/DP A356-359, Thorndon accounts; D/DP A365, 366, tenant ledgers, ii, iii.

² R.J.Thompson, 'An Inquiry into the Rent of Agricultural land in England and Wales during the Nineteenth Century', *J.R.S.S.*, lxx, (1907), pp.598-9, 614. See also Collins (ed.), *Agrarian History*, p.746.

³ Schedule 'A' [Lands Only] income tax returns are shown in chart 10, retail price movements in chart 11.

⁴ Thompson, 'An Inquiry', p.601.

⁵ See below p.173.

losses, and took a greater share of the burden of depression than did their tenants.¹

Another method of calculating rent movement involves using the returns of the rateable value of lands. This method is less accurate as a guide to rent levels than the income tax assessments since the returns cover not only agricultural land but farm buildings, tithes and vacant urban land.² These returns show Essex as the county with by far the largest decrease in rateable value, eight of its sixteen Poor Law Unions registering decreases of over 40 per cent between 1870 and 1894 (table 14). Only fourteen other Poor Law Unions in England and Wales suffered such great falls. Furthermore, the statistician for the 1894-7 *Royal Commission* stated that "assessments of agricultural land . . . , especially in the most depressed districts, have not been reduced in proportion to the fall in rent",³ and by choosing 1870 as his base year, the fall in values appears less sharp than if he had used the peak year of 1876. These figures are, therefore, consistent with the suggestion that the fall in rent in much of Essex between 1880 and 1900 was well over 50 per cent.

Table 14
Changes in the rateable value of 'lands', 1870-1894

(Numbers of Poor Law Unions)

	Increase	Decrease				
		0-10%	10-20%	20-30%	30-40%	40% +
Essex	0	1	1	3	3	8
England & Wales (excluding Essex)	103	124	130	146	57	14

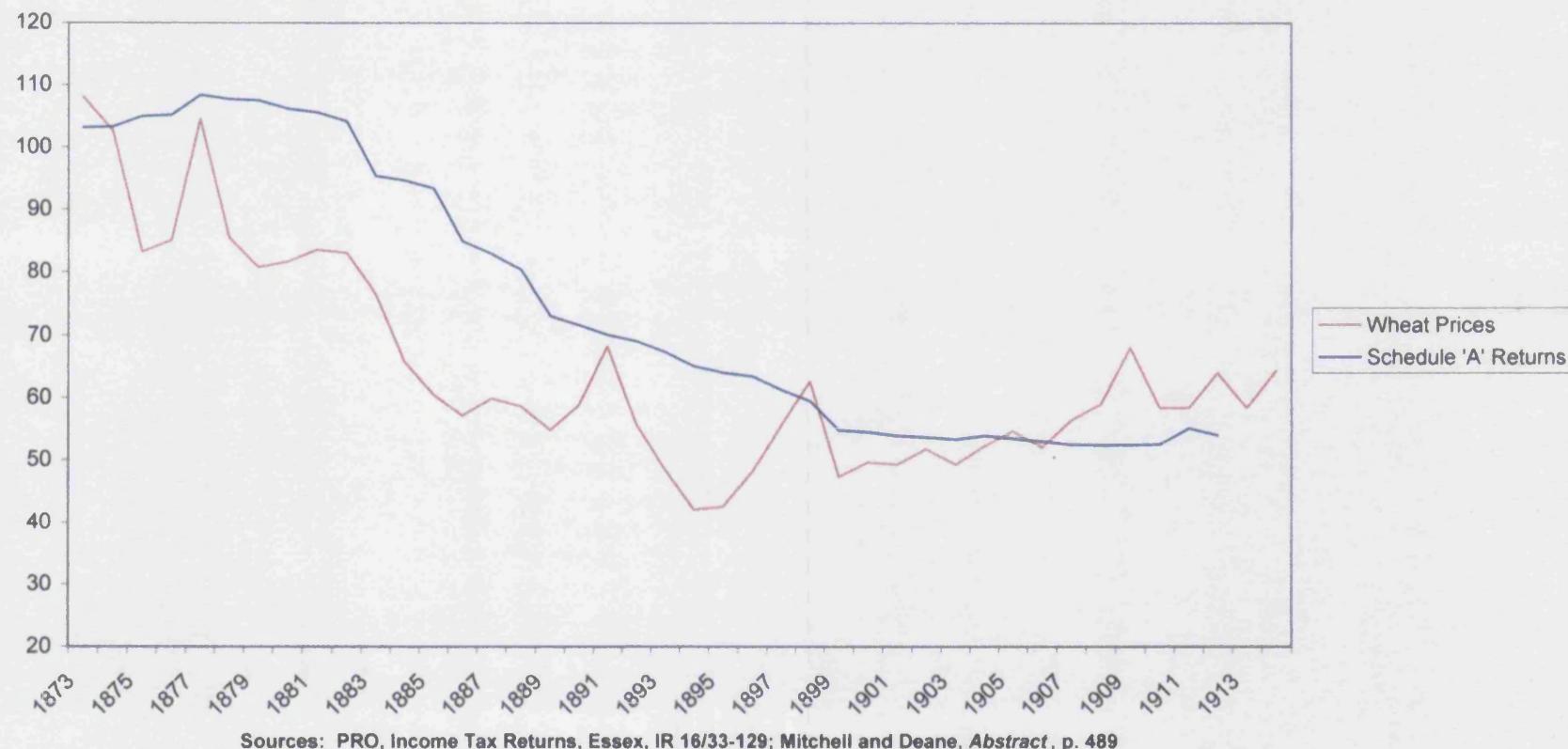
*Source: Agricultural Depression, Final Report, (B.P.P., 1897 xv),
 Statements showing the decrease or increase in the rateable value of
 'lands' in 1894 as compared with 1870, p.5.*

¹See below, chapter 5

²Poor Law Unions such as West Ham show a large increase in rent which is misleading.

³As for table 14.

Chart 12
Wheat Prices and Essex Rents, 1873 - 1914
(using Income Tax Schedule 'A' [Lands Only] Returns)
[Ave. 1865-74=100]



Sources: PRO, Income Tax Returns, Essex, IR 16/33-129; Mitchell and Deane, *Abstract*, p. 489

There was a high correlation between movements in cereal prices and in Essex rents before the mid 1890s (chart 12), but even allowing for the lag in income tax figures, the improvement in cereal prices thereafter was not reflected in rent levels. In part this was due to concern about future prospects after twenty years of demoralising price decline, but more as many farms required a large injection of capital to return them to cereal farms, and rent increases were delayed until investment could be undertaken. Rising agricultural prices restored sufficient confidence for rents to begin to rise from 1904, and more strongly from 1908. Estates where much had been invested now reaped the benefits: the Orsett estate rents rose by 17 per cent between 1894 and 1913/14, and the Thorndon rents rose 26 per cent over the same period.¹ Elsewhere rents recovered, but more slowly. By 1910/12 rent levels in Essex, as shown by Schedule 'A' tax returns,² stood at only 4.4 per cent above rent levels for 1908 and were still some 10.7 per cent below the level for 1897 and 46.8 per cent below the level for 1870/72, showing that, despite a slight recovery, Essex landowners had protected tenants against falling agricultural prices and experienced substantially depressed incomes as a result. It is doubtful that Essex landowners considered depression to have lifted before the First World War.

In the 1890s Commissioner Lambert stated that English rents were reduced insufficiently, and more recently Offer has criticised landowner adjustment of rent and suggested that rents were kept high to pay for a governing class and its consumption, and that farmer incomes fell by more than rents.³ Essex evidence contradicts these claims. Landowners there recognised their customary obligations at great personal cost. Indeed, rent reductions were sufficient to attract tenants to Essex

¹R.U.L., Whitmore MSS., ESS 17/3/72, Orsett estate accounts; E.R.O., Petre MSS., D/DP A396-399, 467, Thorndon estate accounts.

²P.R.O., IR 16 series, Income Tax Schedule 'A' [Lands Only] returns.

³Collins (ed.), *Agrarian History*, pp.746-747; Offer, *First World War*, pp.108-109, 119, 117. National rent evidence also contradicts Offer's thesis – see Collins (ed.), *Agrarian History*, pp.212, 306-308, 745-747, 771.

farms even during the difficult 1890s. Even the belief that rent reductions were tardy as the full extent of the depression was not appreciated until the 1880s¹ is only partially supported by Essex evidence: some owners were tardy, but many reduced rents from the mid 1870s.

Estate archives and individual farm records enable a more detailed analysis of Essex rent changes and its spatial unevenness. The latter is illustrated by evidence presented to the 1894-97 *Royal Commission*: rent fell by 71 per cent between 1882 and 1893 on a 13,000 acre Essex estate, and from £760 to £1 p.a. between 1882 and 1885 on a 637 acre heavy clay farm in the Dengie peninsula,² whereas it fell by a modest 29 per cent between 1882 and 1893 on a 3,000 acre estate near Ongar.³

Table 15 illustrates the decline in rent per acre received on six Essex estates both between 1878 and 1894, and 1878 and 1906. The reduction on each estate between 1878 and 1894 was greater than 50 per cent, and overall rent fall was probably significantly greater than these figures suggest as on some estates rents fell before 1878, and continued to fall after 1894. On the Bonnell estate, for example, received rents fell by 79 per cent between 1875 and 1895.⁴ Other examples of Essex estates experiencing a large fall in rents include the Earl of Verulam's Messing estate where rents fell by 66 per cent between 1878 and 1900, and St. Thomas' Hospital estate which experienced a decline in "book" rents of 53 per cent between 1878 and 1906.⁵

¹ Collins (ed.), *Agrarian History*, p.747.

² *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), *Appendix B 1*, pp.86-90. The remarkable reduction on the heavy clay farm was made by the Governors of St. Bartholemew's Hospital estates purely to attract and keep a tenant and so prevent the farm falling 'in hand', St. Bartholemew's Hospital MSS., EO 16, rentals, 1885-6.

³ *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), *Appendix B 1*, pp.86

⁴ E.R.O., Bonnell MSS., D/DU 28/57, farm rents; D/DHn A2-6, accounts. Charts 13 and 14 illustrate rent movement over time on six Essex estates.

⁵ Thompson, *Landed Society*, p.304; G.L.R.O., St. Thomas' Hospital MSS., H1/ST/E30/34-63, rental.

Naturally "book" rents fell less than received rents since there were considerable abatements, rent arrears and 'writing off' arrears.

Not surprisingly, the greatest rent falls were on heavy London clay land with poor accessibility to urban markets, areas where 'low farming' and ranching became common. Farms in such areas experienced rent falls of over 65 per cent, and some were even let at nominal rents or rent free.¹ On the more fertile boulder clays, prime cereal land, and farms close to railways where dairying was possible, rent reductions were far less, and on prime market gardening land close to London rents did not fall but remained as high as £6 an acre.² The Bonnell estate provides one example. Farms throughout the estate witnessed rent falls between 1877 and 1906, but those on the fertile boulder clays at Good Easter experienced a modest 21 per cent fall in rental whereas the farms on the strong London clays near Purleigh had a fall in rental of 66 per cent.³ Similarly, on the Orsett estate, farms on the more friable loams, which could take good pasture, were let at a higher rent than those on clay soils, and there was a similar but smaller differential in the rents of clay farms which were on productive or poorer clays.⁴

The Thorndon estate provides another example. Here heavy clay farm rents fell between 1878 and 1906 by far more than better soiled farms (table 16). The impact of soil type on falling rents was confirmed by calculating Spearman's rank correlation

¹ *Agricultural Depression*, (B.P.P., 1894 xvi pt. 1), *Appendix B*, pp.86–89; St. Bartholemew's Hospital MSS., Rentals,

² *Agricultural Depression, Darby*, (B.P.P. xvii), Q.59085. Tax assessments for the Lea Valley show that rents of farms in this vegetable and hay growing area close to London fell far less than average in the last quarter of the nineteenth century, P.R.O., I.R 2/112, IR 14/14.

³ E.R.O., D/DU 28/57; D/DHn A 2-6.

⁴ E.R.O., Drivers' Report, (1886), pp.63–67.

coefficient between soil type¹ and the decline in rent per acre on thirty farms on the Thorndon estate between 1878 and 1906. This figure was found to have a value of 0.692. Much of the Thorndon estate was well served by railways, and Lord Petre encouraged dairy farming. Not surprisingly gross rents per acre fell by less than 25 per cent between 1878 and 1894 on this estate, and rose from 1904, so that by 1913 receipts actually exceeded those of 1877.² The benefits of railways were still being realised in the 1880s and 1890s: rents around Ongar remained relatively buoyant, as did those in the Mountnessing area³, Messrs. Driver, in their report on the Orsett estate (1886) mentioned how a particular farm would be enhanced in value by a projected railway,⁴ and in the late 1880s, the new railway in south east Essex attracted migrant farmers from Scotland to hitherto vacant farms.⁵

¹The order of soil types was produced by a combination of comment in the Petre MSSs., soil type predominating in certain parishes mentioned in Kelly's directories for Essex, and information from members of the Brentwood branch of the Essex Young Farmers' Club.

²E.R.O., Petre MSSs, A397–425, 462–467, Thorndon Accounts; In his report to the *Royal Commission*, Joseph Coverdale, the Thorndon estate agent, claimed that rents fell by about 35 per cent between 1880 and 1893, a figure based on a sample of twelve farms chosen by him. It seems, however, that he was probably intent on maximising the hardship that had occurred because a sample of forty farms (almost two thirds of the estate) shows Thorndon gross rents per acre falling by less than 22 per cent in these years. Admittedly, there were large reductions soon after, in 1894–6, but thereafter Thorndon rents remained fairly constant until 1904 when they began to rise sharply. It is significant that farms in which much was invested experienced the least reduction in rent, *idem.*, Petre MSSs., Report of F.J.Coverdale on the agricultural depression as it affected the Thorndon estate, D/DP E 17

³E.R.O., Petre MSSs., D/DP A356–363, 374, 380–425, 467, Thorndon accounts.

⁴E.R.O., Whitmore MSSs., Drivers' Report, (1886), entry on Trenders farm, number 10.

⁵See below, chapter 5.

Table 15
Percentage decrease of rent per acre on Essex farms and estates,
1878-94 and 1878-1906

Estate	1878 - 1894	1878 - 1906
Benyon	66	41
Bonnell	55	50
Ecclesiastical Commissioners [N. Benfleet]	-	65
Guy's Hospital	54	44
St. Bartholemew's Hospital [Dengie Area]	65	54
St. John's College, Cambridge	60	56

Source: E.R.O., Benyon MSS., Estate Summary, v-viii, D/DBe E55, Essex Estate Rent Sheets, D/DBe E57; *idem*, Bonnell MSS., Farm Rents, D/DU 28/57, Accounts, D/DHn A2-6; C.C., E.C.E. MSS., File 46754; *R. C. Agricultural Depression*, (B.P.P., 1894 xvi pt. 1), Appendix A-ix-2, p.425, E.R.O., Guy's Hospital MSS., Accounts, D/DGh E17-41; St. Bartholemew's Hospital MSS., Rentals, EO 16, 1878-1906; St. John's College, Cambridge MSS., Rentals, SB4.

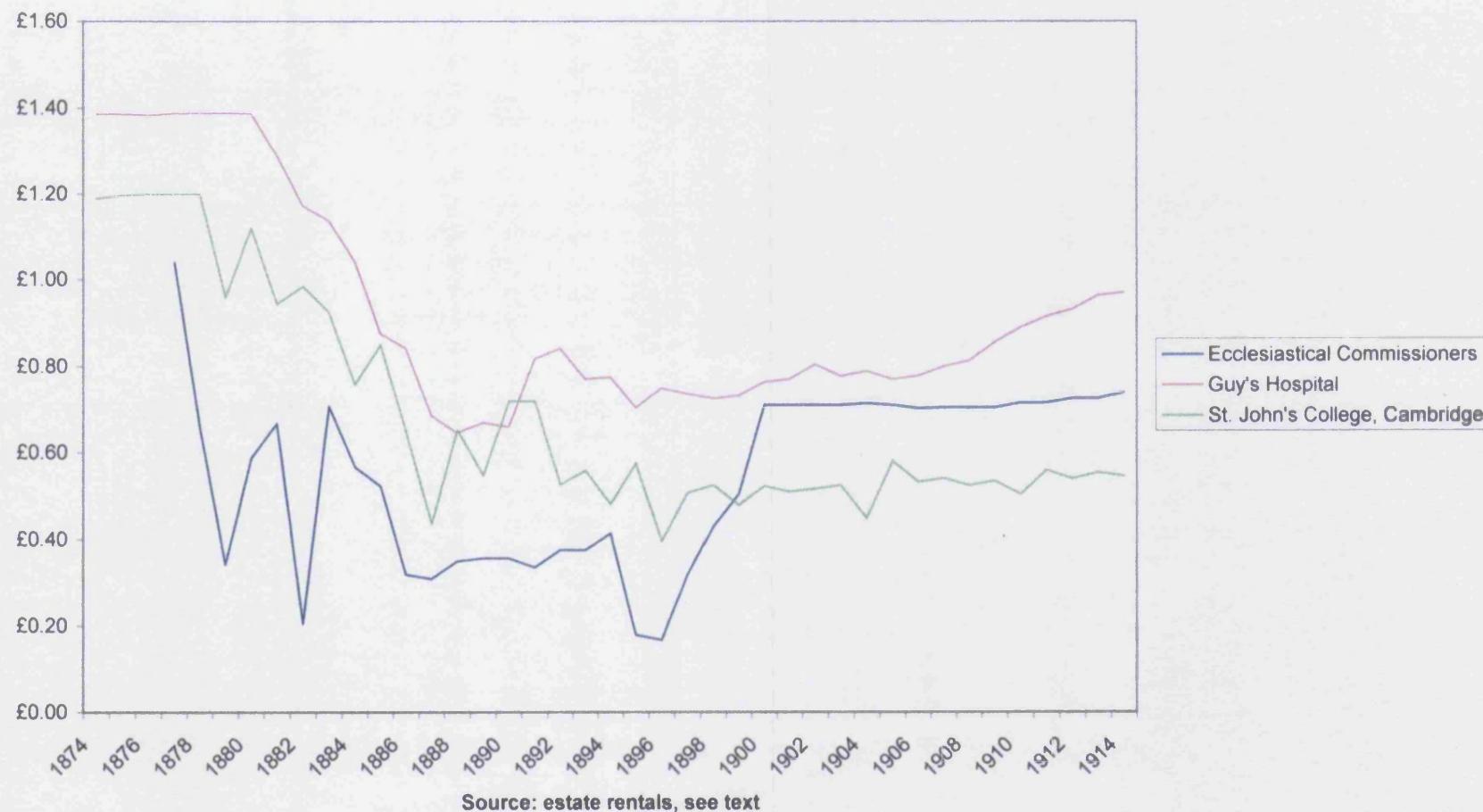
Table 16**Movement of rent on sample farms on the Thorndon estate, 1878-1906**

Good Mixed Soils	Bacons and Dagness Farms	- 24.0 %
	Mountnessing Hall Farm	- 18.0 %
Strong London Clay Soils	Blanketts Farm	- 100.0 %
	Bluntswall Farm	- 31.5 %
	East Horndon Hall Farm	- 31.0 %
	Field House Farm	- 38.0 %
	Tillingham Hall Farm	- 49.0 %

Source: E.R.O., Petre MSS. Thorndon Estate Accounts 1878-9, 1906-7, D/DP A359, A422; Tenant Ledgers, iii, iv, D/DP A366, A367.

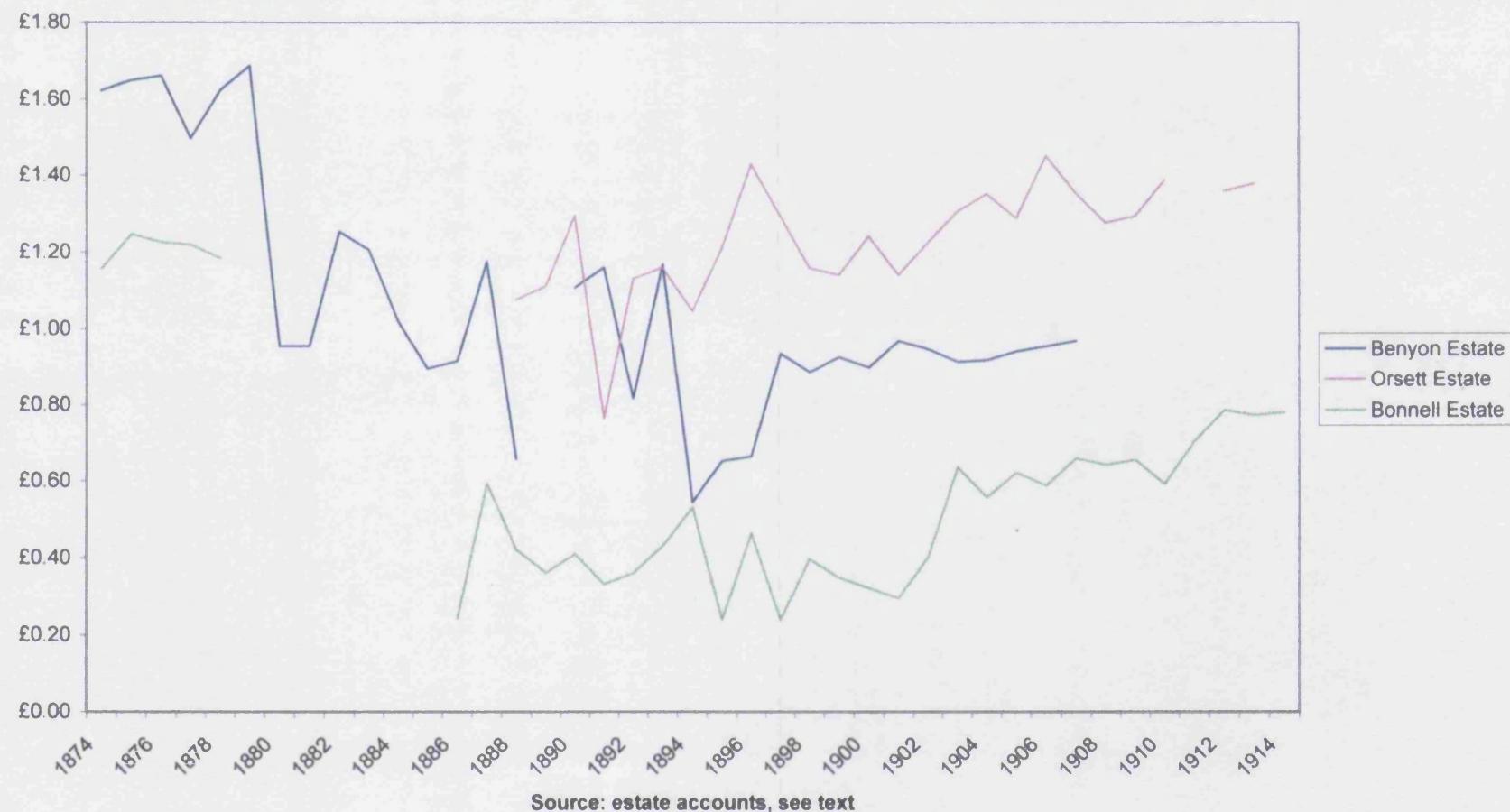
Note: After 1888 all farms were well served by railways.

Chart 13
Movement of rent per acre received on three corporate estates in Essex, 1874 - 1914



Source: estate rentals, see text

Chart 14
Movement of rent per acre received on three privately owned Essex estates, 1874 - 1914



4. Estate Management and Investment

Whereas Essex landowners had, for the most part, not been distinguished by the quality of their economic leadership in the 'Golden Age', investment levels and enterprise each manifested something of a renaissance in the depression. In the mid 1870s, when difficulties first hit farming, some Essex landowners responded quickly to assist hard-pressed tenants and by increasing investment to make farms more profitable, and by the late 1870s, most Essex owners were following this course. Falling prices encouraged them to resume the traditional landlord responsibilities and, in the main, they responded appropriately as far as their finances allowed.

At the start of the depression, however, some landowners, like their counterparts elsewhere in England,¹ believed that low wheat prices were a temporary phenomenon due to poor seasons, and so were, not surprisingly, reluctant to introduce permanent reductions in rent, preferring to accommodate impecunious tenants with temporary abatements "until better times".² On the St. Thomas' Hospital estate in 1880, for example, a tenant of a 721 acre farm requested "a considerable permanent reduction" in his rent following substantial losses, but was only granted a £250 temporary allowance. A similar request the following year met with the same response, the agent writing that "an allowance for a year or two as long as agricultural depression lasted" was preferable to making a permanent rent reduction.³

Abatements might apply to all tenants on an estate or be granted selectively. In 1879-1881 many Essex landowners granted "across the board" remissions of between 5 per

¹Typified in evidence given to the Richmond Commission: "We did not take much notice of it the first year, but afterwards we were obliged to", *Richmond Commission, Gardiner*, (B.P.P., 1881 xvii), Q.53341. This belief may have been common, but Perren cites one far seeing agent who reported that low corn prices "may be taken as practically permanent" in 1879, and who had "long recognized" this problem, Perren, 'Agricultural Transformation', p.126.

² This point is made by Thompson, 'An Inquiry', p.601.

³ G.L.R.O., St. Thomas' Hospital MSS., H1/ST/A6/17, Grand Committee minutes, 1879-87, pp.28, 99.

cent and 20 per cent p.a., but thereafter recognised the permanence of low prices and instead granted rent reductions (which enabled them to apply for a lower land tax assessment). In contrast, the governors of corporate estates gave, in the main, selective abatements,¹ and then only in response to written applications, apparently acting with the short term interests of the institution foremost in mind.² In the short term their tenants fared worse than those of the larger Essex family landowners.³

Abatements still appeared in rent ledgers as late as 1904, but after 1882 were more usually selective, being used to assist particular needy tenants. An example is provided by the Bonnell estate where universal abatements ceased after 1880, but where a 25 per cent abatement was granted in 1887 to one tenant to enable him to pay his rent arrears and continue in occupation.⁴ A similar policy of helping weak but good tenants, and encouraging better farming, was to grant allowances for grass seeding, liming, or manuring. Lord Petre's agent and solicitor both favoured allowances in kind, the latter suggesting in 1890 that the greater part of the allowances to tenants (which were in fact quite small) should be in the form of lime and manures.⁵ Similarly on the Orsett estate, Messrs. Driver gave weak tenants who were "worth keeping" "gifts of oil cake and artificial manures", and found it "encouraging and helping the tenant, and improving the farm".⁶ Such allowances in

¹The Ecclesiastical Commissioners granted a temporary abatement to one Essex tenant only. The governors of St. Bartholomew's Hospital estates only granted one universal abatement to Essex tenants. C.C., E.C.E. MSS., files on Essex properties - abatement in file 46754; St. Bartholomew's Hospital MSS., EO 4/2, list of country tenants to whom allowances were made.

² They may have required written evidence of need because they lacked personal contact with the tenant.

³The Benyon family was by far the most generous of Essex landowners granting substantial universal abatements annually between 1879 to 1889, and continuing to grant large abatements between 1891 and 1894. On top of this they granted selective abatements where necessary. The Benyons were, however, atypical: few Essex owners had the financial strength to follow such a liberal course of action, E.R.O., Benyon MSS., D/DBe E55, 57, rentals.

⁴E.R.O., D/DHn E4, D/DHn A4.

⁵E.R.O., Petre MSS., D/DP A439, letter from solicitor to Lord Petre, 1890.

⁶E.R.O., Whitmore MSS., Drivers' report, p.9.

kind became more common in the late 1880s and the 1890s, but were never large.

Many Essex landowners gave financial assistance to tenants by allowing considerable arrears of rent to accumulate. On the Thorndon estate,¹ for example, arrears of rent built up in the late 1870s, and despite abatements reached over £3,130 (14 per cent of gross rental) by 1883. Better seasons and rent reductions saw the level of arrears fall sharply in the mid 1880s, but continued price depression caused a rise to £2,124 in the early 1890s. Rent remissions and reductions enabled much to be paid off by 1895, and thereafter the trend was downwards despite occasional increases caused by poor harvests.² This experience, common to most Essex estates,³ is shown in charts 15 and 16. Charts 17 and 18 illustrate the position on the St. Thomas' Hospital Essex estates.⁴ The overall pattern is similar, but illustrates more clearly the effect of large abatements in enabling tenants to pay off their rent arrears.

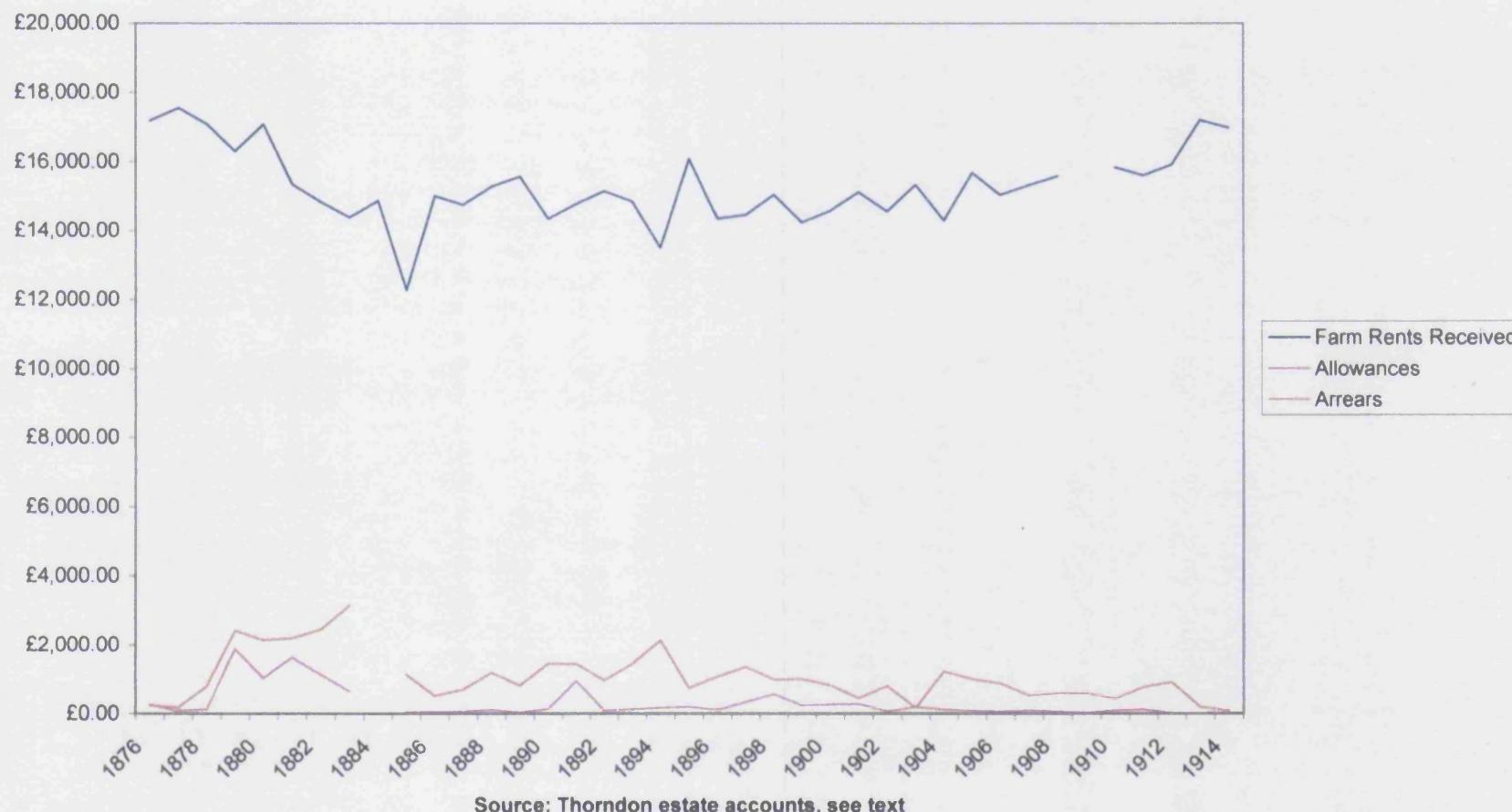
¹E.R.O., Petre MSS., D/DP A355-363, 374, 380-425, accounts.

²*ibid.*

³ Another example is provided by the Benyon estate. William Eve, a substantial tenant farmer, owed over £2,038 by 1885 and £2,400 by 1892, but was kept in occupation despite owing over four times his annual rent. In 1898 Richard Benyon wrote off the entire debt, E.R.O., D/DBe E55, 57.

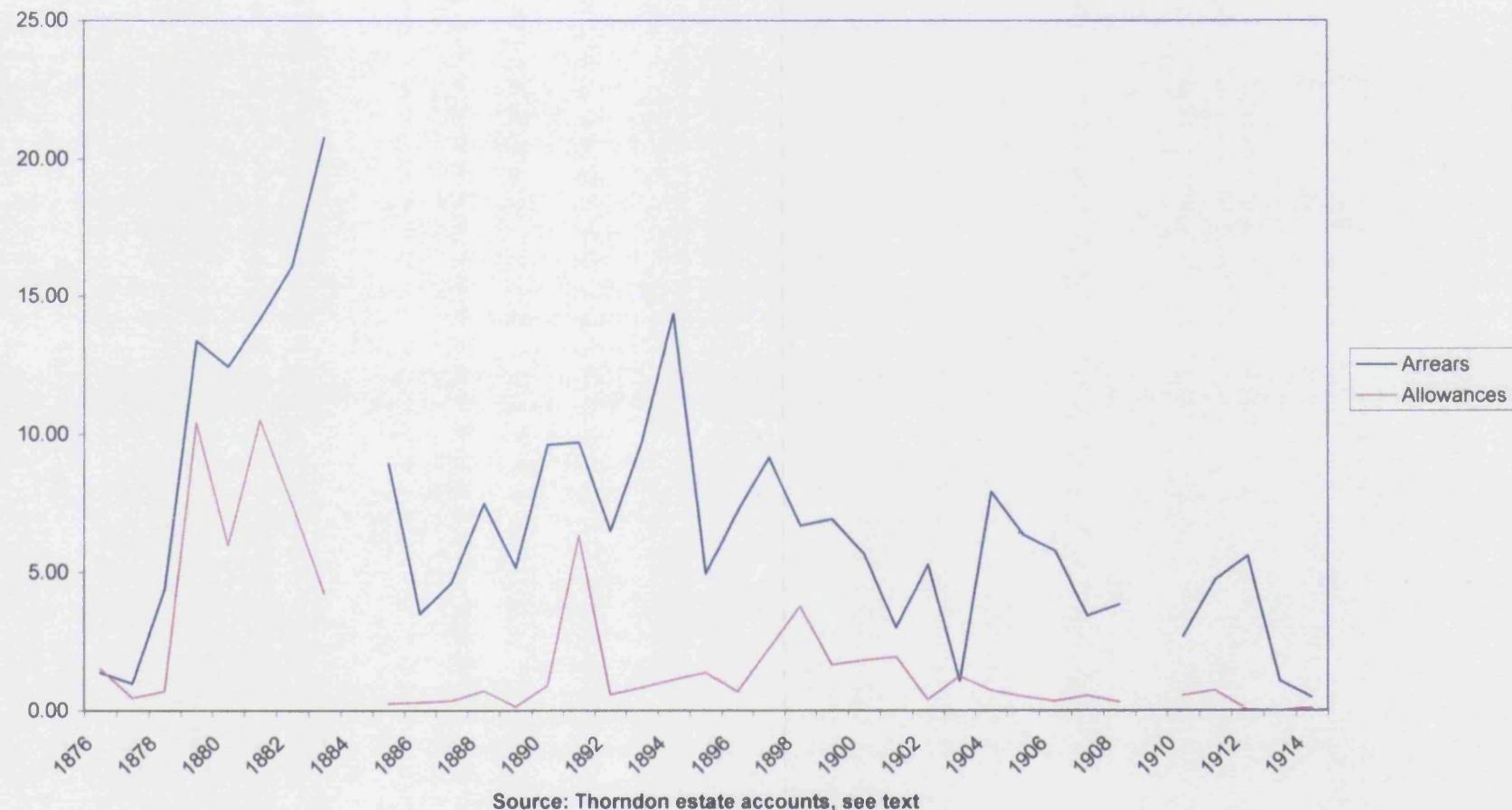
⁴In 1889 over 85 per cent of the net rent due to the hospital from Essex farms was in arrears and much had to be written off in 1890, G.L.R.O., St. Thomas' Hospital MSS., H1/ST/E29/19-22, hospital rental.

Chart 15
Thorndon estate: farm rents received, allowances and arrears, 1876 - 1914



Source: Thorndon estate accounts, see text

Chart 16
Thorndon estate: allowances and arrears of rent as a percentage of expected rents, 1876 - 1914



Source: Thorndon estate accounts, see text

Chart 17

St. Thomas' Hospital Essex estates: rent arrears and abatements, 1874 - 1914

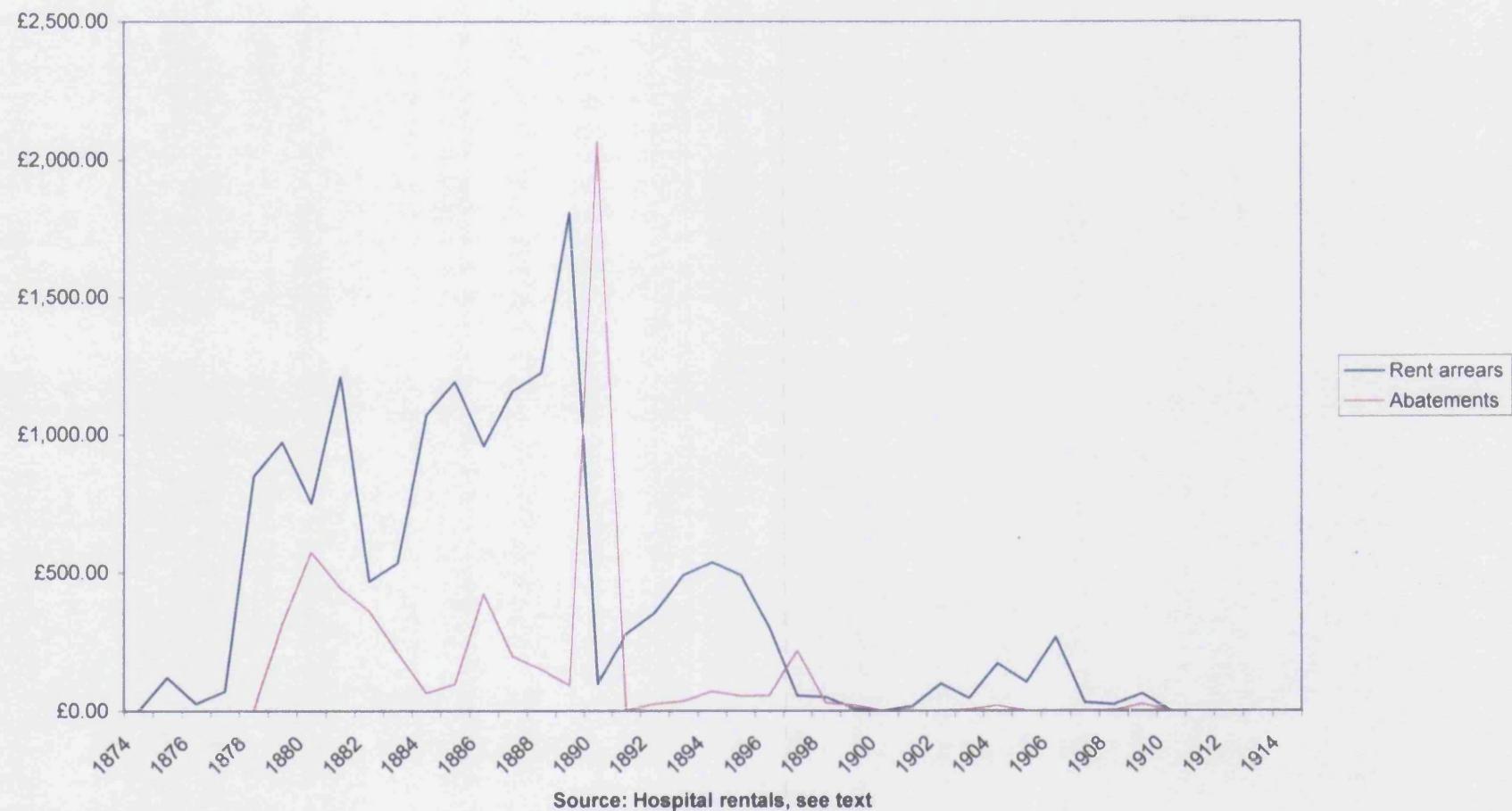
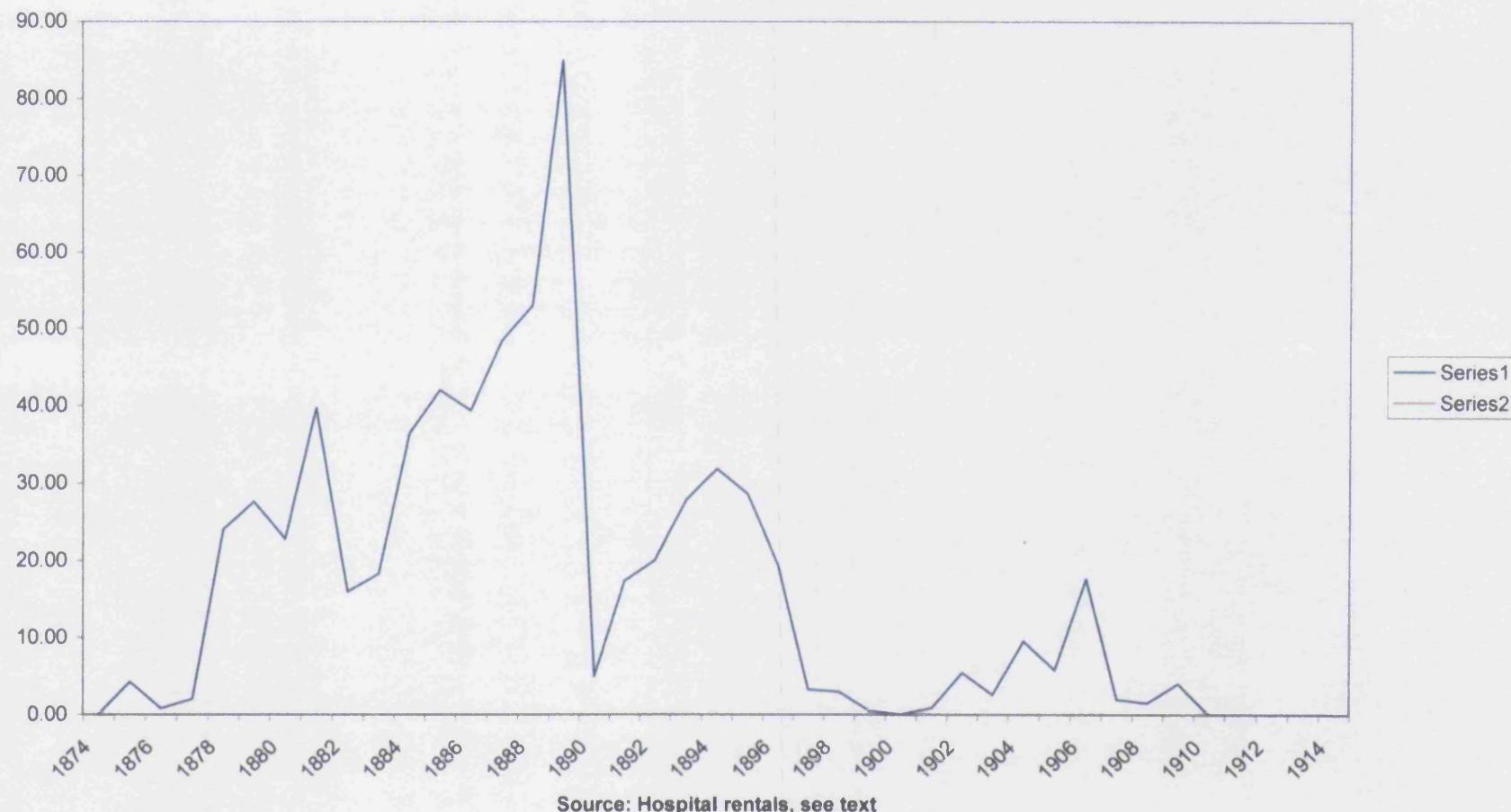


Chart 18

St. Thomas' Hospital: rent arrears as a percentage of expected rents, 1874- 1914



Source: Hospital rentals, see text

Another way in which landowners assisted tenants was by paying costs normally borne by the farmer such as tithes, fire insurance and local rates. Indeed, the 1891 Tithe Rent Act, which formally transferred liability from tenant to landowners, had been anticipated by many Essex landlords. Its impact was to force all owners to follow suite. Lord Petre, for example, began to assist selected tenants in this way from 1884 and Guy's Hospital did likewise from 1888.¹ As a result of the latter, although the rental of the Essex estate fell by 47 per cent between 1879 and 1893, the reduction in income was 60 per cent. The 1891 Act allowed application for a reduction of tithe payment where the tithe rent charge exceeded two thirds the annual value of the land, a common situation in Essex,² but few used this facility due to the cost and time of the legal process.

Although arrears, abatements and similar concessions played their part, rent reductions (discussed above) were the more substantial, longer-term means of assisting and keeping tenants. Landowners acted, in part because this was their customary duty, but also because they were anxious to keep their farms tenanted, being reluctant to assume the burden of direct management. When forced to do so, they found difficulty in avoiding heavy losses. Their experience in this respect was doubtless partly due to the fact that untenanted farms were generally the less attractive and less profitable farms, often run down as tenants lost capital. Some farms became unprofitable due to landlords' over-assiduous concern for long term

¹E.R.O., D/DP A374, 381; *Agricultural Depression, Evidence of E. Lushington, Treasurer of Guy's Hospital*, (B.P.P., 1894 xvi pt. 1), Q.1635. Another example of the effect of the transference of tithe on income is provided by Warren farm on the Thorndon estate where in 1878 the tenant paid £500 p.a. rent and £105 p.a. tithe. In 1893 the tenant paid £500 p.a. but the owner now paid the tithe and so only received £395 net rent, E.R.O., D/DP E 17.

²*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt. 1), pp.74-5. The costs of tithe and tax could be very high. Pringle claimed an 'average' owner in 1894 spent 9s. 1d. per acre on tithe, tax and rates which represented 10.5 per cent of the gross return from the land, or about 32.5 per cent of rent received for the land. *ibid.*, p.79. More evidence is provided by Edward Strutt who, as agent for Guy's Hospital, explained that rates and taxes accounted for 6s. 11 $\frac{1}{4}$ d. and tithe 6s. 1 $\frac{1}{4}$ d. in the pound of the Hospital's gross rental. E. Strutt, 'Burdens Upon Land in Essex', *J.R.A.S.E.*, vi, 3rd Ser., (1895), p.390. An Act of 1896 assisted by exempting agricultural land from half of the rates.

fertility, whereas others suffered the same fate as a consequence of insufficient investment - the 'in hand' farms on the Orsett estate came into this last category.¹ Whatever the cause, examples of losses on 'in hand' farms were common in Essex. On the Orsett estate, for example, expenses on 'in hand' farms exceeded income even when costs were cut by grassing down fields,² and the Ecclesiastical Commissioners faced losses on farms at both North and South Benfleet.³ Indeed, they were delighted to let the North Benfleet farm in 1900 at a mere 8s.6d. an acre rent (its rent was 24s.6d. in the 1870s) as losses had been substantial whilst the farm was 'in hand'.⁴ Other examples of losses made by landowners farming 'in-hand' farms include £2,435 in 1886-87 by Richard Benyon, and £99 on a 40 acre farm (1886-87) and £412 on a 590 acre farm (1887-88) by the governors of St. John's College, Cambridge.⁵ Almost all Essex owners agreed with John Oxley Parker's advice to his clients to keep good tenants at all costs and avoid direct management, advice that was echoed by the Almoner of St. Bartholemew's Hospital who wrote of a Dunton farm in 1879 that "to farm it ourselves is the last thing I would recommend . . . best to accept a very low rent, but better to cultivate ourselves than to leave it."⁶ Accordingly, they granted abatements or reduced rents. The evidence certainly suggests that resident farmers in close and daily contact with the land enjoyed managerial advantages available to only a very few of the more enlightened and free-spending landlords.

¹E.R.O., Whitmore MSS., Drivers Report, 1886, p.7.

²R.U.L., ESS 17/3/72.

³C.C., E.C.E. MSS., files 46754, 50768.

⁴*idem.*, file 46754. Losses on this farm between 1885 and 1892 totaled over £11,906.

⁵ Berkshire C.R.O., Benyon MSS., D/EBy A137, farming accounts 1886-87; Howard, *Finances*, pp.227-228. Losses of £1,225.18.3d over three years on 'in-hand farms' on the Great Canfield estate together with low profits from the estate farms encouraged Maryon-Wilson to sell this 2,106 acre estate in 1900, E.R.O., Maryon-Wilson MSS., D/DFr A31, particulars of Fitzjohn estate, D/DFr E16, correspondence on the sale of the Essex estate

⁶E.R.O., D/DOp B123/146A, 148, 152; St. Bartholemew's Hospital MSS., EO 8/6, Almoner's report on a Dunton farm, November 1879.

Although most landlords were anxious to retain tenants, a point might be reached where a tenant's bankruptcy or eviction was less costly than further inducements to continue farming. That tenants did go bankrupt and were distrained for rent is evident from newspaper sale particulars. This happened particularly where a tenant was thought to be a poor farmer, or where the landowner could no longer afford to help. Smaller owners were generally less able to grant reductions, perhaps a factor explaining the comparatively higher proportion of vacant farms in south east Essex where small owners predominated.¹ Shaw Lefevre, a member of the 1894-7 Royal Commission, went so far as to accuse the Ecclesiastical Commissioners (large landowners) of keeping rents high and evicting bankrupt tenants,² but his claim arose more from political prejudice than evidence. The Commissioners' rent reductions were tardy, as were those of many corporate landowners, but they did grant reductions and abatements when necessary, invested in farm buildings, and allowed rent arrears to mount,³ and their untenanted Essex farms were all the result of the tenant's death rather than evictions.

In fact, the only major Essex landowner not to support capable tenants was Lord Rayleigh, who refused to reduce rents, and when tenants left had his brother and agent, Edward Strutt, cultivate the land. In 1876 he had two farms in hand totalling 854 acres (10 per cent of the estate), by 1896 4,315 acres, and by 1914 5,925 acres (almost 75 per cent of the estate).⁴ Despite his strict parsimony and a switch from stock and arable to dairying with arable farming, he made a mere £602 gross profit in 1891-2 and a £2,204 loss the following year, but thereafter, Strutt's careful

¹ *Agricultural Depression*, (B.P.P., 1894 xvi pt.1), end map.

² *ibid.*, Appendix J, (B.P.P., 1896 xvii), p.613.

³ C.C., E.C.E. MSS., files 50768, 46754, 49364, 43037, 66417. File 50768 shows one of the Commissioners' tenants lost £40,000 between 1875 and 1879, but the Commissioners, far from distraining him, arranged with other creditors to cultivate the lands, provided working capital for a year, invested in new buildings, and enabled the tenant to continue in occupation until he died in 1886.

⁴ Gavin, *Family Farming*, Appendix A, C.

management, detailed accounting, hard work, and economies of scale made his farming pay.¹ Strutt, however, was quite exceptional: for most Essex landowners cultivating 'in hand' farms was costly as well as irksome.

Most textbook accounts maintain that the depression years saw a cut in estate investment with only essential repairs being carried out. Orwin and Whetham provide one example arguing that "these economies first took the form of a slowing down of estate improvement and maintenance; building operations on farms and cottages were drastically cut and only the most necessary repairs carried out."² They go on to assert that "British landlords . . . gradually ceased to be the leaders of the industry and the initiative . . . passed to farmers".³ In similar vein, C.S.Orwin claimed that "with dwindling rents . . . it was almost inevitable that the first line of retrenchment should be in his [the landlord's] expenditure on estate development. All improvements . . . were stopped at once."⁴ Likewise Crouzet writes, "The agricultural depression did not lead to new investment by the large landowners . . . In fact there was net disinvestment and a deterioration in the physical capital of agriculture."⁵ Offer states that farm investment and maintenance was reduced and goes as far as to suggest that landowners were of no real value to agriculture during the years of price depression.⁶ There are dissenters from this view. F.M.L.Thompson, for example, has suggested that many arable land owners increased outlays in order to keep up rent levels, and G.E.Mingay shows that some landowners favoured increased investment

¹*ibid.*, pp. 85, 86, 99.

²Orwin and Whetham, *British Agriculture*, (1964), p.309.

³*ibid.*, p.314.

⁴C.S.Orwin, *A History of English Farming*, (1949), p.77.

⁵Crouzet, *Victorian Economy*, p.173.

⁶Offer, *First World War*, p.110, 114–115.

in 1879-85.¹ Essex evidence adds strong support to the views of Thompson and Mingay. Naturally there was a variety of responses, but for much of the depression, certainly until the mid 1880s, landowners typically increased rather than decreased their level of investment. Indeed, whereas most Essex owners had invested sparingly in the 'golden age', many now invested more both to retain and attract tenants, and to try to halt or slow the sharp decline in rentals.

Increased investment between the onset of depression and the mid 1880s is shown in the ledgers of the land improvement companies, many of whose Essex loans went to owners of estates on London clay soils. The amount loaned by the Land Loan and Enfranchisement Company to Essex borrowers between 1875 and 1884 was more than twice that borrowed between 1865 and 1874, and the General Land Drainage Company lent almost half as much again to Essex owners in the latter period.² Surviving estate papers provide further evidence of higher spending by landowners. At Orsett, Richard Wingfield-Baker, having starved his estate of investment in the 'golden age', borrowed £2,900 in 1875 for buildings and cottages, his son borrowed £1,500 for drainage in 1882, and Whitmore spent £9,501 on restoring farms in 1887 – 92.³ The Bonnell family, who had invested very little between 1853 and 1869, began a programme of investment in new farm buildings between 1870 and 1876 amounting to over 20 per cent of rents received.⁴ Similarly, the Ecclesiastical Commissioners spent heavily on buildings and cottages between 1882 and 1884 at South Benfleet, put money into buildings for stock and dairy farming at Barling between 1883 and 1889, and also invested in buildings, drainage and cottages between 1882 and 1891 at

¹Thompson, *Landed Society*, p.315 says that "there are signs" that arable landowners initially increased outlays on repairs and improvements; Mingay, *Rural Life*, p.170.

²P.R.O., MAF 66/4-5, Land Loan and Enfranchisement Company ledgers 1 and 2 (1861-84); MAF 66/1-2, General Land Drainage Company ledgers 1 and 2 (1851-96).

³*idem.*, MAF 66/4, R.U.L., Whitmore MSS., ESS 17/3/72, accounts; 17/1/4, 16, 26, 27, correspondence; and 17/6/8, 27, 28, 33, 46, papers on building repairs and conversions.

⁴E.R.O., D/DHn E4.

North Benfleet,¹ there was increased investment on the Guy's Hospital and St. John's College, Cambridge estates,² whilst the Petres at Thorndon continued their high level of estate investment.³ The evidence both of land improvement company ledgers and estate accounts, therefore, in part confirms Assistant Commissioner Pringle's statement that although many Essex farm buildings in 1894 were poor or "wretched in the extreme", badly arranged, and lacked cattle sheds, more had been spent on farm buildings between 1880 and 1893 than in the preceding fourteen years.⁴

It is difficult to establish investment patterns after the mid 1880s, particularly on smaller estates. On the one hand, Pringle's claim concerning investment in farm buildings (cited in the last paragraph) might suggest continuing high levels of investment certainly up to 1893. On the other hand, the land improvement company ledgers suggest that there was far less borrowing by Essex landowners - or indeed any landowners - after 1885, although they show that Essex owners were still borrowing from the companies until the mid 1890s.⁵ Problems with this source prevent the making of conclusive judgments.⁶ Overall, there was a reduction in investment after the mid 1880s, but by no means the moratorium suggested by some authors.

A number of larger owners invested heavily in their Essex estates throughout the depression and so, along with reducing rents, shouldered much of the burden of the

¹C.C., E.C.E. MSS., Files 50768, 49364, 46754.

² See below pp.179-180.

³E.R.O., Petre MSS., D/DP A360-363, 374, 380-467, Thorndon estate accounts.

⁴*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), pp.58-59. Pringle particularly noted a lack of investment between 1860 and 1874.

⁵P.R.O., MAF 66/4-5; MAF 66/1-2.

⁶The surviving ledgers are an incomplete series. Those of the Land Loan and Enfranchisement Company have a gap between 1884 and 1896, whilst those of the General Land Drainage Company end in 1896.

depression. The Benyons, for example, did so,¹ whilst at Orsett Whitmore invested £9, 501 to restore run down farms between 1887 and 1892, and thereafter spent an average of £2,000 p.a. (representing 20 - 25 per cent p.a. of gross rents) on repairs until 1914.² Lord Ashburton, who owned a number of arable farms in north east Essex, was another landlord investing heavily on farm buildings in the 1880s and 1890s,³ whilst on the Thorndon estate investments represented over 21 per cent of rents received in the 1880s, 22 per cent in the 1890s, some 26 per cent in the first decade of the twentieth century, and 30 per cent between 1910-14.⁴

Evidence of substantial investment in the latter part of the depression from several larger Essex estate owners is paralleled by substantial investment on the estates of corporate owners. The governors of St. Bartholomew's Hospital estate re-equipped their Essex farms in the 1890s and 1900s spending over 40 per cent of rents received from those farms in the 1890s and 30 per cent in the next decade.⁵ They had invested heavily in preceding decades, but even the previously parsimonious governors of St. John's College, Cambridge began investing far more in their farms. Whereas they had invested a mere 4 per cent of received rents in the 1850s in repairs, drainage and new buildings, 5 per cent in the 1860s and 2 per cent in the 1870s, the 1880s saw 16 per cent invested, the 1890s 28 per cent, and the first decade of the twentieth century some 32 per cent.⁶ Similarly the low investing Guy's Hospital governors increased

¹ It is difficult to calculate investment levels accurately on this estate as payments included sums for repairs and for tax. Total payments represented 30 per cent of received rents in the 1870s, 48 per cent in the 1880s, and 68 per cent from 1890 to 1909, Berkshire C.R.O., Benyon MSSs., D/EBy A135, 139, Turner's account for the Essex estate.

² R.U.L., ESS 17/6/27, Whitmore MSSs., letter 1892; Collins, *Orsett Estate*, p.42.

³ E.R.O., Ashburton MSSs., D/DAn E5, sale of the Essex estate.

⁴ E.R.O., Petre MSSs., D/DP A360-363, 374, 380-467.

⁵ St. Bartholomew' Hospital MSSs, EO 8/7, Almoner's reports; *idem*, EO 16, rentals, 1890-1914; Ha/1/26-28, minutes, 1885-1912.

⁶ St. John's College, Cambridge MSSs., SB4, rentals.

payments on repairs and investments on their Essex estate to 14 per cent of received rents in the 1880s and 19 per cent in the following decade. Thereafter, levels declined a little, but still remained relatively high to 1914.¹ Chart 19 shows the percentage of received rent spent on estate repairs and investments on the St. John's and Guy's Essex estates between 1873 and 1914.

Although most Essex owners invested in their estates after 1885, and many large owners and corporate owners invested heavily, it would be wrong to claim that heavy investment was the norm in Essex after the mid 1880s. Many owners (particularly those of smaller estates) could not afford substantial investment by the 1890s, and others recognised the long term nature of the depression and felt that they had made sufficient investment. It certainly became more difficult to raise bank loans for agricultural investment, some banks recalling loans made in more prosperous times.² The Bonnell family provides an example of smaller Essex estate owners who invested heavily in their farms in the 1870s, but then spent little save on essential repairs.³ Absence of other small estate accounts prevents a firmer thesis, but the Bonnell experience fits the national pattern of estates under 1,000 acres being under-represented in taking up improvement loans.⁴

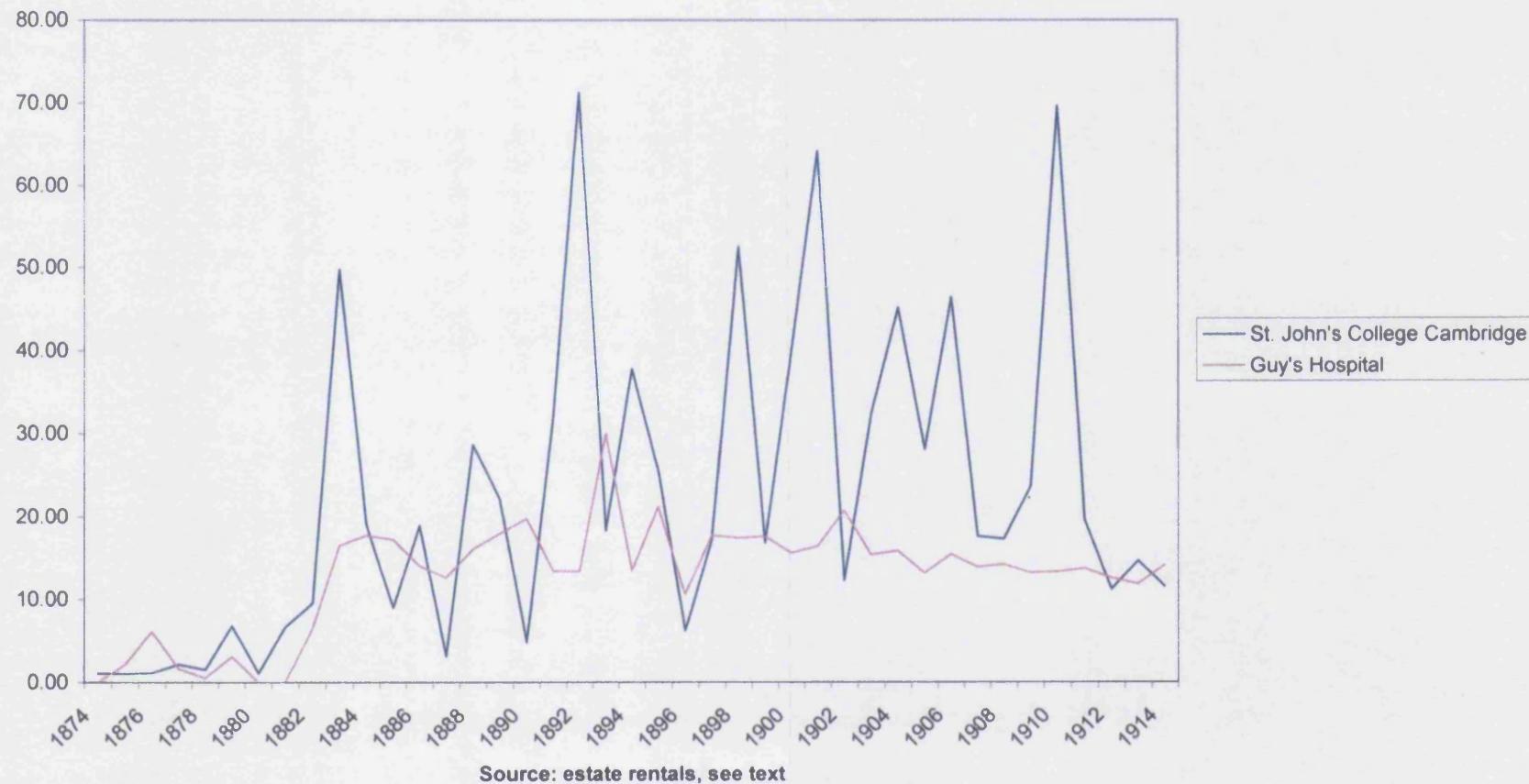
¹ E.R.O., Guy's Hospital MSS., D/DGh E17-49, accounts.

² *Agricultural Depression, Lushington*, (B.P.P., 1894 xvi pt.1), Q.1750. Assistant Commissioner Pringle also noted the difficulty of borrowing for agricultural improvements and the high interest rates, *idem.*, p.59.

³ E.R.O., Bonnell MSS., D/DHn A4-7, accounts; *idem.*, D/DHn E4.; A.D.M. Phillips, 'Landowner investment in farm buildings in the second half of the Nineteenth Century', Agricultural History Society Conference paper, Winter, 1995.

⁴ Phillips, *Underdraining*, p.177.

Chart 19
Sums spent on investments and repairs as a percentage of rent received on two corporate estates in
Essex, 1874 - 1914



Source: estate rentals, see text

One of the largest estate owners who, unusually, chose to reduce expenditure on estate improvements was Lord Rayleigh (9,000 acres, 48 holdings). Between 1882 and 1896 he spent an average of only £270 p.a. on land improvement, and kept repairs to a minimum. Between 1886-97 necessary repairs amounted to 11 per cent of rental income, and a mere 3.1 per cent of rental was reinvested in farm improvements.¹ On 'in hand' farms, Lord Rayleigh and his brother Edward Strutt were even stricter, and were able, in most years, to make their farming pay without costly investment in buildings, drainage, or conversion to pasture.²

Essex evidence certainly refutes the claim that structural adjustment was prevented by lack of investment. Much Essex farm investment carried out in the 1870s and 1880s was for new buildings, often for livestock. The years 1881-3 saw many loans being taken out by heavy clayland owners for drainage, perhaps in response to the wet years of 1878-81, but taking the years 1875-85 as a whole, the Land Loan and Enfranchisement Company made 84 per cent of its loans to Essex owners and farmers for new buildings, and a mere 15 per cent for drainage.³ Similarly the General Land Drainage Company made 73 per cent of its loans to Essex borrowers for new buildings and 27 per cent for drainage,⁴ figures broadly similar to the national figures (62 per cent building, 38 per cent drainage) in the same period,⁵ although Essex owners spent a higher portion on buildings, perhaps as a result of previous neglect. Estate papers provide further evidence that farm investment at this time was mostly in new buildings for stock: expenditure on cattle sheds, covered yards, cowhouses and piggeries are prominent in many account books.

¹Gavin, *Ninety Years*, pp. 83-84.

²*ibid.* Interestingly, Gavin's figures do not include the cost of buying dairy cattle.

³P.R.O., MAF 66/4-5.

⁴P.R.O., MAF 66/1-2.

⁵Phillips, *Underdraining*, pp.122-125.

A significant change in the purpose of investment can be detected around the mid 1880s. Whereas most investment before this time was to encourage arable and stock farming in Essex, far more of the total investment after this date was to enable dairying and grass farming. Examples are numerous. On the Thorndon estate at this time, there was a high level of expenditure on cowsheds and water supplies. Between 1885 and 1887, for example, Lord Petre spent money on cowhouses, sheds and water tanks at Barnards, Crondon Hall, Field House, Fristling Hall and Nutty's farms.¹ Meanwhile, the Ecclesiastical Commissioners spent heavily in providing accommodation for cows at Barling Hall farm in 1883-89 and on laying much of the farmland to grass in 1895-97,² and from the 1890s, in providing new buildings, grass seed, and cowhouses elsewhere,³ whilst Whitmore's investment campaign in the mid 1890s included new accommodation for livestock, dairies, and grass seed on seventeen farms.⁴ Similarly, most of the increased expenditure on farms on the St. Bartholomew's Hospital estates in the late 1880s and 1890s was for new cowhouses and water supplies, and for converting arable fields to pasture.⁵ Indeed, most farm investment on the larger estates, where the land and accessibility were suitable was to facilitate dairying. The evidence shows that Essex landowners were not guilty of failing to adapt to changing markets.

From the early 1880s, Essex landowners shouldered more of the investment burden to support tenants by increasing their expenditure on ordinary repairs. Technically, this had always been the landowner's responsibility (excepting the labour bill), but in

¹E.R.O., Petre MSS., D/DP A383-384, accounts.

²C.C., E.C.E. MSS., file 49364.

³*idem.*, Files 46754, 50768.

⁴R.U.L., ESS 17/3/72; 17/1/4, 16, 26, 27, and 17/6/8, 27, 28, 33, 46.

⁵St. Bartholemew's Hospital MSS., EO 8/7.

more prosperous times the tenants had often paid for minor repairs. Under long-term pressure from falling returns, tenants turned to the landowners for all repairs. This change is evident in the numerous letters asking for repair work to be carried out on the Orsett estate, on fences as well as buildings.¹ Another example is provided by a farm at Thorrington where St. John's College, Cambridge spent £3,750 on drainage between 1882 and 1886, but also spent over £620 on house repairs "as the tenants could not afford it", and between 1888 and 1896 they spent a further £850-16-5d. on repairs and £1,430-11-8d. on new buildings.² The total investment and repair cost was some £637 more than the money received between 1882 and 1896 in farm rent from the tenants. Increased repair work was also a factor in the higher expenditure on farms on the Thorndon, Bonnell, and Guys, St. Bartholemew's and St. Thomas' Hospital estates mentioned above.

Investment in the 1880s and 1890s was not designed to secure high returns but to maintain existing income by attracting and keeping tenants at reasonable rents. Sometimes owners made improvements at the behest of new or potential tenants. The investment by St. John's College, Cambridge on their Thorrington farm (above) made after 1888, for example, was initiated following complaints from an incoming tenant.³ Similarly, on the Orsett estate, an early migrant Scot⁴ insisted that a dairy was built with standings made for fifty cows,⁵ and a fellow Scot demanded water supply and cowhouses before he would rent Fanton Hall farm at North Benfleet.⁶ Whilst some

¹ There were several such complaints between 1897 and 1898 alone, R.U.L., Whitmore MSS., ESS 17/1/25, 26, 27.

² St. John's College, Cambridge MSS., SB4; SB1.22, Senior Bursar's diary, 1897; Howard, *Finances*, pp.230-1.

³ St. John's College, Cambridge MSS., SBI.22, Senior Bursar's diary, 1896.

⁴ The role of immigrant Scots farmers is discussed below in chapter 5.

⁵ R.U.L., Whitmore MSS., ESS 3/1/1, 3/2/1, letters from E.Biddell to M.B.Watt, 1889.

⁶ C.C., E.C.E. MSS., File 46754. In similar vein, incoming tenants on the Waldegrave estate at Navesstock made demands for buildings to be built or remodeled before their arrival as early as 1880, E.R.O., Waldegrave MSS., D/DWg E28, Letters, 28.2.1880, 17.7.1880,

landowners invested partly because they recognized their responsibility to assist tenants in bad times, others did so as a necessity to attract tenants. The Senior Bursar at St. John's, Cambridge obviously believed this when he wrote: "For it is an invariable experience that while an old tenant may be content with what he has been used to, a new man will not go into a farm until it suits his tastes and views."¹

The evidence of Essex estate archives suggests that the aim of maintaining existing returns by investment was at least partly achieved. Comparisons between Essex estates, supports Perren's claims that "a broad correlation between the amount a landlord spent on the farms on his estate and the extent to which rent levels were maintained after 1879".² On the Orsett estate, for example, net rental rose in part as a result of much needed investment between 1890 and 1895,³ whilst the high level of investment on the Thorndon estates enabled rents to stabilize as early as the mid 1880s at a mere 20-25 per cent below the late 1870s level, and undoubtedly is part of the explanation for their above average increase after the depression period.⁴

Whilst it is quite clear that investment affected rent income, it is difficult to quantify those effects owing to the number of factors which determined rent levels. Calculating Spearman's rank correlation coefficient between expenditure on new buildings and repairs as a proportion of rents received between 1873 and 1900, and the decline in rent per acre between 1873/74 and 1900/01 on eight Essex estates for which data is available, a figure of 0.5 was obtained, although this becomes 0.75 if

¹St. John's College, Cambridge MSS., D100.70, statement made by the Senior Bursar at the 1893 audit.

²Perren, 'Agricultural Transformation', p.50.

³See above, chart 14.

⁴E.R.O., D/DP A356-363, 374, 380-384.

the St. Bartholemew's Hospital estate evidence is disregarded,¹ suggesting evidence of the relationship between investment and rent.

Naturally, too, the generally favourable influence of investment on rents does not necessarily indicate that landowner investment was always economically justified. Heavy investment in the 1870s and early 1880s to improve arable and yard-fed stock farming, whilst justified in certain cases on soils suitable for cereal growing was unlikely to have benefited rent levels on other soils and suggests an initial misunderstanding as to the nature of the depression in some parts of Essex and the future of cereal prices. Subsequent investment encouraging grass farming and dairying, and enabling tenants to farm less intensively and cut labour costs was more successful. Indeed, at the cereal and livestock prices prevailing in the depression, many farms on the heavy London clays could only pay their way either by moving to ranching with beef livestock or by dairying. Doubtless, mistakes were made, some owners investing in expensive conversion to pasture of land which was not ideal for such a change. For them, tighter farm management, as practised by Strutt, might have been a better way of combating the depression. Overall, however, landowner action both in terms of support for tenants (which included rent reductions) and investment was sound, and was an important factor in agricultural adjustment.²

Landowners also encouraged adjustment by their flexible approaches to lease clauses. Admittedly there is little evidence of formal alterations in Essex lease clauses in the 1880s and 1890s. Most leases instructed tenants to farm on a four course system and described how the land was to be farmed in the last two years of the tenancy. Some had detailed cropping clauses, and listed soil exhausting crops which were forbidden

¹The St. Bartholemew's properties were particularly run down and in need of substantial investment when taken over by the hospital governors, including estates elsewhere in England. Most of their Essex farms were on heavy clays.

²See below, chapter 5 for details and evaluation of the adjustment.

by owners. The Petres, for example, allowed tenants to grow a maximum of two acres of potatoes, and these only for home consumption.¹ Similarly, mowing covenants had changed little from mid century, although the availability of cheap nitrogenous fertilizers and basic slag encouraged landowners to relax restrictions on sales of fodder crops from the farm on condition that an 'equal value' of artificial manure was bought.²

Kindleberger has attacked landowner management on the basis of these formal leases, suggesting that the clauses obstructed structural adjustment,³ but as in the 'golden age' the apparent conservatism of lease clauses is misleading. According to both Druce and Pringle,⁴ and the evidence of both landowners and farmers to the *Royal Commission*, good farmers were allowed freedom of cropping and lease clauses were commonly ignored.⁵ The Treasurers of both Guy's and St. Bartholomew's Hospitals confirmed that cropping covenants were not binding upon honest tenants who had reasonable grounds to farm in another fashion, and C. Matthews claimed to have had freedom of cropping "for years" and to have used his own nine year system on his Good Easter farm.⁶ The depression, therefore, appears to have encouraged most

¹E.R.O., Petre MSS., D/DP T182 series, leases.

²*idem.*, As late as 1887, however, some Thorndon estate leases only allowed tenants to sell a third of their hay crop, D/DP T182/28.

³Kindleberger, *Economic Growth*, pp.246-247.

⁴*Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p. 29; *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.62.

⁵An example of this change is provided by the reaction of the St. Bartholemew's Hospital estate staff to Essex farmers contravening lease covenants. Whereas in 1861 a farmer was threatened with fines and possible eviction at, in 1892 a similar case was merely noted, St. Bartholomew's Hospital MSS., EO 8/7, Almoner's reports, 1894-1900; Ha/1/22, Governors' minutes 1861. Insistence on lease clauses on the Orsett estate in 1886 may have provoked the mild retort from the surveyors to the owner that the agent was "over zealous in your interest": E.R.O., Whitmore MSS., Drivers' report, p.9.

⁶*Agricultural Depression, Lushington*, (B.P.P., 1894 xvi pt.1), QQ. 1719, 1768-1769; *Richmond Commission, Evidence of S. Waterlow of St. Bartholomew's Hospital*, (B.P.P., 1881 xv), QQ.2216, 2223, 2321-2; *Agricultural Depression, Evidence of C. Matthews*, (B.P.P., 1896 xvii), QQ.61475-8, 61634-40.

Essex landowners to adopt an even greater flexibility on cropping.

Given flexibility on lease clauses, legislation in this period had limited impact on Essex tenurial relationships. *The Agricultural Holdings Act* of 1875, which gave tenants legal security for improvements, added little to existing practice as it was permissive and it was reported that most Essex landowners contracted out of the Act.¹ *The Agricultural Holdings Act* of 1883 made compensation for unexhausted improvements compulsory, but loopholes in the Act gave landowners the right to prescribe courses of cropping or prohibit 'off sales'.² In 1906 a further Act removed these landowner rights and allowed free sale and cropping save in the last year of a tenancy, and in 1908 *The Agricultural Holdings Act* consolidated past laws. At last the tenant had secured the legal freedom to farm as he pleased together with the right to full compensation for unexhausted improvements, although in Essex, and, no doubt, elsewhere,³ the freedoms had long been partially enjoyed: change on the farm was less than the statute book implies.

Landowner flexibility also extended to the length of lease or tenancies. The business of farming seemed so uncertain, and farm product prices fell so steeply, that tenant farmers became reluctant to be tied for long to a farm or to a rent. Accordingly, yearly tenancies became more common in Essex, a trend not apparent in 1881, but noted by Pringle in 1894.⁴ On the St. Bartholomew's Hospital estate in 1880, for example, all twenty Essex farms were held on leases, many for a twelve year term. By Michaelmas 1896, half were held on yearly agreements, and by 1910 seventeen

¹*Richmond Commission, Waterlow and Lushington*, (B.P.P., 1881 xv), QQ.2320, 2748 - 9.

²Orwin and Whetham, *British Agriculture*, pp.298, 300.

³*ibid.*, p.300; *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.29; *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.62.

⁴*Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.29; *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.46.

were held on yearly agreements and only three on seven year leases.¹ Thorndon estate tenure agreements followed a similar pattern. Although fourteen year leases were still common on the estate in the mid 1880s, the tenant ledgers show that yearly agreements were increasingly common from the late 1870s and had become the norm by the 1890s. Leases did not entirely disappear on this estate, however: several ten year leases were granted in 1900, and by 1914 land was held both by lease and by yearly agreements.² On some estates, leases remained the only form of tenancy agreement, but even in these cases the length of lease was shortened: on the Bonnell estate, for example, leases granted between 1850 and 1874 were for fourteen years, whereas by the early twentieth century leases were for seven years.³

Some Essex landowners showed resourcefulness in boosting their non-agricultural incomes during the depression. Non-farm rent income had always played a part in the estate economy, but falling farm rents encouraged many Essex landowners to maximise alternative revenue and in a few cases such activities became a vital aspect of estate management. On most estates income from non-agricultural sources played only a minor part in the finances of the landowner as few estates had much opportunity to exploit such income and expansion of such income, however necessary and valuable, was often at the margin. For some, however, the expansion of industry, the demand for non-farm housing, timber or minerals provided the means to supplement falling rent rolls.

The sale of timber and underwoods was one such source of income, although the few estates where records of timber sales have survived suggests there was little room for further exploitation in the depression years. On the Thorndon estate, for example,

¹St. Bartholomew's Hospital MSS., EO 16, rentals 1879/1880-1909/1910.

²E.R.O., Petre MSS., D/DP A366-8, Thondon estate tenant ledgers, iii, iv, v.

³E.R.O., D/DHn E4; D/DHn T23, 25, 27, Bonnell estate leases; D/DHn A8, lease of Purleigh Hall; D/DU 28/57, farm accounts 1871-85.

income from timber fluctuated sharply (e.g. from 5.7 per cent of total income in 1885 to 30 per cent in 1886), but over a long period (1850s to 1900s) the trend remained constant with a slight fall in the 1890s.¹ Whitmore, who sold elm trees to the Royal Dockyard at Woolwich and held several large timber sales in the 1890s, merely increased the proportion of total income attributable to timber from 1 per cent to 3 per cent.² Despite this, his surveyors urged him to plant larches on waste ground, and he planted shrubs in the 1890s as future sources of timber.³ Other natural estate produce was increasingly exploited as farm rent income fell. Reeds, which sold at 25s. a hundred bundles in 1886, were suggested as a source of income at Orsett, whilst both Whitmore and Lord Petre provide examples of owners letting out grassland and parkland as 'keep' for the animals of local farmers.⁴ Returns here were small: Lord Petre earned on average only £40 per annum from such leases.⁵ Landowners also sold game, fruit, and vegetables from the estate, one at least subsidized estate repairs by making tiles and pipes in the estate furnace, and several leased the shooting rights over their farms.⁶

Few Essex estates contained exploitable mineral resources,⁷ although some were able to excavate gravel. The Orsett estate was unusually fortunate in having large

¹E.R.O., D/DP A309–326, 341–363, 374, 380–384, even numbers 386–396, odd numbers 397–425. It should be noted that a high proportion (about 10 per cent) of the income from timber was taken in the cost of cutting, collecting, peeling and carting. Sometimes the proportion reached almost 30 per cent of the gross return on Thorndon timber sales.

²R.U.L., Whitmore MSSs., ESS 17/1/11, 17/1/16, correspondence, 17/4/25–26, leases.

³R.U.L., ESS 17/1/19, 17/4/25–26, 17/3/72; E.R.O., Whitmore MSSs., Drivers' report, p.6.

⁴E.R.O., Whitmore MSSs., Drivers' report, p. 6; R.U.L., Whitmore MSSs., ESS 17/4/33, 48, 51, 57, 59, 61, 64, 67, leases; E.R.O., D/DP A309–326, 341–363, 374, 380–384, even numbers 386–396, odd numbers 397–425.

⁵E.R.O., D/DP A309–326, 341–363, 374, 380–384, even numbers 386–396, odd numbers 397–425.

⁶e.g. Lord Petre at Thorndon and John Wilkes on the Lofts Hall estate, E.R.O., D/DP A 386–413; Robin, *Elmdon*, pp.60–1.

⁷Lady Waldegrave's coal mines were situated at Radstock near Bath, and not in Essex. E.R.O., Waldegrave MSSs., D/DWg E28, letter from Moutrie to Wilkinson, 9.4.1881.

unexhausted deposits of chalk and brick earth.¹ Realizing the potential of this source of income, Whitmore concluded mineral leases with the Wouldham Cement Company and with a firm of brick makers. By 1906 rents and royalties from these two firms provided 17 per cent of total estate income.² Thameside estates were also fortunate in being able to rent and sell land for industrial use. Examples include Whitmore's letting land to the Wizzard Cooking Range Company, to the Kynoch Explosives Company, and to Thames Haven Oil Wharves, and the Ecclesiastical Commissioners letting 108 acres on Canvey Island to the Eldon Engineering Company.³

Non-farm property rents had long been a source of income on estates. Many larger Essex estates owned some form of non-farm property such as shops, cottages, public houses and mansions. Such income became proportionately more important after 1880 as the value of houses did not decline as swiftly as that of agricultural land. Perhaps the best Essex example of the importance of housing to an estate was at South Weald near Brentwood (Tower estate) where, in 1887, house leases produced an income of £777 or 22 per cent of total rental income.⁴ Falling agricultural rents encouraged Essex landowners to expand their housing interests on their estates. Francis Whitmore built a small housing estate at Stifford, in the south of the Orsett estate, and Lord Petre did likewise at Ingatestone,⁵ and to increase the value of his houses, put pressure on the railway company to improve the service to Ingatestone.⁶

¹The Lion Cement Company did quarried some of this chalk in 1886, and their lease accounted for 4 per cent of total estate income, E.R.O., Whitmore MSSs., Drivers' report, pp.36, 63-65, 67.

²R.U.L., Whitmore MSSs., ESS 17/9/215, 222, 228, 229, 256, 17/3/72, leases.

³R.U.L., Whitmore MSSs., ESS 17/9 series, leases; 17/1/2, 3, 7, 8, 42, correspondence; 17/9/266, sale of land; C.C., E.C.E. MSSs., File 50768.

⁴E.R.O., Tower MSSs., D/DTw A6, estate accounts.

⁵R.U.L., ESS 17/9 series; E.R.O., D/DP A439; Robin, *Elmdon*, p.61.

⁶E.R.O., D/DP A439. The solicitors suggested further building in the Shenfield, Warley and Billericay areas.

He also let Ingatestone Hall, as three separate dwellings, whilst John Wilkes let his mansion at Elmdon to a preparatory school and, after 1900, to a businessman. Very few Essex owners were fortunate to have out-county urban properties. Maryon-Wilson's north and south London properties and Benyon's West End properties and Hackney estate (De Beauvoir Town) provided constant ground rents which did not decline. On the Benyon estates urban rents averaged £12,400 p.a.¹

In order to produce cash and to dispose of land which was seen as a liability, some Essex owners sold parts of their estates despite low land values and a relatively inactive market. This may account for the sale of Lord Ashburton's 4,215 acre Essex estate in 1894, the one big Essex estate which came onto the market between the mid 1880s and the turn of the century.² Lord Ashburton owned 36,772 acres in Britain, and the scattered, arable Essex farms were his least attractive and remunerative properties, returning an average of only 12s. an acre despite heavy expenditure on repairs.³ With concomitant problems in the City, Lord Ashburton sold the Essex estate to raise cash and to prevent further losses. More commonly, sales after 1880 were of smaller acreages, such as distant, outlying farms. Whitmore, for example, inherited several such farms in 1887 and found them expensive to administer. He was "disposed to get out of the outlying farms at any price", and sold several in 1894 and 1896.⁴ Other small plots of land and one other farm were sold on the Orsett estate between 1897 and 1900.⁵ Despite these sales, the pattern of landownership changed little before 1914, a point noted in section 2 (above) of this chapter.

¹G.L.R.O., E/BVR/191, 192.

²E.R.O., D/DAn E5.

³*idem*.

⁴R.U.L., ESS 17/1/11, letter 17.2.1894.

⁵R.U.L., ESS 17/1/27, 31, letters April 1898 and June 1899, 17/9/124-266, land sales and leases.

Obviously, there was scope in Essex for the profitable sale of land for non-agricultural use. Land that could be sold for industrial and commercial purposes commonly commanded higher prices than land sold for farming. The sale of 13^{1/4} acres of meadowland by the Benyons to the East India Dock Company in 1882 provides an example. The price fetched by the land was £3,307, between four and five times its asset value as agricultural land.¹ The available evidence suggests that land sales to industrial or commercial buyers became more common after 1880, but tended to be restricted to south Essex, particularly on the Thames bank marshes, although there were some sales near to London and the larger Essex towns and along railway lines.² Because of its situation, the Orsett estate is able to provide several examples of 'industrial' sales. Between 1890 and 1906, Whitmore sold land (generally marshland of limited agricultural use) to Kynoch Ltd., the Woudham Cement Company, the Tilbury and London Railway Company, the Corringham Light Railway Company, and various builders attracted by the housing potential of land in Stifford. Whitmore also sold several public houses, and thirteen cottages to 'weekend visitors to the country'. Between 1887 and 1906, small land sales on the Orsett estate realized over £21,700, equivalent to about 13 per cent of farm rents.³ The greater exploitation of non-farm income suggests that some Essex landowners were enterprising, but most managed their estates effectively but without entrepreneurial flair.

The depression appears to have brought little change in Essex landowner support of

¹E.R.O., D/DBe E55, 57.

²The governors of St. Thomas' Hospital, for example, sold 288 acres of marshland in Aveley to the War Office for use as a rifle range. G.L.R.O., St. Thomas' Hospital MSSs., H1/ST/A6/21, Grand Committee minutes (1902), p. 11. Interestingly the Thorndon Tenant Ledgers show that Lord Petre let part of one farm to the War Office from 1886 for similar use, whilst in 1898 Guy's Hospital sold Bramble Island (178 acres) to The High Explosives Company Ltd.: E.R.O., D/DP A 367, *idem.*, Guy's Hospital MSSs., D/DGh T52, sale of land.

³R.U.L., ESS 17/9/155-266; 17/1/21, 27, correspondence; 17/4/70, land sales; papers of Sir John Whitmore. (These last have now vanished and I wish to thank Dr. E.J.T.Collins for showing me a copy of the above figures which he made some years ago).

local agricultural societies which had always been keen.¹ Depression appears, however, to have encouraged some landowners to reassess their role as leaders of the agricultural community and even to increase involvement in entrepreneurial activities. Several wrote to seed merchants to be able to give tenants expert advice on conversion of arable to pasture, and one at least gave a tenant a pamphlet to encourage experimentation in seed growing.² Edward Strutt managed the Rayleigh estate himself, improving stock, vastly expanding dairying, introducing cost accounting and developing marketing strategies, and he acted as a consultant to Guy's Hospital and to other landowners.³ Some landowners also took an interest in marketing. Several were members of the Eastern Counties Dairy Farmers' Society in the 1890s, whilst Whitmore founded the East Anglian Farmers' Society in 1897 to assist his tenants to market their produce.⁴ He also encouraged fruit growing and established a home farm with a model dairy to give a lead to tenants on his estate. Other landowners assisting farmers in this fashion included two Stanstead landowners, one of whom, Fuller Maitland, took over a creamery to assist his tenants, whilst the other, Sir James Blyth, set up a model dairy for his tenants in 1892.⁵ Yet, although Essex owners showed a greater degree of leadership in the depressed years than in the 'golden age', and shouldered much of the burden caused by depressed prices, active involvement in generating new initiatives, in encouraging high output alternatives to cereals or dairying, in marketing or in agricultural co-operation was rare. Although they were effective estate managers, Essex evidence supports Hall's view that the owners

¹See above, chapter 2.

²E.R.O., Bonnell MSS., D/Hn E12, letter from Irving to Matthews, 6.3.1884; R.U.L., ESS 17/1/4, letter from James Carter and Company to Kemp-Smith, 9.2.1894; letter from S.Squier to Kemp-Smith, 20.3.1894.

³Gavin, *Ninety Years*, p.88.

⁴See below chapter 5, section 7.

⁵E.R.O., Stanstead Mountfitchett library folder: newspaper cutting of 21.10.1889; W.Gaskill and C.A.M.Press, *Essex Leaders Social and Political*, (1906), entry no.9.

“however kindly and helpful to their tenants, are yet deficient in leadership.”¹

5. Landlords in Society

After the 1870s political and social dominance was slowly wrested from the English landed classes at national level. By 1914 the elite still included many landowners, but had now become a class of more varied origins.² This change was brought about in part by legislation, but also by the comparative economic decline which landowners experienced. The Civil Service, for example, hitherto a bastion of the landed classes, became more open to educated talent from whatever background, and, to a lesser extent, appointments in the Church and army followed suit. In parliament itself the decline of landowner dominance was especially marked: whereas landowners and their families provided some 66 per cent of M.P.s in 1868, the figure had fallen to 25 per cent by 1914.³ The status of Essex landowners reflected these national changes, but, despite the depression and the declining importance of agriculture in the county economy, they retained considerable, if diminished, influence in rural society itself and in local and county politics down to 1914.

Whereas in 1880, landowning families still dominated Essex county and borough seats, by 1902 they accounted for only two of the eight Essex M.P.s, the other six including a company director, a merchant and an engineer.⁴ Although retaining some political influence over tenants and employees (as shown in the Oxley Parker papers and in handbills warning against election corruption in Essex),⁵ landlord political

¹Hall, *Pilgrimage*, p. 437.

²This is studied in Thompson, *Landed Society*, chapters x and xi.

³Horn, *Changing Countryside*, p.187.

⁴Anon., ‘Essex Elections’, pp. 86-92; Kelly's, *Directory for Essex*, (1902, 1912); Gaskill and Press, *Essex Leaders*. By 1902 West Ham was considered outside the administrative and electoral county, which reduced the county's seats to eight. In 1892 West Ham had elected an ex-miner, Keir Hardie, to Westminster.

⁵Horn, *Changing Countryside*, p.193; E.R.O., The Rural Labourers' Vote: Handbill, T/P 68/38/9.

power had been weakened by the 1872 Ballot Act and the 1883 Bribery and Corruption Act. Furthermore, as south and central Essex became less rural, landowners had less influence over voters: indeed, the displacement of Essex landowner M.P.s first began on the outskirts of London. Above all, perhaps, landed men found electioneering costly at a time of declining land values and rent rolls, and their place was increasingly taken by the 'nouveau riche'.

With regard to local agricultural politics, however, the landlords' influence remained strong. In 1879/80, they overcame the challenge to their political leadership from the Farmers' Alliance, a national organisation looking outside traditional political parties to secure direct representation of tenant farmers in parliament, and reform of tenurial relationship legislation.¹ At the second national meeting, held in Essex on 15th August 1879,² it was clear that the Alliance represented a farmers' vote of no confidence in both the existing Conservative M.P.s and landowner leadership³. Several large tenant farmers complained that both major political parties neglected the needs of tenant farmers and some advocated working with the Liberals to protect their interests.⁴ Not surprisingly, the *Essex Standard*, a Tory paper, saw the Alliance as "a new wing to the Liberal Party", and, as such, it was condemned by Conservative M.P.s.⁵ Indeed, at the East Essex Conservatives' meeting, tenant farmers wishing to promote the Alliance were not allowed to speak.⁶ Most Essex landowners and land agents opposed the Alliance, but Conservative M.P.s were sufficiently rattled to meet their supporters well before parliament dissolved in 1879.⁷ In the event the Alliance

¹*The Times*, 21.10.1879, *Essex Standard*, 17.5.1879.

²*Essex Standard*, 16.8.1879.

³Of Essex's nine M.P.s, all were Conservative.

⁴*Essex Standard*, 16.8.1879, 22.11.1879.

⁵*Essex Standard*, 16.8.1879, 23.8.1879.

⁶*The Times*, 21.10.1879.

⁷*ibid.*; *Essex Standard*, 13.9.1879, 20.9.1879.

appears to have had little impact on the Essex election results: with the exception of the boroughs of Colchester and Maldon, the county remained firmly Conservative despite a slight swing to the Liberals of about 3 per cent.¹ the traditional voting pattern and landowner leadership seems to have overcome opposition from the Alliance and the larger tenant farmers. Nationally, the Liberals won the general election, but the impact of the Alliance in the victory is unclear.²

The Farmers' Alliance effectively died in Essex as a political force after the 1880 election,³ and there were no further challenges to landowner leadership for over a quarter of a century. In Lancashire tenant farmers' organizations were formed in the 1890s as farmers increasingly became less confident in landowner leadership and representation, but no such associations were formed in Essex despite the immigration of Lancashire tenant farmers, at least one of whom had been a strong supporter of tenant farmer associations,⁴ perhaps due to greater landowner support for Essex tenants. Interestingly, and perhaps surprisingly, there were few cries for the return of protection either nationally or in Essex in the 1880s and 1890s, although some protectionist meetings were held.⁵ The Essex Chamber of Agriculture, supported by both tenants and landowners, seemed more interested in obtaining specific government measures to alleviate the lot of the farmer, and in the abolition of tithes.⁶ Perhaps the agricultural interest recognised the political inexpediency and

¹Anon., 'Essex Elections', pp.86-92

² W.Bear, 'The Revolt of the Counties', *Fortnightly Review*, xxvii, (May 1880), pp.720-5. Even Bear, who as secretary to the Alliance could not be objective, admitted that the Alliance's role was but one of several factors leading to the Liberal victory.

³The Essex branch of the Farmers' Alliance continued to meet to discuss matters of interest to tenant farmers into the 1890s: on 15th March 1890, for example, it met to discuss the Tithe Bill, *Essex Standard*, 15.3.1890.

⁴A.Mutch, 'Farmers' Organizations and Agricultural Depression in Lancashire, 1890-1900', *Ag.H.R.*, xxxi, pt. 1, (1983), pp.26-36.

⁵e.g. in Romford, *Essex Standard*, 5.7.1879.

⁶*ibid.*, 16.4.1881.

futility of a campaign for protective tariffs. Although nationally there was some disquiet over inequalities in landownership, radicals demanding land redistribution received scant support in Essex. Agents from the English Land Restoration League toured the county in their red vans in 1891, 1896 and 1897, but seem neither to have generated much debate about landownership, nor to have mounted a serious challenge to landowners.¹

Early in the twentieth century, English landowners, including those in Essex, again faced organised political challenge to their leadership from some farmers, but again the challenge was limited, weak and ineffective. Discontent, caused by the limitations in the 1908 Agricultural Holdings Act and a growing feeling that the interests of landowner and tenant differed, led to the founding of the National Farmers Union, a pressure group to advance the ideas and protect the interests of tenant farmers.² A fund was set up to enable the Union to sponsor its own M.P.s and a 'lobbyist' was appointed to represent farmers' interests in the House of Commons.³ Several Essex farmers became members of the N.F.U., and an Essex branch was founded, but landowner support for tenants and, after 1908, increasing prosperity, meant that the N.F.U. and the discontent it represented was neither sufficient nor widespread to pose serious challenge to the traditional landowner dominance in Essex before 1914.

The political influence of landowners was also diluted by the creation of county councils in 1888 and parish councils in 1894,⁴ but the demise of landowner influence

¹F.E.Green, *A History of the Agricultural Labourer, 1870-1920*, (1920), pp.97-98; English Land restoration League, Special Report, *Among the Labourers with the Red Vans*, 1898, (1898).

²Mingay, *The Gentry*, pp.66-67; Horn, *Changing Countryside*, p.186.

³Horn, *Changing Countryside*, p.186.

⁴Orwin and Whetham, *British Agriculture*, p.293, for example, state, "Here was another whittling away of landlord power".

here was far less evident than at Westminster, and although landowners had to share political power, they did not lose it entirely. The newly elected bodies took over many of the administrative powers previously held by Justices of the Peace, thereby advancing the principles of democracy and accountability, but initially, the powers lost in their capacity as magistrates were regained by some landowners becoming county councillors.¹ As the traditional leaders of rural society, and with time and means to be unpaid councillors, some stood for election, and many were elected to the county council in 1889 and 1894, and landowners dominated as aldermen.²

In time, however, the landlords' influence lessened. Lists of aldermen and councillors published between 1896 and 1911 show that increasingly landowners had to share their traditional powers with tenant farmers and with non-agriculturalists. Among the 26 aldermen holding office in 1910 were seven farmers, together with businessmen, brewers and merchants, whilst of 27 councillors listed in Gaskill and Press' book of Essex Leaders in 1906 only four were landed gentry.³ Of the remaining 23 councillors, most were businessmen, bankers, and commercial men and four were tenant farmers.⁴ None of the mayors or ex-mayors listed had been large landowners.

Gaskill and Press' book, which aimed to give readers a 'pen picture' of some 78 'leaders' of Essex in 1906, clearly showed a decline in the importance of landed men

¹The continuity of landowner and magistrate control has been investigated by several historians: J.P.D.Dunbabin, 'Expectations of the New County Councils and their Realization', *H.J.*, viii, no.3, (1965), pp.353-379; L.J.Sharpe, 'Elected Representatives in Local Government', *British Journal of Sociology*, xiii, (1962), pp.189-209; Kingsbury, 'Landed Interests', pp.367-381.

² Kingsbury, 'Landed Interests', p. 376; Dunbabin, 'Expectations', p.373. Dunbabin notes that 17 of the 21 aldermen elected in 1889 were magistrates, but only 25 of the 65 councillors, *ibid.*, pp.378-379.

³Essex County Council, *County of Essex Manual, 1910-11*, (Chelmsford, 1910), pp.34-35; Gaskill and Press, *Essex Leaders*. The 27 are a sample of about 30 per cent of Essex councilors, chosen by the authors for their "importance".

⁴*ibid.*

in Essex county political and social life as only 25 per cent of those selected for inclusion were landowners. Although the selection is inherently subjective, and two resident landowners of large estates are omitted, the book is indicative of the popular attitude towards landowners' position in Edwardian Essex society. Indeed, at one point the authors claimed that "nowadays the captain of industry has replaced the feudal lord".¹ Another significant entry is that on charitable donations where it was claimed that commercial men who had settled in Essex had become the more important benefactors of local charities.² It was not, of course, unusual in Essex for established landed families to be joined or supplanted in society by the 'nouveaux riche',³ but late Victorian and Edwardian England saw an intensification of this process, although rich newcomers were no longer so likely to invest their capital in agriculture owing to diminishing returns.

Despite their diminished presence among Essex M.P.s and, to a lesser extent, in county politics, there were other areas where landowner influence remained strong. Although there had been an increase in the number of businessmen on the Bench, as late as 1912 landowners accounted for the majority of Essex magistrates,⁴ and they continued to provide Essex Yeomanry officers,⁵ whilst the impact of parish councils on landowner power was negligible. Not only were the powers of such councils very limited, but few people showed interest in them.⁶ Above all, at the most local level Essex landlords remained able to withstand most challenges to their authority even

¹Gaskill and Press, *Essex Leaders*, entry on Reuben Hunt.

²*ibid.*

³Examples include the Benyons who had made money in the East India Company; the Westerns of Felix Hall who had been London grocers, Neave at Dagnams near Romford who had been the Governor of the Bank of England, Baker at Orsett who had been a London rope maker.

⁴Kelly, *Directory of Essex*, (1912). A mere 18 were farmers.

⁵*ibid.*

⁶Brown, *Meagre Harvest*, p.224.

down to 1914. They still presided at local societies and village fetes, and gave encouragement to such societies,¹ and most landowners continued to help maintain the physical fabric of villages on their estates, and they remained important local benefactors. Whitmore, for example, was active in repairing and building cottages at Orsett,² whilst John Wilkes, owner of a 4,500 acre estate at Elmdon, subscribed in 1895 to many groups including the local choir and bellringers, the village coal and cricket clubs, the local hospital, three local schools and the local agricultural society.³ Furthermore, the regard in which farmers and villagers held the traditional landowners remained extremely durable. Again, an example is provided by Wilkes who, after 1905, let his mansion to the wealthy Sir James Bailey and lived at Elmdonbury farm on the estate. Sir James, a Deputy Lieutenant of the county and an active magistrate, built a reading room, organized regular fetes, and was a generous local benefactor, yet evidence cited by Jean Robin shows that local people still regarded Wilkes rather than Bailey as the true leader of that community.⁴

Naturally, declining incomes had some impact on landowner lifestyle. As discussed above,⁵ many Essex landowners had taken out mortgages on parts of their estates by the mid 1870s. When prices, land values and rents were rising it was comparatively easy to service these debts, but values in the depression severely reduced the margin between the mortgage and the asset value of the land, making the former dangerously large in relation to the value of the property on which they were secured. Furthermore, falling rentals made it increasingly difficult to service debts, whilst

¹Whitmore, for example, revived the Orsett and District Cottage Garden and Agricultural Society in 1895, L.Thompson, *The Orsett Show*, (1956), p.18.

²Collins, *Orsett Estate*, pp.36, 91.

³E.R.O., D/DU 508/3.

⁴Cited in Horn, *Changing Countryside*, p.47; E.R.O., Lofts Hall MSS., D/DU 508/5, cash account.

⁵See above chapter 2.

interest payments took a larger proportion of income.¹ Reduced land values on the Orsett estate, for example, meant that in 1886 the £201,000 debt represented 94 per cent of the estate's asset value, whilst 85 per cent of the annual net rental was devoted to servicing the debts.² Similarly on the Barrett-Lennard estates mortgage debts represented over 90 per cent of the asset value of the English properties by the late 1880s.³ These mortgages were secured on the Essex estate at Belhus and far exceeded the value of that property. To raise money to pay off some of the debts and to service the rest, the Barrett-Lennards sold their Suffolk and Irish estates together with their London house.⁴ Landowners faced further financial problems when death duties became chargeable on land in 1894. Mortgage charges and death duties may well have played a part in leading to the bankruptcy of two large Essex landowners, Honeywood in 1895 and Majendie in 1912.⁵

Few Essex landowners seem to have been able to augment their estate finances from City incomes or similar sources, although those who did have extensive non-agricultural investments must have found such income invaluable. Lord Petre, for example, had invested £75,900 in stocks and shares,⁶ which at 3 per cent or 3.5 per cent would have given an annual income equal to at least 18 per cent of farm rental in the 1850s and 15 per cent in the 1890s. Likewise, E. Irving (who acquired the

¹For a full discussion on mortgages and their effect on landowner indebtedness in the period see Canadine, 'Aristocratic Indebtedness', pp.624-650.

²E.R.O., Whitmore MSS., Drivers' report, p.10.

³Calculated from E.R.O., Barrett-Lennard MSS., D/DL C68, letter from Charles Wood to Thomas Barrett-Lennard, 27.4.1877; Whitehall Securities Corporation Ltd., Thames Land Company MSS., conveyance no.19.

⁴Oral evidence from the late Sir Richard Barrett-Lennard; E.R.O., Barrett-Lennard MSS., D/DL C68, Correspondence; *Grays and Tilbury Gazette*, Obituary, 25th January 1919. The Essex estate was finally sold (excepting a small acreage) in 1923 after the death of the third baronet, death duties having been paid in both 1919 and 1923.

⁵Shrimpton, 'Landed Society', pp.62-63; *Essex Weekly News*, 8.3.1912.

⁶E.R.O., Petre MSS., D/DP E51/8, finances.

Bonnell estate) had about £20,000 invested in shares and mortgages which regularly produced about £750 a year. In 1913 he earned £1,728-5-6d. from his portfolio whereas net rents gave him a mere £738-4-4 $\frac{1}{2}$ d.¹ A few Essex landowners took an active interest in industry and commerce: Thomas Barrett-Lennard became chairman of the Essex and Suffolk Insurance Company and Ruggles-Brise became a director of Ind Coope and Company, the Romford brewers,² but such moves were not typical and few Essex landlords were sufficiently important to be invited to become directors of leading London firms. Although ground rents from urban properties sustained the Benyons and Maryon-Wilsons, income from collieries assisted the Waldegraves,³ and Francis Whitmore married the rich daughter of a cotton magnate,⁴ the vast majority of Essex owners relied almost exclusively on income from land. Most Essex landowners whose wills have survived seem to have had some stocks, shares or consols, but in the main income from these sources was not high, and, despite falling returns from estate income, there is little evidence of Essex owners increasingly investing in consols or other non-estate investments in the late nineteenth century.⁵

Declining incomes from rents necessitated some 'housekeeping' economies particularly as the costs of living for the gentry - wages, stabling, subscriptions, clubs, clothing, entertaining, hunting and other sport, mortgages, mansion repairs, etc. - fell far less than Essex rents. The growing ability of the 'nouveaux riche' to indulge in expenditure of this kind probably helped maintain their cost. The absence of diaries or similar sources for individual owners prevents detailed analysis of the impact of

¹E.R.O., D/DHn A8. The portfolio included overseas as well as domestic shares.

²Gaskill and Press, *Essex Leaders*.

³G.L.R.O., E/BVR/191, 192, Haymarket rentals, E/BVR/359-399; Thompson, *Landed Society*, p.131; E.R.O., D/DWg E28; Collins, *Orsett Estate*, p.36. The Benyon's urban rents in Hackney did not fall in the 1880s and 1890s but remained fairly constant at c. £12,400 p.a.

⁴I wish to thank Dr. E.J.T.Collins for this information.

⁵c/f Thompson, *Landed Society*, p.308.

diminishing income in landowner lifestyle in Essex, but several surviving sources suggest that many landowners were forced to live more simply. Some made reductions in their establishments: Lord Carlingford, for example, dispensed with the services of two boys by curtailing flower growing in his gardens,¹ whilst Sir George Pechell reduced his stable establishment to one horse and a boy, and gave notice to his coachman and house servant in 1876.² Another example may be found at Orsett where in 1883 on the advice of a firm of solicitors, the establishment was cut to save on wages and on heating costs.³ Whereas in 1883 Orsett Hall had 18 servants (wages £779) of whom three looked after game and four worked in the stables, by 1886 Whitmore had only one game keeper and one groom and by the early twentieth century there were only eight servants at the hall and no groundsmen. Further reductions were made between 1904 and 1908.⁴

It is not easy to establish the impact of the depression on landowners' sport, but that it had some influence seems beyond doubt. There is clear evidence of some landowners reducing their sporting commitments: Lord Carlingford ceased preserving game in 1879, and although Francis Whitmore later spent on coppices (above) his father, Thomas, had earlier reduced game keeping staff to a minimum (as described above) in 1883, and sold off most of the horses at Orsett Hall. Quarter Sessions records suggest that poaching was no longer tackled with as much enthusiasm as it had been in the 'golden age', and early Lancastrian immigrant farmers noticed with

¹E.R.O., Waldegrave MSS., D/DWg E28, letter 8.8.1879.

²E.R.O., Oxley-Parker MSS., D/DOp B123/179, letter from George Pechell, 25.8.1876.

³Whitmore MSS., "Suggestions as to reducing expenditure at Orsett Hall", report, 1883, now in E.R.O.

⁴*ibid.*; *idem.*, Whitmore MSS., Orsett Hall: Servants Wages Book, now in E.R.O. He also installed a small range for the servants to use when the hall was 'unoccupied' to save on fuel. Age changes in families (necessitating different numbers of servants), absences at census time and use of non-resident servants made an analysis of Census enumerators' books to estimate reductions in the number of servants in Essex landowner households generally impossible.

approval the comparative laxity with which game laws were enforced in Essex.¹ Essex landowners, it seems, were becoming more interested in attracting and keeping good tenants than in sport.

Even so, hunting and shooting remained important elements of landowner life. Leases show that most Essex landowners continued to reserve sport to themselves (rabbits and hares excepted), shooting remained popular on larger estates, most landowners continued to attend the local hunts and the hunt balls, and throughout the 'depression' years five Essex hunts and one stag hunt continued to meet regularly.² Indeed, despite reducing staffing and implementing strict parsimony in the house, Whitmore spent heavily in planting coppices to increase the stock of game at Orsett.³

There were several other ways in which landowners curtailed their personal expenditure in the depression years. Thomas Whitmore reduced the number of his charitable donations, his club memberships from nine to three,⁴ and, like Sir Thomas Barrett-Lennard, sold his London house.⁵ Sir Thomas also tried to cut expenses at Belhus by spending more time at his smaller Brighton house, and he sold paintings and furniture to raise money.⁶ Other landowners sought to reduce the annual charges

¹E.L.Smith, *Go East for a Farm*, (Oxford, 1932), p.34. This may also explain the almost total absence of surviving complaints about game preservation from tenants.

²High 'bags' were recorded in the 1880s at the Audley End estate. Ruggles Brise, *Shooting Reminiscences in Essex and Elsewhere*, (Chelmsford, 1934), p.8. Hunt membership cost £700 p.a., *idem.*, *Hunting Notes*, pp.14, 18.

³Collins, *Orsett estate*, p.34.

⁴E.R.O., Whitmore MSS., list of standing orders of T.C.D.Whitmore, now in E.R.O.

⁵E.R.O., Whitmore MSS., correspondence between T.C.D. Whitmore and his son, 1901, now in E.R.O.; Oral evidence from the late Sir Richard Barrett-Lennard. In his letter of 1901 Whitmore wrote that the London house was "far too much to draw out of the estate for only a few months."

⁶Oral evidence from the late Sir Richard Barrett-Lennard; E.R.O., Barrett-Lennard MSS., D/DL C68, letter from Thomas Barrett-Lennard to his son Thomas, 29.8.1905.

on the estate by paying off family portions and jointures where possible,¹ whilst Wilkes, as mentioned above, let his mansion and moved to a modest estate farm.² For many Essex landowners a simpler lifestyle and closer attention to expenditure was sufficient to enable survival in changed circumstances, with little loss of power or status at local level and only a slight loss at county level. Naturally, the impact of falling rentals on landowner lifestyle obviously varied with the means of each landowner. A few were ruined, but Essex evidence suggests that most landowners managed to maintain at least some semblance of their former lifestyle up to the First World War.

6. Conclusions

There has been much debate over the appropriateness of the term 'agricultural depression' to describe the period covered in this chapter,³ but there can be no doubt this it is an appropriate epithet for the experience of Essex landowners. Farm rents, the main determinant of landowner income, fell heavily in both absolute and real terms, and by far more than the fall in most other counties. Furthermore "recovery" did little to increase landowner incomes as Essex rents and land values remained depressed for a further decade after prices began their recovery in 1896. Obviously not all Essex owners suffered to the same degree; rent reductions varied with soil type, market accessibility, and investment. Even so, most Essex landowners suffered seriously reduced incomes.

Many of the attacks made on late nineteenth century Essex and English landowners by historians have been addressed in this chapter. It has been argued that most Essex landlords were successful estate managers despite facing challenging circumstances.

¹At Orsett, Whitmore persuaded his aunts to 'sink' their 'portions' in the estate, Collins, *Orsett Estate*, p.40.

²See above p.192.

³See above chapter 1.

The long period of depression and limited recovery saw few changes in the pattern of Essex landownership, but many changes in landowner attitude. First, depression encouraged landlords to resume their traditional role of protecting tenants against hard times. When prices fell most landowners assisted hard-pressed tenants by allowing rent arrears to mount, by granting temporary rent abatements, and, later, by reducing rents. Increasingly, they took responsibility for payment of tithes and general maintenance which had been the tenants' responsibility in the 'golden age'. The size of the rent adjustment alone refutes Offer's claim that "rents held firm",¹ at least for Essex, and shows that landowners shouldered much of the burden of the depression.

As well as a readiness to protect tenants – not least in order to keep farms tenanted – there were other respects in which Essex landowners proved to be more enterprising during the depression than in the 'golden age'. The evidence marshalled here contradicts the image of landowner neglect prominent in textbook accounts. Lease clauses were operated even more flexibly than in the 'golden age', and, far from having a moratorium on farm investment as prices and rents fell, many Essex landowners invested relatively heavily in the 1870s and 1880s, and some continued this into the 1890s. The nature of some of this investment might be challenged because until the mid 1880s much was to encourage arable-livestock farming and conversion to pasture was only significant from the mid 1880s. This might suggest that some landowners were slow to appreciate that price trends would persist, but as chapter 5 will show, market signals were not clear on this point, whilst Essex soils and climate continued to favour mixed farming.² Naturally, not all Essex owners could invest heavily given falling incomes, but whilst investment was more restrained after 1885, in general it remained both sufficient and appropriate.³ In short,

¹ Offer, *First World War*, p.117.

² See chapter 5 below.

³ See chapter 5 below

landowner leadership and investment at this time did, on balance, represent a positive response to both market signals and traditional responsibilities.

The tenants' need for assistance and the landowners' willing response helped to preserve the Essex landlords' social and political leadership to a surprising degree. Naturally, reduced incomes, agriculture's diminishing importance in the British economy and the growing number of commercial men with money and political influence, had an impact on their status, and in every respect their influence in 1914 was less than it had been in 1870. This was particularly evident in the reduced presence of landowners among Essex M.P.s. Yet there were few signs of such significant changes at the more local level. Challenges to landowner leadership from the Farmers' Alliance and, later, from the National Farmers' Union were brushed aside, and in local politics, on the bench, as Yeomanry officers, local benefactors, and in local social and sporting activities Essex landowners continued to enjoy their traditional influence into the twentieth century.

In sum, Essex landowners as a whole were at least competent, and many were successful estate managers. They showed traditional social responsibility, responded to changing markets and enabled the necessary structural change to take place on their farms by supporting and attracting tenants, adjusting leases and prudent investment. There remain, however, questions over their performance as entrepreneurs. As mentioned above and explored further in chapter 5, few were innovative and few engaged in promoting radical alternatives to the traditional answers to depression. In particular, few supported innovation in marketing or education, or encouraged high yield alternatives to cereals and milk. Likewise, they failed to lobby Parliament to provide support for their tenants. Chapter 5 examines the role and performance of tenants in this same period.

Chapter 5

Farming in the great depression

1. Introduction

The response of Essex farmers to the great agricultural depression raises several issues, the most important being the quality of their management. Contemporaries considered that Essex farmers were conservative and short-sighted, that they failed to change their farming systems when it was necessary to do so, and compared them unfavourably with allegedly innovative migrant farmers.¹ Historians have made similar charges. O'Grada notes Kindleberger's allegations of farmer failure and delay in switching resources to "safer and more promising openings" such as horticulture and dairying, and writes that "the list of seeming error and inertia is impressive", if anecdotal.² Similarly, the *Agrarian History of England and Wales* notes that for many historians depression "was the measure of failure of the arable sector to reshape its production function and switch to alternative products", with farmers looking "nostalgically to the past", trying "to ride out the storm", making "only minor changes in their cropping", and failing to move sufficiently to milk, fruit, vegetable and hay production.³

Allied to these issues is the question of how seriously Essex farmers were affected by depression: was the general experience no worse than some discomfort and restructuring or did farmers' incomes fall as far as the more pessimistic accounts suggest? Other issues include the extent and nature of changes in marketing and

¹See for example *Preston Guardian*, 19.9.1896; 24.10.1896.

²O'Grada, 'British Agriculture', pp.146, 147, 150. Similar accusations come from Fletcher, 'Great Depression', pp.417-432, reprinted in Perry, *British Agriculture*, pp.30-55. This can be seen in the light of the debate on late Victorian entrepreneurship where British entrepreneurs are believed to have failed, being less dynamic, flexible and efficient than overseas competitors. See, for example, D.N.Aldcroft and H.W.Richardson, *The British Economy, 1870-1939*, (1969).

³Collins (ed.), *Agrarian History*, pp.143, 148, 805.

tenant investment, the effect of depression on tenant turnover, and how far the Scots and Lancastrian incomers deserve their reputation for enterprise. For the most part the sources used in this chapter are those whose nature was discussed in chapter 3. Particularly useful have been the parish agricultural returns, local Essex newspapers, reports to the Royal Commissions investigating agricultural problems in the early 1880s and again in the mid 1890s, and, of course, Essex estate accounts.

2. Reduction of Labour Costs

Chapter 4 showed that Essex landowners shouldered much of the burden of falling prices in the last quarter of the nineteenth century, by increased investment, and, more, by rent remissions and reductions. Farmers also were forced to respond to falling prices. Their responses were not uniform, but most sought to reduce losses by cutting costs and amending land use appropriately. As Essex agricultural wages declined at a slower rate than most prices, labour costs could only be reduced by cutting the labour force, involving either reducing the acreage under labour intensive cereal and root crops, or using more machinery. As mechanisation involved large expenditure not recoverable for several years, most Essex farmers adopted the first strategy to a greater or lesser extent. Compared to the 'golden age', repair work was reduced, cultivations and weeding, ditch cleaning, fence repair and ploughing were often done less thoroughly, and some fields were converted to pasture.¹ By the early twentieth century, one commentator noted that in north west Essex, "Corn areas had declined, good stubbles had reverted to grass. Cottages and farm buildings were decayed, fences neglected,"² and Hall, wrote of the county as a whole, "the land is

¹As early as 1878 it was reported that "winter field work is not prosecuted now as it used to be. Nothing is done except what is absolutely necessary", *Essex Standard*, 21.12.78, and in 1881, Druce commented that "the state of agriculture in this county appears to have retrograded as regards the cleanliness and the condition of the land", *Richmond Commission, Report, Druce*, (B.P.P., 1881 xvi), p.366.

²Mays, *Reuben's Corner*, pp.14-15.

cheaply worked and is not so clean as formerly".¹ This was low farming.

The result of such a policy in saving on labour can be seen on the unusually fine soils of Doggets farm in south-east Essex. The farm remained primarily an arable farm, yet savings in the use of labour enabled the annual labour bill to be cut from £1,481 in 1882/83 to £ 915 in 1901/02, a fall of 38 per cent.² Another example may be found on a farm on the Tabor estate where 19 regular labourers were employed in the 1870s together with between three and six casual labourers depending on the season. By 1887 the total number had been reduced to 18, two being casual labourers, and from 1895 only 13 labourers were employed.³ There is no evidence that the acreage declined. A similar but smaller decline in the workforce took place on both Great Henny farm in north Essex and Lorkins farm at Orsett in south Essex.⁴ The impact of this practice on the mean number of agricultural labourers per hundred acres of farmed land in Essex can be estimated using the census returns and agricultural returns. Whereas there were 5.5 labourers per hundred acres in 1871, this had fallen to 4.6 in 1881, 4.2 in 1891, and 3.8 in 1901. Essex farmers, therefore, were able to make substantial savings in their labour bill.

3. Reduction of the Cereal Acreage

Another obvious response of Essex farmers to price depression was to reduce wheat acreage with its high cultivation costs. Textbooks suggest that the dramatic decline in the price of wheat (it fell from 58s.8d. a quarter in 1873 to 22s.10d. a quarter in 1894)

¹Hall, *Pilgrimage*, p. 68; See also similar comments in the *Report on the Decline in the Agricultural Population of Great Britain, 1881-1906*, (B.P.P., 1906 xcvi), pp.32, 39.

²R.U.L., South Essex Farms MSS., ESS 18/2 series, Doggets farm.

³E.R.O., Tabor MSS., D/DTa A53-76, farm accounts.

⁴E.R.O., D/DU 441/53-76, miscellaneous farm accounts, Great Henny; R.U.L., Whitmore MSS., ESS P250/11, accounts of Lorkins farm.

made most farms unprofitable for wheat growing,¹ resulting in a wholesale reduction of cereal cropping² whereby the English wheat acreage contracted from occupying 14 per cent of farmed land in 1872 to 6.6 per cent in 1901. Such books also accuse those who continued wheat growing of managerial failure.³

Such accusations are unfounded. Naturally the price fall made poorer farms unprofitable for wheat growing in Essex and as a result, both the acreage and relative importance of wheat declined. Whereas over 23 per cent of Essex farm land had been under wheat in 1870, a mere 13.85 per cent was under that crop in 1901, a fall of over 40 per cent.⁴ Historians who accuse Essex farmers of inertia ignore this positive and substantial response to falling wheat prices. Indeed, evidence of finely tuned response to the depression is provided by the close correlation of price and wheat acreage change. A calculation of the coefficient gives a value of 0.89, suggesting rapid and appropriate response by farmers to changes in wheat prices.⁵ Furthermore, rather than a mindless flight from wheat, Essex evidence shows a more varied experience and more subtle response to falling prices, with some parishes witnessing

¹In 1881, one north Essex farmer mentioned that wheat prices had to be above 48 shillings a quarter for a reasonable profit, yet after 1877 wheat prices never rose to this figure, *Richmond Commission, Gardiner*, (B.P.P., 1881 xvii), Q.Q.53350. The point was also made by Jefferies' (non-Essex) farmer who commented on his wheat, "It is a fine crop; but just think what it cost me to produce it, and bear in mind the price that I shall get for it." R.Jefferies, *Hodge and his Masters*, (1979 ed.), 'A Man of Progress', p.34, and by farmer J.Todhunter of Manor Farm, Parndon whose gloomy prognosis in 1886 suggested that he could "really see nothing for it except the poor clay lands be abandoned", Parker, *Oxley Parker Papers*, p.153. Cereal farmers were also harmed by low wheat yields on the heavier lands in the late 1870s, *Richmond Commission, Report, Druce*, (B.P.P., 1881 xvi), pp.366-367.

²See for example, Orwin, *English farming*, p.76, who suggests that cereal farmers who "carried on along the old lines" went bankrupt or were forced to leave farming; Crouzet, *Victorian Economy*, pp.170-171; Mathias, *Industrial Nation*, p.345; Collins (ed.), *Agrarian History*, pp.148, 167.

³ e.g. Fletcher, 'Great Depression', p.431.

⁴See table 17 and also chart 20.

⁵ See chart 21.

a reduction of some 67 per cent whilst others hardly experienced a reduction at all.¹ Essex farmers only reduced wheat acreage on poorer soils. Table 17 shows that the reduction in the proportion of wheat grown was greatest on the marshes (soil type 9) and on the London clay soils (soil type 2) where cultivation costs and low prices made much of these soils submarginal for wheat production, particularly in wet weather. Accordingly, farmers reduced the percentage of their land under wheat from over 24 per cent to 11 per cent between 1870 and 1901, and that under all corn and pulse crops from 48.5 per cent to 26.3 per cent. Reductions were also made in wheat acreage on light and alluvial soils (types 7, 8 and 9) which lacked the nutritious value of heavier soils and were liable to 'burn'² in times of drought, pushing them towards being submarginal for wheat growing as prices fell.

Historians, have both ignored the reduction in wheat acreage and suggested the extent of reduction was insufficient and illustrative of managerial failure. In fact, despite low prices, wheat remained a paying crop on many farms, especially those on the richer soils of Essex (the boulder clays, heavy and medium soils), particularly as farm rents – a major cost to the farmer – fell, as farmers reduced labour costs, and as demand for straw for thatching and furniture making remained buoyant.³ In such areas, farmers reduced their wheat acreage on the poorer lands, but continued to grow it profitably (even if the profit was lower than in the 'golden age') on the more suitable soils. One north Essex farmer, who claimed in the 1870s that wheat would become unprofitable when its price fell below 40s. a quarter, was able to make a

¹This is studied in detail in Hunt and Pam, 'Managerial Failure'.

²Becomes hot and dries out.

³ The introduction of the reaper-binder also reduced production costs at this time, O'Grada, 'British Agriculture', p.156.

profit with wheat priced at 28s. a quarter after rent reductions and the transference of tithe payment to the landowner.¹ His farm had unusually fertile soil, but the experience of more typical farmers was similar. In 1891, for example, Primrose McConnell, perhaps the best known Scottish migrant farmer in Essex, found

Table 17

Wheat cropping in Essex, 1870-1911

(Acreage of wheat per 100 acres of agricultural land)

Soil Type	1870	1881	1891	1901	1911
Essex	23.09	18.81	17.34	13.85	17.26
1 Metropolitan London Clay	12.14	10.20	9.21	7.99	8.57
2 London Clay	24.02	18.53	15.77	11.00	12.24
3 Boulder Clay	24.37	20.91	20.00	17.60	25.43
4 Heavy Soils [not clays]	22.12	18.89	19.48	15.33	21.07
5 Medium Soils	24.63	21.91	20.07	17.93	19.90
6 Tendring Hundred Medium Soils	24.22	20.36	17.42	15.71	19.30
7 Light Soils	23.17	18.21	16.13	14.47	16.26
8 Thames Valley Light Soils	18.18	15.72	12.73	11.84	11.30
9 Alluvial Soils	26.30	17.78	16.30	9.91	11.04

Source: Derived from parish summaries of the agricultural returns. P.R.O. MAF 68 series. [The returns for 1871 no longer exist].

that wheat cultivation was profitable at 30s. a quarter, Edward Strutt grew wheat profitably at Terling,² and Christopher Matthews made a profit even in the early

¹Danvers, 'Agriculture in Essex', pp.259-260.

² McConnell, 'Experiences', p.320; Gavin, *Ninety Years*, pp.85, 86, 88, 100. Taking a sample of 3,140 acres in Terling, 28 per cent of Strutt's land was under wheat, 14 per cent under barley, and 8 per cent under oats in 1914, and between 1886 and 1897 one third to one half of his farm sales was from wheat.

1890s, the nadir of wheat prices, growing three wheat crops in his nine year rotation on his Rodings farm, and claiming in 1894 that although a mere 15 per cent of his farm was under grass, he had no desire to change as his system stood the test well.¹

Essex was not alone in finding wheat profitable on suitable soils: Coppock found in the Chilterns that easy to cultivate and moderately fertile land remained in arable, with little modification in its cropping, and in Scotland one farmer made a profit growing wheat even at a price of only 26s. a quarter on good soils.² Moreover, on good soils in other counties wheat acreage did not decline as much as in Essex: in Lincolnshire, for example, the corn crop fell by a mere 11 per cent between 1875 and 1900.³ National figures show that wheat was not abandoned wholesale but as a gradual response to the changing economic situation. Indeed wheat still occupied one and a half million acres at the end of the depression.

The fact that wheat could still be profitably grown on suitable soils, even in the 1890s, is generally omitted from textbooks. Perry and Fletcher, for example, both

Strutt claimed in 1901 that wheat paid better than any other crop in Essex, Rider Haggard, *Rural England*, p.463. When assessing the value of the wheat crop, both grain prices and the price of wheat straw have to be considered.

¹*Agricultural Depression, Matthews*, (B.P.P., 1896 xvii), QQ.61634-39, 61466 - 68. The late J.A. Matthews (grandson of Christopher) told me in 1978 of a family meeting during the mid 1890s to decide whether to move from cereals to meat. The farm's soils, its geographical position and expected product prices encouraged the family to remain committed to wheat, providing an example of a rational decision being made by an Essex farmer to continue wheat production.

²J.T.Coppock, 'Agricultural Change in the Chilterns, 1875-1900', in Perry, *British Agriculture*, pp.74-75; Hutcheson, 'The Past and Future of Scottish Agriculture', quoted in P.J.Perry, *British Farming in the Great Depression 1870-1914*, (1974), p.125. For Norfolk, a recent commentator has written, "on good wheatlands ... the impact of the depression was also not as serious as many believed", A.Howkins, *Reshaping Rural England : A Social History, 1850 - 1925*, (1991), p.144, and Thirsk found evidence of the four course system continuing on the chalk wolds of Lincoln and in Yorkshire, Thirsk, *Alternative Agriculture*, p.153.

³J.H.Brown, 'Agriculture in Lincolnshire During the Great Depression', Unpublished Ph.D. Thesis, Manchester University, (1978), chapter 6. Indeed, in Lincoln in the mid 1880s, there was an increase in the wheat acreage 2,800 acres, Anon., 'The Agricultural Returns for the Year 1885', *J.R.S.S.*, xlix, (1886), p.148.

suggest that continued wheat growing was, in the main, due to reluctance to change.¹ Essex evidence refutes such claims: whilst the wheat acreage, was reduced considerably on the London clays and light soils, the reduction was quite modest on the boulder clays and medium loams where wheat could still be grown profitably.² With the advent of better prices in the early twentieth century, most areas in Essex showed a slight increase in wheat cropping, but it was the better wheat soils which showed the greater increase.³ It is apparent that Essex farmers made rational decisions based in response both to changing prices and to the soil on their farms.⁴ Accusations of managerial failure based upon continued wheat cultivation are misconstrued.

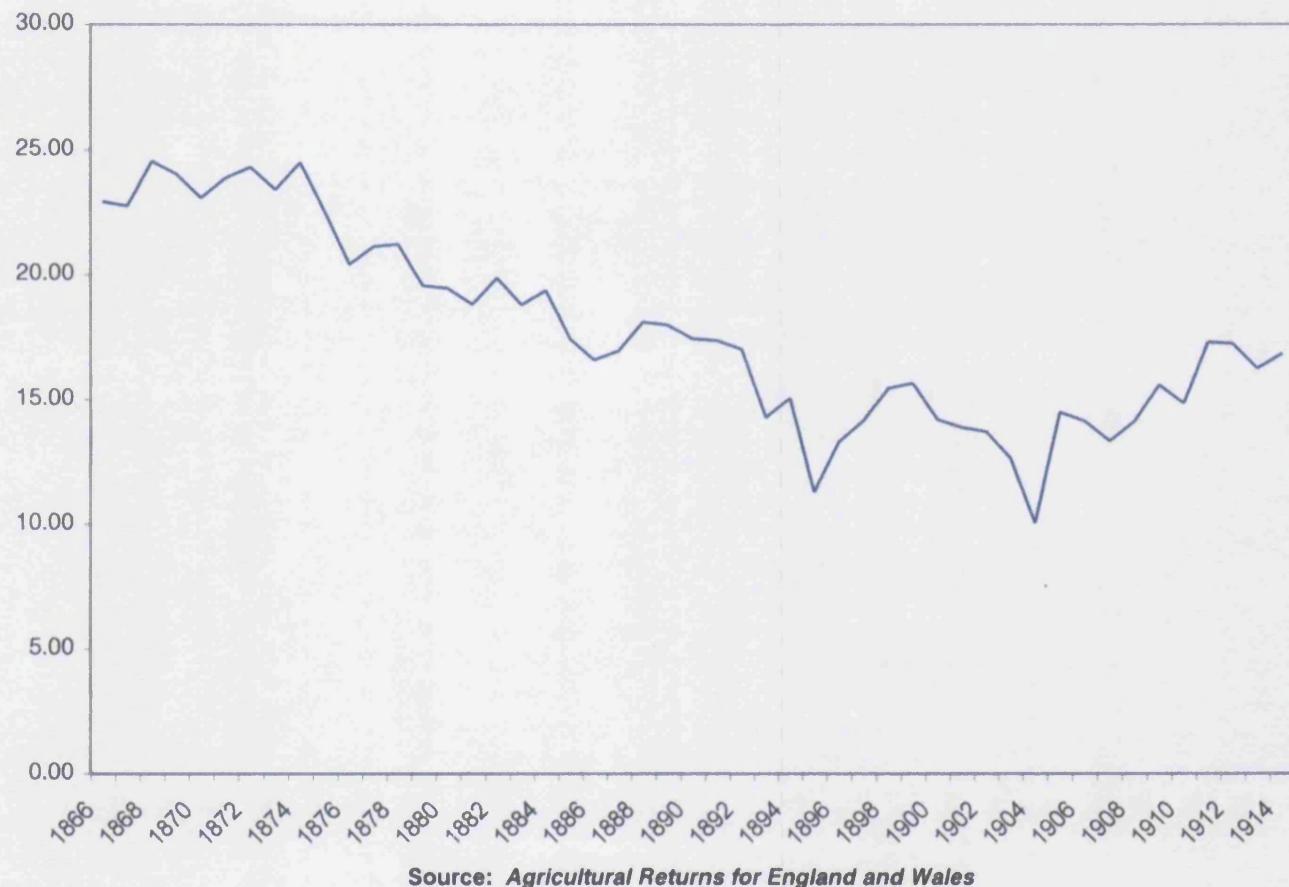
¹Perry, *British Farming*, pp.65, 123-125, Fletcher, 'Great Depression', p.431.

² See table 17. Contemporaries noted the differential response occasioned by soil type. Writing in 1908, one commentator noted that farming in south and north Essex had altered substantially during the 'depression' with "a good deal of land laid down to grass", whereas practices in north east and in west Essex had changed little, *Report of the Departmental Committee Appointed by the Board of Agriculture and Fisheries on Agricultural Education in England and Wales, Evidence of T. Goodchild, Chair of the Agricultural Sub-Committee of the Essex Education Committee*, (B.P.P., 1908 xxi), QQ.1074-1075. In similar vein, Strutt noted after the war that the "better class arable lands ... will probably be always well cultivated" whereas "the poor heavy three horse lands are already doomed to either grass or perhaps lucerne", *R.C. to Inquire into the Economic Prospects of the Agricultural Industry in Great Britain, Evidence of E. Strutt*, (B.P.P., 1919 viii), QQ.1330-1340.

³By 1911, for example, wheat occupied a greater percentage of farm land on the Essex boulder clays than it had in 1870.

⁴See Hunt and Pam, 'Managerial Failure'.

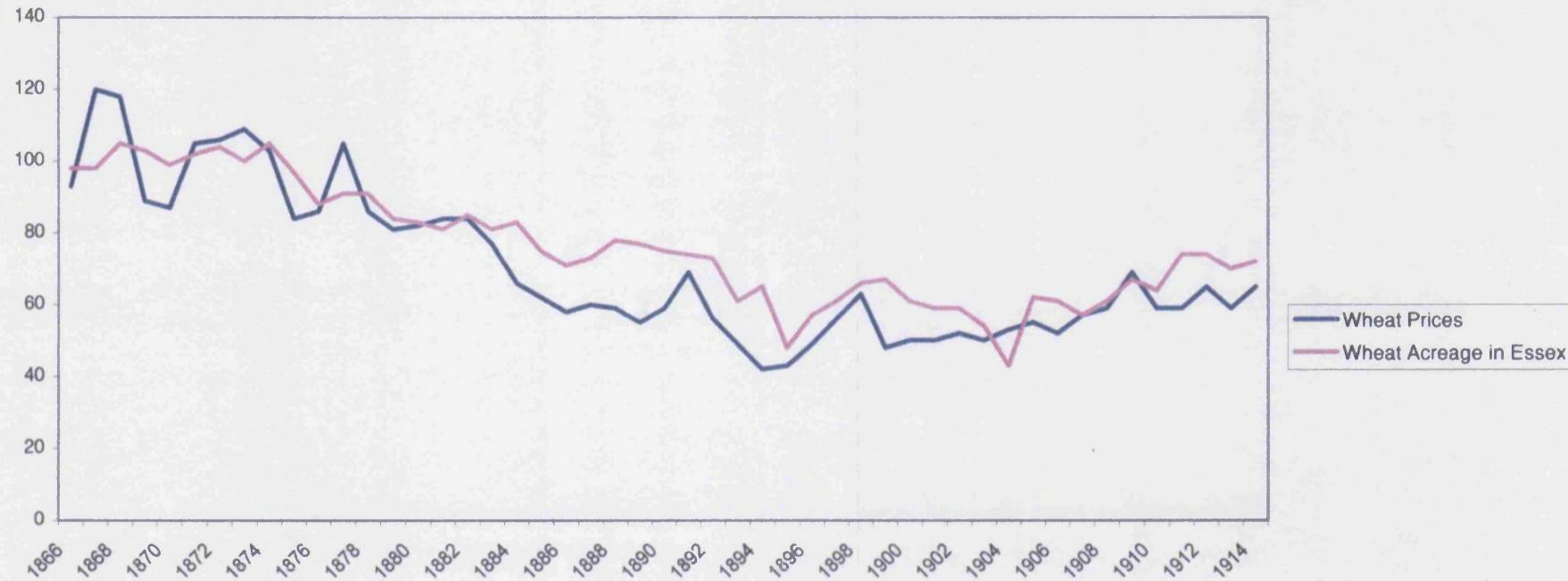
Chart 20
Essex farms: percentage of total farm land under wheat, 1866 - 1914



Source: *Agricultural Returns for England and Wales*

Chart 21

The Percentage of Essex Farmland Under Wheat Plotted Against Wheat Prices, 1866 - 1914
[Average 1866-76 + 100]



Source: Mitchell and Deane, *Abstract*, p. 489; *Annual Agricultural Statistics*

Falling wheat prices also encouraged some Essex farmers to substitute barley and oats for wheat as their prices fell less, and their cultivation required less labour.¹ Cropping at Great Henny provides an example of this. Whereas in the 'Golden Age' wheat had commonly taken more acres than barley, after 1873/74 the position was reversed, and in some years the acreage planted with barley was a fifth or more larger than that planted with wheat.² Naturally, such a switch (common on the light soils of Lincolnshire)³ was less possible on the heaviest London clay soils of Essex. As a result, by 1901 on the Essex boulder clays the proportion of the land under barley was similar to that under wheat, and on the heavy loams was even greater than that under wheat. On the medium soils too, barley remained an important crop, but on the London clays and lighter soils it had declined sharply.⁴ When wheat prices rose from 1909, many Essex farmers began to substitute wheat for barley. With the long term contraction of the cereal acreage came an associated reduction in root crops, and some farmers substituted mangold for turnips and swedes owing to its demand by London horse and cowkeepers,⁵ and others replaced roots with more cheaply cultivated lucerne and other 'artificial grasses'. The reordering of cereal priorities where the soil permitted and other crop changes are further indications that Essex farmers reacted positively to market forces within the limits imposed upon them by geography.

¹Between 1872 and 1878 barley prices rose from 37s. 4d. to 40s. 2d., the peak being 44s. 11d. in 1874. Wheat prices, however, fell from 57s. 0d. to 46s. 5d. despite slight recovery in prices in 1873 and 1877. The switch from wheat to barley on suitable soils was noted as early as 1875 by one commentator: F.Clifford, 'The Labour Bill in Farming'. *J.R.A.S.E.*, 2nd Ser., xi, (1875), p.71. Chart 22 illustrates comparative movement of prices of the major grains.

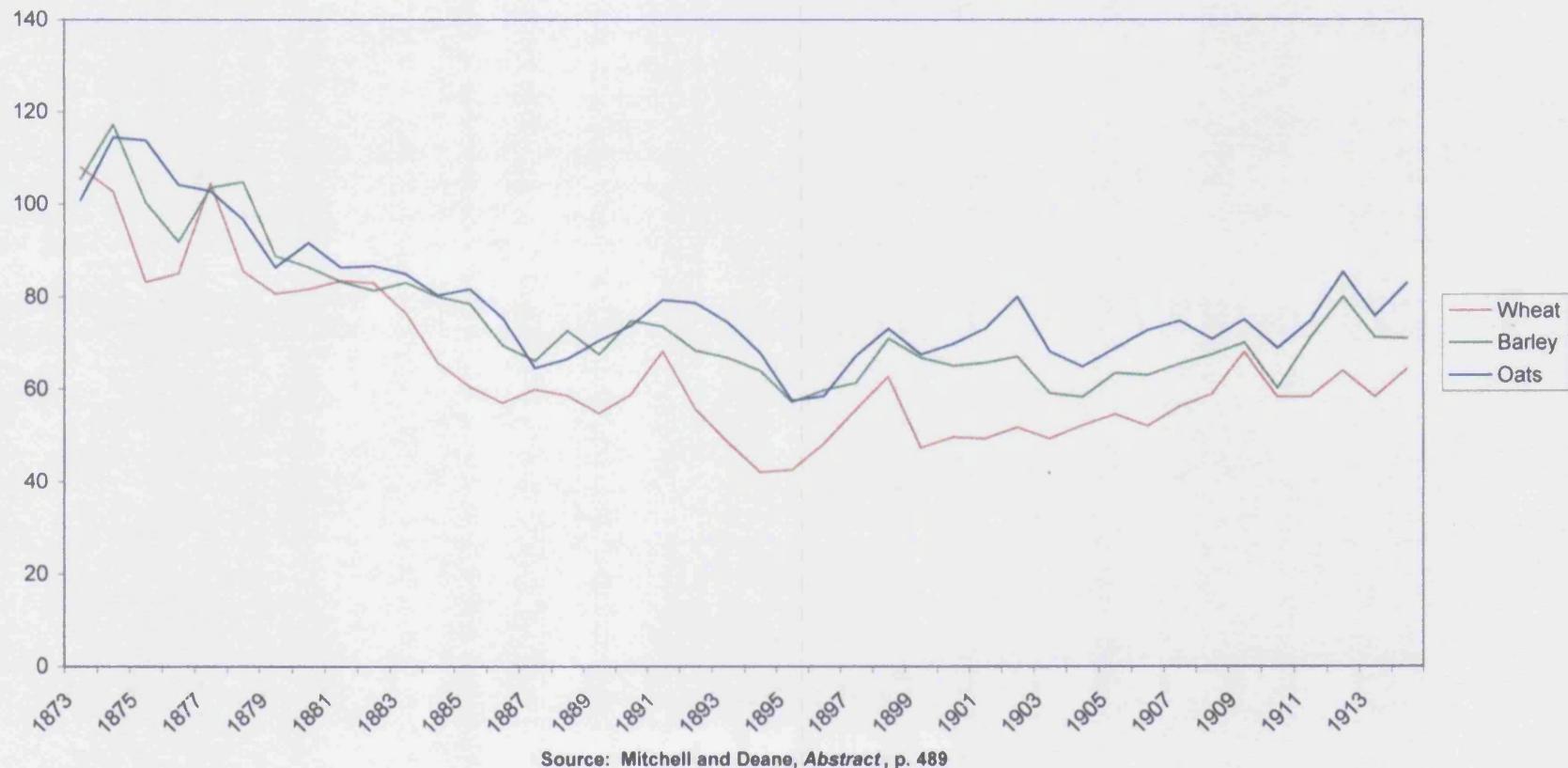
²E.R.O., D/DU 441/66-78, Miscellaneous Farm Accounts, Great Henny.

³Brown, 'Lincolnshire', chapter 6.

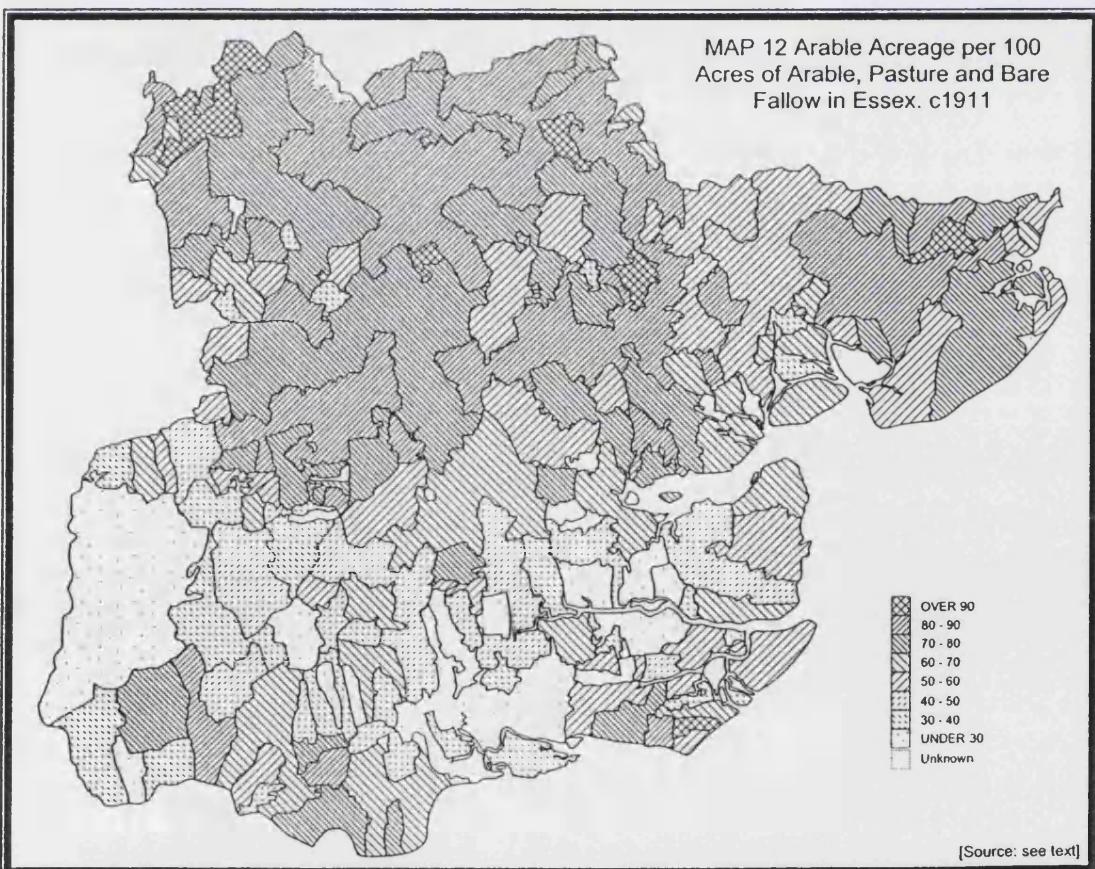
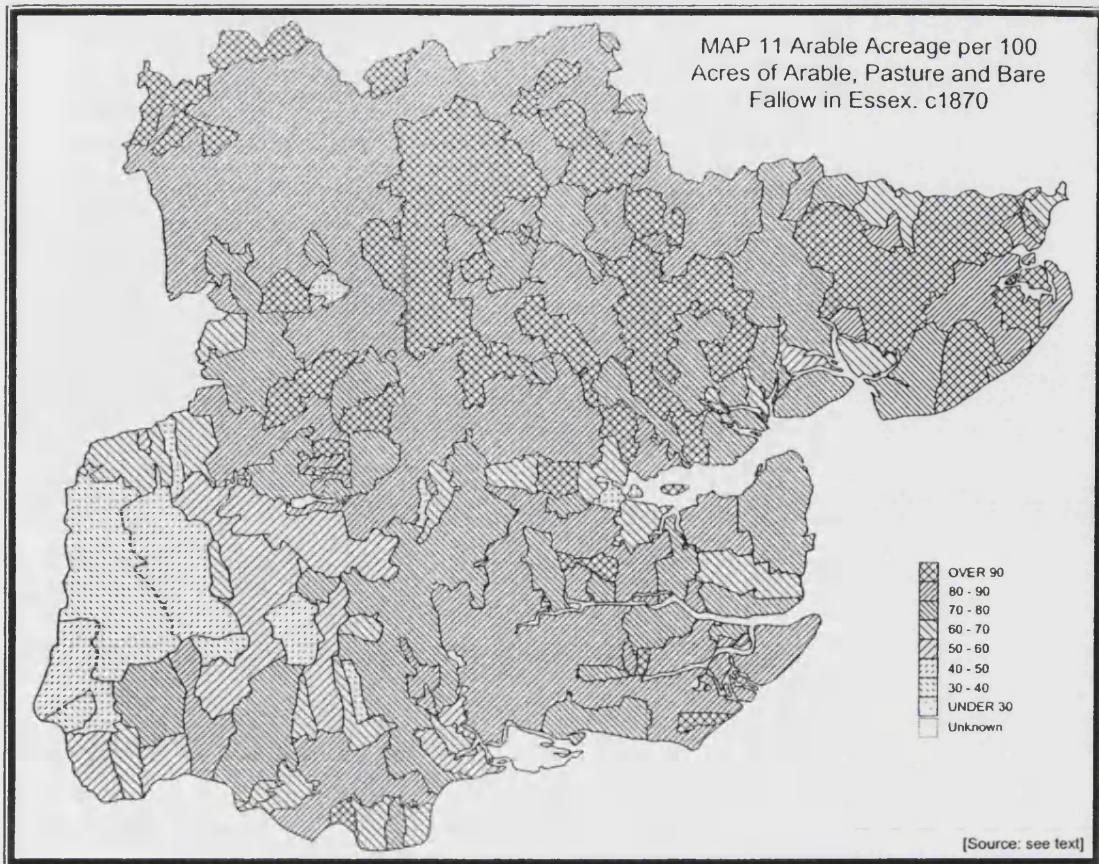
⁴Calculated from the Parish Summaries of the Agricultural Returns (1901), PRO, MAF 68/1893.

⁵*Agricultural Depression*, Matthews, (B.P.P., 1896 xvii), QQ.61474.

Chart 22
Price of main grains, 1873 - 1914
[Ave. 1865-74=100]



Source: Mitchell and Deane, *Abstract*, p. 489



Despite the fact that on some soils wheat farming did still pay, diminishing acreage and falling prices meant that the overall value of cereal output on Essex farms fell sharply. Using Ojala's methods (see appendix) the gross farm output in Essex for 1870/72, 1893/95, 1900/02 and 1910/12 has been calculated. Cereals as a whole fell from providing 54.51 per cent of Essex gross farm output in 1870/72 to 30.58 per cent in 1893/95, rose slightly to 32.68 per cent in 1900/02, but then fell again to 27.71 per cent in 1910/12. The value of gross output of oats increased in this period, but that of pulses, roots and other green crops declined (although it was not possible to calculate changes in vegetable output), and wheat fell from providing 35.81 per cent of gross agricultural output in 1870/72 to a mere 14.01 per cent in 1893/95, and this rose only marginally in the following decade and a half. Overall, the decline in the value of gross output of wheat between 1870/72 and 1893/95 at fixed 1910/12 prices was almost 53.25 per cent, although the decade and a half after 1893/95 witnessed a rise of 14.52 per cent. The decline in cereals as a whole was 43.64 per cent in the first period with a further decline of 2.24 per cent in the last period, this last reflecting, in the main, a fall in barley output.

4. Increase in Grass Acreage

A common reaction to falling cereal prices on the less remunerative Essex soils was to increase grass acreage (chart 23) at the expense of arable, sometimes by extending the acreage under temporary grass: the heavier Essex clays, less suited for permanent pasture, took good three or four year leys which could be extended if arable prices remained low. Leys, favoured by Scottish tenants (to whose entry into Essex much of the increase in ley farming was due), cleaned and rested the land whilst also providing cattle fodder without high labour costs. Temporary grass was generally cut for hay. The small increase in temporary grass between 1881 and 1901, shown in table 18, underestimates actual growth since leys of over two years were generally

returned as permanent rather than rotational grass.¹

Despite these extensions of grass leys in Essex, the expansion of permanent pasture was larger. Conversion to high quality permanent pasture could be expensive,² but running costs were much lower than arable. The increase of permanent pasture, common to all soil types,³ was most marked on the London clays (soil type 2), where

Table 18

Temporary grass in Essex, 1870-1911

(Acreage per 100 acres of agricultural land)

Soil Type	1870	1881	1891	1901	1911
Essex	10.06	10.02	11.61	12.84	8.00
1	7.55	3.54	2.96	3.62	2.68
2	10.31	9.92	11.41	11.24	5.06
3	10.94	10.21	15.65	17.14	9.85
4	13.08	12.26	13.49	16.33	12.13
5	11.49	10.73	12.78	16.03	9.96
6	14.30	13.36	17.52	15.72	14.19
7	11.92	12.66	14.05	12.65	10.13
8	5.60	5.16	8.35	4.81	3.74
9	6.03	10.12	9.21	13.90	7.69

Source and key to soil types: see table 17

it increased from occupying 25.1 per cent of the farmland in 1870 to 54.6 per cent in 1911, and on the light soils (soil type 7). Examples are numerous. Francis Whitmore converted arable to pasture on a number of his heavy clay farms in the 1890s

¹Pringle himself found this to be the case in Bedfordshire, Coppock, 'Agricultural Change', p.63.

²Costs included preparation, seed, fertilizers and new building. The Duke of Bedford estimated the cost in the early 1890s to be about £15 an acre, *ibid.*, p.65.

³It even took place to some extent on the Fitzjohn estate's home farm on boulder clay soils in the Rodings, E.R.O., Maryon-Wilson MSS., D/DMw E6, E12, inventory of Fitzjohns home farm, 1876, 1905.

including North Benfleet Hall farm (540 acres) where the arable was reduced from 465 acres in 1888 to 148 acres in 1895.¹ Lord Petre laid fields to grass on several of his farms at this time, and at Barling Hall farm the land agent advised the owners to grass most of the marshland.² Again, Essex was typical of many English counties. In the Chilterns, Coppock found that heavy arable fields were laid down to grass, and even on soils unsuited to grass pastoral farming was adopted through temporary grass leys³. National figures show an increase of over 23 per cent in the grass acreage between 1873 and 1896.

Table 19

Permanent grass in Essex, 1870-1911

(Acreage per 100 acres of agricultural land)

<u>Soil Type</u>	<u>1870</u>	<u>1881</u>	<u>1891</u>	<u>1901</u>	<u>1911</u>
Essex	20.58	24.28	28.68	33.75	36.17
1	61.05	67.61	72.89	74.49	73.68
2	25.10	28.24	35.69	49.70	54.60
3	12.20	14.29	15.76	17.82	19.94
4	10.94	11.35	13.44	15.71	17.35
5	12.39	15.89	18.50	19.66	23.03
6	12.08	13.67	18.41	20.64	20.36
7	14.96	20.93	25.43	33.38	33.61
8	25.09	29.92	37.16	34.45	40.26
9	26.54	30.20	40.34	50.26	55.85

Source and key to soil types: see table 17.

Many Essex farmers converted fields to grass by allowing the poorer fields to become rough grazing. Commonly carried out without expensive preparation, such

¹R.U.L., Whitmore MSS., Letters and estate correspondence. ESS 17/3/89, farm account, North Benfleet Hall; 17/4/28, correspondence on in-hand Farms, North Benfleet.

²E.R.O., Petre MSS., D/DP E17, Report of F.J.Coverdale upon the agricultural depression as affecting the Thorndon estate, 1893, p. 15; C.C., E.C.E. MSS., file 49364.

³Coppock, 'Agricultural Change', pp.74-75.

conversion produced poor pastures,¹ and was done more to cut labour costs than to promote pastoral farming. The attitude of the Ecclesiastical Commissioners was typical. Finding arable cultivation unremunerative, they "laid down a considerable area of the worst of the ploughed land to grass and temporary grass leys, and should propose to lay down more . . . with a view to reduce expenses."² Changing the land use of fields which had become sub-marginal for cereals to rough pasture was an effective strategy to reduce costs. Such land sustained fewer animals per acre than traditional pasture, reduced overall farm output, but maximized output per man.

Contemporaries, who saw good farming as maximisation of output per acre, regarded low farming grassland as "abandoned" farm land. They were shocked by the descriptions of 'derelict' land in the reports of the *Richmond Commission*,³ by alarmist estimates of the acreage involved - the *Essex Weekly News* claimed that 38,000 areas had fallen out of cultivation in Essex by 1885,⁴ and by Pringle's map of south east Essex with its numerous black patches representing apparently abandoned fields,⁵ and failed to distinguish between truly abandoned land and low farming grassland. In fact, the total acreage of abandoned agricultural land was not great. Druce enumerated 5,021 acres as "derelict" by 1881, and even allowing for a possible rise during the 1880s,⁶ it is doubtful that abandoned land ever accounted for more than

¹Pringle claimed that little good grass had been laid between 1879 and 1893, *Agricultural Depression, Statement of R.H.Pringle Supplementary to his Report*, (B.P.P., 1894 xvi pt. 1), p.129.

²C.C., E.C.E. MSs., file 46754. Youngerson's conversion of arable to pasture in 1875 was also in part due to "the cost of labour", Fussell, 'Home Counties Farming', p.325.

³Druce wrote: "The state of agriculture was deplorable. Some land was altogether derelict and more was full of weeds and natural rough grasses upon which a few cattle were picking up a bare living." *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.31.

⁴Quoted in M.R.Innes, 'Chelmsford: A Geographical and Historical Survey of Factors Influencing Settlement at the Confluence of the Chelmer and Can', unpublished manuscript at E.R.O. based on University of London M.A. Thesis, p.359.

⁵*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), end paper.

⁶*Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), pp.3, 31; *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), pp.41–42, 48, *idem.*, *Statement, Pringle*, p.128.

one per cent of the county's farm land. Some contemporaries also misinterpreted evidence. When Arthur Pryor, a Widford landowner (near Chelmsford), claimed that 21,472 acres of land around Rettendon were untenanted,¹ it was believed that the land was derelict. An analysis of Pryor's figures shows that only 3,153 acres were uncultivated, the rest being farmed by landowners.

The Agricultural Returns and evidence to Commissions show that low farming grassland was relatively localised to east and south-east Essex, and, in particular, to London clay or alluvial soiled farms remote from railways. Assistant Commissioner Spencer noted the extent of this form of farming around Maldon in 1893 and quoted the land agent C.A.Parker as saying that a thousand acres were "out of cultivation" in this Union,² whilst Shaw Lefevre, the senior Commissioner on the 1894-97 *Royal Commission*, found several untenanted "abandoned" farms in the Dengie peninsula and along the south bank of the River Crouch.³ Even as late as 1907 the *Victoria County History* recorded that:

" in the region between Chelmsford, Maldon and the Blackwater in the north, and the Tilbury, Southend Railway in the south, [south east Essex] 42.6 per cent of the land is no longer tilled and is . . . producing a scanty, coarse herbage which can be used only for rough grazing".⁴

¹St. John's College, Cambridge MSS., SB1 20, Senior Bursar's diary, 1884-1891, cutting from the *Standard*, 22.7.1887 at front of diary. This apparently confirms M.B.Watt's claim to have looked southwards from Rettendon church to see "22,000 acres of vacant land." H.Watt, 'Changes in Agriculture in Thurrock, 1880-1965', *Panorama*, ix, (1965), p.23.

²*Labour, Report, Spencer*, (B.P.P., 1893-4 xxxv), pp. 75-76. He also wrote in these pages: "I drove through the greater part of it [the Union] and saw fields once arable but which have now ceased to grow any crop but thistles, . . . and other striking proofs of want of cultivation."

³*Agricultural Depression, Final Report*, (B.P.P., 1896 xvii), Appendix J, pp.611-614; in south east Essex (223,000 acres) just under 13 per cent was described as "out of cultivation" in 1893.

⁴MacNunn, 'Social and Economic History', p.339. The author did not differentiate between derelict land and poor grassland.

Historians and some contemporaries have seen the abandonment of arable in favour of low quality pasture as further evidence of failure by Essex farmers. Channing, for example, stated that the change in land use from high yielding arable to "ranches for cattle" was not "serious cultivation",¹ whilst more recently, Kindleberger has assumed that 'low farming' of this nature was not a deliberate move to suit market trends but an abandoning of fields by farmers who had no answer to falling cereal prices.² Yet on farms where cereal production had ceased to be profitable, where soils limited greater flexibility in land use, where lack of railways made dairying unattractive, and where costly conversion to quality permanent pasture would not pay, Essex farmers showed that it was possible to produce meat and hay with a minimal outlay of capital and labour, and as a result make some profit on difficult soils.

As touched on above, some Essex farmers who switched from arable to grass concentrated more on producing hay than grazing. Hay provided cheaper winter stock feed than roots or green crops, as labour and cultivation costs were comparatively low. Furthermore, metropolitan demand for hay was increasing, whilst after the initial outlay on laying to grass, it was cheaper to grow grass for hay than to buy and tend store cattle. Landowners encouraged hay production by lifting lease restrictions on 'off-sales', but high transport costs limited its extension to farms relatively close to railways or water transport.

Hay increased significantly in importance in Essex during the depression. Output rose by 36.8 per cent (at fixed 1910/12 prices) between 1870/72 and 1893/95, by 25.6

¹F.A.Channing, *The Truth About Agricultural Depression: An Economic Study of the Evidence of the Royal Commission*, (1897), p.4.

²He states "they simply let it 'tumble down' to grass", Kindleberger, *Economic Growth*, pp.242.

per cent between 1893/95 and 1900/02, and by a further 2.7 per cent between 1900/02 and 1910/12.¹ It was one of the very few crops on Essex farms to show both an absolute and relative increase in value during the depression years: whereas it had provided a mere 4.4 per cent of total Essex farm gross output in 1870/72 the figure stood at 9.4 per cent in 1893/95 and at 16.6 per cent in 1900/02. By 1910/12 hay still provided 14.4 per cent of total Essex agricultural output. On farms close to London hay production had always been popular, taking almost fifty per cent of the farmed land in 1870,² but after the 1870s hay production became common in other areas, particularly on the heavy clays and light soils where the retreat from cereals was greatest.³ Farms in south Essex in particular found hay a profitable crop: one intending tenant advised the Orsett estate agent in 1894 that he would rather be restricted in selling corn off the premises than in selling hay or straw.⁴ The accounts of Fanton Hall farm show the importance of the hay crop there: in 1893 a large proportion of the poorer arable was laid to grass, and hay sales in that year totalled £422-0-1d. whilst wheat sales (which had higher production costs) raised only £487-4-0d.⁵ Table 20 shows the increase in grass grown for hay on Essex farms. The slight drop in grass grown for hay the 1890s was a direct response to the drought of 1893, and the further drop in the 1901-11 decade reflected a shift to grazing and cereals as livestock and cereal prices rose.

¹These figures and those which follow are calculated using Ojala's methods. For full details of methodology, see appendix.

² See table 20

³ See table 20. It was in this area that Rider Haggard met a Waltham Abbey farmer in 1901-2 who, "like the great majority of his neighbours ... was a hay farmer", selling his hay at Whitechapel in London, Rider Haggard, *Rural England*, p.479.

⁴R.U.L., Whitmore MSS., ESS 17/1/12, letter from Baker to Kemp-Smith, 6.5.1894.

⁵C.C., E.C.E. MSS., file 46754. Lorkins (Orsett), provides a typical south Essex London clay farm. A mixed farm selling fatstock and cereals until the late 1880s, wheat sales typically produced £130-6s.-6d. p.a. and barley £239-1s.-6d (figures from 1885). By the mid 1890s Lorkins was a grazing farm. No wheat was sold and only £75 of barley, less stock was carried than in the 1880s and hay had become the major cash crop. Much of the grassland was let as keep to other farmers. As a result labour costs were reduced considerably and profits enabled this holding to be expanded (89 acres in 1880; 229 acres in 1905). R.U.L., Whitmore MSS., ESS P250, nos. 1-6, Lorkins farm day books; Collins, 'Great Agricultural Depression', pp.15-17.

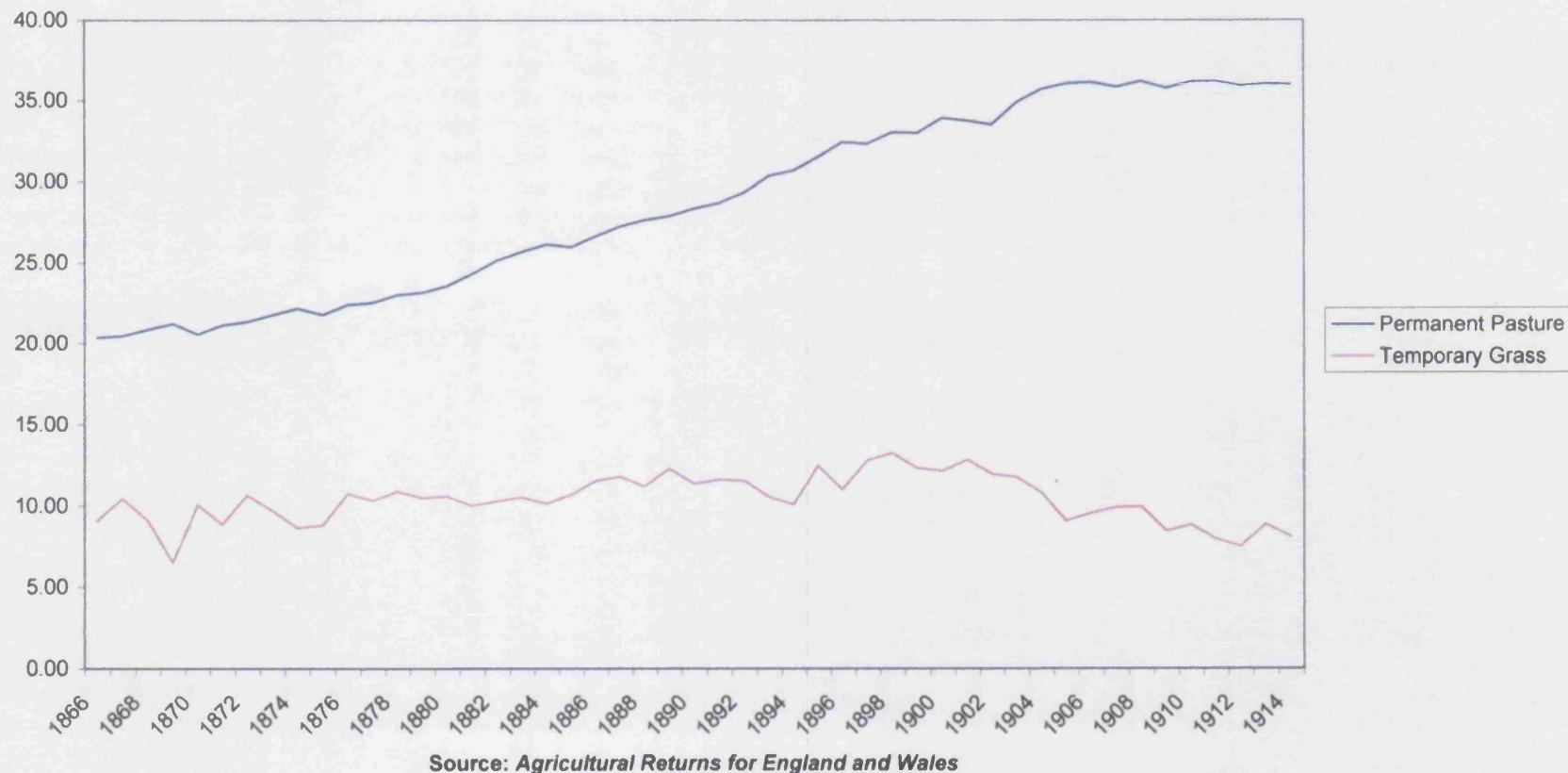
Table 20**Grass cut for hay in Essex, 1870-1911**

(Acreage per 100 acres of agricultural land)

<u>Soil Type</u>	<u>1870</u>	<u>1881</u>	<u>1891</u>	<u>1901</u>	<u>1911</u>
Essex	15.50	-	20.78	20.49	-
1	48.68	-	56.02	56.36	48.39
2	15.40	-	24.87	23.64	22.98
3	13.55	-	18.07	19.70	15.36
4	12.00	-	14.76	14.11	12.85
5	12.08	-	16.81	17.41	15.60
6	16.41	-	18.71	17.89	18.29
7	14.54	-	22.14	17.54	17.96
8	7.79	-	13.09	7.37	9.59
9	7.37	-	18.25	14.15	19.14

Source and key to soil types: see table 17. Figures are not available for 1881, nor is a county figure for 1911.

Chart 23
Essex farms: percentage of total farmland under grass, 1866 - 1914



Source: Agricultural Returns for England and Wales

5. Increase in Livestock

Despite the continuous profitability of corn production in parts of Essex, and the low quality of much new pasture, there was a modest but steady increase in beef livestock farming during the depression. Pringle claimed that "only those who kept a considerable head of stock or took to cow keeping appear to have withstood the consequences of bad seasons and low prices, and still continue in occupation", whilst losses on 'in hand' farms at Orsett in 1886 were attributed in part to there being "not a single head of stock on any of the farms."¹ In the 1870s increased cattle numbers were noticeable on the medium and lighter soils where farmers were able to intensify the meat element in their mixed farming system to compensate for poor returns on grain. Thereafter there was a steady growth in cattle numbers, temporarily reversed (except on clay soils) in the 1890s when hay and straw prices were high. Many Essex farmers continued to combine livestock fattening with arable farming, feeding cheap corn to stall fed bullocks,² but others took up low intensive livestock farming on clays where cereals were unattractive and lack of railways made dairying impossible.³

The extent to which increasing dependence upon livestock and low intensive grazing was driven by the need to cut labour costs is evident Essex livestock figures: despite the increase in permanent grass, there was a distinctly less proportionate increase in the head of livestock per hundred acres of farm land in the county as a whole between 1881 and 1901. On the London clays, the parish agricultural returns show an increase in head of beef and milk livestock of some 77 per cent between 1870 and 1901, but a

¹*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), pp.48; E.R.O., Whitmore MSS., Drivers' report, p.7.

²e.g. Matthews, *Agricultural Depression, Matthews*, (B.P.P., 1896 xvii), Q.61474.

³P.R.O., MAF 66 series, parish agricultural statistics.

98 per cent increase in permanent pasture,¹ and the numbers of sheep, lambs and pigs declined over these three decades. Lorkins farm, on the clays of north Orsett, noted above as an example of a farm once “almost entirely arable” which became “a grazing farm”, increased its acreage substantially, but “carried a smaller head of stock than when it had been under the plough”.² Here, as on other farms, reduced dependence on cereals and increased dependence on meat occurred alongside a reduction in livestock numbers.³

There was, therefore, no wholesale shift to cattle farming in Essex: indeed the importance of beef output relative to other farm products increased only gradually. Beef output (at fixed 1910/12 prices) rose by 9.2 per cent between 1870/72 and 1893/95, by 5.8 per cent between 1893/95 and 1900/02, and by 9.1 per cent 1900/02 to 1910/12,⁴ and whereas in 1870/72 beef cattle accounted for 3.8 per cent of Essex gross agricultural output, by 1893/95 it accounted for 6.8 per cent, and 6.0 per cent by 1910/12.⁵ The slow increase in beef cattle numbers was in part due to farmers' difficulty in obtaining capital to build up herds quickly, but more to the need to reduce labour costs on farms where a retreat from cereals was required, which discouraged labour intensive stall-fed beef production and encouraged rough grazing that sustained fewer cattle. Furthermore, since cattle fattening did not always pay,

¹Even allowing 4 per cent for abandoned land (a very high figure), this still gives 94 per cent, and cattle stocking on the London clays was low before 1870.

² Collins, *Orsett Estate*, p.72.

³ Indeed, the increase in cattle in the county may have been exaggerated by the agricultural returns being taken in June, as there was probably a shift away from expensive over-wintering to cheaper summer pasturing of cattle.

⁴ Appendix 1.

⁵*ibid.*

farmers and landlords tended to be cautious about putting up new buildings or expensive conversion to pasture, even though the cost of feeding stuffs had fallen by between one third and one half.¹ After the 1870s, few Essex farmers wished to risk further heavy losses and instinctively opted for less intensive farming.²

Table 21

Beef cattle and calves in Essex, 1870-1911

(Number per 100 acres of agricultural land)

<u>Soil Type</u>	<u>1870</u>	<u>1881</u>	<u>1891</u>	<u>1901</u>	<u>1911</u>
Essex	5.34	6.55	6.68	6.44	7.18
1	10.33	10.52	9.87	6.15	9.54
2	5.13	5.57	5.98	7.04	7.65
3	3.87	4.81	4.80	6.61	6.93
4	2.27	2.71	4.17	4.03	4.17
5	4.26	7.67	5.64	5.60	8.17
6	5.20	8.45	7.08	5.88	6.53
7	2.94	4.36	4.78	4.39	5.70
8	10.76	18.22	9.45	8.00	10.73
9	6.62	10.94	9.99	9.89	9.14

Source and Key: As for table 17.

To increase turnover whilst employing less capital, Essex farmers increased their head of cattle aged under two years at the expense of older animals, and moved to earlier fattening and sale. Whereas 47 per cent of enumerated cattle (not including cows or heifers in calf) were aged under two years in 1870, this figure had risen to 60 per cent in 1891 and 67 per cent in 1911. Some of this was due to an expansion of

¹In general beef fattening was profitable as both Matthews and the Ecclesiastical Commissioners found. *Agricultural Depression, Matthews*, (B.P.P., 1896 xvii), QQ.61474, 61481; C.C., E.C.E. MSS., File 46754.

²Beef fattening became less attractive as fatstock prices fell at a faster rate than store prices: Besse suggested that whereas between 1876/80 and 1904/8 the former fell by 20-30 per cent, the latter fell by only 8-12 per cent, Perry, *British Farming*, p.48.

dairying, but this alone cannot have explained the size of the increase.¹ Such a change was common in other corn counties such as Lincoln.²

Table 22

Sheep and Lambs in Essex: 1870-1911

Number per 100 acres of agricultural land

Soil Type	1870	1881	1891	1901	1911
Essex	51.30	39.58	39.90	33.14	28.65
1	21.84	8.91	7.73	4.22	8.27
2	46.78	22.47	27.46	31.67	24.41
3	46.47	27.16	25.61	23.00	17.39
4	69.05	47.02	54.45	50.15	58.17
5	58.62	38.62	37.67	23.84	20.56
6	50.23	50.49	50.62	42.99	28.18
7	55.30	42.61	45.54	29.14	30.44
8	31.67	21.42	30.48	25.69	16.94
9	86.66	76.04	59.98	61.70	60.42

Source and key to soil types: see table 17.

There were six times as many sheep as cattle in Essex in 1870 (tables 21-23), and their value in terms of wool and meat gross output was almost twice that of beef cattle, yet only contributed a mere 7.55 per cent of the gross Essex farm output. With the exception of farms on loams, heavy non-clay soils and on marsh pastures, sheep numbers declined substantially in Essex after the early 1870s despite the increase in grass. Output of mutton, lamb and wool from Essex farms fell by about 19 per cent (at fixed 1910/12 prices) between 1870/72 and 1893/95, and by almost 39 per cent between 1870-72 and 1910-12.³ Official statistics may underestimate sheep numbers

¹Similarly the proportion of lambs enumerated in Essex flocks rose, although more modestly from 31 per cent to 41 per cent over the same period. *Agricultural Returns*, (B.P.P., 1870 lxviii, p.1; 1881 xciii table 2; 1890-1 xci, p.1; 1902 cxvi pt.1; 1912-13 cvi).

²Brown, 'Lincolnshire', chapter 7.

³Appendix 1.

as more farmers looking for quick, if small, returns sold fatstock young, sometimes before the midsummer figures were collected,¹ but such under-enumeration cannot account for much of the sizeable fall in Essex sheep numbers. The chief cause of the decline was low wool and mutton prices,² whose importance increased for sheep farmers as cheap fertilizers obviated the need for sheep to be kept for their dung and as cereal and root acreage was reduced. It is also likely that some farmers were reluctant to restock when disease ravaged their flocks between 1878 to 1883.

Pigs, being cheap to keep, were raised on most arable and some dairy farms. The county's pig population fluctuated but over the whole period from 1870 to 1912 averaged ten pigs per hundred farmed acres.³ Their contribution to Essex gross output was substantial, being over 12 per cent in 1870/72, 18 per cent in 1893/95, and 14.75 per cent in 1910-12, and between 1870-72 and 1910-12, the value of Essex pork and bacon output declined by a mere 11.7 per cent.⁴ It seems surprising that pig farming did not increase at this time as pigs gave a good return and were cheap to feed, particularly on dairy farms where some skim milk was generally available even when the farm was primarily producing milk for the market, yet pigs remained a 'side-line' for most farmers. This failure to expand pig farming, one of the few alternatives apparently missed by Essex farmers, was a national phenomenon.⁵

¹See above, chapter 3.

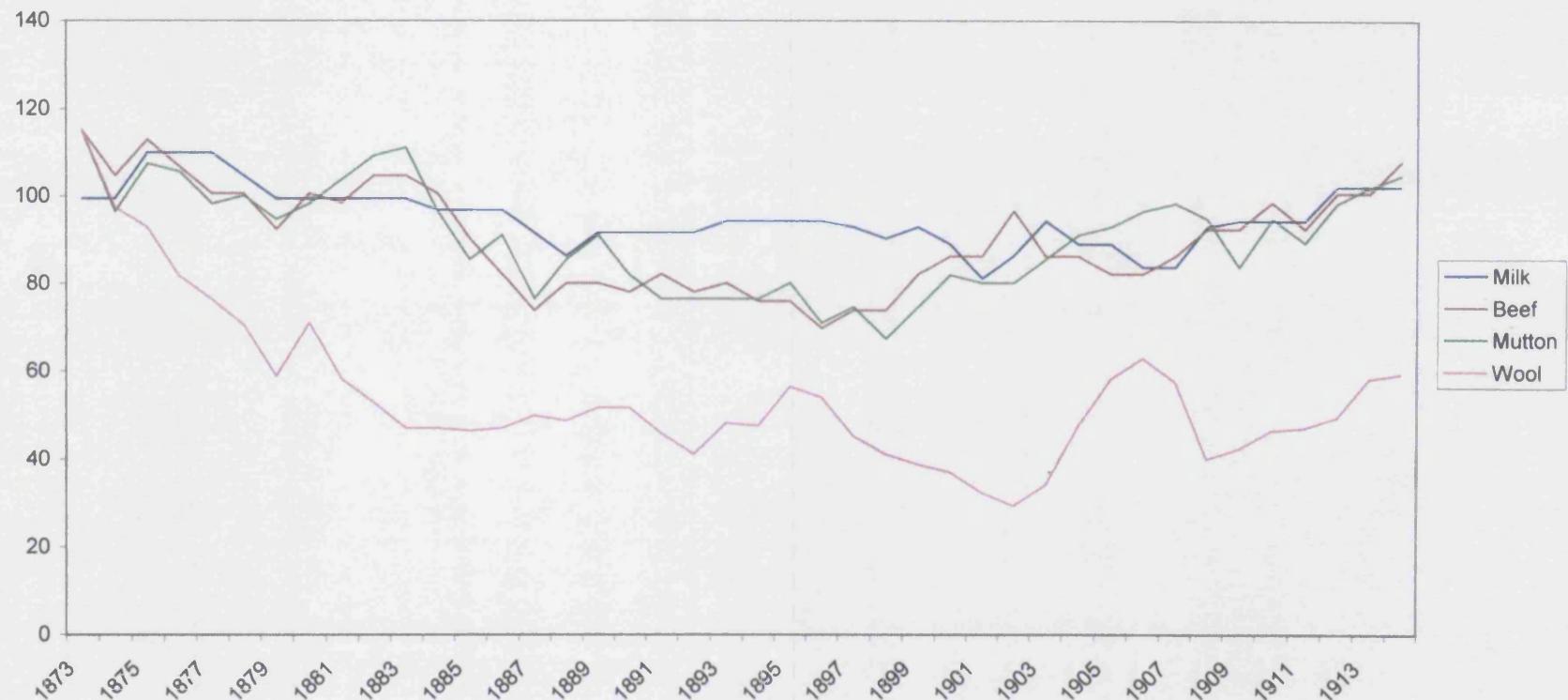
²Mutton prices remained buoyant until 1883 but then fell sharply to 1887. Wool prices fell very sharply from 1873 to 1885, and after a brief period of respite fell again in the early 1890s. Overall, wool prices fell (depending on quality) by 50 to 60 per cent.

³*Agricultural Returns*, 1870, (B.P.P., 1870 lxviii), p.363; 1872, (B.P.P., lxiii), p.675; 1901, (B.P.P., 1902 cxvi, pt 1), p.1; 1912, (B.P.P., 1912-13 cvi), p.1.

⁴ This was at fixed 1910-12 prices. See appendix 1.

⁵ Thirsk, *Alternative Agriculture*', p.196.

Chart 24
Price of milk, beef, mutton and wool, 1873 - 1914
[Ave. 1865-74=100]



Source: St. Bartholemew's Hospital MSS., Governors' Minutes, Ha/1/21-29;
Annual Agricultural Returns for England and Wales

Whereas sheep numbers fell, pig numbers remained relatively constant and the increase in beef cattle was steady and unspectacular, the increase in dairying in Essex during the depression was remarkable: by 1911, dairying was the major livestock enterprise in Essex.¹ In terms of value of gross output, Essex milk increased absolutely and relatively to other Essex farm products. Milk output produced £229,127 p.a. at current prices in 1870/72 (representing some 4.4 per cent of total Essex farm output). By 1893/95 it provided £401,256 (some 14.5 per cent of total farm output), by 1900/02 £408,448 (almost 13.6 per cent) and £641,164 (over 17.3 per cent) by 1910-12,² and whereas in 1870/72 milk had accounted for 15.8 per cent of gross livestock output from Essex farms, by 1893/95 it accounted for 29.8 per cent, by 1900/02 33.3 per cent and by 1910/12 40.2 per cent.³ Dairying developed on arable land as well as grassland farms in Essex, as indeed was the case in Wiltshire.⁴

From the figures above, it is quite clear that dairying became a very important aspect of Essex farming.⁵ Dairying was on the increase throughout Britain,⁶ of course, but the increase in milk output from parts of Essex was particularly high. Although never important on the more profitable cereal lands, nor in areas distant from railways, dairying increased substantially on farms close to London and along railway lines. The importance of railways as a factor in farmer's decisions to turn to dairying is

¹ Chart 25 shows the increase in the number of cows and heifers in milk or calf per 100 acres of crops, bare fallow and pasture in Essex between 1866 and 1914. Maps 13 and 14, based on statistics from the parish summaries of the agricultural returns show the numbers of cows and heifers per 100 acres of farmed land in Essex in 1870 and 1911 respectively, P.R.O., MAF 68/240, 68/2463. Maps 15 and 16 show the availability of rail transport in the county in 1870 and in 1911.

² Appendix 1.

³ Chart 26 shows the gross output of wheat and milk from Essex farms at certain years between 1870/72 and 1910/12, calculated using Ojala's method and 1910/12 fixed prices.

⁴ Thompson, 'Agriculture since 1870', pp.106-107.

⁵ J.P. Sheldon, *British Dairying*, (1908), pp.139-140.

⁶ Perry, *British Farming*, p.16, particularly notes the increase in dairying on the clays of the Weald and Leicestershire, as well as on lighter soils in Lancashire and Norfolk.

made clear by the later expansion of this branch of farming onto the clays of south and of south-east Essex as new railway lines reached farms hitherto under rough pasture. There was some increase in both dairy and non-dairy cattle until the mid 1880s, but after the arrival of the railways there was a sharp increase in the number of cows and heifers, but a decline in non-dairy cattle.¹ Significantly, the switch to dairying seems to have been more common on the larger Essex estates which could afford the costs of conversion.

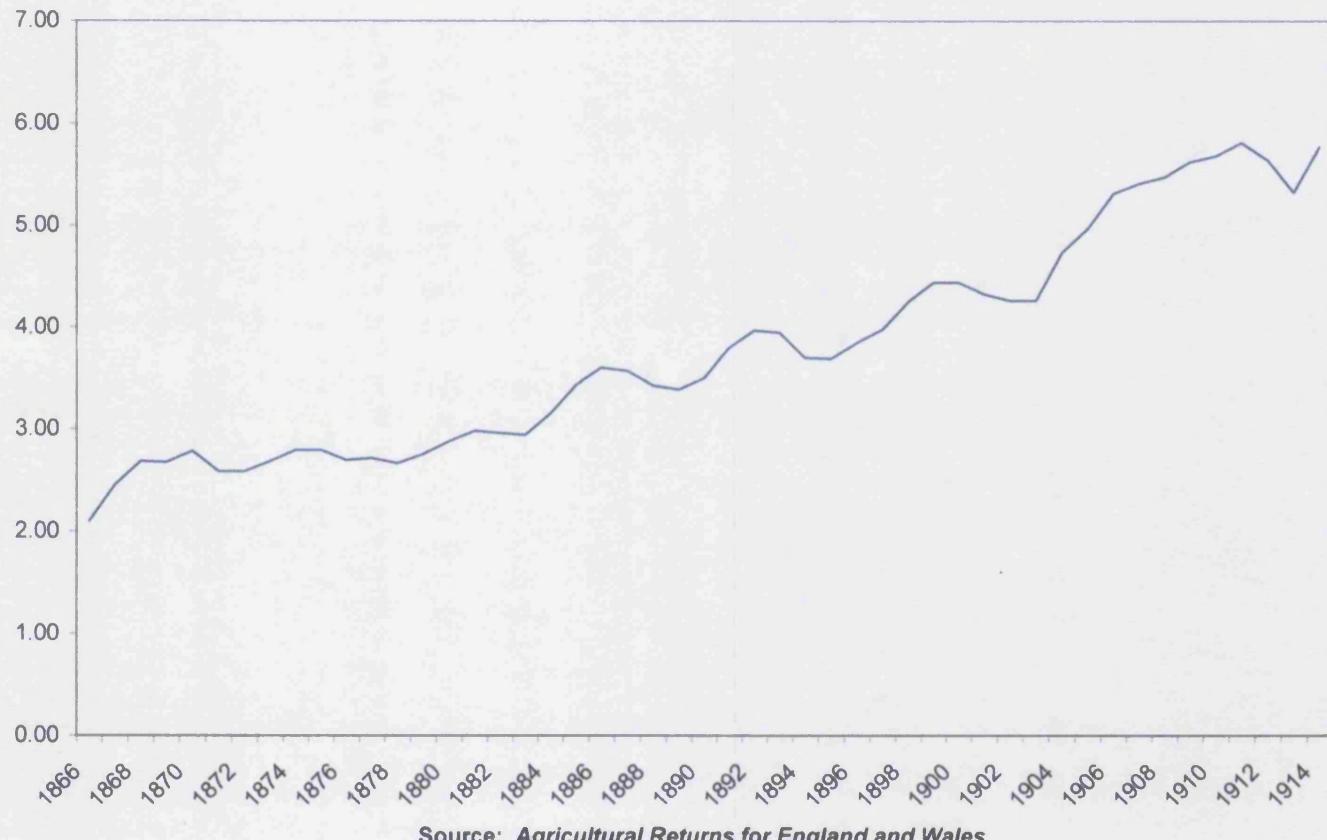
As mentioned above, contemporary commentators and subsequent scholarship have blamed much of the depression of Essex agriculture on the short-sightedness of landowners and farmers in failing to switch more readily from arable to pastoral farming, and in particular to dairying.² The charge of short-sightedness before 1870 was challenged above,³ and even at a time of rapidly falling cereal prices there were good reasons why many Essex farmers did not initially, and in some cases ever, switch to pastoral farming. In the main, the reasons were similar to those inhibiting conversion before the 1870s.

¹P.R.O., MAF 66 series, Parish Agricultural Statistics. This issue is explored further in Hunt and Pam 'Managerial Failure'.

²See above and also Kindleberger's assertion that there was a "failure of British agriculture to transform", Kindleberger, *Economic Growth*, pp.209, 239–243, 247. See also Collins (ed.), *Agrarian History*, p.167.

³See above chapter 3.

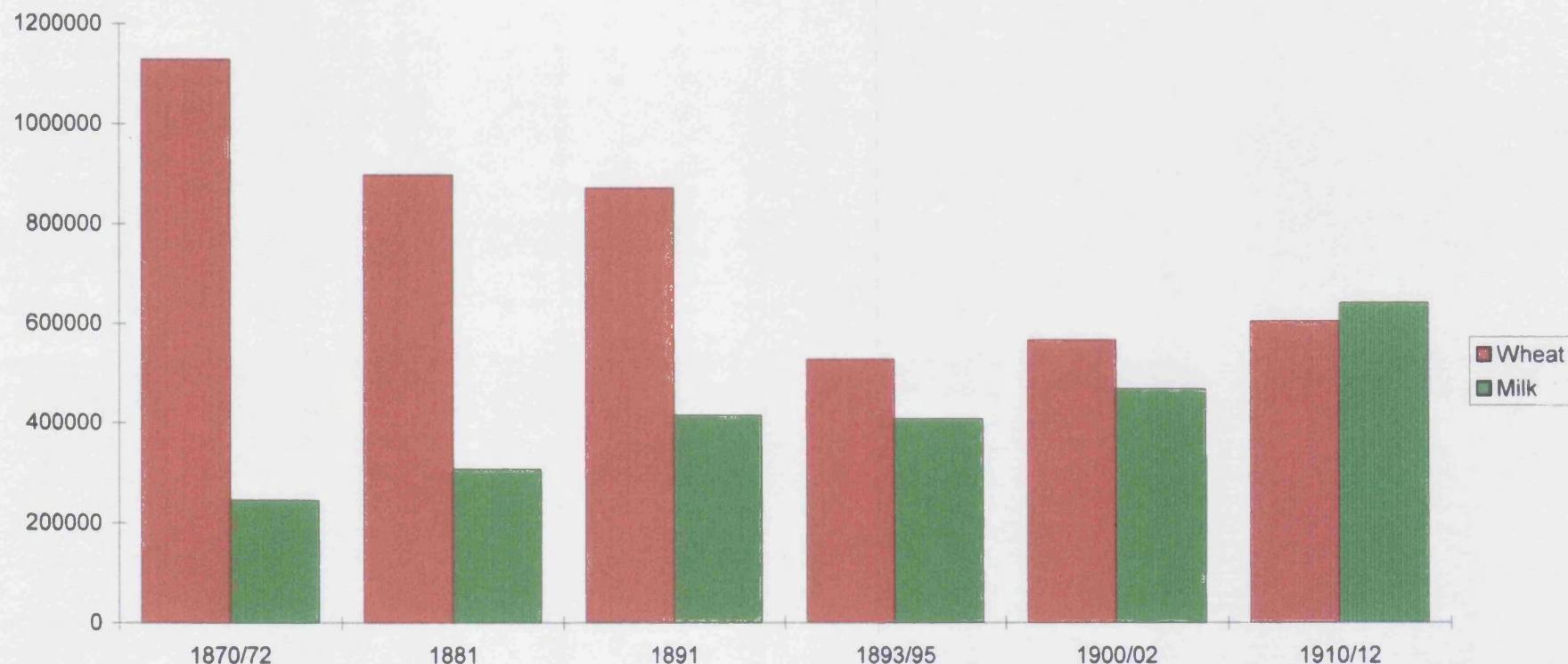
Chart 25
Essex farms: number of cows and heifers in milk or calf per 100 acres of farmland, 1866 - 1914



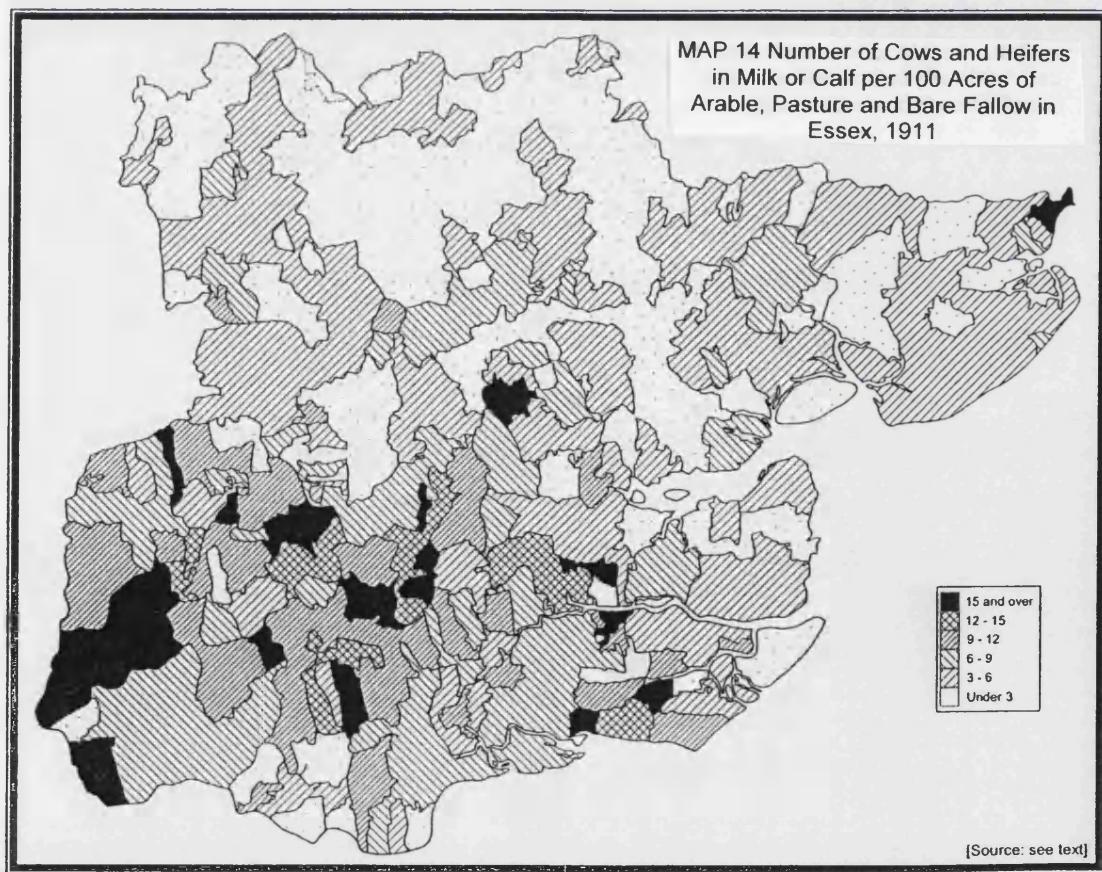
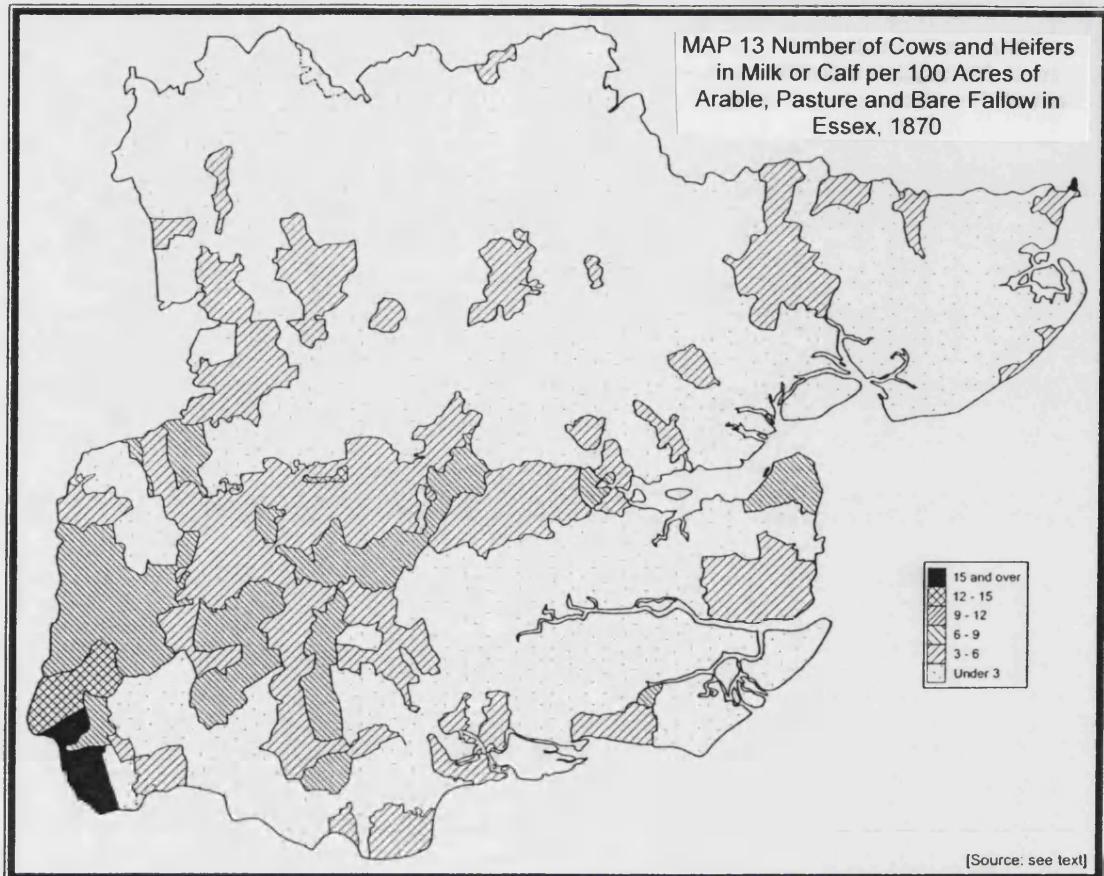
Source: *Agricultural Returns for England and Wales*

Chart 26

Essex farms: gross output of wheat and milk in certain years, 1870/72 to 1910/12 calculated at fixed 1910/12 prices



Source: see text and Appendix 1



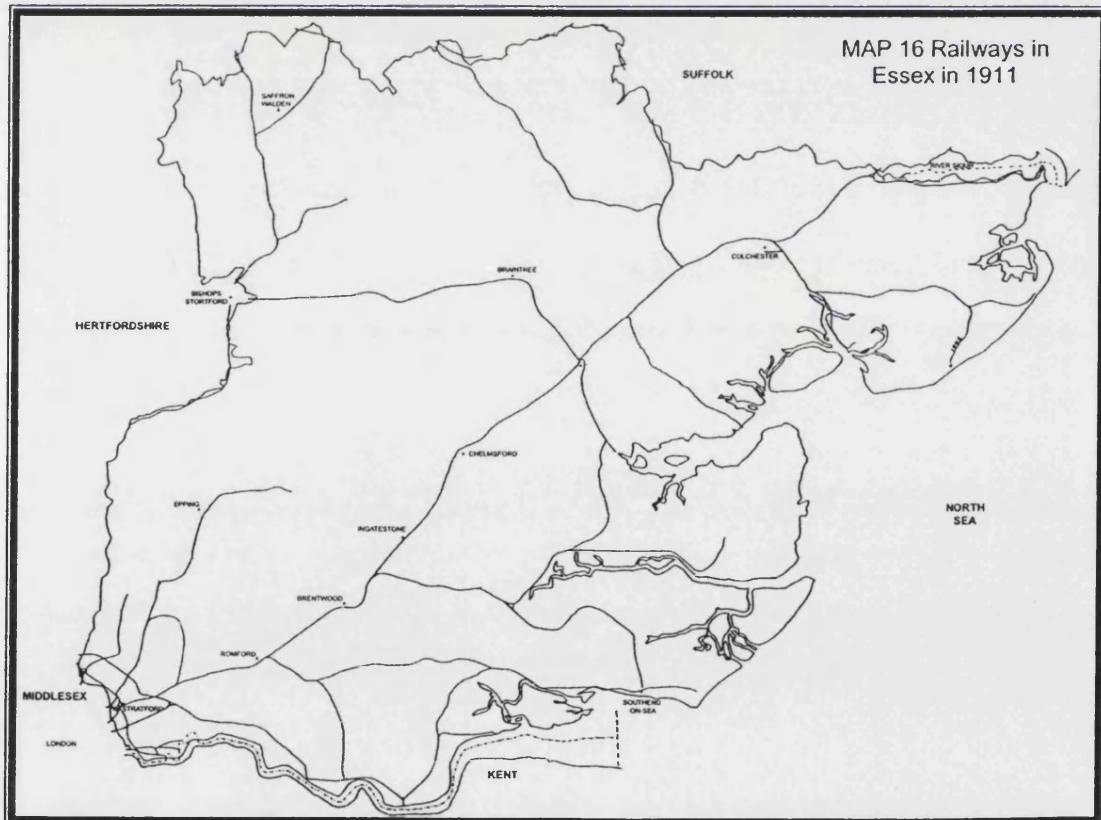
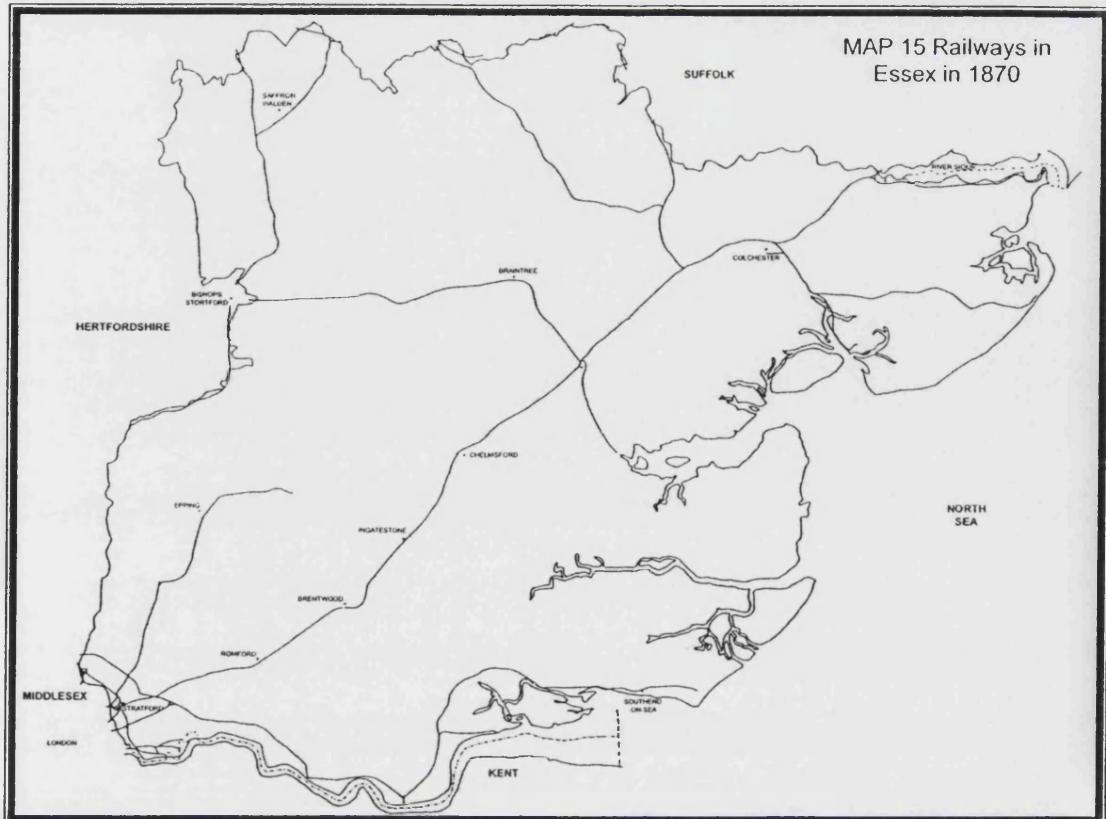


Table 23**Cows and heifers in milk or calf in Essex, 1870-1911**

(Number per 100 acres of agricultural land)

<u>Soil Type</u>	<u>1870</u>	<u>1881</u>	<u>1891</u>	<u>1901</u>	<u>1911</u>
Essex	2.78	2.97	3.79	4.32	5.81
1	6.22	5.09	5.38	6.79	11.51
2	2.54	3.12	4.81	6.53	9.08
3	2.02	2.28	1.76	1.86	3.28
4	1.84	1.84	2.73	2.36	2.50
5	2.42	2.26	3.13	3.55	4.87
6	1.74	1.48	2.24	2.15	3.67
7	2.98	2.66	3.84	4.25	5.30
8	2.43	5.31	5.69	3.20	4.02
9	3.00	2.73	4.18	2.93	5.56

Source and key to soil types: see table 17

First, contrary to some contemporary and many subsequent claims, Essex farmers did respond to price changes.¹ As shown above, they responded differently but appropriately to the price fall, basing their response on many factors including soil type, production costs and the availability and cost of transport. Where wheat made a profit it was kept, often with cost reductions as horses and machines replaced more costly labour. Where wheat did not make a profit, it was substituted by other forms of farming: on better cereal soils by other cereals, on submarginal cereal land by dairying where there was good access to urban markets and by hay, low farming beef production or other products on farms more distant from railway stations. Such changes indicate rational responses to economic realities. The doubling of Essex dairy cattle numbers between 1870 and 1911 (they rose by 257 per cent on London

¹As long term price movements were obscured by sharp fluctuations, farmers' decisions were informed by short term movements based in the main on what they had received at the last harvest or market, what prices they expected to receive at the next, and by price information from local newspapers and farming journals.

clay farms) and the close correlation between wheat prices and the Essex wheat acreage at this time also suggest rapid and appropriate responses to changes in prices.¹

Furthermore, price indicators did not always indicate the need to abandon cereals that Kindleberger and Fletcher have suggested.² The sudden fall in wheat prices in the years 1873 to 1875 was immediately followed by a rise to 1877, and the fall before 1879 was followed by a 'lull' in the early 1880s which encouraged many Essex farmers to believe that cereal prices had recovered. Indeed in real terms prices in the 1870s compared favourably with those in the 1860s, a decade which had witnessed price fluctuations and, at times, lower wheat prices than occurred in the 1870s, and barley prices were buoyant until 1879. During the 1870s and early 1880s, therefore, there was no consistent indication that a long term depression in cereal prices was beginning. After 1882 price trends became more obvious, but even then a slight rise in wheat prices between 1889 and 1891 may have suggested the 'depression' had ended.³ Furthermore, although some "experts" advised farmers to quit cereals, others gave contrary advice. Newspapers and members of the *Richmond Commission* encouraged such views in the 1880s by suggesting that adverse weather had been the chief cause of depression in cereals,⁴ and even Caird was forecasting a recovery of wheat prices in 1888, writing "there are signs of improvement even now".⁵

¹See above chart 20. The response of farmers to prices and the manner in which this response was governed by soil type and proximity to railways and so the market, is discussed at greater depth in Hunt and Pam, 'Managerial Failure'.

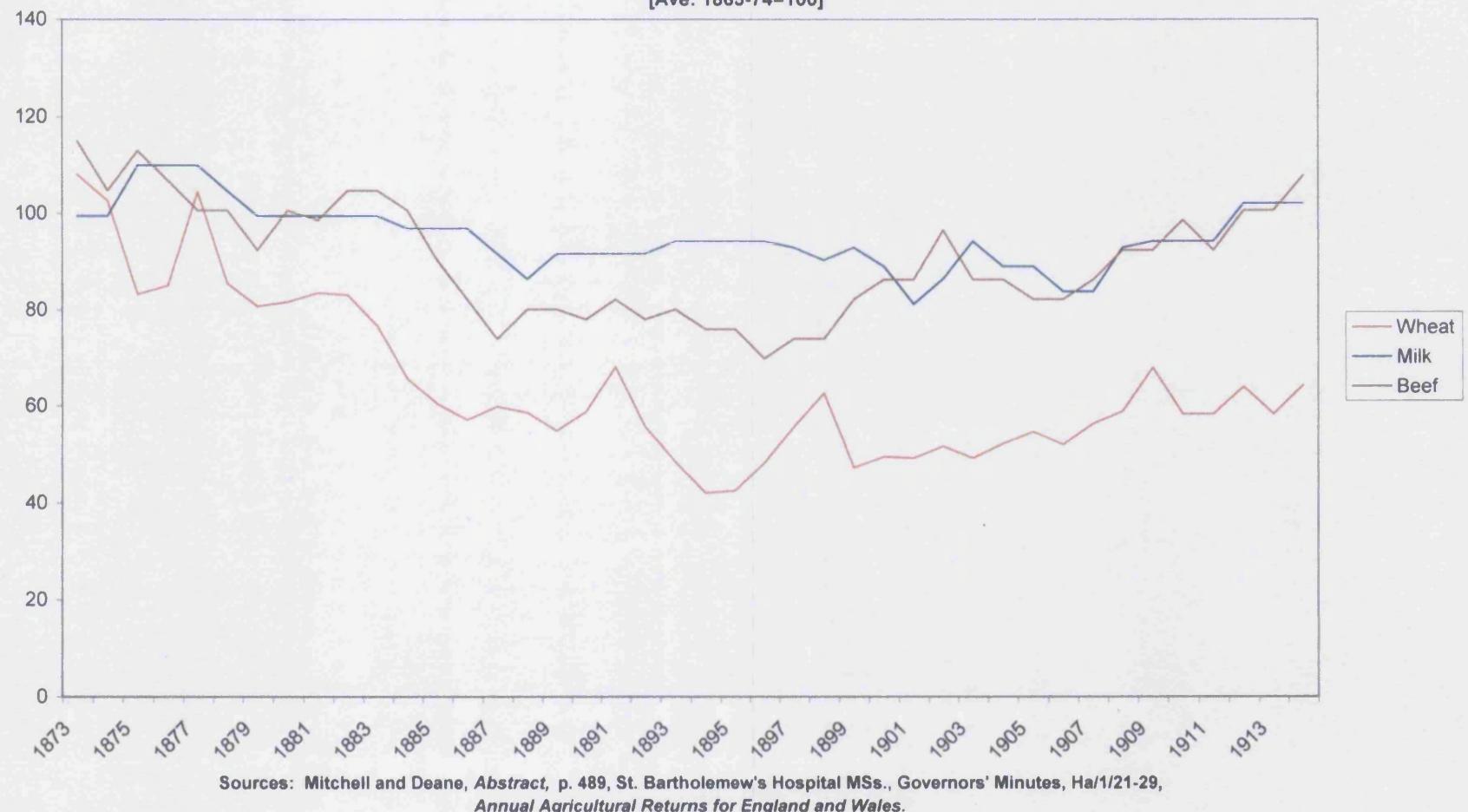
² Kindleberger, *Economic Growth*, pp.239-245; Fletcher, 'Great Depression', pp.32-38, 52-53.

³ Chart 27 compares the movement of wheat, beef and milk prices between 1873 and 1914. A more extensive study of farm product prices and their comparative movement may be found in Hunt and Pam, 'Prices and Structural Response'.

⁴e.g. *Richmond Commission, Report, Druce*, (B.P.P., 1881 xvi), p.366.

⁵Caird, 'Recent Experiences', pp.153-154. In similar vein see also W.E.Bear, *The British Farmer and His Competitors*, (1888), p.70.

Chart 27
Price of wheat milk and beef, 1873 - 1914
[Ave. 1865-74=100]



Allied to this, the attraction of a switch to meat or dairy farming was not strong. Essex farmers would have been discouraged from moving to sheep farming by the sharp and continuous fall in the price of wool (which provided about a quarter of the receipts from sheep), by the liver rot epidemic which decimated flocks between 1879 and 1881, and low profits: in 1880 one local newspaper article stated that grazing was not profitable.¹ Certainly over the depression as a whole, meat prices fell rather less than cereal prices, but there were substantial price falls in mutton and beef, particularly between 1883 and 1887, making livestock farming less attractive at the very time that price signals led Essex farmers to realize the extent of the problem in cereal farming. Edward Strutt, for example, discontinued fattening yarded cattle on his farm in hand from the mid 1880s because he found it unprofitable owing to the high cost of store bullocks and, in the early 1890s, of hay,² and in 1892 the *Preston Guardian's* Essex reporter claimed that farming for meat did not pay, a comment supported by Channing in 1897.³ Price differentials between cereals and meat widened appreciably only between 1891 and 1893, when input costs for livestock farming were high, and again after 1897.⁴ In contrast, milk prices remained relatively stable in the longer run, and although seasonal variations and fluctuations obscure short term price trends, the St. Bartholemew's series suggests that prices fell only gradually between the mid 1870s and mid 1890s, and by a mere 20 per cent, holding up rather better than other farm product prices.⁵ This is why Essex farmers in

¹Essex Standard, 3.1.1880. The following year one leading Essex landowner claimed that far from concentrating on livestock, the remedy to depression was to improve wheat production, *Essex Standard*, 1.1.1881.

²Gavin, *Ninety Years*, pp.85-86.

³Preston Guardian, 1.10.1892.

⁴Channing, *The Truth*, p.57.

⁵Milk prices and their movement compared to cereal prices is taken up in more detail in Hunt and Pam 'Prices and Structural Response', pp.490-501. The present writer has written to Unigate, to the Wiltshire C.R.O. (where the Unigate papers are now deposited) and to Lord Rayleigh's Dairies, but has been advised that no papers survive relating to milk prices, production costs or co-operative marketing.

suitable areas substantially expanded milk production.

Not only were price signals not clearly encouraging a move from cereals to livestock but, as noted above, wheat farming remained profitable on many Essex soils, and skilled managers of arable land were understandably wary about switching to managing pastoral farms which involved heavy initial outlay (a total cost of £8-£10 per acre was not uncommon for laying down good pasture¹) and in which they had little skill. Even Caird, who in 1851 had called for a switch to dairying in Essex was, by 1888, advising against further conversion to pasture.² His article on laying land to pasture claimed that "on the whole, it appears that . . . there is no possible profit in the proceeding until from six to ten years have elapsed", but that it took "up to fourteen years to form a good permanent pasture".³ He concluded that "the conversion of arable to pasture had recently been unprofitable".⁴ Particularly important, is that neither the heaviest Essex clays nor the lighter soils would grow good quality permanent grass (especially given the low rainfall in Essex) although temporary leys and rough grazing could be made on both.⁵

¹Sturgess, 'Agricultural Revolution', pp.112-113.

²Caird, 'Recent Experiences', pp.153-154.

³*ibid*. As noted in chapter 3 above, Sir John Lawes in the same article claimed that really good grass took thirty years to reach its best, and even Pringle, whose articles recommended laying clayland to grass (R.H.Pringle, 'The Future of Clay Land', *Agricultural Gazette*, 16.5.1887, p. 469, - 19.12.1887, p. 572), noted the limits to grassing fields and dairying on the Essex clays, *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), pp.61-62. As late as 1894 another expert (and former Essex farmer) claimed that "permanent pasture does not flourish" on clay soils in dry climates as were common in Essex, Bear, 'Advantages', p.263.

⁴Caird, 'Recent Experiences', p.154.

⁵Two Dengie farms, both on the St. Bartholemew's Hospital estate provide an example of soil type affecting changes in land use. Mayland Hall farm had 217 of its 270 acres under arable in 1874, but only 103 acres by 1898, and by 1904 was "nearly all laid to grass", whereas Badnocks farm, known to be only "good for wheat and beans", had a constant arable acreage (392 acres of a total 483 acres) 1874-1902, St. Bartholemew's Hospital MSSs., Almoners' Reports for 1874, 1898, 1901 and 1904, EO 8/6, 8/7. Similarly Lord Petre's solicitor noted that a remedy to depression was to invest in buildings and water supplies "so as to enable the farmers to breed and go in for dairy work *where the nature of the soil permits.*" [my accentuation]. E.R.O., Petre MSSs., D/DP A439, Letter to Lord Petre from his solicitor.

In their apparent "failure" to put more arable land to grass, Essex farmers were not alone. Nowhere saw a sudden and widespread abandoning of arable in the 1870s or 1880s; the increase in grass occurred gradually. In parts of Wiltshire, Thompson found a move from meat to corn growing was common right up to 1878,¹ a Lincolnshire landowner reported as late as 1896 that "it does not pay on the east coast to put land to grass", and a witness to the *Royal Commission* from the same county claimed that "if the Wolds cannot be farmed as they are now [cereals] they must go out of cultivation."²

Significantly, and contrary to the claims of some contemporaries and some recent scholarship,³ Essex evidence shows that even dairy farming was not always or everywhere profitable. One Scottish migrant wrote "it is doubtful if . . . dairying pays better than other forms of farming, but when people have been accustomed to it . . . they do well to adopt it even in a new and untried county".⁴ Low profit margins meant that dairy farmers had to keep transport, marketing and labour costs to a minimum, and proximity to a railway was essential. It was, therefore, taken up on the poorer cereal growing farms close to railways, but a good proportion of Essex farms, especially before the railway building of the 1880s and 1890s, were situated more than ten miles from a railway line. Moreover, the London milk market was not always a reliable vent: Taylor has shown that the liquid milk trade in London was

¹Thompson (1959), *loc. cit.*, p. 97.

²Brown, 'Lincolnshire', p.137; *idem.*, *Agriculture*, p.34. Other examples from Lincolnshire, from the Chilterns, from Norfolk and from Scotland were cited above.

³e.g. Brown's comment that "the milk trade seemed to have everything in its favour", Brown, 'Lincolnshire', p.48, and Kindleberger's statements that "it evidently would have been profitable to transform British agriculture much more thoroughly to dairying", and that in the depression "dairy farmers near cities suffered not at all", Kindleberger, *Economic Growth*, pp.247, 241.

⁴McConnell, 'Experiences', p.311. McConnell regarded Scottish success as being more based on meagre use of labour and farming cattle than on dairying. Elsewhere he added that "unless one has a love for the work [dairying] . . . it would be much better to let it alone", P.McConnell, *Dairy Management*, (1886), p.16.

overstocked in the late 1870s, mid 1880s and 1890s, noting that the last period was a time of "real crisis when the milk seller fared worse than other livestock farmers".¹ Indeed, one Scottish migrant dairy farmer reported in 1893 that low prices left him "unable to compete", whilst another saw 1895 as a ruinous year with "markets downcoming - especially milk".² Dairying required strict herd management to ensure a constant supply of milk throughout the year and obtaining skilled labour in a corn county was a problem.³

Obviously, there were some farmers who refused to change from their farming out of inertia or ignorance or because they regarded dairying and grass farming as "low status farming": indeed, a reporter for the *Agricultural Gazette* of 24.4.1882 claimed that to lay land to grass was an admission of failure. Some, including both Pringle and Lord Petre's solicitor, were perhaps too ready to claim that the lighter soils and heavier clays could not support dairying,⁴ underestimating what Strutt and Scots settlers achieved with the help of grass leys, but there were limits to the practicality of dairy-farming in many parts of Essex. The charges of inertia and inflexibility may not be entirely groundless but they have been exaggerated.

With their incomes under pressure, farmers sought relief in any activities that

¹Taylor, 'Growth and Structural change', pp. 57. Assistant Commissioner Pringle noted that milk prices received by farmers had fallen some 14 per cent between 1883 and the early 1890s and argued against a further expansion of dairying in Essex, *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), pp.64-65, 83. Local newspapers similarly bemoaned the glut and intense competition in the milk market, and the difficulty farmers had in securing buyers: *Essex County Standard*, 2.2.95; 4.1.96. (I am grateful to Mrs. L. Stringer of L.S.E. for these two references), and the Senior Bursar of St. John's College noted that one of his tenants who did "a good deal of dairying" was in financial trouble as "receipts fell here too", St. John's College MSS., SB1.21, Senior Bursar's diary.

²E.R.O., D/DP E17, p.7; R.U.L., Whitmore MSS., ESS 17/1/17, letter from M.B. Watt to Whitmore, 9.9.1895. As late as 1898, Alec Steel wrote to Whitmore that "London is flooded with milk" and prices were low, R.U.L., Whitmore MSS., ESS 17/1/27, letter from Steel to Whitmore, 20/5/1898.

³Whitmore, for example, had great difficulty getting a skilled manager for his model dairy, R.U.L., Whitmore MSS., ESS 17/1/26, various letters, 4.2.98 - 28.2.1898

⁴*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.62; E.R.O., D/DP A439.

appeared relatively immune to depression, and poultry rearing, previously considered to be a minor activity undertaken by farmers' wives, became more important, expanding on clayland farms in south and south east Essex where returns on arable farming were lowest. Regrettably, figures were only collected on poultry numbers in the mid 1880s and so the extent of the expansion and also the contribution of eggs and poultry meat to Essex farm output remain unquantifiable. Even the fact of expansion in Essex has to rely almost entirely on evidence from the 1894-97 *Royal Commission*, where advances in poultry breeding, the development of poultry farming between 1882 and 1894, the introduction of cheap poultry houses for use in stubble fields, and fattening hens for the London market were reported.¹ Some idea of the profitability of poultry fattening may be gained from the success of Isaac Mead of Waples Mill near Good Easter, who concentrated on rearing poultry and expanded his holding on the profits,² and from Matthews' claims that breeding and fattening chickens was his most profitable venture.³ Smallholders particularly favoured poultry rearing. The land agent L.J.Rutter claimed that several derelict farms in the Basildon area had been sold in small lots for this purpose, and one magazine reporter who visited South Benfleet noted the numerous chicken runs where fowl were fattened in clover fields.⁴ It would seem, however, that poultry rearing could have been further increased in Essex, but being a labour intensive activity with little mechanisation, it was best suited to small farms and smallholdings rather than the medium sized and large farms which dominated the county.⁵

¹*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.63. The increase in fowls in early twentieth century Essex was mentioned by E.Brown, Collins (ed.), *Agrarian history*, p.492.

²Mead's success is told in his autobiography, Mead, *Life Story*.

³Matthews fed his chickens on cheap grain, *Agricultural Depression, Matthews*, (B.P.P., 1896 xvii), QQ.61601, 61562, 61480.

⁴*idem., Evidence of L.J.Rutter*, (B.P.P., 1894 xvi pt.3), QQ.34299; *Country Life*, (1903), p.xlvi.

⁵Collins (ed.), *Agrarian history*, pp.490, 494.

6. Increase in Fruit, Vegetable and Seed Acreage

Increased fruit and vegetable growing was another response made by some Essex farmers to the depression. Unlike converting from arable to pasture, however, fruit and vegetable growing was labour-intensive and required large inputs of fertilizers or manure to be profitable. The initial cost of conversion to fruit farming was high and landowner assistance was commonly required.¹ Orchards were planted on the heavy clays of the Dengie peninsula and elsewhere on London clays, and although orchard fruits were never a major concern in Essex, they almost doubled their acreage between 1871/2 and 1900/2 to reach a peak at 2,521 acres.² Soft fruits were grown on some light soils such as those by Stamford-le-Hope,³ and the acreage under small fruits expanded from a mere 941 acres in 1891 to almost 2,000 acres by 1900/2 (regrettably, no figures are available for the period before 1891). Although fruit growing increased in Essex during the depression, and its expansion was sufficient for Essex to be known as a leading 'small fruit' growing county by 1905, it never became a major activity except around Tiptree, where Wilkins opened a jam factory and fruit farms.⁴ Glass culture - the forcing of 'early' vegetables under glass - was brought into Essex during the depression years.⁵ Like other forms of market gardening, it was both labour intensive and dependent upon good transport. First practised along the Lea Valley, it was introduced on the heavy clays of south Essex in the 1890s,⁶ and by the early twentieth century had spread to the Chelmsford and

¹Whitmore assisted Thomas Ridgewell in this way. In 1898 his farm, Goldwells, had 25 of its 42 acres under fruit, and Whitmore planted fruit trees on other farms on his estate, R.U.L., Whitmore MSS., ESS 17/1/6, correspondence on Goldwell's farm, 2.5.1898, 20.10.1898, 1.11.1898.

²*Agricultural Returns*,

³Rowley, 'The Memoirs', p.32.

⁴P.Hall, 'England c. 1900', in H.C.Darby (ed.), *A New Historical Geography of England*, (1973), Chapter 12, p.690; Wood, *Seax*, p.38. Wilkins began fruit growing in 1864 and jam manufacture in 1885, a move which proved successful in the 1890s and which led to an expansion of the Tiptree fruit acreage. In 1913 Mech's old farm at Tiptree Hall was added to the estate.

⁵I wish to thank Dr. E.J.T.Collins for this point.

⁶The Pinkerton family brought this system of farming to Bulphan from Waltham Holy Cross, Rowley, 'The Memoirs', p.33.

Rayleigh areas.¹ Although a viable response to the depression in certain areas, glass culture was never a major undertaking in Essex except along the Lea Valley. Regrettably, no figures exist to measure the importance of this form of farming.

A more important change than the expansion of fruit or glass culture was the growing of vegetables. Between 1870 and 1881 the acreage under 'gardens' in Essex rose from under 4,200 to over 5,700 acres² despite overseas competition and house building on prime 'garden' land. The bulk of the expansion was along the Thames and around Colchester, and by the early 1880s 'gardens' accounted for 11.5 per cent of the agricultural land (15.4 per cent of the arable land) on light soils in the former area.³ House building on suitable 'garden' land caused a contraction in 'gardening' in the 1880s⁴ after which the acreage remained constant into the twentieth century.

Kindleberger and others have suggested that farmers should have been more aware of higher yield alternatives to cereals, including fruit and vegetables.⁵ In fact, further expansion was not possible since 'gardening' was only possible on light, well drained soils with ease of access to town manure and urban markets and where labour was plentiful.⁶ Most of the marginal and sub-marginal cereal land in Essex did not meet

¹Pratt records that in one year Rayleigh farmers sent 334 tons of cucumbers, 55 tons of tomatoes and 78 tons of fruit to London, E.A.Pratt, *Transition in Agriculture*, (1906), p.89.

²Most of the increase came after 1877, *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.28.

³Derived from Parish Agricultural Returns for 1881 for Thameside parishes, P.R.O., MAF 68/ 753. Most of the Belhus estate tenantry grew vegetables for the London market, some gardeners specializing in one particular crop: Knight of Aveley, for example, being known as the 'marrow king'. Collins, 'Great Agricultural Depression', p.18. I wish to thank the late Sir Richard and Lady Barratt-Lennard for information about this estate and for their hospitality.

⁴R.Battersby, 'Development of Market Gardening', p.37.

⁵ Kindleberger, *Economic Growth*, pp.240–241.

⁶The annual agricultural statistics underestimate the importance of vegetable growing. Most growers cultivated a succession of crops on their holdings each year, whereas the figures in the returns refer only to the crop being grown in early June. The increase in market gardening in Essex cannot be measured using numbers of 'gardeners' over time, since although the number listed in *Kelly's Directories* increased from 139 in 1870 to 173 by 1910, many vegetable growers were listed as 'farmers'.

these requirements, and it is no surprise that contemporaries noted "market gardeners give the Essex clays a wide berth."¹ Furthermore, market gardening was no panacea: the 1890s saw market saturation with glasshouse farmers in the Lea Valley facing falling tomato and cucumber prices.²

Obviously, not all vegetable crops were grown in market gardens, nor was all 'garden' acreage devoted to vegetables. Many more acres of vegetables were grown by ordinary farmers on suitable soils, as part of an arable rotation: in 1870, for example, when a mere 0.5 per cent of farmed land in Essex was returned as 'garden', vegetables accounted for over 2.12 per cent of the farmed land.³ The following years saw a considerable increase in vegetable production from Essex farms, in part due to farmers replacing traditional animal-feed roots with more marketable carrots, cabbages and potatoes. As early as 1879 a commentator wrote that "many farmers in Essex, near the metropolis, grow vegetables most successfully in alternation with corn and other usual farm crops".⁴ By 1901 some 4.5 per cent of Essex farm land was devoted to vegetables,⁵ much being outside the traditional light soils along the Thames where the proportion of land under these crops remained fairly constant at just under a quarter of the farmed acreage. There was a slight contraction in the period 1901-11. Although farms distant from towns but on suitable soils, could sell the standing crop to a London wholesaler or employ schoolchildren to overcome the problem of labour shortage at peak periods⁶ the labour intensive nature of vegetable

¹ *Essex Standard*, 23.1.1886.

² Rider Haggard, *Rural England*, p.470.

³ *Agricultural Returns (1870)*, (B.P.P., 1870 lxviii), p.363.

⁴ Whitehead, 'Market Gardening', p.852. Cabbages could also survive drought better than roots: see *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.60.

⁵ *Agricultural Returns (1870)*, (B.P.P., 1870 lxviii), p.363; *Agricultural Returns (1901)*, (B.P.P., 1902 cxvi, pt.1), p.1. These figures do not include acreage for peas.

⁶ An example of the latter is provided by Orsett where schools closed for a fortnight during the pea-harvest, Rowley, 'The Memoirs', p.32.

growing made it a less attractive alternative to dairying or grass farming in most of Essex.

Among the more eccentric responses to depression was the adoption by certain farmers of more intensive farming systems. Prout, for example, successfully maintained continuous corn cropping on heavy clays by the Essex-Hertfordshire border using steam tillage and artificial manures and having no stock, a north Essex farmer raised large quantities of green peas for the London market and fed the pods and haulms to pedigree Suffolk sheep, whilst Strutt's dairying was based on intensive arable cultivations.¹ Some farmers on the medium and light soils near railways specialized in crops for seed firms and in flowers. Seed growing had existed in 1867, but in 1907 had grown sufficiently to be considered "one of the most important and prosperous" industries in Essex, engaging the activities of 45 firms.² It was mostly centred on Kelvedon and Marks Tey, and employed a large labour force (costing over £4-10s. an acre on one farm in 1912).³ Flower growing was practised around Colchester (Pratt estimated that 100 tons of roses and lilies went to London from this town each year), Ardleigh and Epping.⁴ Such cultivations were labour intensive but showed that profits could be made by enterprising farmers with capital where soil and accessibility enabled specializations of this nature.

A few farmers were remarkably innovative. Some planted cricket bat willows along

¹*Richmond Commission, Evidence of J. Prout*, (B.P.P., 1882 xiv), QQ.60637-61046; Rider Haggard, *Rural England*, p.449; Gavin, *Ninety Years*, pp.85-86.

²M.Christy, 'Industries : The Growing of Seeds', in *V.C.H. Essex*, ii, (1907), pp.478-479.

³A.W.Ashby, 'Some Minor Farm Crops: Seed Growing in Essex', *J.R.A.S.E.*, lxxiv, (1913), pp.149-151.

⁴Pratt, *Transition*', p.76.; G.F.Bosworth, *Essex*, (Cambridge, 1909), pp.72-73. Such enterprises could be combined with more traditional farming. One Thorrington farmer regularly grew primroses for sale in London on Primrose Day and another north east Essex farmer grew fields of nasturtium to sell as seeds, St. John's College, Cambridge MSS., Senior Bursar's diary, SB1.20 (1888), SB1.22 (1896). Similarly, on an Ardleigh farm (400 acres) flowers were grown and chickens raised alongside more traditional farming, Rider Haggard, *Rural England*, pp.450 - 52.

streams on their farms;¹ others collected and sold blackberries and mushrooms, and marsh farmers cut and sold reeds for thatching; in 1899 reeds from Horndon fetched 25 shillings per hundred bundles.² Some bred horses,³ whilst Wordley took in lame London carthorses on his Orsett farm, reselling them after a period of convalescence, and he offered keep and stabling for hunters.⁴ Henry Cole, another south Essex farmer, ran a market by Tilbury Fort where he sold his own marsh sheep,⁵ and Lord Rayleigh founded a milk round in 1900 to sell his milk.⁶ One farmer contemplated buying North Benfleet Hall farm to breed pointers, and another took a 280 acre heavy land farm and bred rabbits profitably.⁷ Not all such enterprises were successful, of course - the Boreham farmer who tried to grow a third of an acre of tobacco is one example of failure⁸ - and most Essex farmers were far more traditional in their response to the depression.

7. Changes in Marketing

Most Essex farmers made no changes to their marketing techniques after 1873 despite falling prices, although before the depression was over a minority of farmers was engaged in cooperative marketing. For the most part, therefore, marketing trends

¹Hall, *Pilgrimage*, p.68. Christopher Matthews also planted willows on his land. I am indebted to the late J.A. Matthews Esq. for this information.

²R.U.L., ESS P250, Lorkins farm records; *Preston Guardian*, 19.9.1896; R.U.L., Whitmore MSS., ESS 17/1/31, 33, 34, various letters, 13.5.1899–13.1.1900.

³Just before 1914 Geoffrey Matthews, Christopher Matthews' son, bought a stallion for stud purposes, oral evidence, J.A. Matthews Esq.

⁴R.U.L., ESS P250, no. 6, Lorkins farm day book, 1885-1918.

⁵Rowley, 'Further Extracts', p.10.

⁶Gavin, *Ninety Years*, pp.96, 112. By 1914 he had twelve shops and a depot in London and a shop in Southend as well as a local milk round, *ibid.*, pp.120-121.

⁷R.U.L., Whitmore MSS., ESS 17/1/11, letter Treadwell to Kemp-Smith, 17.3.1894; *Agricultural Depression: Darby*, (B.P.P., 1896 xvii), Q.59244.

⁸'Questions and Answers', *Agricultural Gazette*, new ser., xxvi, 28.11.1887, p.503, answer of H. Moore. John Bateman also tried to grow tobacco but found the labour costs too high, Thirsk, *Alternative Agriculture*, p.156.

discernable in the 1860s, described in Chapter 3, continued during the depression years. Smaller markets declined as larger town markets expanded and had their facilities improved,¹ and dealers and middlemen became increasingly important, especially for milk, meat, cereal products, and peas. Most vegetable growers located within 20 miles of London rented stands in one or other London wholesale market,² but even here middlemen, who bought a standing crop and harvested it themselves, were becoming important.³ Spitalfields market accommodated six times the original number of fruit and vegetable salesmen following rebuilding in the 1870s and 1880s, and by the late 1880s a mere half dozen milk wholesalers dealt with Essex dairy farmers selling in London.⁴ In the main, these changes might be regarded as beneficial for farmers, who could concentrate on production rather than distribution, but the system was open to abuse for, as Rew noted:

"The average farmer does not know, and has no means of knowing, whether the beasts he sells fetch their full price. The purchaser, as a rule, does know with very remarkable accuracy".⁵

Many Essex growers took advantage of the vegetable markets opened by the Great Eastern Railway Company at Bishopsgate and Stratford which had direct links with the railway system.⁶ The latter was enlarged between 1879 and mid 1880s and was

¹Chelmsford and Romford markets both expanded at this time, particularly increasing their cattle handling facilities. In 1883 one landowner called Romford "the greatest cattle market near London." H.L.R.O., H/C 1883, 42a, Bill for a Proposed Railway Line From Grays to Romford, evidence of Sir Thomas Barratt-Lennard to a House of Commons committee.

²*Interim Report of the Departmental Committee on Distribution and Prices of Agricultural Produce, Interim Report on Fruit and Vegetables*, (B.P.P., 1923 ix), p.17.

³*ibid.*, pp.18-20; Pratt, *Transition*, p.128.

⁴ *Market Rights*, Matthews, (B.P.P., 1888 liii), QQ. 1710, 1724; Atkins, 'The Growth', p.221.

⁵R.H.Rew, *An Agricultural Faggot: A Collection of Papers on Agricultural Subjects*, (1913), p.148. Similarly in the 1880s, McConnell noted that "not one farmer in ten keeps a set of books", P.McConnell, *The Agricultural Depression*, (1887), p. 16.

⁶P.A.Graham, *The Revival of English Agriculture*, (1899), pp.213-214.

handling over 64,600 tons of vegetables, most brought by rail, by 1898.¹ Special trains to Bishopsgate in June and July served pea growers in the Kelvedon area.² Continued railway building helped Essex farmers. Druce had claimed in 1881 that the county was badly served by railways;³ construction in the 1880s and 1890s remedied much of this defect in south and south-east Essex (see map 16), although as late as 1914 some areas of Essex remained quite isolated, encouraging commentators like P.A. Graham to call for a programme of light railway building.⁴

Essex farmers were also able to take advantage of concessions introduced by the railway company in 1895 with their 'Direct Supply System'⁵ whereby fruit, vegetables, flowers, seeds, fowl and dairy products were carried in consignments of up to 60lbs. by fast passenger train to London at low rates, on the condition that produce was packed in company supplied boxes to ease loading and handling - was useful.⁶ The G.E.R. produced pamphlets on poultry breeding, and made available lists of both poultry breeders and season ticket holders (with addresses) to encourage direct sale.⁷ Graham attributed the increase in rail carriage of agricultural products on

¹*ibid.*, p.213; *Market Rights, Evidence of Mr. Birt*, (B.P.P., 1888 liii), Q. 3032. The road figure referred to the volume carried in 1886.

²Pratt, *Transition*, pp. 127-28. 'Pea Specials' ran four times a day between Monday and Thursday, and consisted of 30 wagons, each taking two and a half tons of peas.

³*Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.32.

⁴Graham, *Revival*, p.210.

⁵Before this date preferential rates for consignments on long journeys had led J.W.Martin to accuse the Great Eastern Railway Company of "ruining" Essex agriculture. Certainly in 1881 in terms of pence per ton per mile, it cost farmers sending butter to London 12d. from Brentwood (15 miles), 7.8d. from Braintree (41 miles), but 2.2d. from Antwerp (206 miles). This was good economic sense by railway companies rather than a malicious attack on Essex farmers. It is unlikely that railway companies deliberately delayed local fruit to enable foreign food to get to the market first, as Martin averred. J.W.Martin, *The Ruin of Rural England: A Warning*, (1901), pp.62-78. Another book arguing that railways had destroyed British agriculture was R.H.Rew, *The Best Means of Improving the Financial Condition of Agriculture*, (1886), p.14.

⁶Graham, *Revival*, pp.211-213, 216; E.E.Williams, *The Foreigner in the Farmyard*, (1897), pp.133-34, 139-40.

⁷Graham, *Revival*, pp.212, 216; Williams, *Foreigner*, p.134.

the Great Eastern Railway in the late 1890s to company policies.¹

Although agricultural cooperation had begun in Britain in the 1860s, there was no great interest until well after the depression set in. Indeed, even in 1894 a national society attracted little support,² yet the 1890s did witness the founding of a number of local agricultural cooperative societies. In 1895 there were 58 such societies in the U.K. (of which 12 were distributive societies); by 1901 there were 653.³ Low agricultural prices, combined no doubt with the example of farmers elsewhere (particularly in Ireland and on the continent) and that of Scots farmers in Essex, eventually provided by the 1890s sufficient incentive for some Essex farmers to band together for the collective sale of produce to regain market control from middlemen.

In 1891, an Essex vicar, Rev. H. Jones, set up his Farmers' and Gardeners' Supply Society, a small, local concern, to negotiate lower freight rates for vegetable conveyance to London.⁴ More important was the formation in April 1892 of the Eastern Counties Dairy Farmers' Association.⁵ Other cooperatives followed between 1896 and 1909 as shown in table 24. The 1912-13 report showed increases in membership and business in the initial years of cooperation, but these were not spectacular, and the number of farmers involved was small: in 1909 less than one in five Essex farmers were members of an agricultural cooperative, and overall impact

¹Graham, *Revival*, pp.212, 216.

²The National Agricultural Union was set up by the Earl of Winchelsea with the British Produce Supply Association as an offshoot to retail members' produce direct to customers via market stalls and a London shop. *ibid.*, pp.17-19; E.A.Pratt, *Agricultural Organization*, (1912), pp.95-99.

³*Report on Industrial and Agricultural Cooperative Societies in the U.K.*, (B.P.P., 1912-13 lxxv), p. 61, table xxxiii. These figures do not include smallholding or allotment societies, nor productive societies run by retail cooperatives.

⁴*Essex Standard*, 11.4.1891.

⁵*Essex Weekly News*, 29.4.1892; *Essex County Standard*, 30.4.1892.

was limited.¹

Yet the farmers' cooperative movement in Essex was important among the responses to depression in Essex and in parts of the county it was influential: three cooperatives became well-known in the London market. The history of these societies is difficult to trace as, save for one society (Eastern Counties Farmers), the business records have not survived,² and newspaper reports, estate correspondence and scattered references in contemporary books and pamphlets give some insight into the workings of only the Eastern Counties Dairy Farmers' Association and Cooperative Society, and the East Anglian Farmers' Cooperative. The history of the Eastern Counties Farmers' Society is well documented,³ but although three of the original committee of twelve were farmers from north east Essex, the vast majority of its membership were Suffolk farmers.

Essex farmers founded the Eastern Counties Dairy Farmers' Association in 1892 to "watch over, protect and further the interests of the dairy industry and farming generally in the Eastern Counties".⁴ Membership was open to all Essex farmers, but

¹Calculated from figures for farmers enumerated in census returns and those given for members of co-operatives in the *Essex County Standard* (for the Eastern Counties Dairy Farmers' Association) and the *Report on Industrial and Agricultural Co-operative Societies*, (B.P.P., 1912-13 lxxv), pp.184-186.

²As noted above, the present writer wrote to Unigate (later joined by the Eastern Counties Dairy Farmers' Association), to the Wiltshire C.R.O. (where the Unigate papers are now deposited) and to Lord Rayleigh's Dairies, but was advised that no papers relating to co-operative marketing survive.

³Eastern Counties Farmers' Co-operative Association Limited, *Fifty Years' Service to Agriculture, 1904-1954*, (Ipswich, 1954)

⁴Pratt, *Transition*, p.29. Members paid an annual 10s. subscription.

Table 24**Agricultural distributive societies in Essex, membership**

<u>Cooperative Society</u>	<u>1900</u>	<u>1901</u>	<u>1902</u>	<u>1903</u>	<u>1904</u>	<u>1905</u>	<u>1906</u>	<u>1907</u>	<u>1908</u>	<u>1909</u>
(Date formed)										
Eastern Counties Dairy Farmers (1896) (a)	52	52	52	51	50	53	56	94	116	117
East Anglian Farmers (1897)	60	59	60	62	60	61	61	61	62	64
Eastern Counties Farmers (1904) (b)	-	-	-	-	158	289	452	686	801	889
Epping and Waltham (1905)	-	-	-	-	-	42	45	47	51	52
Tendring Hundred (1905)	-	-	-	-	-	42	54	57	67	71
Mayland (1907)	-	-	-	-	-	-	-	-	22	26
Saffron Walden (1909)	-	-	-	-	-	-	-	-	-	49

(a) This list does not include Eastern Counties Dairy Farmers' Association (1892)

(b) These figures include a large number of Suffolk farmers, the society being based at Ipswich.

Source: *Report on Industrial and Agricultural Cooperative Societies in the U.K.*, (B.P.P., 1912-13 lxxv), pp.184-186.

migrant farmers dominated both in terms of members and officers. In 1898, the Chairman spoke of previous failure by Essex farmers to organise and, referring to Scottish migrant farmer influence, commented, "now ... that they had an infusion of blood and ... of brains from the north" cooperation would develop successfully.¹ Scots provided the treasurer, the first two secretaries and several of the committee.²

¹*Essex Weekly News*, 11.3.1898 in E.R.O., T/P 181/18/10/2, Cuttle Collection of Newspaper Cuttings. I wish to thank Mrs. E. Sellars for this reference.

²Information from scattered letter headings in R.U.L., Whitmore MSS., ESS 17/1 series, and newspaper reports: *Essex Weekly News*, 29.4.1892, 16.3.1900, 17.3.1905.

In part this reflected Scottish migrant farmers' involvement in dairying, but also the propensity of migrants to cooperate in a new environment. Initially, the society concentrated on the purchase of farm requisites, especially fertilizers, on the dissemination of dairy farming information,¹ and restricted price competition between members by fixing minimum milk prices and paying members to turn surplus milk into cheese. Contemporary accounts suggest modest success with most members getting the agreed minimum price for their milk and membership rising from an initial 60 in 1892 to 238 in 1900 and 300 by 1905.²

Table 25

Agricultural distributive societies in Essex, sales

Name of Cooperative	1900	1903	1906	1909
Eastern Counties Dairy	£6,644	£19,952	£36,422	£40,923
Farmers				
East Anglian Farmers	£15,408	£9,652	£7,329	£13,949
Eastern Counties Farmers	-	-	£126,996	£239,529
Epping and Waltham	-	-	£2,156	£3,218
Tendring Hundred	-	-	£5,289	£7,242
Mayland	-	-	-	£1,545
Saffron Walden	-	-	-	£851

Source and notes: as for table 24

The Eastern Counties Dairy Farmers' Cooperative Society was formed from the Association when four members were chosen "to draft a simple scheme of

¹Pratt, *Transition*, p.29. Matters discussed included dairy management, breed improvement, cow insurance, milk analysis, contract farming and milk pricing.

²*Essex Weekly News*, 29.4.1892, 16.3.1900, 17.3.1905. Although Lord Rayleigh was the President and his brother and agent, Edward Strutt, was Chairman, few landowners joined: in 1902 membership comprised 268 farmers but only two landowners, *Essex Weekly News*, 14.3.1902. The society also encouraged dairy farmers in the Midlands, West Country and Norwich to organise into associations affiliated to the Central Association of Dairy Farmers, *Essex Weekly News*, 11.3.1898, in Cuttle Collection, *loc. cit.*

cooperation"¹ to sell members' milk and eggs to London retailers. Suffering from increasing numbers of Essex dairy farmers, poor grass yields and from a glut of milk on the London market at that time, they felt that control of the London wholesale milk trade by six wholesalers lowered farmers' returns.² One writer claimed that there could be as many as four middlemen between producer and consumer,³ and save the Colchester condensed milk factory, opened in the late 1880s,⁴ there were few other outlets for Essex dairy farmers. Essex farmers also wished to control quality and quantity, and prevent milk adulteration by middlemen.

Initially, acting as a commission agent, after 1904 the society sold members' milk direct to customers,⁵ who included both small roundsmen and larger retail distributors such as the Royal Arsenal and the Stratford Cooperative Societies. The latter took between 900 and 950 gallons of milk a day from the society in 1904, as well as all their new laid eggs.⁶ From 1905, the society regulated supply to demand by holding back milk in times of glut at its new refrigeration and separating plant in Stratford, later bottling it or turning it into cream.⁷ In 1907, the Eastern Counties Dairy Farmers' Cooperative Society merged with the Association, becoming a separate entity within the larger society,⁸ gave up its commission agency function, and

¹R.U.L., Whitmore MSS., ESS 17/1/26, letter from A.Steele to Kemp-Smith, 17.3.1896.

²The middlemen bought milk at 1 barn gallon = 17 pints, but sold at 1 barn gallon = 16 pints. Pratt, *Transition*, pp.29-30; Whetham, 'London Milk', p.372.

³F.Lawson Dodd, *The Problem of the Milk Supply*, (1904), pp.13,22.

⁴Fussell, *English Dairy Farmer*, p.320.

⁵R.U.L., Whitmore MSS., ESS 17/1/26-28, various letters, 1896-8. An example of the society's help may be found in the Orsett estate letters - in 1898 Nicholls, the society's agent, secured a contract for Whitmore when the latter failed to find a purchaser and acted as intermediary when complaints arose, *idem.*, ESS 17/1/27, 28, letters Nicholls to Kemp-Smith.

⁶*ibid.*, ix, No. 99 (August 1904), p.15.

⁷*Stratford Cooperator*, xiii, no.6, (December 1908), p.63. I wish to thank the Hon. S.Newens, M.P. for this reference.

⁸*Essex Weekly News*, 15.3.1907. See also table 24.

concentrated on wholesale dealing. The society set up a depot at Ongar in 1909 to turn surplus milk into cheese and also broadened the scope of its activities, selling members' hay, straw and potatoes on commission, and continuing to purchase farmers' requisites at advantageous prices.¹

These two dairy societies appear to have been relatively successful. In the 1890s Steel calculated that the Association could save a farmer £10 on a 25 ton consignment of purchased superphosphate, a saving of over 15.5 per cent.² Pratt estimated the saving on other fertilizers to be £1 a ton (31 per cent), and the society claimed to be able to enable members to secure 2d. a barn gallon more than was common on individual contracts, an increase of between 25 per cent and 30 per cent.³ Although, as noted above, the Association's membership grew steadily, membership of the cooperative society remained small (about 50 members), but growth was reflected in rising sales (£ 6,644 in 1900 to £ 36,422 in 1906) and necessary increases in administrative staff: starting with one secretary and one agent in 1896, a second agent and an assistant secretary were needed by 1898,⁴ and further staff were employed at the new Stratford depot from 1905.⁵ The number of farmers sending milk to the Society more than doubled with the merger, and by 1914 the combined society had a membership of over 400, 12 per cent of Essex farmers.⁶

¹R.U.L., Whitmore MSS., Letters, 17/1/28-32; E.A.Pratt, *Smallholders: What they Must Do to Succeed*, (1909), p.103. The depot was first tested at Billesden Farm, Ongar, according to the late Mr. Hugh Gemmill, whom I wish to thank for his hospitality. For a detailed account of the methods used by the society in selling milk see H.W.Wolff, *Cooperation in Agriculture*, (1912), pp.100-101.

²Essex County Standard, 7.3.1896. The cost was £53.15.0d. compared to £64.7.6d. at Mark Lane.

³Essex Weekly News, 15.3.1901; Pratt, *Transition*, p.36; British Agricultural Organization Society, *Farmers' Cooperative Societies*, Leaflet No. 5, (1899), p.2.

⁴R.U.L., Whitmore MSS., ESS 17/1/26-35, various letters, 1898-1900.

⁵Stratford Cooperator, xiii, no.6, (December 1908), p. 63.

⁶From c.50 in 1906 to 116 in 1908, table 24; Essex County Standard, 13.3.1914. A few members were landowners who joined the society on behalf of several tenants. The society continued to grow, and in 1923, just prior to its merger with the London Milk Combine (later United Dairies), was one of the largest dairying and milk societies in England: M.A.F., *Report on the Cooperative Marketing of Agricultural Produce in England and Wales*, (1926), p.31.

Whereas the Eastern Counties Dairy Farmers' Association was a county-wide movement initiated by farmers themselves, East Anglian Farmers (1897) was a localized organization promoted by a landowner, to improve marketing and increase profits for his tenants. This initiative began with Whitmore arranging the sale of his tenants' produce in London as a response to problems they faced in marketing vegetables and fruit, in standardization, packing, grading, and seasonal variations. Initially unsuccessful, Whitmore rented a shop in America Square, near Fenchurch Street Station, and set up the Orsett Park Supply Association to supervise supply.¹ Although orders increased, estate correspondence, full of letters of complaint from customers, shows that Orsett tenants had difficulties in balancing supply and demand. Whitmore found the return was not worth the effort or capital invested and closed the Association in December 1897.²

This did not end Whitmore's cooperative initiative. Earlier that year he had founded the East Anglian Farmers' Cooperative to provide his tenants' requisites more cheaply by bulk purchase.³ Within a few months the new cooperative was acting as a commission agent in marketing members' fruit and vegetables, and soon acquired warehouses at Stratford and in the City, and a stall at Covent Garden market. Two full time managers provided market information and acted as commission salesmen.⁴ After 1909 the cooperative also acted as a commission agent for several smallholders' societies.⁵ Although officers of the society included large landowners from all over

¹*ibid.* The Association was based on Lord Winchelsea's projects.

²R.U.L., Whitmore MSS., ESS 17/1/22-25, various letters.

³M.A.F., *Cooperative Marketing*, pp.81, 82.

⁴British Agricultural Organization Society, *Agricultural Cooperation*, Leaflet No. 1, (1899), p.3; *Essex Weekly News*, 10.3.1899; R.U.L., Whitmore MSS., ESS 17/1/24-32, various letters.

⁵M.A.F., *Cooperative Marketing*, pp.82, 188.

Essex,¹ it remained small and local with membership stagnating after an initial surge.² In 1911 the society had only 70 full members, together with affiliated members. This represents under 2.5 per cent of Essex farmers,³ but obviously a much higher proportion of south Essex vegetable growers and market gardeners. It is probable that the society remained small in part because it was centred on one estate, and, more, because it catered only for vegetable and fruit farmers living near enough to the metropolis to sell in a London market.

Eastern Counties Farmers, the third cooperative for which details exist, was founded by large tenant farmers in Suffolk to reorganize marketing in the face of falling profits. A number of north Essex farmers joined. It both provided members' needs in bulk, and sold their produce on commission. Unlike other Essex agricultural cooperatives, it catered for the whole range of farm products and employed experts to give advice to farmers and to market particular products.⁴ Attracting the larger tenants, the society grew rapidly: within one year it had 158 members (representing 61,620 acres) and by 1909 had 899 members.⁵ The four other local societies mentioned in the 1912 return experienced very modest growth, and the scant attention paid to them in the Essex newspapers suggests that their importance was not great.⁶

¹R.U.L., ESS 17/1/25, 32. The landowners were Messrs. Benyon, Henniker, Lockwood, Neave, Petre, Rasch, Rayleigh, Round, Strutt, Tower and Whitmore.

²*Essex Weekly News*, 10.3.1899; table 24 above.

³Table 24. Even in 1923 this society had only 100 members. M.A.F., *Cooperative Marketing*, pp.82, 188.

⁴Pratt, *Smallholders*, p.102; Eastern Counties Farmers' Cooperative Association MSS., report and statement of accounts for the ten months ending December 31st 1905; Wolff, *Cooperation*, p.43.

⁵Eastern Counties Farmers' Cooperative Association MSS., report and statement of accounts for the ten months ending December 31st 1905; *Report on Cooperatives*, (B.P.P., 1912-13 lxxv), pp.184-186.

⁶*Report on Cooperatives*, (B.P.P., 1912-13 lxxv), pp.184-186. The Epping and Waltham Society merged with the Eastern Counties Dairy Farmers' Cooperative Society in 1911, whilst in 1914 the Tendring Hundred Cooperative Society only numbered 77 members: *Essex Weekly News*, 10.3.1911, 27.3.1914.

The late and limited impact of agricultural cooperation in Essex (and indeed England as a whole), in stark contrast to the rapid progress made on the continent,¹ was, perhaps, due partly to suspicion of cooperation with distant farmers - vegetable growers near Colchester preferred to join a local society than one some sixty miles away² - and partly to the specialized nature of the cooperatives, which limited potential members (cooperatives retailing members' hay or cereals might have been more successful in Essex).³ It must also be the case that some farmers felt, rightly or wrongly, that the savings made by the societies were not sufficient to warrant them paying an annual subscription. To some extent too, the muted impact of cooperation may reflect the ability and willingness of Essex landowners to shoulder a major part of the costs of depression,⁴ reducing the need for cooperation. Moreover, the tripartite structure of Essex agriculture may have inhibited cooperation: larger tenant farmers growing cereals probably regarded collective action as more appropriate for peasant farmers,⁵ and also have feared the risks involved. Yet the fault lay more with owners than tenants. Setting up a cooperative enterprise required initial capital and risk taking which only substantial landowners could provide. Francis Whitmore showed what could be done, but few owners in Essex or nationally followed his example. This was a mistake. Van Zanden has suggested that lack of cooperation prevented radical change in British farming: the European countries which experienced rapidly rising production and productivity, especially in high yield alternatives to cereals, were those where agricultural cooperation expanded from the

¹Collins (ed.), *Agrarian History*, pp.667, 688.

²Rew even suggested that locally farmers failed to cooperate owing to jealousy, *ibid.*, p. 672.

³Societies appealing to a wider range of farmers were those buying in bulk for members. Most societies avoided retail trade itself; even distributive societies only acted as commission agents or wholesalers. Lord Winchelsea's failure may have had influence here.

⁴Landowner support for co-operation was common but passive (as the list of officers in the E.A.F. shows). Some, like Lady Warwick, spoke at meetings in their favour (*Essex Weekly News*, 6.3.1903) but only two - Lord Rayleigh and Francis Whitmore - were active in setting up cooperatives for tenants. Governments tended to be indifferent, Collins (ed.), *Agrarian History*, p.689.

⁵This was a view expressed by some contemporaries, T.S.Dymond (ed.), *Report on the Visit of the Essex Farmers' Party to Denmark, May and June 1900*, (Chelmsford, 1900), p.36.

1890s and where, by 1910, most farmers were members of a cooperative.¹ Similarly, agriculturalists in Essex, as elsewhere, failed to impose uniform standards and improve supply by promoting food processing plants on the Danish model.² Again, landowners needed to take a lead due to the costs and risks involved, but failed to do so.

8. Other Responses to Depression

As farmers sought to cut costs, it is probable that they economised on manures, either by reducing the amount used or by switching to cheaper industrial fertilizers. The increased grass acreage in Essex encouraged an increased use of superphosphates and, in the 1890s, of basic slag which facilitated conversion to pasture and improved poorer grassland. Many Essex farmers switched to feeding stock on 'cake' rather than on root crops as low cereal prices cheapened the price of cattle 'cake'.³ To assist, landowners changed lease clauses to reflect the substitution of artificial fertilizers for farmyard manure by allowing freedom of sale of fodder crops as long as artificial manures or cake "of equal value" were purchased in return.⁴

The impact of the depression on mechanization was not great, and the greater use of powered barn machinery and of better (although not usually steam powered) field machinery continued. Farm sale catalogues show that most Essex farmers had their own mowing and reaping machines, corn drills, hay turners, horse rakes, and feed preparation equipment, and a small but increasing number had milking machines.

¹ Van Zanden, 'Green Revolution', pp.236-237.

² Collins (ed.), *Agrarian History*, pp.192-193.

³ *Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.63.

⁴ Such a change was common on Essex estates, but some leases still limited sales of fodder crops even if there was no prohibition: as late as 1887 the tenant at Ingrave Hall on the Thorndon estate was only allowed to sell a third of his hay crop each year. E.R.O., Petre MSS., D/DP T182/28, lease of Ingrave Hall farm, 1887. Lease clauses had not always been enforced for good farmers, as shown in chapter 3 above.

Others, however, especially smallholders, still used scythes for harvesting. Larger farmers like Matthews and Cole bought a steam engine and tackle and even rented them to local farmers, but most Essex farmers relied on visits from the peripatetic steam threshing machine.¹ Steam ploughing was still not common in Essex, the enormous overheads required by steam ploughing preventing any major switch from traditional horse ploughing,² and even as late as 1914, the comparative cheapness of agricultural labour in Essex made wholesale mechanisation an unattractive alternative to traditional methods.

Falling profits in the late nineteenth century changed the attitudes of some Essex farmers to education as the value of skill in dairy, grass and vegetable management was increasingly, but only gradually, recognised.³ The Essex Agricultural Society started up courses on butter making to encourage consistency in quality and flavour, and ran a series of crop experiments in the 1890s to educate farmers on both arable and pasture farming. The County Council sponsored a series of (poorly attended) agricultural lectures in the same decade⁴ and in 1893, founded the Essex County Technical Laboratories which provided agricultural and horticultural education as well as laboratories: farmers could send soil or fertilizer samples for analysis, and write in for advice. Ten years later the premises were expanded as farmer interest

¹Rider Haggard, *Rural England*, p.476; E.R.O., Miscellaneous Farm Accounts: Matthews MSS., D/DU 768/2; *Agricultural Depression*, Matthews, (B.P.P., 1896 xvii), Q.61529; oral testimony of J.A. Matthews Esq.; Collins, *Orsett Estate*, pp.51, 55; Graham, *Revival*, p.29; Horn, *Changing Countryside*, p.67.

²*Report of the Departmental Committee on Agricultural Machinery, Evidence of P. McConnell*, (B.P.P., 1919 viii), pp.42-43.

³e.g. one farmer claimed that consumers found the quality of Essex butter unreliable as its quality varied owing to the variety of ways in which it was manufactured. *Report of the departmental Commission on Agricultural and Dairy Schools, Evidence of G. Baynes*, (B.P.P., 1888 xxxii), QQ. 4028-32, 4048-52.

⁴*Essex Standard*, 29.3.1890, 7.11.1891; J.Bryce, *A Short History of the Essex Institute of Agriculture*, (n.d.), Thurrock Public Library, E 378, pp.3-4, 6.

increased.¹

By the early twentieth century the County ran a variety of courses at the Technical Laboratories concentrating on poultry and dairy management, agricultural and horticultural labour, and aspects of science which affected practical agriculture.² They also spread agricultural knowledge by giving lectures on market days in Chelmsford, and elsewhere in the county (for example the laboratory scientists lectured at Orsett on laying land to grass), by encouraging and publishing accounts of field experiments (e.g. techniques of grassing down, types of manure, new crops such as sugar beet) and by farm visits.³ In 1913 they acquired Brittons Hall Farm (150 acres), west of Chelmsford for practical dairy herd management tuition.⁴ Yet despite the increasing availability of agricultural education after 1890, it was only a few Essex farmers, agents and landowners who showed active interest in the county schemes.⁵ Both the government and landowners did little to promote agricultural education or agricultural science, in stark contrast, for example, to Holland,⁶ and the impact of the lectures seems to have been very limited: even by 1914 most farmers had no formal training and had been shown how to farm by their fathers.

¹Bryce, *Short History*, pp. 3-6; Essex Education Committee, *Agricultural Education in Essex*, (1904), p.5; Pratt, *Transition*, pp.32-35.

²Essex Education Committee, *Agricultural Education*, pp.13-18; Anon., Agricultural Education in England and Wales', *Journal of the Board of Agriculture*, xiii, (1906-7), pp. 645-646, 652-653. Schools in Chelmsford and Stratford taught agricultural subjects, *Report on Agricultural and Dairy Schools*, (B.P.P., 1888 xxxii), *Appendix*, p. 180.

³Pratt, *Transition*, pp.33-35;

⁴Bryce, *Short History*, p.3.

⁵Amongst those who did were a couple of more substantial Essex farmers who worked near Chelmsford and number of Scottish migrant farmers, according to the late Hugh Gemmill Esq. and the late R.Kenchington Esq.

⁶ M.Wintle, 'Modest Growth and Capital Drain in an Advanced Economy: the Case of Dutch Agriculture in the Nineteenth Century', *Ag.H.R.*, xxxix, pt. 1, (1991), p.25.

9. Changes in Farm Size

Farm size had an impact on land use. Labour intensive, high yield farming such as market gardening, poultry keeping or soft fruit growing were suited to small farms, limited mechanization and family labour, and large tenant farms, as were common in Essex, hindered such transition. Accordingly, one would expect to see a reduction in farm size at a time when market conditions favoured small farms specializing in these products.¹ Yet official statistics published from the mid 1870s, based on the parish agricultural returns² show that until the early 1880s the slow trend towards consolidation noted in chapter 3 above continued and larger farms were still increasing in Essex, albeit slowly, at the expense of smaller properties.³ Essex estate accounts confirm this. A tenant on the Tower estate, for example, who in 1873 held one farm, rented six as one large concern by 1880, and Druce commented that smaller farms had diminished at the expense of farms of over 300 acres between 1875 and 1880.⁴

The modest trend to larger farms was reversed from the early 1880s and then with only a slight decline in the proportion of farms over 300 acres and a slight increase in the proportion of smaller farms, although farms of between 500 and 1,000 acres also showed a modest increase. In the main, Essex followed the national pattern of movement in farm sizes, although the mean Essex farm was estimated to be larger than the mean English farm throughout the period 1870-1914, the figures for 1910 being 66.1 acres and 60.1 acres respectively.⁵ The tables also confirm the limited impact of the small-holding movement in Essex.

¹ Collins, *Agrarian History*, pp.179-181.

² *Agricultural Returns*, (B.P.P., 1875 lxxix), p. 593 and ff. The parish summaries give holding size for 1870 and 1911, but variation in classification prevents comparison

³ see table 29.

⁴ E.R.O., Tower MSS., D/DTw A6, Correspondence and Accounts; *Richmond Commission, Report, Druce*, (B.P.P., 1882 xv), p.29.

⁵ *Agricultural Returns for 1910*, (B.P.P., 1911 c), pp.139-516.

Table 26**Changes in the size of holdings in Essex, 1875-1913**

(Holdings as a percentage of total acreage held)

Size of Holding	1875	1880	1885	1895	1913
Under 50 acres	8.08	7.70	7.27	7.55	8.79
50-100 acres	11.72	9.70	9.86	11.11	12.43
100-300 acres	44.33	44.60	43.74	44.25	45.71
300 - 500 acres	22.81	23.00	23.92	21.53)	
500-1000 acres	11.35	13.00	12.46	13.64) 33.06	
over 1000 acres	1.71	2.00	2.74	1.91)	

Source: Agricultural Returns for 1875, (B.P.P., 1875 lxxix), pp. 39 and 46; Richmond Commission: Report of S.B.L. Druce, (B.P.P., 1882 xv), p.29.; Agricultural Returns for 1885, (B.P.P., 1884-5 lxxxiv), p.1; 1895, (B.P.P., xcii), p.1; 1913, (B.P.P., 1914 xcvi), p.151. Note: 1875 figure for 5-50 acres includes holdings under five acres.

Table 27**Changes in the number of holdings in Essex by size, 1875-1913**

(Holdings as a percentage of total number held)

Size of Holding	1875	1885	1895	1913
5 - 50 acres	42.00	43.52	43.70	46.64
50-100 acres	19.03	16.36	17.68	18.12
100-300 acres	29.73	29.73	29.32	27.57
300 - 500 acres	7.19	7.74	6.72)	
500-1000 acres	2.06	2.38	2.39) 7.66	
over 1000 acres	0.16	0.28	0.17)	

Source: As for table 26 above

Census material provides another insight into the number and size of agricultural holdings. Table 28 shows the number of farmers and graziers in Essex and the rate of increase or decrease in that number for each decade between 1851 and 1911. The decrease up to the 1880s may be, as Dr Horn suggests, a reflection of unlet farms or

land for which tenants could no longer be found,¹ or may show the gradual move to larger, and therefore fewer, holdings in Essex, the trend being reversed from the mid 1880s and accelerating thereafter.

Table 28

Number of farmers and graziers in Essex and the percentage increase or decrease in each decade, 1871-1911

<u>Date</u>	<u>Number</u>	<u>Rate of Change</u>
1871	3,925	
1881	3,303	1871-1881 - 15.85 per cent
1891	3,193	1881-1891 - 3.33 per cent
1901	3,767	1891-1901 + 15.24 per cent
1911	4,246	1901-1911 +11.28 per cent

Source: Census returns.

Estate records show how modest the decline in the number of larger farms was. Although some record multiple holdings and large farms being broken up into smaller units, most show little change in holding size.² It seems likely that tenants who reduced the number of their holdings from the early 1880s did so to save money as they had insufficient capital to continue to farm large acreages and tenants with sufficient capital to take large farms at that time were scarce. Certainly, few new tenants took multiple holdings until the return of better times after 1908.³ There was, however, no concerted move to create smaller farms.

The reluctance of Essex owners, and indeed landlords nationally, to subdivide

¹Horn, *Changing Countryside*, p.63. Her figures exclude female farmers and graziers.

²Examples of change between 1880-84 include the Ecclesiastical Commissioners' smaller South Benfleet estate where three farms were created from a single holding, and the Thorndon estate where a tenant gave up the largest of his three farms, and where one large holding at Ingrave was split into four separate holdings, C.C., E.C.E. MSS., file 50768; E.R.O., Petre MSS., D/DP A365, 366. Another example is farmland near Basildon which was cut into plots for poultry rearing, *Agricultural Depression, Darby*, (B.P.P., 1894 xvi, pt 1), QQ.34289-34388.

³Evidence for this comes from a number of estates, e.g. E.R.O., Petre MSS., D/DP A 367-8. G.L.R.O., St. Thomas' Hospital MSS., H1/ST/E30/64-70, Clerk's rental; H1/ST/A6/22, minutes.

holdings despite a demand for small farms¹ may be due in part to hidebound ideas, but probably more to the difficulties and expense that would be involved in such a radical move: reorganisation of fields and putting up new farm buildings could be costly and involved risk.² Collins has speculated that large farms may have been a factor hindering the transition to more profitable products³ and possibly reconstruction on European lines, and certainly some Essex contemporaries noted that whilst Danish agriculture had been “revolutionised” by education and co-operation, this had only been possible as most Danish farmers held small farms or were smallholders.⁴ They questioned how far a full recovery could take place in Essex without the division of larger farms into smallholdings.⁵ The failure of landowners to take on such costs and risks to promote small farms would go some way to support Offer’s criticism of the tripartite system and large tenant farms.⁶ That most owners did not promote agricultural education, scientific farming or cooperative ventures adds to the suggestion that Essex landlords were poor as leaders and entrepreneurs.

Essex landowners, like their counterparts nationally, failed to promote the smallholding movement successfully, whose aim was to provide holdings larger than allotments but under 30 acres to encourage labourers to remain on the land and even create a class of peasant farmers as a bulwark against socialism.⁷ Such a move might have encouraged the successful peasant farming developed successfully on the continent. Essex County Council was slow to respond to the 1892 Smallholdings

¹Rutter stressed the size of the demand in his evidence, *Agricultural Depression, Rutter*, (B.P.P., 1894 xvi pt.3), QQ. 4198-341201, 34299, 34325.

² Collins (ed.), *Agrarian History*, pp.181-182

³ *ibid.*, p.179.

⁴ Dymond (ed.), *Visit of the Essex' Farmers*, pp.33-35.

⁵ *ibid.*, p.36.

⁶ *ibid.*, p. 175; Offer, *First World War*, ch.8.

⁷Kingsbury, ‘Landed interests’, pp.333-334.

Act. No land had been acquired under this Act by 1895, and a mere 653 acres by 1903,¹ perhaps as the cost (including that of new buildings) discouraged Essex labourers from applying for smallholdings. County Councils, with no powers of compulsory purchase, paid market rates for land, and land in south-west Essex, where there was a demand for smallholdings, was too expensive for many labourers to buy. Poor soil quality of potential holdings was a further factor discouraging the smallholding movement,² as was landowner disinterest in erecting new buildings.³ With a lack of demand for holdings, the County Council's Smallholdings Committee did not meet for several years, but as demand for smallholdings grew in the early twentieth century,⁴ and legislation in 1907 gave County Councils powers of compulsory purchase, the Council leased two farms and bought about 900 acres for smallholdings.⁵ Demand persisted and, following criticism from the Board of Agriculture, the County Council increased its smallholdings substantially between 1912 and 1914,⁶ but even by 1914 smallholdings made no significant impact on Essex farming.

Some landowners provided smallholdings. Lord Wantage, for example, bought an Essex estate for this purpose, and at Tolleshunt Knights, local landowners leased a

¹*ibid.*, p. 340. There were, of course, many smallholdings not provided under this Act: in 1886, for example, 5,653 smallholdings existed in Essex of which 46 per cent were under five acres - *Return of Allotments and Smallholdings in Great Britain*, (B.P.P., 1890 lvii), pp.128-129.

²Allotments were unpopular near Maldon due, apparently, to the heavy soil, and it is likely that smallholdings were viewed similarly, *Labour, Report, Spencer*, (B.P.P., 1893-4 xxxv), p.79. According to on land agent, demand for Essex smallholdings [10 to 80 acres] from agricultural labourers declined in the 1890s, but increased from shopkeepers and salesmen even on clayland. *Agricultural Depression, Rutter*, (B.P.P., 1894 xvi pt. 3), QQ.34299-34316, 34325.

³ Collins (ed.), *Agrarian History*, p.181.

⁴*Report of the Departmental Committee of the Board of Agriculture and Fish to Inquire into and Report upon the Subject of Smallholdings in Great Britain, Evidence of F.Impey*, (B.P.P., 1906 lv), QQ. 9705-6.

⁵Kingsbury, 'Landed Interests', pp.593-95, 599.

⁶*ibid.*, p.605.

hundred acres to a group of labourers who even set up their own local wholesale cooperative society.¹ At Tiptree, smallholders bought or leased six to twelve acre plots for growing seeds and vegetables, and the Salvation Army set up eighty smallholdings (each with a house) at Boxted near Colchester.² Overall, however, the impact of smallholdings provided by private owners was probably even less than those provided by the County Council.

10. The Extent of the Depression

The analysis of land use changes above provides one indication of changes in profitability in different aspects of Essex farming. Rent change provides another such insight and it was shown in chapter 4 above that in this respect, farmers had much less reason to feel depressed than landowners. Here, the extent of depression is further assessed by attempts to measure the gross output of Essex agriculture, and changes in farmers' income and in the incidence of bankruptcy and tenant turnover.

In the minds of most contemporaries there was little doubt of the fact of depression in Essex. As early as 1881 Druce found that in Essex "agricultural depression does exist: the farmers are, as a whole, in a very deplorable condition and many are verging upon bankruptcy" and a year later he claimed that the "depression was in no way mitigated but on the contrary . . . the state of the county was worse".³ By 1897 the Commissioners reported that "among the counties included in this section [arable] Essex appears . . . to have suffered more severely than any other", and Strutt felt that

¹*Report of the Departmental Committee of the Board of Agriculture on Smallholdings in Great Britain*, (B.P.P., 1906 iv), p.25.

²L.Jebb, *The Smallholdings of England: A Survey of various Existing Systems*, (1907), pp.109-113, 426-431.

³*Richmond Commission, Report, Druce*, (B.P.P., 1881 xvi), p.366; *idem.*, (B.P.P., 1882 xv), p.31.

the Essex farmer "is being ruined gradually".¹ Remembering north west Essex before 1914 one Essex man has written "there was great poverty, malnutrition and neglect. Corn areas had declined, good stubbles had reverted to grass. Cottages and farm buildings were decayed, fences neglected."² Certainly if the above statements are true there is little wonder that the vicar at Ramsden Crays near Wickford refused to hold a harvest thanksgiving in 1881 as it would be an "unreal ceremonial".³

Statistics confirm that depression existed in Essex. It is possible to calculate estimates of the value of the gross agricultural output from Essex farms using price and yield statistics and the annual agricultural returns. The method used in this thesis to convert crop acreages and livestock numbers into marketed output values is based on that of Dr. Ojala,⁴ but Essex yields and prices have been used where possible in place of his national yields and import prices. The result of these calculations is shown in tables 29 and 30 and in charts 28 and 29. Not surprisingly, difficulties arise in such computations. First, the years 1870/72 are used as a baseline because earlier statistics are considered unreliable, and because most accounts consider depression to have begun by 1873, but these were years of high cereal yields in Essex and so may exaggerate pre-depression cereal "output". Secondly, no account is taken of changes in the quality of produce: the change from concentration on mutton to higher priced lamb, for example, is not reflected in the calculations. Finally, no statistics are available to calculate vegetable, soft fruit, straw, poultry or egg output, products

¹*Agricultural Depression, Final Report*, (B.P.P., 1897 xv), p.8; *idem.*, *Strutt*, (B.P.P., 1894 xvi Pt.1), Q.13894.

²Mays, *Reuben's Corner*, pp.14-15.

³*Essex Weekly News*, 1881, quoted in Wood, *Seax*, p.30.

⁴See appendix 1.

which became increasingly important to Essex farmers during the depression, and so gross output for 1900/02 and 1910/12 may be underestimated. Despite these shortcomings, the figures in tables 29 and 30, and charts 28 and 29 are sufficiently accurate to advance upon existing, more impressionistic, understanding of the extent of the depression in Essex.

The figures, at first sight, appear to confirm that Essex agriculture experienced severe depression between 1870/72 and 1893/95 with gross output at current prices falling by some 46.25 per cent. Much of this movement, however, was due to general price deflation, and at constant 1910-12 prices Essex gross output declined by a more modest 19.42 per cent.¹ The initial drop in output values in the 1870s was followed by substantial recovery as Essex farmers successfully amended their farming systems to meet changed market conditions. Indeed, by 1891 output at fixed 1910-12 prices stood a mere 1.1 per cent below the 1870-72 level showing that Essex farmers had successfully amended their farming systems to meet changed market conditions. A second period of depression in the 1890s witnessed a sharp reduction in the value of Essex farm output as farmers reduced cereal acreages substantially and turned more to 'low intensive' farming. As noted above,² this move to 'low intensive' farming and the consequent reduction in output should not be interpreted as failure, but as a rational adjustment, and a way of improving total factor productivity.³ In the early twentieth century, rising prices enabled a recovery in output, although in 1910/12 it

¹Thompson's figures differ slightly from these. His hay prices, for example, are lower than those used here, whilst he uses 1873, a depressed year in parts of Essex, for his base year, Thompson, 'Anatomy', pp.233-34.

²See above, this chapter, section 4.

³See e.g. Offer, *First World War*, p.94.

was still 12 per cent less than it had been in 1870/72. In terms of physical output, national figures show a fall of 4 per cent between 1873 and 1894, and a rise of 4 per cent between 1894 and 1911,¹ so that by the latter date output was approximately the same as in 1873. Accordingly, the greater fall in Essex gross output could suggest severe depression.

Table 29

Essex farms, gross output at fixed 1910/12 prices

[1870/72 = 100]

	1870/72	1881	1891	1893/95	1900/02	1910/12
Cereals	100.00	79.39	78.24	56.36	59.37	55.10
Hay	100.00	128.54	170.98	136.76	171.76	176.38
Other Crops	100.00	79.40	79.63	68.86	55.40	75.04
Orchards	100.00	79.19	95.91	112.50	151.59	134.68
Livestock	100.00	99.04	120.96	106.55	102.21	118.86
TOTAL	100.00	89.20	98.90	80.58	81.22	87.96

Source: see Appendix 1

Table 30

Essex farms, gross output of wheat and milk at fixed 1910/12 prices

[1870/72 = 100]

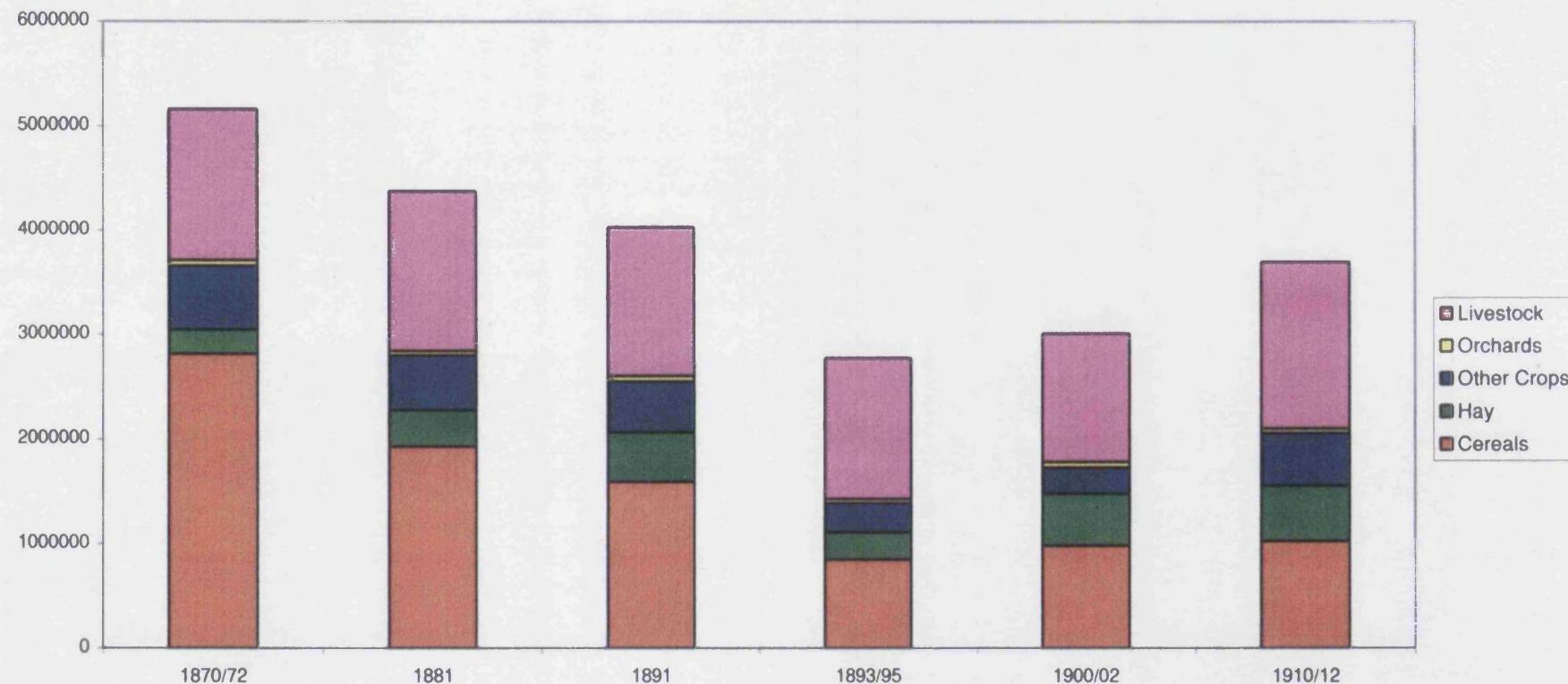
	1870/72	1881	1891	1893/95	1900/02	1910/12
Wheat	100.00	79.58	77.28	46.75	50.14	53.54
Milk	100.00	125.69	169.49	166.56	190.74	261.31

Source: see Appendix 1

¹Thompson, 'Anatomy', pp.232-233.

Chart 28

Essex farms: gross output calculated at current prices, 1870/2 to 1910/12

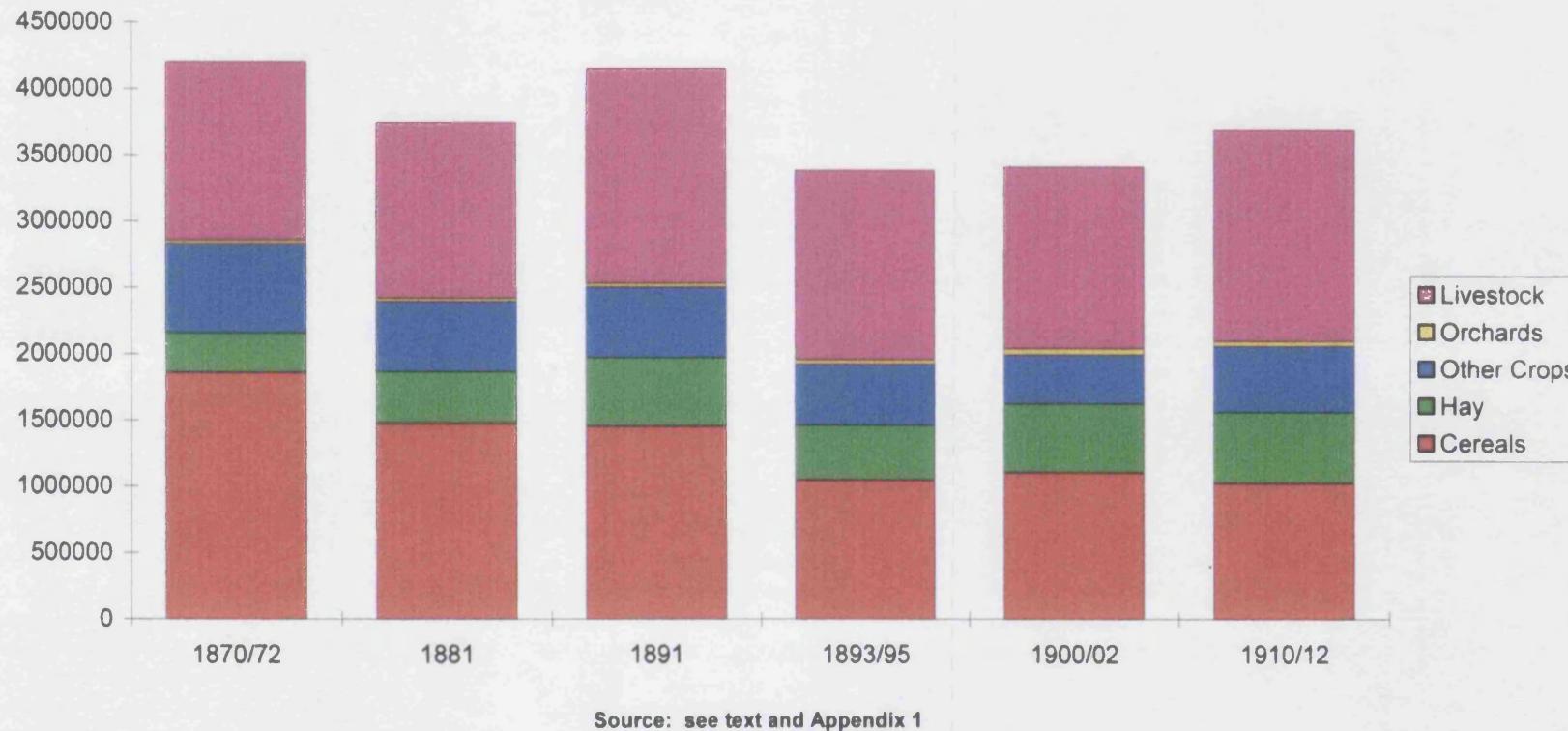


Source: see text and Appendix 1

Chart 29

Essex farms: gross output calculated at fixed 1910/12 Prices, 1870/72 to 1910/12

282



Source: see text and Appendix 1

The decline of the wheat acreage and falling cereal prices accounted for much of the reduction in output. As noted above, the gross output value of wheat in Essex at fixed 1910-12 prices fell by almost 53.25 per cent between 1870/72 and 1893/95, but that of most other arable crops, other than oats and hay, also declined.¹ The gross output value of crops as a whole fell by 32.1 per cent at fixed 1910-12 prices between 1870/72 and 1893/95. Between 1893/95 and 1910/12 the real gross output of cereals declined slightly, despite a modest revival in wheat and oats output, due to a fall in barley output.

Fletcher argued that livestock output rose substantially in England during the depression, but it appears that in Essex this rise was more modest.² Despite a major increase in dairying (the value of its gross output rose by some 66.56 per cent at fixed 1910/12 prices between 1870/72 and 1893/95, and continued to rise substantially until 1914) and a more modest rise in beef output, particularly after 1893/95, the output of Essex livestock at fixed 1910/12 prices rose in value by a mere 6.55 per cent between 1870/72 and 1893/95, and declined by 4.3 per cent between 1893/95 and 1900/02. Between these years gross output had fluctuated: constant output between 1870/72 and 1881 was followed by a substantial rise in the 1880s and a sharp fall in the 1890s. The value of gross output of mutton, lamb and wool declined continuously between 1893/95 and 1910/12, but overall there was a substantial overall increase in livestock output between 1900/02 and 1910/12: by the latter years output figures stood at 18.86 per cent above those of 1870/72 at fixed 1910/12 prices. The figures show that livestock output (especially dairying and, to a lesser extent, cattle fattening) became increasingly important to total gross output as arable output declined, and that the recovery to 1910/12 was based more on expanding livestock output than on a recovering arable sector.

¹See table 29.

²It should be noted, however, that lack of poultry and egg figures (included in Fletcher's national statistics) severely biases downward the county figure for 1900/2 and 1910/12.

Using the sample of parish summaries of the agricultural returns mentioned above, it is possible to estimate changes in gross output on the various Essex soil types. These are shown in charts 30 and 31. A similar trend was experienced on all soils, although the figures do not take fruit, vegetables or orchards into consideration and so affect Thames Valley soil figures particularly.¹ These measures add qualified quantitative confirmation of agricultural depression in Essex, endorsing contemporary comment, the evidence of falling prices, rentals and land values, and lower standards of cultivation.² It is also true that there was something of a recovery after 1900/02, giving by 1911 the "unexcited prosperity" noted by Hall.³

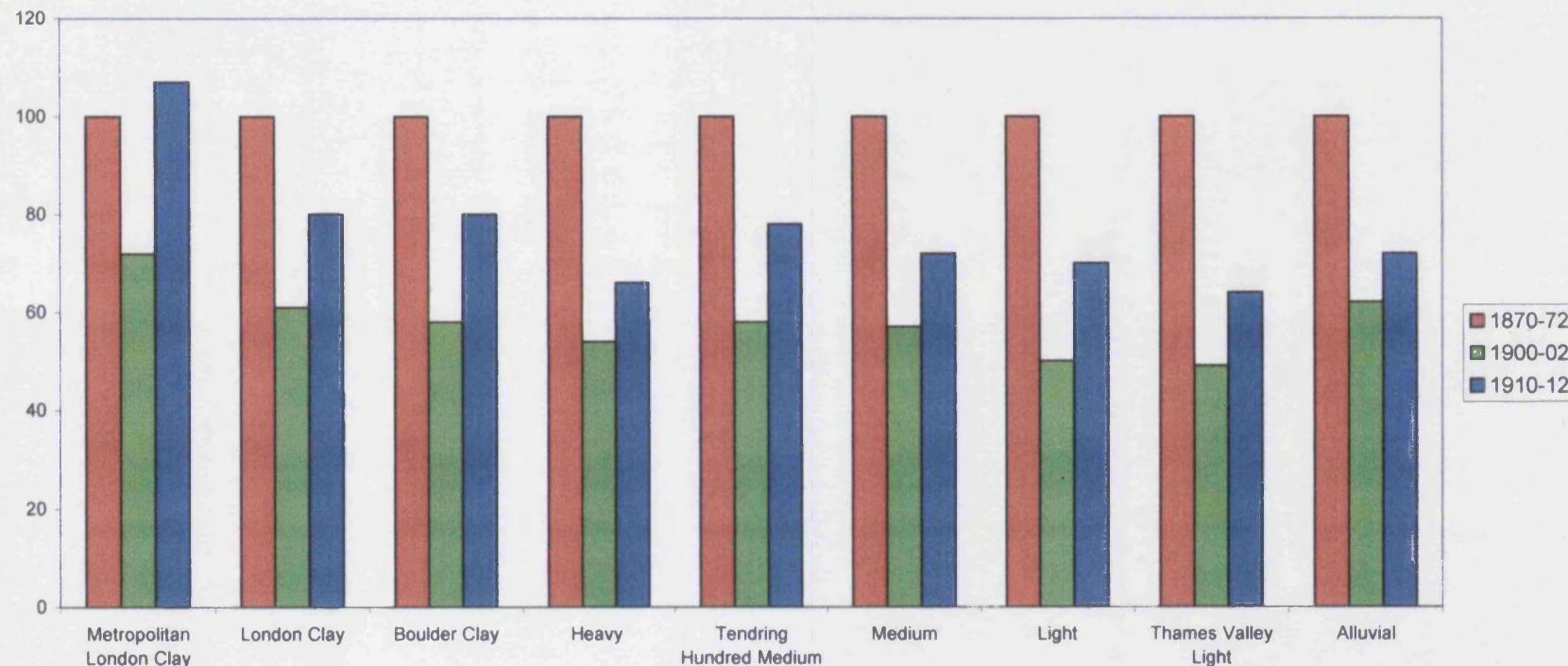
Chapter 4 above described a significant decline in landowner incomes, sufficient to warrant the term 'depression'. Essex farmers experience is less clear cut. It is impossible to get accurate county figures for Essex farmers' profits: such a calculation would involve deductions for rent, rates, and farm inputs such as seed corn, fertilizer, feed and labour, and it is not possible to isolate Essex farm inputs from national aggregates. Furthermore, too few farm accounts survive to illustrate the overall position.

¹ Declining Essex output was matched by an increase in labour productivity per head. Using the method described by Dewey,¹ a figure of 35 per cent is generated for the county between 1871 and 1891. The same calculation shows a 23 per cent and 22 per cent improvement in labour productivity between 1871 and 1901 and between 1871 and 1911 respectively.¹ The calculations are, however, extremely crude, and Thompson has noted the weakness of using county census data in this way to measure labour inputs as census figures differ from the number actually employed, Thompson, 'An Anatomy', p.235.

² This work has not attempted a calculation of Essex total factor production. Such calculations are at best extremely tentative due to weaknesses in measuring output, labour and capital, estimations of which vary sharply, whilst it is not possible to calculate accurate county figures, see Hunt and Pam, 'Responding', p.237, n.44.

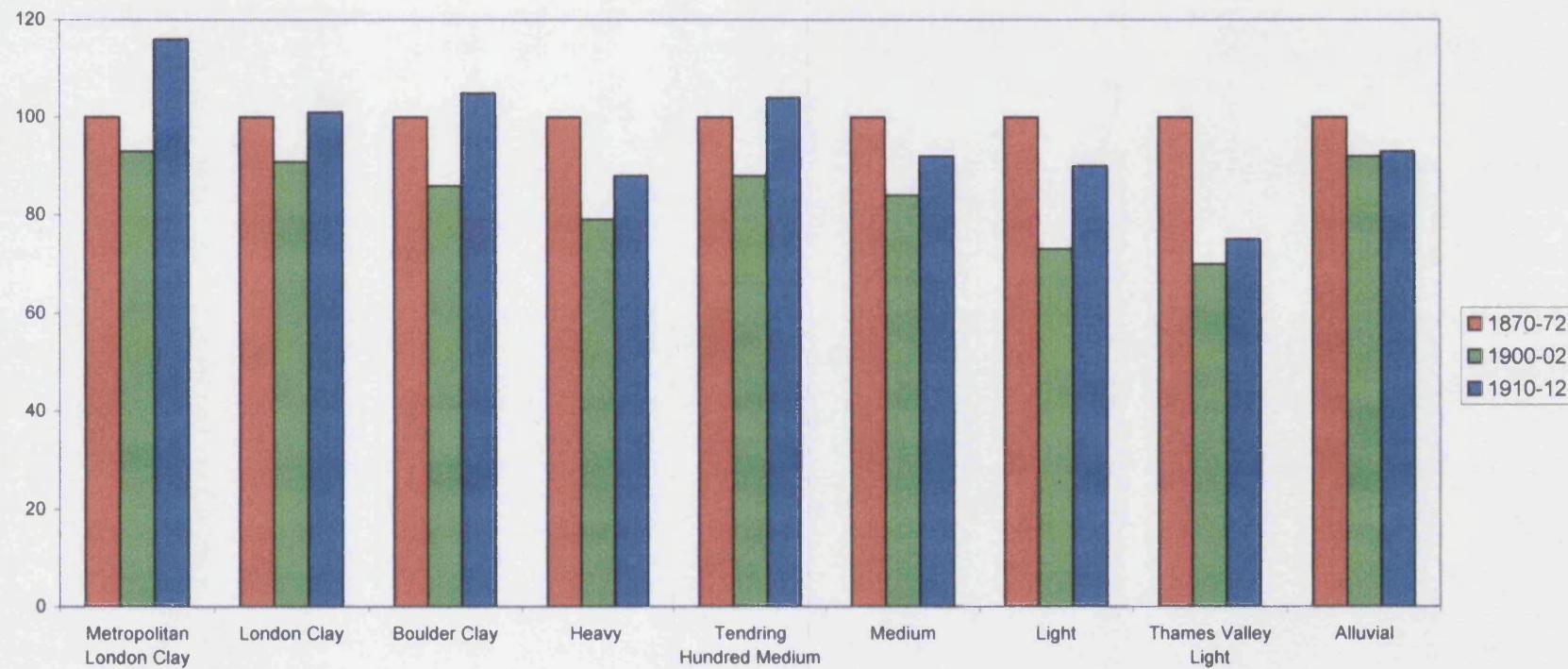
³ Hall, *Pilgrimage*, pp.68-69.

Chart 30
 Index of Essex farm gross output by soil type from 86 parishes calculated at current prices, 1870/2,
 1900/2, 1910/12
 [1870=100]



Source: see text and Appendix 1

Chart 31
 Index of Essex farms' gross output by soil type from 86 parishes at fixed 1910-12 prices, 1870/2,
 1900/2, 1910/12
 [1870=100]



Source: see text and Appendix 1

It is, however, possible to look at trends in the division of total factor income between landowners, farmers and labour. Some idea of trends in 'labour' input on Essex farms can be gained from census figures and average wage levels. This, albeit crude method, suggests that between 1870/72 and 1900/02 the Essex farm labour bill fell by over 28 per cent, a figure close to that revealed in the few surviving individual farm accounts. Gross farm output (which fell by 41.72 per cent at current prices between 1870/2 and 1900/02) fell by rather more than labour costs, but less than rents which fell by some 48 per cent over the same period. Relative to that of farmers, therefore, labourers' share of income from Essex farming rose¹ whilst the landowners' share fell. On balance, it is probable that between 1870/72 and 1900/02 the Essex farmers' share in agricultural income remained constant. In this sense too, though, the period can reasonably be regarded as a time of depression for Essex farmers as they came to have a constant share of a diminished total output.²

Between 1900/02 and 1910/12, however, the Essex farmers' share of farm output rose substantially, and by 1910/12 with output down a mere 28.36 per cent below the 1870/72 level (at current prices), only a slow increase in labour costs between 1901 and 1911, and rents remaining 46.8 per cent below the 1870/72 level, some farmers were not significantly worse off than they had been in the years before the depression.³ The case for considering the depression to have lifted by 1910/12 is, therefore, far more appropriately applied to Essex farmers than to Essex landlords.

¹ Clearly the effect of rising farm wages had more than offset the impact of reduced numbers of farm labourers.

² As noted above, at this time prices fell between 23.5 per cent (Rousseau) and 30 per cent (Sauerbeck-*Statist*), Mitchell and Dean, *Abstract*, pp.472-475.

³ Prices in 1910/12 were between 14 per cent (Rousseau) and 21.3 per cent (Sauerbeck-*Statist*) below those of 1870/72, *ibid*. Hall felt by 1911 that "Essex farmers are in a thriving condition again", Hall, *Pilgrimage*, p.68. Further confirmation that Essex farmers' income in 1910/12 was almost at the 1870/72 level comes from using Essex census and farm output figures in O'Grada's method to calculate farmers' income, O'Grada, 'British Agriculture', pp.147-148.

Naturally, individual farmers fared differently, some making good profits, others losses, but overall, whereas Essex 'golden age' farm accounts suggest good tenants made 10 per cent on their capital,¹ average returns were much reduced thereafter. Although Primrose McConnell (using £6 per acre capital) claimed to make a 10 per cent profit in the late 1880s and early 1890s, Channing cited a 7 per cent return on five farms where £10 per acre capital was employed, Edward Strutt made only 6.2 per cent on his capital from 'in hand' farms in the same period despite strict parsimony, and Lord Braybrooke's home farm averaged a 5.4 per cent return on his capital between 1874 and 1878, and made a loss of 0.6 per cent p.a. between 1883 and 1886.² Other figures are provided by Pringle who claimed that in the early 1890s those who farmed "well" (by which he meant intensively, using about £10 per acre) made only 3 per cent on their capital (on a 300 acre farm this might represent a return of £90 p.a.), those who practised 'low' farming made 12.5 per cent.³ Because virtually all Essex farmers suffered some loss of income in the period 1870/72 to 1900/02, despite rent falls, they would have been justified in regarding those years as "depressed". By the twentieth century, some farmers were again getting between 8 per cent and 15 per cent on their capital,⁴ and farmers who adjusted their farming appropriately found that their real incomes by 1914 were much as they had been before the depression.

¹See above, chapter 3.

²*Agricultural Depression, Shaw-Lefevre*, (B.P.P., 1896 xvii), *Appendix J*, p. 611; *Gavin, Ninety Years*, pp.83, 86-87; Channing, *The Truth*, p.31; E.R.O., *Braybrooke MSS.*, D/DBy A 270, home farm accounts. In 1881 on one Guy's Hospital 150 acre arable farm the tenant was making a mere 4.33 per cent on his capital (assuming he was employing the usual £10 per acre): *Richmond Commission, Lushington*, (B.P.P., 1881 xv), Q.2719. Matthews claimed that even in the mid 1890s £10 per acre was the minimum amount of capital an Essex arable farmer needed: *Agricultural Depression, Matthews*, (B.P.P., 1896 xvii), Q.61580.

³*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.55.

⁴E.R.O., D/DU 508/11, 22-23, 28, miscellaneous farm accounts, Elmdonbury farm and Chiswick Hall farm, Lofts Hall estate; R.U.L., *Essex Farm MSS.*, ESS 6/1/1-2, balance sheet of Alec. Steel (1902) and (1907). Similarly the farmer at Elmdonbury farm on the Lofts Hall estate, made 10.8 per cent on his capital in 1911/12 to 1912/13, E.R.O., D/DU 508/22, 23. It was at this time that Strutt's profits on

Not surprisingly, reduced incomes between the 1870s and 1900 had an impact on tenant farmer lifestyle, but evidence of major change is limited. Some (one in two hundred at the peak), went bankrupt,¹ and many of the rest survived partly by economising. Men like Wordley at Lorkins (North Orsett), and many of the Scots lived simpler lives than had been common among Essex farmers before 1873, although evidence is fragmentary and anecdotal.² By the 1880s *Punch* had ceased to publish cartoons lampooning farmers' affluent lifestyle and pretensions. On the other hand, the social standing of Essex farmers does not appear to have declined markedly, and villagers still considered them "well to do". The Essex hunts were still patronised by farmers, many of the larger tenant farmers shot as well as hunted,³ some joined the magistracy and (after the local government legislation of the 1880s) local council,⁴ and the ability of a minority to continue to follow a relatively affluent lifestyle was facilitated by the recovery of farm prices in the early twentieth century. Lifestyle for the majority of Essex farmers was far from the so-called "cultured" life of the 1860s, but most farmers who farmed wisely were, with rent reductions and, despite price fall, still able to live comfortably.

his home farm increased, that Kingsmoor Farm showed a profit in most years, having seen almost two decades of losses, and one Orsett estate tenant retired back to Scotland (1907) with £7,000, Collins (ed.), *Agrarian History*, p.221.

¹Figures calculated from *Essex County Standard*.

²The Senior Bursar of St. John's College, Cambridge noted that tenant farmers were less well off in the depression years and cited a Rawreth tenant farmer who, in 1891, owned only one dog-cart to transport his family of six, St. John's College, Cambridge MSS., SB1.20.

³See, for example, Rider Haggard, *Rural England*, p.438.

⁴Henry Marriage, for example, was a county councillor, magistrate, and school board member, Sam. Ratcliffe and F. Vaisey were Magistrates, whilst Thomas Goodchild and E.A. Fairhead were county councillors. All were substantial farmers, Gaskill and Press, *Essex Leaders*.

Another way of measuring the extent and the geography of the depression is by examining the incidence of bankruptcy and tenant turnover. Bankruptcy material shows the initial impact of the depression to have been devastating: the number of Essex farmers declared bankrupt in 1870-72 had averaged about one in a thousand; in 1880-82 it was five times higher (admittedly still only 0.53 per cent of the total but a sharp increase in only a decade).¹ Table 31 shows that there were far fewer farming bankruptcies in the early 1890s, partly because landowners were, by then, even keener to retain tenants and had lowered rents substantially, and also because the weakest farmers had gone and the survivors had adapted to changed conditions by 1890. Legal changes in 1883 which prevented indebted persons from choosing liquidation to escape creditors may also have diminished the number of farmers declared bankrupt. Tenant turnover records reflect the same pattern. Table 32 shows the tenant turnover on eight Essex estates. As the figures show the percentage of the number of tenants at the start of each decade who left their tenancy during that decade, they do not take multiple changes within the decade into account. Even so, the significant increase in tenant turnover after 1870 on most estates is noticeable. On five estates, the reasons for tenants quitting were given, (table 33) illustrating an increase in tenants quitting after 1873 owing to financial difficulties.

Table 31

Bankruptcies amongst Essex farmers: 1870/2-1910/12

		1890-92	10
1870-72	7	1900-02	6
1880-82	53	1910-12	4

Source: Essex Standard

¹Figures from *Essex Standard*.

Map 17 shows, the spatial distribution of the bankruptcies in Essex had little pattern.

In 1880-82 a number of failures took place on the heavier clays of south east Essex where less affluent landowners with smaller acreages were common, but the heaviest incidents of bankruptcy were, as in the 'golden age' (above chapter 3), in high rented areas on better soils, and on farms close to urban and the metropolitan markets, where landowners were less liable to be lenient with tenants or feel the need to keep them at all costs.

The value of bankruptcy material for mapping changing agricultural prosperity, as canvassed by Dr. Perry,¹ is questionable. It takes into account only the few, extreme cases of agricultural failure, no account of farm size, the tenant's skill, or the attitudes and financial strength of the landowner.² The last is important, as whether a tenant went bankrupt or not depended to a large extent on the owner's attitude and means. Some Essex landowners distained heavily indebted tenants, others supported them.

¹Perry and Johnson, 'Temporal and Spatial', pp.297-311; Perry, 'Where was the Depression', pp.129-148.

²Perry claims that 41 per cent of farm tenant changes in Dorset between 1870 and 1893 were due to spatial factors such as soil type and market accessibility. This leaves 59 per cent due to spatially irregular variables such as tenant skill and landowner attitude and means, Perry and Johnson, 'Temporal and Spatial', p.310.

Table 32

**Tenant turnover on eight Essex estates against number at risk at start of decade,
1860/70 – 1900/10**

Estates	1860-70	1870-80	1880-90	1890- 1900	1900-10
St. Bartholomew's Hospital	4/15 26.6%	10/17 58.8%	7/17 41.2%	10/17 58.8%	5/15 33.3%
Benyon	2/9 22.2%	6/12 50.0%	3/12 25.0%	8/14 57.1%	1/12 8.3%
Bonnell	3/7 42.9%	3/7 42.9%	1/4 25.0%	1/4 25.0%	0/4 0%
Ecclesiastical Commissioners	-	0/3 0%	3/5 60.0%	3/6 50.0%	2/6 33.3%
St .John's College, Cambridge	1/8 12.5%	1/8 12.5%	3/8 37.5%	5/8 62.5%	2/8 25.0%
Orsett	2/29 6.9%	25/33 (a) 75.8%	9/27 (b) 33.3%	18/25 72.0%	11/25 44.0%
Petre	8/48 16.6%	24/55 43.6%	24/52 46.1%	26/60 43.3%	21/57 36.8%
St. Thomas' Hospital	1/7 14.3%	3/7 42.9%	2/8 25.0%	3/8 37.5%	2/8 25.0%
TOTAL	21/123 17.1%	72/142 50.8%	52/133 39.1%	74/142 52.1%	44/135 32.6%

Source: Estate Accounts

(a) This figure is for 1870-85

(b) This figure is for 1885-90.

MAP 17 Farmer Bankruptcies in Essex,
1880/82, 1890/92, 1900/02

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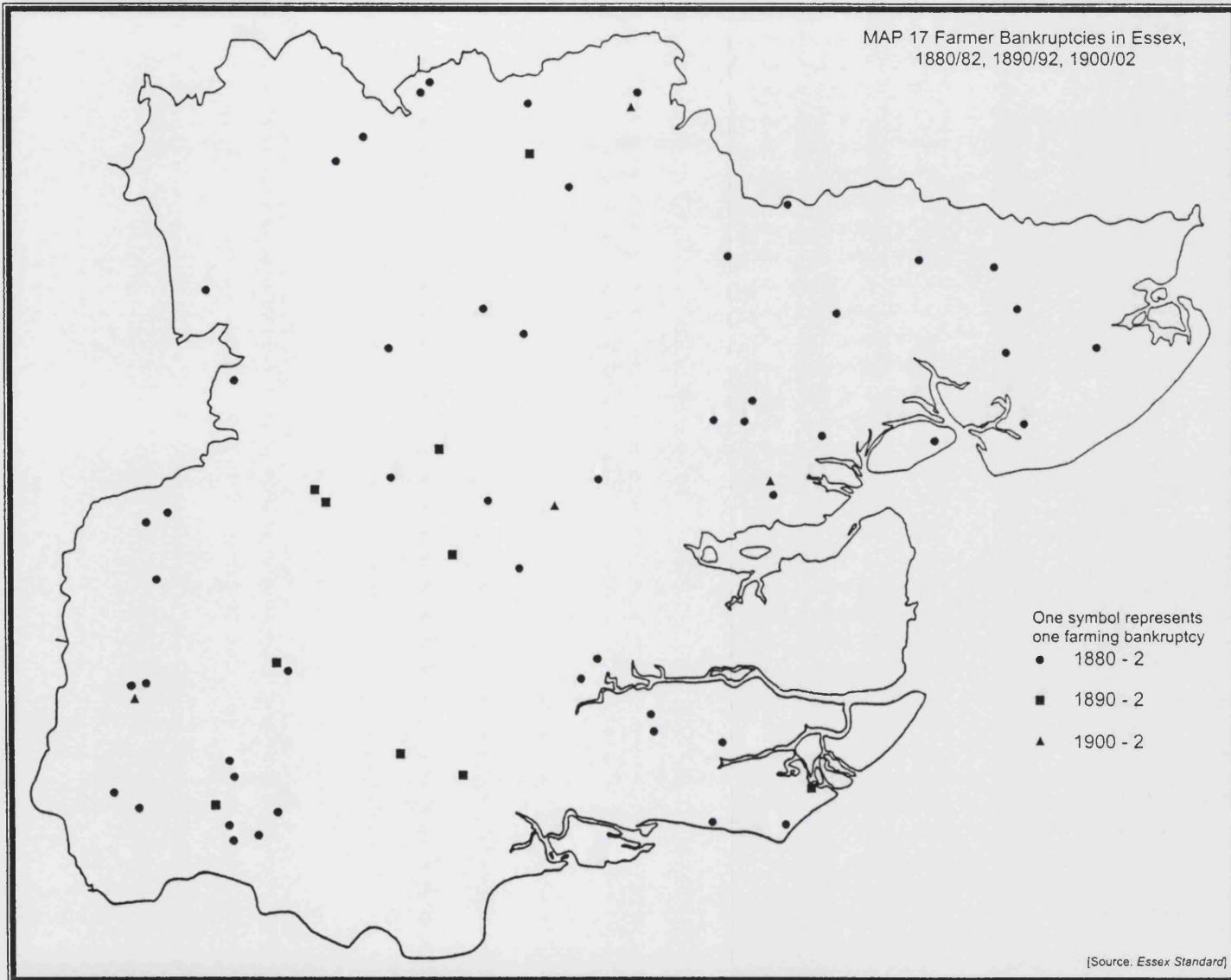


Table 33**Causes of tenants quitting on five Essex estates shown as a percentage of the total number of tenants quitting on those estates, 1850-1900**

<u>Reason</u>	<u>1850-73</u>	<u>1873-1900</u>
Death, Retirement or ill health	63.16 per cent	43.39 per cent
Large financial losses or bankruptcy	15.79 per cent	35.85 per cent
Reason for quitting not given	21.05 per cent	20.76 per cent

Source: Estate archives for St. Bartholomew's Hospital, Benyon, Ecclesiastical Commissioners, St. John's College Cambridge, and St. Thomas' Hospital estates.

An analysis of tenant turnover on one large estate containing farms on a variety of soil types removes the landowner variable. Thorndon is the only Essex estate of sufficient size and with suitable archives for such a study, and, even here, only some entries in the estate ledgers explain why tenants left farms, and an analysis of the affect of railway proximity on tenant turnover is not possible because, after the railway building of 1886/87, few farms on the estate were more than five miles from a railway line. Despite shortcomings, some conclusions can be drawn. First, there was some correlation between tenant turnover and soil type on the estate. Farms on the boulder clays (about 1,100 acres) on mixed boulder clay and medium soils, and heavy (not clay) soils showed little change of tenancy.¹ On the other hand, and perhaps significantly, all of the estates' untenanted farms in the 1880s were on the poorer London clay soils either near Stock or in the Horndons, and four of these farms (totalling over 1,000 acres) changed hands more than five times between 1878 and 1910,² suggesting that farms on the poorer London clays suffered worse in the depressed years than farms on other soils, including other heavy soils.

¹E.R.O., D/DP A365-367.

²*ibid.*

Whilst this analysis suggests that soil type influenced tenant turnover, it is a crude measure of its importance because other factors were also clearly important. Some London clay farms on the estate had a low tenant turnover rate, and most farmers who remained in occupation on boulder clay and heavy (not clay) soiled farms were men of capital and known ability. To test the impact of soil type on tenant turnover further, a calculation of Spearman's rank correlation coefficient between turnover of tenants and the soil quality of thirty sample farms (totalling about 10,000 acres) was made.¹ It gave a figure with a value of 0.4772, implying that, given the shortcomings of the sample, there was some correlation.

Perhaps unexpectedly, the Thorndon records show that the landowner was not able to control tenant turnover by the size of his expenditure alone. Again calculating Spearman's rank correlation coefficient between total landowner expenditure on 25 sample farms (almost half the estate) between 1860 and 1910 and the tenant turnover for 1875-1910 on those farms, the figure was found to have a value of 0.2126 indicating low correlation. Undoubtedly, this was because expenditure went upon farms most in need and was not always sufficient. Similarly, there was no correlation between farm size and tenant turnover which may explain the contrary opinions on the viability of the small farmer in depressed conditions advanced by Pringle and Strutt.² their individual experience obviously differed. Calculating the rank correlation coefficient between tenant turnover and farm size the figure had a value of -0.1457 for the period 1850-75 and 0.0027 for 1875-1910.

Several unquantifiable factors had significance in determining the rate of tenant

¹*ibid.* A degree of caution has to be exercised, the soil quality list being created from comments in the Thorndon MSs. and in Kelly's *Directories*, and discussions with members of the Brentwood branch of the Essex Young Farmers' Club.

²*Agricultural Depression, Report, Pringle*, (B.P.P., 1894 xvi pt.1), p.56; *idem.*, *Pringle*, QQ.8636-8; *idem.*, *Strutt*, QQ.13906-7, 13915.

turnover. In particular, the Thorndon tenant ledgers suggest that tenants whose families had farmed on the same farm for generations were less likely to move: on the Thorndon estate, E.L.Marriage, for example, like his father before him, continued to occupy the family farm (Horsefrith Park near Writtle) despite his claim that it "yielded little or no return for capital and labour".¹ In the last analysis, however, the decision whether or not to quit a farm was, in the main, an economic decision made by the tenant based on projected profits or loss, but with other intangible personal factors playing a major part.²

11. Migrant Farmers in Essex

In good times, farmers tend not to be mobile. Movement involves changing home and workplace, losing landlord ties and knowledge of the idiosyncrasies of a particular farm. Obviously, there was some movement between farms in the 'golden age', but before the 1880s there is no evidence of mass 'migration' into Essex.³ After 1880, not only did tenants quit more frequently but there was also an influx of West Country, Lancastrian and Scottish farmers. E.L. Smith undertook the first major study of this long-distance movement in the early 1930s.⁴ His researches showed the in-migration was common to much of south-east England, but especially affected Essex, Suffolk and Hertfordshire.

It is difficult to discover what became of tenants who left Essex farms. Some moved

¹E.R.O., D/DP E17, p.6.

²Some tenants left farms hurriedly. One Cressing farmer committed suicide having lost £800 in six months, whilst a Bower Hall estate tenant secretly left the country in 1885 with five years of his lease to run when the owner refused to terminate the lease. Lack of comment in newspapers, however, suggests such cases were not common, *Essex Standard*, 14.2.1880; E.R.O., Bower Hall MSS., D/DHf 36A, lease of Smith Green farm.

³Mrs. E.Sellars advises me that following investigation of 56 parishes in the 1881 Census (all in central and west Essex), she found only one Scottish migrant farming family.

⁴Smith, *Go East*.

to other farms in the county or elsewhere, whilst others emigrated.¹ A few became bailiffs on the farms they once tenanted,² but many left farming. Scattered examples give some idea of their destinations. One north Essex farmer became a clerk in a Colchester architect's office, some London cab drivers, one a publican, another a wine merchant's traveller.³ It is equally difficult to compile systematic information on the origins of Essex tenants. Leases suggest most were already farmers, many from Essex. A few were seedsmen, shopkeepers and butchers, whilst some tenants came from backgrounds quite outside agriculture, the most unusual being a Liverpool dock labourer, who took a 75 acre farm near Rettendon.⁴ Most of the northern migrants to Essex had been dairy farmers in Lancashire or Scotland, but a few were not: exceptions included two labourers, a tallyman from the Manchester clothing trade, and a village postmaster who had kept a few cows on an adjacent smallholding.⁵

With the exception of Smith's pioneering work, there has been little detailed investigation into the migrants, although their presence in East Anglia features prominently in the secondary literature on the agricultural depression, most usually in the context of claims of migrant innovation and success, contrasted with native short sightedness and failure.⁶ Were such claims correct, they would provide evidence for managerial failure by Essex farmers and landlords, but in fact, they have been based on flimsy evidence: the migrants' farming achievements and much else about them is

¹Rowley, 'Further Extracts', p.12.

²e.g. on the St. Thomas' Hospital estate, G.L.R.O., St. Thomas' Hospital MSSs., H1/ST/A6/17, pp.20-21, 14.10.1879.

³St. John's College, Cambridge MSSs., SB1.22, Senior Bursar's Diary, 1894; *Preston Guardian*, 1.10.1892; R.U.L., Whitmore MSSs., ESS 17/1/16, letter 1.5.1895; *Essex Standard*, 14.3.1891. Another seems to have quit a farm in 1896 and then encouraged his wife to go to work as a school teacher, R.U.L., Whitmore MSSs., ESS 17/1/19, letter 13.1.1896.

⁴*Preston Guardian*, 25.10.1892.

⁵Watt, 'Changes', p.23; oral information from the late Hugh Gemmill Esq. of Norton Mandeville and the late Dr. Kenchington of Chignal St. James.

⁶For examples of such statements, see below.

obscure and needs further examination. What proportion of Essex farmers were migrants, where did they settle, and how influential were they? Were they agrarian innovators or merely competent farmers? How successful were they, and what was the basis of their supposed success? Migrant farmers came to Essex from many parts of Britain,¹ large numbers coming from Devon and Cornwall, but most left few records to enable analysis of their settlement and farming practices. Here, therefore, only two important migrations, those from Lancashire and Scotland, are examined. Both left records that can be used by historians. The settlement of Lancashire farmers in Essex was reported in the *Preston Guardian* in 1892 and 1896. The Scottish migration received much publicity in the 1893-97 *Royal Commission* reports and from the writings of Primrose McConnell,² and these, together with scattered references in estate records and local newspapers, remain the main source for study of Scottish farmers in Essex.³

There was substantial immigration of farmers to Essex during the depression, E.L.Smith, claiming that as many as 244 farming families (including 43 Lancastrians and 93 Scots) moved into Essex farms between 1880 and 1910.⁴ Dr. Kenchington reports that some 20 Cornish farming families migrated into Essex between these years.⁵ Obviously, a sizeable minority were Scots. Using known Scottish names from the 'farmer' entry in the 1906 Kelly's *Directory*,⁶ it seems that there were at least

¹On the Orsett estate in the 1890s, for example, tenants included men from Northumberland, Wales, the West Country, Scotland, Wiltshire and Hertfordshire. Nearby Tunnel farm was taken by a Devon farmer in 1880. R.U.L., Whitmore MSS., ESS 17 series; *idem.*, South Essex Farm MSS., ESS 8/1, Tunnel farm.

²McConnell, 'Experiences', pp.311-325.

³In due course I hope to work on the 1891 and 1901 census returns.

⁴Smith, *Go East*, p.20.

⁵I wish to thank the late Dr. Kenchington (of Chignal St. James and Writtle Agricultural College) for this and other information about migrants.

⁶Kelly's *Directory of Essex*, (1906). I wish to thank Mrs. A Lyon of North Benfleet Hall Farm (herself an Essex Scot) who confirmed my list of Scottish farming families in Essex recorded in Kelly's

142 Scots who held Essex farms in that year, a figure which includes the Essex born sons of migrants. Most came to Essex between 1885 and 1901, although the migration continued into the twentieth century.¹ Contemporaries directed attention on them in part because of McConnell's writings, partly because of their accents and clannishness which set them apart from native farmers, and above all because of their apparently novel and successful approaches to farming in Essex.

Table 34

Migration of Scottish farmers into Essex, 1880-1920

1880-1890	33	1901-1910	26
1891-1900	34	1911-1920	16

Source: Smith, *Go East*, p.20.

Table 35

**Estimated number of Scottish migrants and their sons
farming in Essex, 1866-1914**

<u>Date</u>	<u>No.</u>	<u>Date</u>	<u>No.</u>
1866	12	1894	83
1874	15	1906	142
1886	21	1914	164

Source: Scottish families in Kelly's *Directory* under 'Farmers'.

The reasons for the migration were economic. Agriculture in Lancashire and Ayrshire, from which most northern migrants came,² was reasonably prosperous

Directories, 1866, 1874, 1886, 1894, 1906, 1914. Common English and Scottish names such as Brown were omitted.

¹The *Examiner* suggested that there were 120-130 Scotsmen farming in Essex in the early 1890s, probably an over-estimate, *Agricultural Depression*, Pringle, (B.P.P., 1894 xvi pt.1), Q.8682.

²Most of the Scots who settled in Essex as farmers came from North Ayrshire, a dairying area south west of Glasgow. The *Glasgow Herald* of December 1890 lists 32 Scottish farmers who had migrated to Essex between 1878 and 1890 of whom 28 came from Ayrshire, most from villages near Kilmarnock, G.L.Waring, 'The Invasion', *Essex Farmers' Journal*, xxvi, no. 6, (August 1947), p.26.

throughout the period,¹ with high rents and demand for farms. Assistant Commissioner Speir described Ayrshire as "a veritable congested district which rears twice as many farmers as there are farms for",² where land values had fallen a mere 5-10 per cent between 1880 and 1894, and where, on one not untypical estate, rents had been reduced by a mere 4 per cent.³ As a result, profits were low despite farmers' industry, use of family labour, and the buoyant demand for their produce. There was also resentment towards landlords with Lancastrian and Scottish leases being long, restrictive and strictly enforced. Damage caused by game on Lancashire farms,⁴ and Scottish tenants having to pay for all farm repairs caused further resentment. At the same time, Essex was attractive to migrants with available farms, comparatively low rents, and virtual freedom of cultivation. Moreover, the potential market for milk in nearby London, and the willingness of the larger Essex owners to spend on repairs, cowhouses and grassing fields attracted new tenants. Migrants were also attracted by the reputed success of those already settled, and even by the dry Essex climate which enabled them to work more "steadily" than was possible in the north and north west.⁵

Potential migrants gained information about opportunities in Essex from a variety of sources. Smith maintained that there was no organized encouragement to draw migrants to the south.⁶ In the case of the Scots this was so, but Lancashire men were

Thorndon and Orsett estate records confirm that most Scottish migrants came from north Ayrshire villages.

¹T.W.Fletcher, 'Lancashire Livestock Farming During the Great Depression', in Perry, *British Agriculture*, pp.77-108; *Agricultural Depression, Evidence of J.Speir on Ayr, Wigton, Kircudbright and Dumfries*, (B.P.P., 1894 xvi pt. 3), pp.4, 8.

²*Agricultural Depression, Speir*, (B.P.P., 1894 xvi pt. 3), p.4.

³*ibid.*, p.8.

⁴A.Mutch, 'Rural Society in Lancashire, 1840-1914', unpublished Ph.D. Thesis, Manchester University, (1980), pp.127-128; Smith, *Go East*, p.34.

⁵Smith, *Go East*, pp.31-32.

⁶*ibid.*, p.27.

encouraged to migrate by the Lancashire Tenant Farmers' Association whose activities even extended to touring Essex in 1892, looking for suitable vacant farms.¹ Several Essex owners and their agents advertised vacant farms nationwide. John Oxley-Parker, for example, advertised in Scottish newspapers, whilst both Whitmore and the Governors of St. Bartholomew's Hospital advertised in newspapers circulating in north Devon, the north west, Yorkshire, and Scotland.² The most potent factor encouraging migration to particular areas, however, was the advice of friends and neighbours who had already moved. David Gemmill cites an occasion when 16 Scotsmen came south and stayed with a fellow Scot at Ongar Park farm, in order to look at available farms,³ whilst several Lancastrians followed Dobson, himself invited to a farm near Purleigh on the newly acquired Essex estate of Mr. Bashall, a successful Lancashire businessman.⁴ Bashall also advised potential Lancastrian migrants about vacant farms in his locality.⁵

¹*Preston Guardian*, 1.10.1892.

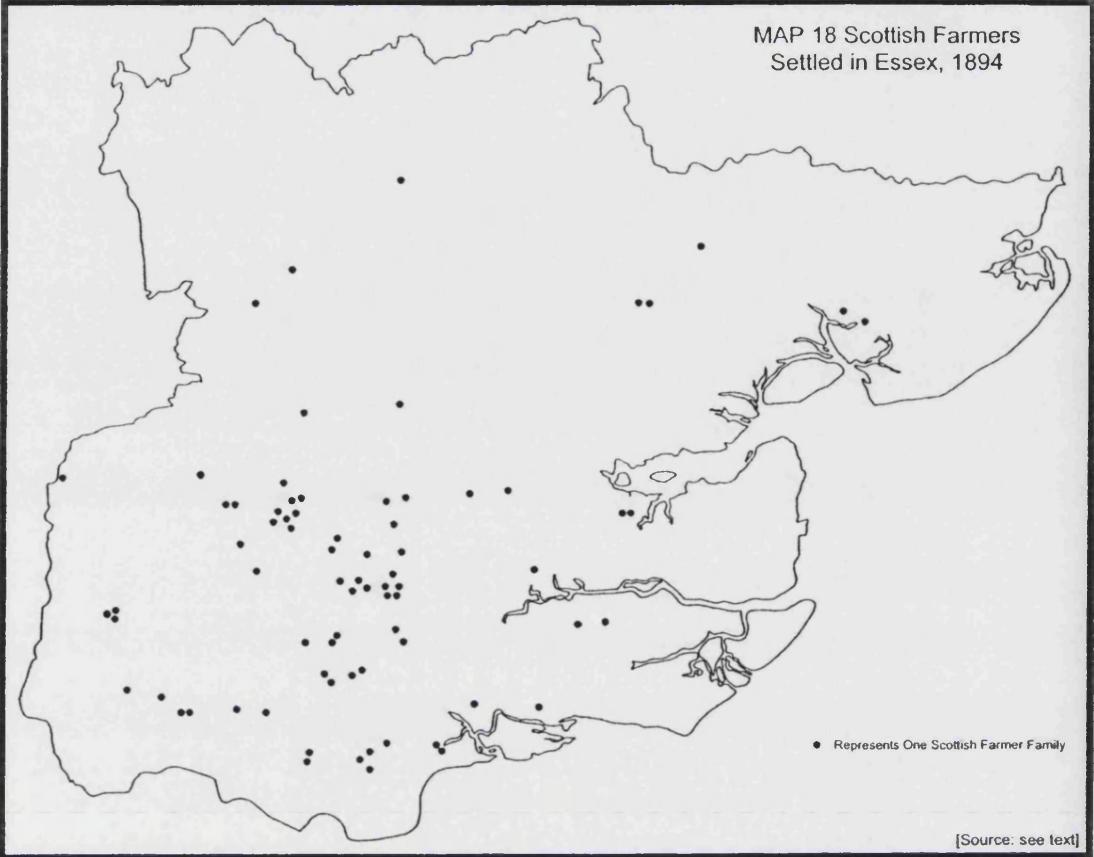
²Wood, *Seax*, p.30; R.U.L., Whitmore MSS., ESS 17/4/45, 76; St. Bartholemew's Hospital MSS., Almoner's Report, (1889), EO 8/7.

³Waring, 'The Invasion', p.26, n. by D.Gemmill.

⁴*Preston Guardian*, 3.10.1896.

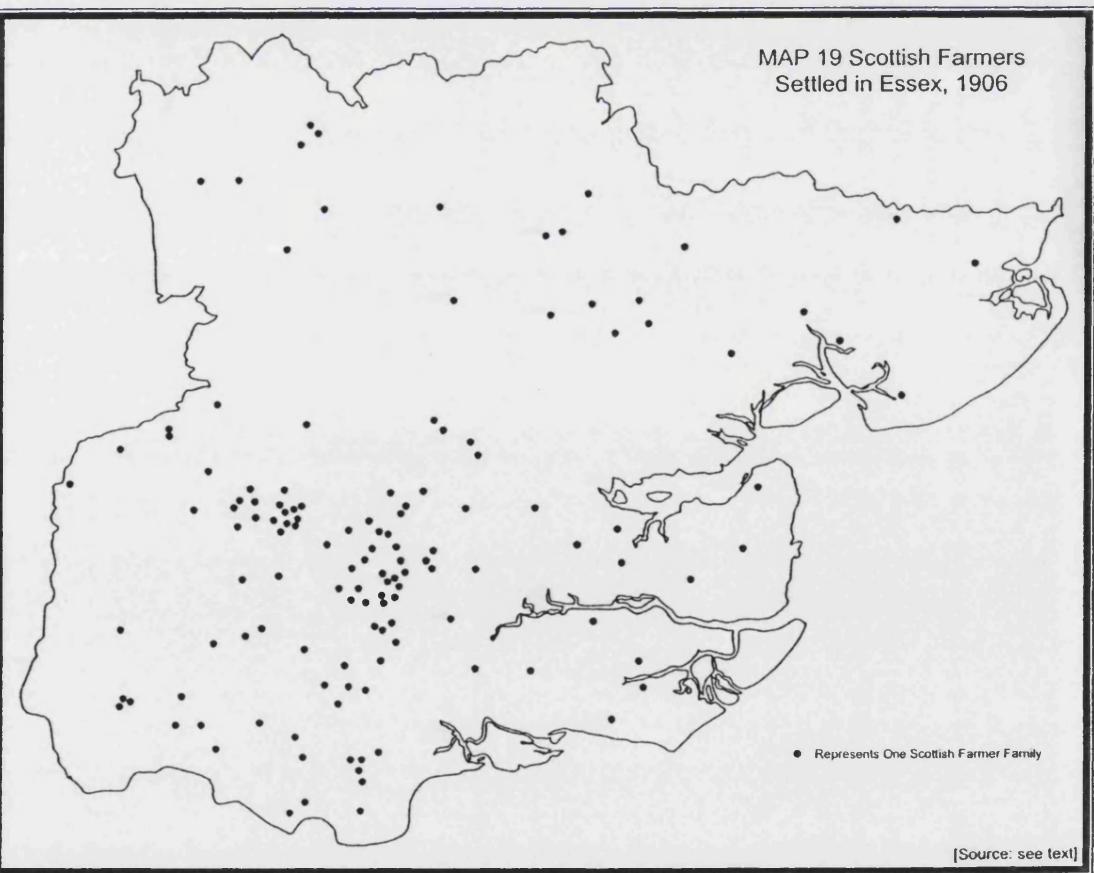
⁵*ibid.*

MAP 18 Scottish Farmers
Settled in Essex, 1894



[Source: see text]

MAP 19 Scottish Farmers
Settled in Essex, 1906



[Source: see text]

With few exceptions, Lancashire migrants to Essex mentioned in the *Preston Guardian* took farms on poorer London clay soils in the Dengie area not far from Bashall's estate.¹ Although several contemporaries made allusions to the areas where the Scots settled,² no detailed analysis has been made of their dispersion. Using the evidence of Scottish migrant farmers from the county directories,³ the settlement pattern of the Scots in Essex can be illustrated, and is shown on maps 18 and 19. Of the migrants who settled before 1894, over two thirds became tenants in central and south west Essex, with the Ongar, Brentwood, and Ingrave-Buttsbury areas containing the majority. Comparatively few settled elsewhere in Essex, including in the areas preferred by Lancastrians. Scots migrants arriving between 1894 and 1906 settled in the same districts, although several took farms in the north east and south east of the county.

This settlement pattern did not occur merely because untenanted farms were more common in these areas. McConnell claimed that Scottish migrants only took untenanted farms,⁴ but whilst this was so on the Thorndon estate in 1886-87,⁵ later settlers did not follow this pattern: of 20 Thorndon farms taken by Scotsmen between 1886 and 1899, only six had been in hand previously.⁶ Furthermore, vacancies in south east Essex and in the fertile Rodings appear not to have attracted Scots tenants.⁷

¹*Preston Guardian*, 3.10.1896.

²There are, for example, comments about this in McConnell, 'Experiences', p.311; *Glasgow Herald*, (December 1890), quoted in Waring, 'The Invasion', pp.25-26.

³As noted above, the list was confirmed by Mrs. A. Lyon of North Benfleet Hall farm, herself from the Essex Scot farming community.

⁴McConnell, 'Experiences', p.313, a point accepted uncritically by subsequent commentators, e.g. Collins (ed.), *Agrarian History*, p.776.

⁵E.R.O., D/DP A366, 367.

⁶*ibid.*

⁷On the Fitzjohn estate in the Rodings, six farms totalling 667 acres were in hand in the late 1890s, but no Scots settled there, E.R.O., Maryon-Wilson MSS., D/DFr A31, particulars of Fitzjohns estate; A52-70, rentals; E16, correspondence on the sale of the estate.

A number of other factors seem to have been influential. Naturally the Scots were attracted to farms which could take reasonable grass or grass leys and where rents were low, but crucially with access to the urban milk market. Most came from dairy farms south west of Glasgow, and wishing to apply their expertise to exploit the growing London milk market, took farms close to railway lines. In 1906, 48 of the 142 Scottish-named families listed in Kelly's *Directory* lived within two miles of a railway; most of the remainder lived within five. The arrival of Scots in south east Essex provides further evidence of the importance of railways in the settlement pattern: no Scots settled in this area, despite availability of farms and very low rents, until railway lines had been completed.¹ Migrants also favoured large estates whose owners advertised nationwide and were known to be prepared to invest in dairying. They also tended to settle near other Scots, partly from clannishness, but more because many learnt of suitable vacant farms from these same Scots.

Scholarly textbooks and popular myth in Essex farming circles today submit a tale of agrarian triumph for the migrants, claiming that, where Essex farmers had failed, the incomers made large profits, due mainly to innovation, industry and use of family labour. Mingay, for example, writes that the Scots succeeded thanks to their new ideas and new methods: "they abolished bare fallow and instead went in for heavier manuring and temporary pasture, and they replaced the old Essex wooden plough by lighter and modern implements."² Likewise, Brown maintains that "dairying was almost entirely neglected in Essex until ... the collapse of cereal farming on the heavy clay soils. It was then that farmers used to dairying in Scotland and the West Country began to move into the county They set about adapting Essex agriculture to dairy

¹The south east was an area with many smaller, poorer estates. The low numbers of Scots here may also be due to their realization that such owners could not afford to build dairy accommodation. The fact that very few Scots settled in the fertile Rodings, an area not well served by railways, provides more evidence of the influence of railways on Scots settlement.

²Mingay, *Rural Life*, p.64. This view is echoed in Collins (ed.), *Agrarian History*, p.776.

farming ... and Essex's native farmers began to follow their lead.¹ Similarly, Perry notes that "on the whole the migrants succeeded" due to "hard work and skill", Horn writes that "most of the migrants made a success of their farming where their English predecessors had found such difficulty", and Mathias compares Essex farmer failure with Scottish success and adaptability.² Interestingly, such accounts are not peculiar to Essex. Writing of the Chilterns, for example, Coppock claimed that migrant farmers were "among those most successful in riding the depression, partly because they were less conservative than the local farmers, and partly because they worked hard and lived hard."³ It is argued here that there is some truth in such accounts, but they are considerably exaggerated.

Migrants have been credited with introducing dairying and the grassing-down of arable fields, and so succeeding where native Essex farmers failed to adapt.⁴ This claim is unfounded. Certainly migrants expanded dairying in Essex,⁵ and possibly further encouraged Essex neighbours to adopt this style of farming, but they did not introduce it. As shown in chapter 3 above, dairying was common in parts of Essex long before the Scots and Lancastrian 'invasion', and was being increasingly taken up by native Essex farmers in the depression.⁶ Furthermore, although most Scots and

¹Brown, *Agriculture*, p.49. Thirsk also suggests that migrant Scots brought dairying to Essex, Thirsk, *Alternative Agriculture*, p.168.

²Perry, *British Farming*, p.100; P.Horn, 'When the Scots Moved South', *Countryman*, (n.d.), p.82, in E.R.O., Z13; Mathias, *First Industrial Nation*, p.318. An Essex-Scot farmer in the 1930s answered E.L.Smith's question, "How do you think your father managed to make it pay where other people couldn't then?" with, "Worked like hell, mate....When these Scots people came down here to farm they worked....Previous to this the farmers never worked." Howkins, *Reshaping Rural England*, p.151.

³Coppock, 'Agricultural Changes', p.75.

⁴*Preston Guardian*, 19.9.1896, 24.10.1896.

⁵ Strutt claimed that the increase in dairying between 1880 and 1894 in Essex was due to migrant farmers, *Agricultural Depression*, Strutt. (B.P.P., 1894 xvi pt.1), QQ.13890-92.

⁶The example of Edward Strutt (mentioned above) is the best known, Gavin, *Ninety Years*, p.85. As early as 1886-7 32.4 per cent of Strutt's gross farming output came from milk and 39 per cent from corn; by 1896-7 the figures were 49.4 per cent and 28.3 per cent respectively.

Lancastrian migrants were dairy farmers providing milk for London or cheese for Lancashire co-operatives,¹ dairying was only one feature of their farming, and most combined dairying with traditional Essex farming: indeed a few were primarily wheat farmers.² Indeed, comments such as those in the *Preston Guardian* suggesting that dairying was a panacea and wheat growing never profitable were mistaken, as demonstrated above, and McConnell effectively contradicted such claims when he reported that dairying did not pay much more than wheat farming but was adopted by most Scots because it was their field of expertise.³ Moreover, most Scots arrived during and after late railway building in south and south east Essex which facilitated conversion to dairying, and also at a time when basic slag was enabling many clay farms to take good temporary or even permanent grass and clover.⁴ Many of the farms they occupied had been best suited for arable farming or ranching shortly before their arrival.

One practice marking out the Scots was their use of leys (mentioned above),⁵ which with heavy seeding and good fertilizers enabled grass to be grown on clays which would not take good permanent grass. Scots also reduced labour and horse costs by growing fewer roots and gradually converting arable to grass.⁶ Without question,

¹e.g. *Preston Guardian*, 22.10.1892, 3.10.1896; *Agricultural Depression*, (B.P.P., 1896 xvii), *Appendix J*, pp.612–613.

²McConnell, 'Experiences', p.323; C.C., E.C.E. MSS., file 46754 (1900-1904). Others became vegetable growers, Collins (ed.), *Agrarian History*, pp.777, 175.

³*Preston Guardian*, 24.10.1896; McConnell, 'Experiences', p.311.

⁴Basic slag was a by-product of the Thomas process of steel making and became available to farmers in the late 1880s. It was a fine fertilizer for pastures, and although Orwin and Whetham claim it was less successful in Essex than in the wetter parts of Britain, one contemporary Essex agricultural chemist felt it had "an almost miraculous effect in improving the quality and quantity of the herbage", Orwin and Whetham, *British Agriculture*, pp.281, 356; T.S.Dymond and F.Hughes, *Notes on Agricultural Analyses made in the County Technical Laboratories, Chelmsford, During 1901-1903*, (Chelmsford, 1904), p.19.

⁵ *Agricultural Depression*, Pringle. (B.P.P., 1894 xvi pt.1), QQ.8547-50.

⁶McConnell, 'Experiences', p.317.

Essex farmers had much to learn from the Scots in the use of temporary grass, which restored fields, saved labour, and produced grass cheaply. The Scots also tried to replace fallowing with leys, but whilst successful on medium soils, leys proved unsuccessful in dealing with weeds on the strong clays where Pringle noted that the old rotation was better¹.

The migrants made profits by economising on labour, using a grubber for weeding, and rarely ploughing a field more than three times,² using between half and a third as much labour as their Essex neighbours³ whom McConnell accused of wasting "the labour of men and horses from the laborious way of doing their work".⁴ Migrant farmers, however, were not alone in such moves to less-intensive farming: much of the movement to 'low farming' throughout the depression was initiated by Essex landowners and farmers, although evidence from *Royal Commission* witnesses and estate accounts suggest that migrants probably pushed these economies further than most Essex farmers.⁵ As a result they were said to have lost less in bad seasons and made a larger return on their capital in good ones.

There is some suggestion that parsimonious Scottish farmers may have been harming the land by carrying these methods too far. The fact that the "majority of Essex farmers" are said to have felt that the Scots farmed badly may partly be indicative of prejudice, but similar accusations also come from Strutt, Pringle (who claimed that they used nitrate of soda improperly and so exhausted the land) and the estate staff of

¹*Agricultural Depression, Pringle*. (B.P.P., 1894 xvi pt.1), QQ.8547, 8557-8558.

²McConnell, 'Experiences', p.317; G.E.Fussell, 'The "Foreign" Invasion of Essex', *Essex Farmers' Journal*, xxx, no. 5, (July 1951), p.43. Essex farmers ploughed six times.

³McConnell, 'Experiences', p.317; *Agricultural Depression, Strutt*. (B.P.P., 1894 xvi pt.1), Q.13892.

⁴McConnell, 'Experiences', p.317.

⁵*Agricultural Depression, Strutt*. (B.P.P., 1894 xvi pt.1), QQ.13891-92, 13918-20; *idem., Pringle*. QQ. 8715-17; St. Bartholemew's Hospital MSs., EO 8/7, Almoners' reports 1894-7, Fryern farm.

St. Bartholomew's Hospital, all experts in the field¹. Cochrane, tenant at Stokes Hall farm between 1891 and 1903, for example, was accused of having insufficient capital to farm well, and of selling all his fodder crops, using the timber as he wished, and employing insufficient labour. As a result, his arable fields were "foul" and in some years full of weeds and thistles.² Much the same was said of Black, tenant at Fryern Farm near Downham between 1894 and 1900.³ It would seem that Essex farmers, whose families had been on a farm for several generations, were slower than the Scots to push less-intensive farming to the extreme because they gave higher priority to the long term well-being of the soil.

In part, migrant farmers were able to employ less hired labour because they relied extensively on family labour. The families of Essex farmers, particularly the females, were less involved in farm work, especially on large arable farms, whereas a Lancastrian migrant claimed that a large working family was essential for survival.⁴ On one 200 acre mixed farm, for example, a not untypical Lancastrian migrant had only two hired labourers, the rest of the work being done by the family,⁵ whereas an Essex farmer would have employed six or seven labourers. Census material giving summaries of the number of farmers and working relatives in Essex shows no large

¹*ibid.* The Senior Bursar of St. John's College, Cambridge, found one Scot who sold off all produce, did not manure, and had a mere three labourers for a 150 acre farm, St. John's College, Cambridge MSSs., SB1.22, Senior Bursar's diary, 1895. Similar complaints were common elsewhere including Oxfordshire and Cambridgeshire, Collins (ed.), *Agrarian History*, pp.777, 373.

²St. Bartholemew's Hospital MSSs., EO 8/7, Almoner's reports, 1891-1903,

³*ibid.*

⁴*Preston Guardian*, 26.9.1896.

⁵*Preston Guardian*, 19.9.1896. One Essex farmer claimed that the Scots "came with their large families and sacked all their workmen, whilst their own sons and daughters, in stockingless feet, milk the cows", Waring, 'Invasion', p.26. L.Marriage (Chelmsford dairy farmer in the 1890s) made a similar - if less acidic - point at the annual dinner of the Eastern Counties Dairy Farmers' Society in 1898 when he commented on the "increasing difficulty in getting men to milk the cows. Their Scotch friends overcame that difficulty by persuading their wives and daughters to turn to - but Essex farmers could not do that, and he did not think the Scotch ladies would be willing to do it when they had been in the county a year or two", *Essex Weekly News*, 11.3.1898.

scale substitution of family for non-family labour in Essex between 1881 and 1911,¹ and so it seems likely that few Essex farmers followed the immigrants' example.

It is worth noting that migrants had lessons to learn from native farmers more accustomed to local soil and weather, and that they also made mistakes. Some migrants were forced to adopt traditional Essex arable rotations as their own methods failed,² whilst others, who hoped to avoid fallowing on clay farms, found that fallows were essential to eradicate weeds.³ Migrants also were commonly accredited, even by other Essex farmers, with great industry and frugality,⁴ and whilst there is probably truth in such claims, it would be wrong to associate frugality and industry with immigrant farmers alone. The *Preston Guardian* noted the success of Essex Quaker farmers owing to these very attributes,⁵ and some of the cited evidence of migrant frugality - e.g. that they were prepared to keep pigs and market naturally growing berries - can be paralleled by accounts of native Essex farmers doing the same.⁶

Not least, the success of migrant farmers has been exaggerated. Many migrants were successful, including on farms where previous tenants had failed, but it would be

¹*Census Returns, 1881*, (B.P.P., 1883 lxxx), table 10, p.142; *idem*, 1891, (B.P.P., 1893-4 cvi), table 7, p.150; *idem*, 1901, (B.P.P., 1902 cxviii), table 32, p.61; *idem*, 1911, (B.P.P., 1913 lxxviii), pp.174-176. It is noticeable that the 1921 Census return shows nearly a quarter of Lancashire farm work was done by relatives whereas the Essex figure was under 5 per cent (Smith, *Go East*, p.24), but it should be remembered that Lancastrian dairy farming was much less labour intensive than Essex mixed farming.

²*Preston Guardian*, 3.10.1896; G. Fussell, 'Primrose McConnell', *Essex Farmers' Journal*, xxxiii, no. 8, (October 1954), pp.25-26; Anon., 'Scottish Farming in Essex', *C.L.*, viii, no. 195, (29.9.1900), pp.396-397.

³As noted above, Mingay, *Rural Life*, p.64 wrongly attributes the success of the Scots in Essex to their abolition of fallows.

⁴*Agricultural Depression, Matthews*, (B.P.P., 1896 xvii), QQ.61662-63. He added that "you cannot starve a Scotchman".

⁵*Preston Guardian*, 1.10.1892.

⁶*Preston Guardian*, 25.10.1892, 19.9.1896; c/f pages 256-257 above.

wrong to assume that success was entirely a consequence of immigrant virtues. In some cases they succeeded due to transport improvements, to reduced rents or increased landlord investment. Nor were they universally successful. There are contemporary accounts of Scottish failures and instances where their incomes were barely sufficient for survival. In 1891 the *Essex Standard* reported the Scottish *North British Daily Mail* as admitting that "not all [Scots were] successful",¹ whilst Pringle said that he did "not think that the Scotch farmer on the very stiff land is doing very much good", and most merely "held their own" by using less labour than native Essex farmers.² Estate records provide further evidence of mixed Scottish performance: on the Thorndon estate, for example, Shaw Lefevre found that in 1896 two Scots had failed and three others were doing very badly,³ and several Scots were among those owing arrears of rent on this estate in the 1890s.⁴

Too many contemporaries contrasted Scottish successes with Essex failure without looking at the different contexts. Many Essex failures occurred early in the depression when farmers were still learning the advantages of 'low farming' and had lost capital. By the late 1880s, when the Scots first came to Essex in any number, rents had been considerably reduced, the long-term nature of the depression was better understood, railways had come to parts of south-east Essex hitherto distant from stations, and many landowners were encouraging grass farming and dairying and were more prepared to accept 'low farming'.⁵ Two other points are also important. First, as mentioned above, few migrants settled on poorer soils far from

¹*Essex Standard*, 14.2.1891.

²*Agricultural Depression, Pringle*, (B.P.P., 1894 xvi pt.1), QQ. 8527, 8620.

³*Agricultural Depression*, (B.P.P., 1896 xvii), *Appendix J*, p. 611.

⁴At Michaelmas 1893 there were sixteen farmers in arrears on the Thorndon estate. Six of these were Scots, who accounted for over half of the total arrears. E.R.O., D/DP A367.

⁵The Thorndon estate provides an example of such rent reductions. Mountnessing Hall farm was let to a Scot, Alec Burr, for £400 p.a. in 1893 whereas his immediate predecessor had paid £504. 10s.0d. p.a., the rent having been slowly reduced from £600 in 1881. E.R.O., D/DP A366, 367.

railways where failure was more likely. Secondly, Scottish migrants are said to have been more able to obtain credit from relatives or banks than Essex farmers, in part due to the more liberal lending policy of Scottish banks,¹ but also because the creditworthiness of many Essex farmers had been diminished by losses before the mid 1880s.

10. Conclusions

In this chapter several aspects of Essex farming between 1873 and 1914 have been examined. Probably the three most important question addressed concern the degree to which farmers were depressed, how well they responded to more challenging market conditions, and how far the experiences of migrant farmers confirm textbook claims that the responses of Essex farmers were, in general, limited, late and short-sighted.

Although Chambers and Mingay, Fletcher and Thompson, are correct in claiming that there was no general agricultural depression in Britain, Essex agriculture was depressed. Some parts of Essex and some aspects of farming in the county were less depressed than others, and in the main were not as disastrous as the more pessimistic contemporary spokesmen claimed, but evidence of falling prices, reduced output and incomes confirms that the label 'depression' is appropriately used to describe Essex tenant farmers' experience between 1873 and 1896. The evidence also shows, however, that in general tenant farmers suffered far less than landowners and, unlike landowners, had experienced substantial recovery by 1914.

This chapter has revisited aspects of landowner performance in the period and whereas chapter 4 showed that landlords were, in the main, competent estate managers, this chapter reinforces earlier evidence they failed to provide inspiring

¹I wish to thank Dr.P.J.Perry for this point.

leadership during the depression. In particular, most failed to promote agricultural cooperation and small family farms, necessary measures to encourage high yield alternatives to cereals such as pig farming, poultry, horticulture, and cheese and butter production. Accordingly, there was no agricultural restructuring in Essex along Danish, Dutch or Belgian lines. Indeed, by supporting the individual response of tenants on larger farms, landowners may have hindered more radical transformation. Their caution in view of high costs and the limitations created by soil type and market accessibility is understandable, but represents entrepreneurial failure, and lends support to aspects of Offer's criticism of the estate system.

In contrast, tenant response to the depression was impressive. They were more market orientated than critics claim and adjusted their methods and output mix in rational ways. They manifested a great variety of responses to depression, and most continued to make a living. That they continued to rely on cereals in parts of Essex, and elsewhere moved to 'low farming' ranching is neither evidence of inertia nor desperation, but of rational responses given soils, transport availability, market signals and rising labour costs. On many soils, cereal crops remained profitable, even at the low prices prevailing in the 1890s, and elsewhere alternatives were sought. There was an expansion of horticulture, seed growing and poultry farming on suitable soils, but the main alternatives were dairying, where rail availability permitted, and 'low farming' involving ranching and hay production, where it did not. Critics may argue that the slow and limited adoption of cooperation in Essex, and the failure both to adopt ley farming widely or to move more to high output alternatives to cereals such as pork, poultry and horticulture, give some support to the familiar textbook image of unenterprising Essex farmers. Certainly, there were some missed opportunities, but overall, Essex farmers proved to be effective agricultural managers and have been criticised considerably more than is justified.

Nor does the evidence of apparent migrant success detract significantly from this

revised interpretation of Essex farmers' performance. The migrants were, indeed, relatively successful. Most were frugal and industrious, used family labour extensively, and were tenacious and dynamic, as shown by their willingness to move long distances to unfamiliar soils and climate. They came well prepared to practise dairying but were prepared to be flexible in their style of farming. Whilst this contrasts with some Essex farmers in the 'golden age' and also with some of those who failed in the depression, most Essex farmers survived because they displayed similar methods and attitudes. Furthermore, those Essex farmers who failed in the earlier years of the depression faced obstacles which had been considerably eased by the time most Scots and Lancastrians arrived. The most important contributions of migrant farmers were to show that farms could be run with less labour, to demonstrate that temporary grass was possible on clay soils, and their prominent role in the beginnings of agricultural cooperation in Essex. Their influence on neighbouring farmers, added to that of others, encouraged dairying, and the spread of agricultural education. They clearly impressed those investigating Essex for the *Royal Commission* of 1894-97, and they have subsequently impressed historians. Even so, their overall contribution to Essex farming was not as great as is often claimed, and it would be wrong to continue using migrant farmers as evidence that Essex landowners and farmers were short-sighted and unenterprising.

Chapter 6

Conclusions

This thesis has examined the response of Essex landowners and farmers to changing economic circumstances in the 'golden age', in the period of 'agricultural depression', and in the subsequent recovery. The study has brought out a number of points where current understanding has to be modified.

One finding has been to confirm that wide divergences of experience existed not only within Essex, but even within estates and parishes. Such diversity owed much to soil type and accessibility to markets, factors which influenced the style of farming and type of investment that was profitable. Depressed agricultural prices, particularly cereal prices after 1873, intensified this diversity. Where soil type allowed, farms remained profitable as wheat producers. Elsewhere, farmers made profits only by changing land use, the new lines of production often being determined by market accessibility. The attitude, resources and skill of both the landowner and the tenant were also important factors in determining both patterns of investment and responses to economic change.

The value and reality of the term 'mid-Victorian boom' has been successfully challenged for the economy as a whole,¹ and the use of the term 'golden age' when applied to agriculture has been questioned. Even so, most textbook accounts describe the years 1850-73 as a golden age. Crouzet, for example, claims that the term is justified since these years saw agriculture transformed and farmers' prosperity rise.² Essex evidence throws doubt on such interpretations. In particular, Essex landowners certainly did not find these years 'golden'. Although rents and land values rose in the

¹R.A.Church, *The Great Victorian Boom, 1850-1873*, (1975).

²Crouzet, *Victorian Economy*, p.166.

county between mid century and the 1870s, and some owners did well from this, most experienced only a modest rise in real income from rents, and for some incomes fell. Furthermore, returns for owners investing in estate improvements were commonly only 3 or 4 per cent, involving a loss if the money was borrowed. Many Essex owners were indebted with estates encumbered by high mortgages. Overall, therefore, the period was one of only modest prosperity for Essex landowners. Given that in the twenty years following the mid 1850s Essex rents rose rather more than rents in England as a whole, it is possible that English landowners in general may not have found this period a 'golden age'. With regard to their social position, however, the epithet 'golden age' remains accurate.

In contrast, Essex tenant farmers made quite acceptable returns in these years despite rising rents and the rising cost of labour per acre. Farm product prices rose by rather more than inflation between 1850/2 and 1870/2, unit costs on arable farms fell, and cereal yields improved, a situation producing satisfactory returns. There were few bankruptcies, and some farmers even enjoyed an extravagant lifestyle, but for most Essex farmers the years 1850 to 1873 are more accurately described as 'comfortable' rather than 'golden'. The implications of these findings is that, if Essex is at all typical, the label 'golden age' should not be applied to agriculture between 1850 and 1873 without considerable qualification.

Whilst Essex evidence questions the existence of a 'golden age', it offers qualified support to the epithet 'agricultural depression' for the period 1873-1896. Most Essex landowners experienced severely depressed incomes as farm rents fell heavily both in absolute and in real terms, a loss made worse as owners took over payments of tithe and insurance and wrote-off rent arrears. Not surprisingly, some were forced to make reductions in house and grounds staff. As rents fell there was a sharp decline in land values, more frequent tenant bankruptcy and turnover, and a substantial fall in real gross output, indicators that led contemporary commentators to describe this as

‘depression’. Farmers benefited from falling rents, but labour costs did not decline as much as farm output, and so the farmers’ share in agricultural income remained approximately constant. As a result, they had a constant share of a diminished output, and so their incomes were also reduced. Even so, with suitable structural adjustment and a move to “low farming”, which maximized output per labourer rather than output per acre, most Essex farmers were not ruined, little land was actually abandoned, and most farms remained profitable. As noted above, recent work, has rejected any notion of a general chronic depression in English agriculture and sees the period more as one of restructuring. In contrast, Essex agriculturalists certainly experienced a depression but it was not as disastrous as the more pessimistic commentators have suggested.

Evidence from Essex shows substantial recovery in farmers’ fortunes from the late 1890s, but landowners fared less well as rents and land values remained depressed until several years into the new century, and then rose only modestly. For most landowners, therefore, there was no major recovery, and in 1914 their incomes were still considerably less than they had been before the depression. In contrast, farm output recovered well, even though it remained below pre-depression levels, and as the farmers’ share of farm output now rose substantially, they were, by 1910/14, not significantly worse off than they had been in the 1860s.

Textbook accounts maintain that the ‘golden age’ was a time of high investment in farm improvement by landowners, and despite some recent qualifications, the notion of enterprising and dynamic men showing leadership and investing liberally in their estates remains the accepted picture of ‘golden age’ landlords. Essex evidence does not support this impression. Certainly, some owners invested heavily and most estates saw some investment in repairs, buildings and drainage, and for a variety of other purposes, but there were few high spending landlords in the county. Essex investment levels were considerably lower than general accounts suggest and there

was no great injection of cash in drainage schemes. Indeed, on many estates the investment levels were inadequate. Modest Essex estate investment in the 'golden age' challenges existing interpretations especially if further research suggests the Essex experience was replicated in other counties.

Low investment levels do not necessarily indicate poor management by Essex owners. In part they were due to the fact that much Essex land was already well drained by existing non-pipe drainage, and that further pipe drainage entailed high costs and low returns. Yet the evidence suggests that low investment was also an aspect of landowners retreating from economic leadership, and that far from consolidating their leadership role, they were abdicating some of their responsibilities to their agents and tenants. Much investment appears to have been stimulated primarily by the need to retain tenants, landowners being content to leave investment decisions to them, and there is also evidence that tenants themselves were investing more in drainage, farm improvements and repairs - a subtle moving of the boundaries between landlord and tenant responsibilities. The impression of a partial retreat in agricultural leadership was also apparent in management style, in the failure to lead by example in agricultural innovation, and in the priorities applied to social expenditure and estate investment.

Essex evidence also challenges the accepted view that the main source of increasing farm productivity between 1850 and 1873 was rising returns from meat fattening, and that the period saw major structural change with greatly increased livestock numbers, extended high farming, and increased use of machinery, fertilizer and animal feed. At mid century, Essex farms were, in the main, arable farms, and livestock, save on farms close to London, played a quite subsidiary role. By 1873 there had been some change, including the extension of dairying and market gardening in suitable areas, but across the county as a whole this was limited. Despite an increase in livestock numbers, Essex farms were still primarily for cereal production: indeed, on many

farms the wheat acreage had increased since mid century and whilst some farmers extended pasture, more were ploughing up pasture for arable use. In other respects too, change during the 'golden age' was incremental. There was a slight increase in farm size, a gradual extension of high farming, and some expansion in the use of barn machinery and even steam ploughing, but these changes were modest. Structural change in Essex was, in fact, barely perceptible. At the end of the 'golden age' most Essex farmers continued to farm much as they had at mid century.

In the third quarter of the nineteenth century, therefore, Essex farmers appear to have preferred incremental change. This, and in particular their attachment to wheat, has given rise to the charges of short-sightedness, and of failure both to extract more advantage from proximity to London and to respond to "obvious" market signals. Such criticism has, however, been overdone. Naturally, some farmers displayed inertia and short-sightedness, but most were rational in their decision to adjust or opt for continuity. The decision of many to remain committed to cereals in the 'golden age', for example, may seem not to have been particularly enterprising, but was rational in view of Essex soils and rainfall which favoured growing cereals rather than grass. Indeed, significant structural change would have required high levels of investment and, initially, some years of reduced income. Furthermore, although meat prices increased relative to cereals, wheat and other cereal prices rose satisfactorily during the years 1850/2 and 1870/2 and this combined with rising yields and falling unit costs on arable farms gave cereal farmers quite acceptable returns, providing little incentive for farmers to change their style of farming. Naturally, some farmers closer to London or on main railway lines moved to dairying but fluctuating prices and competition from rail-borne milk and meat discouraged others from doing the same. Others with farms on suitable soils which were also near markets, sources of manure and plentiful labour extended market gardening. On most Essex farms, however, cereal growing remained the rational choice. Similarly, there was little

encouragement to invest heavily in machinery as labour was plentiful and cheap, and displaced men might lead to higher poor rates.

The performance of landowners in the following period, the years 1874 to 1896, has long been criticised, a view recently supported by Avner Offer. Such scholars argue that landowners “ceased to be leaders” as “the initiative . . . passed to farmers”,¹ that a major reduction in estate investment occurred, high rents persisted, and restrictive covenants in leases and uncertain compensation for unexhausted improvements combined to prevent necessary structural change. Offer also suggests that agriculture, particularly in corn counties, led the “vanguard of economic retardation”.²

This interpretation has been challenged by, amongst others, Thompson and Mingay, and Essex evidence supports their challenge. Falling prices appear, in fact, to have encouraged Essex landowners to resume more of their traditional landlord responsibilities. They relieved tenants of much of the burden of the depression by reducing rents, making abatements, taking over payment of tithes, allowing considerable rent arrears to accumulate, and writing off debts. Furthermore, both investment levels and agricultural enterprise saw something of a renaissance in the depression. Contrary to a number of accounts, many Essex landowners invested substantially in the 1870s and early 1880s, mostly in new buildings, to keep existing tenants and to attract new tenants. Some continued substantial investment in the latter part of the depression, in many cases to extend pasture and enable tenants on suitable farms to move to dairying. Obviously, as rents fell, not all owners could afford this, but most now paid for all farm repairs. Moreover, lease covenants were generally relaxed, providing further evidence that most Essex landowners managed their estates well during the depression. Owners also showed more initiative in

¹Orwin and Whetham, *British Agriculture*, p.314.

² Offer, *First World War*, p.95.

exploiting alternative sources of revenue. This rebirth in landowner leadership and management seems to have continued up to 1914.

Whilst Essex evidence shows landowners were generally successful in managing their estates within the pre-existing socio-economic system, it suggests that most were unimpressive as entrepreneurs. Some landlords like Edward Strutt and the Whitmores were alert to more radical alternatives to boost incomes and encourage agricultural change, but only a minority were so involved. There were missed opportunities as Essex farmers failed to exploit sufficiently opportunities for supplying the home market with eggs, bacon, butter and cheese, allowing these markets to become dominated by continental suppliers. In part this happened because dairy farms near railways concentrated on supplying milk, a more profitable branch of dairying, and because other areas where alternatives for cereals were needed were distant from railways. It is also the case, however, that such labour intensive, high yield forms of farming required small family farms, and cooperative production and marketing. Essex farms, being relatively large and reliant on hired labour, were not suitable, and it required landowners to invest and take the risk of dividing estates into small farms and providing the buildings and support necessary for new tenants to follow these branches of farming. Few did, and perhaps here the tripartite estate system and the protection it afforded tenants did hold back change. Similarly, setting up effective cooperatives was costly and involved risk taking, something which only substantial landowners could afford, but again only a minority actively supported Essex farmer cooperatives. Perhaps owners might also have done more to lobby Parliament either to get support for farming and for agricultural change, or for assistance in improving agricultural education and training. They might also have encouraged railway companies to build in the remoter parts of the county. Essex landowners, therefore, were competent if conservative managers who managed well within the existing system after 1873. On the other hand, they failed to

think “outside the box” and to show entrepreneurial flair, which affords support to some of Offer’s criticisms of the estate system.

Perhaps because tenants were aware that owners were showing greater interest, sympathy and support, there was little challenge to landlord political dominance locally. The challenge mounted by the Farmers’ Alliance in 1879 was easily brushed aside and whereas landowner influence diminished at national level, it remained very strong in local and county politics and society, even though by the late 1880s they had, to some extent, to share their position on the County Council and in the magistracy with richer commercial men and larger farmers. The social position of Essex landowners was also well maintained despite falling rentals and land values, and they were still considered superior to men who had made money in business, commerce or as farmers. Indeed, in 1914 the relative social positions of landowners, tenant farmers and labourers in Essex villages seemed to have changed little since mid century. Far more change was to come with the break up of estates in 1919-1923, and with the opening up of previously isolated parts of Essex by the motor car.

Detailed examination of the work of farmers in Essex after 1874 has also provided further insights into the nature of the depression and suggested several respects in which traditional views probably need to be modified. Many textbooks suggest that over much of England, but not in the cereal growing south-east, there was a massive reduction of cereal cropping and extension of cattle raising, dairying or, in favoured areas, fruit and vegetable farming as wheat became an unprofitable crop. Such accounts also accuse Essex and other south-eastern farmers of managerial failure and of an inability to read market signals or make rational decisions. In particular, they deride them for failing to reduce cereal acreage and expand dairying, both deemed essential measures for survival.

In fact, Essex farmers can be defended from such charges. The evidence shows that they responded readily to price changes, and that a commitment to cereals by some farmers was not in most cases evidence of managerial failure. There was a reduction of the cereal acreage on most soils (and Essex wheat acreage and prices show a very close correlation) but despite textbook claims to the contrary, wheat remained a paying crop on many farms until the 1890s, and even then continued to be a profitable crop on some boulder clay soiled and heavy loam farms. Naturally, farmers here preferred to grow wheat than turn to dairying. Essex farmers also reordered cereal priorities as wheat, barley and oats prices changed. Furthermore, despite the assertions of several historians quoted in chapter 5 above, price indicators were not clear in showing Essex farmers the advantages of abandoning wheat in favour of meat or milk; fluctuating wheat prices did not clearly indicate the long term trend, wool prices fell substantially, and meat prices also fell quite sharply at times. Although milk prices remained more stable in the longer term, there were problems with occasional oversupply, competition from other farms in Britain, and difficulties in recruiting skilled dairymen in a traditional 'corn county'. Moreover, good pasture was both difficult and expensive to establish in Essex, and returns on such investment were long delayed.

Essex farmers did not, however, show an unconditional, unthinking commitment to cereals. Where soils did not enable profitable cereal production, most farmers sought to farm less intensively, to reduce costs (particularly labour costs), and to develop other lines of production. Given the tripartite estate system and its comparatively large farms, and given also rising labour costs but falling rents and farm prices, most made an appropriate reduction of cereal acreage, and substituted a variety of rational responses. In general, farmers near to railways moved to dairying, and those elsewhere towards hay production and "low farming" ranching, and to other activities such as poultry rearing. A few, where soil and situation allowed, moved to horticulture and some to seed production and flower growing. As a result there was

significant structural adjustment in Essex agriculture with less wheat being produced and an appropriate increase in grass and dairying. There was certainly no inertia, as many textbooks allege. Contrary to most views, this study argues that low farming with reduced farm output but increased output per labourer was not evidence of agricultural failure but a sensible and rational strategy to reduce costs and keep farms profitable at a time of falling prices and rents but rising wages.

Structural change was most evident on the poorer, expensive to work clays where a retreat from wheat was necessary, and less evident on good cereal soils, but was generally adequate throughout the county. There was a fall in county agricultural output values in the 1870s, but the 1880s saw substantial recovery as Essex farmers responded to changed market conditions by reducing less profitable lines of production, reordering cereal priorities, cutting costs, and converting the poorer fields to grass. These incremental changes were varied and depended to a great extent on soil type and transport facilities, but they proved sufficient to restore output, showing both that Essex farmers were successfully able to amend their farming systems, and that the amount of adjustment required was less than critics assumed. Particularly low cereal prices in 1893 and 1894 led to a further drop in output but again farmers were able to amend farming style and the early twentieth century witnessed much recovery. Undoubtedly a few farmers showed inertia, and some farmers failed, but most made rational incremental adjustments and continued to make a living.

Some writers have used the apparent success of migrant farmers as evidence that Essex farmers were unenterprising: incomers allegedly flourishing, due to hard work, use of family labour and adaptability, where Essex farmers failed. It is true that most, but by no means in all migrants were relatively successful, and were helped by frugality and family labour. Little is known about the west-country migrants, but most Scots and Lancastrians, included dairying as part of their farming, and they showed that farms could be run with less labour, that temporary grass leys were

possible on clay soils, and they played a prominent role in initiating co-operation. Yet their impact and their success has been exaggerated. Many Essex farmers survived the depression by similar methods. Moreover, the Essex farmers who had failed in the early years of the depression faced considerable obstacles which had eased by the time the Scots arrived: in particular, the farms converted to dairying in south-east Essex in the eighties and nineties would not have been viable for milk production before the railway building that occurred at about the time the migrants settled in Essex.

Naturally, for farmers as for landowners there were some missed opportunities. Critics point out the failure to develop high yielding alternatives to cereals along Danish lines, and probably more could have been done in pork and bacon production, but in the main Essex farmers, working within boundaries set by soil, market accessibility and institutional constraints, and in the context of quite challenging circumstances, showed considerable managerial success. Accordingly, it can be argued that Essex farmers responded impressively to the depression and managed structural adjustment rather better than did many farmers on the continent who relied so heavily on tariff protection and government support.¹

This work has studied in detail agriculture in one county in the corn growing south-east between 1850 and 1914. In some respects the Essex experience differed significantly from generally accepted interpretations of English agricultural history, something which raises questions about the accuracy of textbook generalisations, especially if future work on other counties shows that the Essex experience was similar elsewhere. Thus, the findings contribute to a better understanding of English agriculture and also challenge parts of the traditional interpretation of agricultural fortunes in the 'golden age', depression and recovery. Additionally, investigation of

¹ Tracey, *Government and Agriculture*, pp. 20-23, 26

the response of agriculturalists to falling prices after 1873 has provided fresh evidence on British managerial and entrepreneurial performance at this time.

Appendix

Gross Agricultural Output in Essex

Introduction

This work has sought to estimate the gross agricultural output in Essex using E.M. Ojala's method of converting crop acreages and livestock numbers into marketed output values.¹ This involves calculating total farm production of crops, meat, wool and milk from crop acreage and animal numbers and the yields of crops and weight or volume of wool, milk or meat in given years. Output is calculated by estimating the total product sold off the farm and the prices obtained by the farmer. Unless otherwise stated, Essex crop yield figures (available in the agricultural returns after the mid 1880s) have been used, and with the exception of oats, rye and hay the amount of gross produce consumed on the farm is the same as suggested by Ojala.

The years 1870/72 are used as a baseline because earlier statistics are considered unreliable, and because most accounts consider depression in parts of Essex to have begun by 1873. 1893/95 are used as being the trough of the depression, 1900/02 as the end of the depression and beginning of recovery, and 1910/12 as typical years before the First World War. Output for the years 1881 and 1891 has also been calculated to examine shorter term changes. With the exception of 1893/95, these years or groups of years match population census returns.

Not surprisingly, difficulties arise in such computations. First, the years 1870/72 were years of high cereal yields in Essex and so may exaggerate pre-depression cereal

¹Ojala, *Agriculture*, Appendix, pp.191 - 210.

"output". Secondly, no account is taken of changes in the quality of produce: the change from concentration on mutton to higher priced lamb, for example, is not reflected in the calculations. Furthermore, no county statistics are available to calculate vegetable, soft fruit, straw, poultry or egg output, products which became increasingly important to Essex farmers during the depression, or even the sale of leather or horses, and so gross output for 1900/02 and 1910/12 may be underestimated. Finally, use of 1910/12 fixed prices enables examination of the change in physical output over time, but the choice of the base year affects the figures: had 1870/72 prices been chosen where cereal prices were high, for example, the reduction in output would have appeared greater than that given here. Despite these shortcomings, the estimates calculated provide a reasonable guide to gross agricultural output from Essex farms between 1870/2 and 1910/12.

Prices and yields

1. Cereals

National prices were used for cereals as Essex farmers sold much of their wheat in London and Essex prices did not vary appreciably from national levels. Crop yields for 1870/72 were not obtainable. For wheat and barley yields, the yield at Great Henny farm was used. This figure was very close to figures cited by Druce as "average" yields in Essex before 1878. The yield of oats was calculated from figures given by Druce. The years 1870/72 were years of high cereal yields in Essex, but they have been chosen for the sample as statistics before 1870 are of suspect reliability and on the heavier Essex clays depression had already begun in 1873.

There were no figures available for rye. Accordingly the price and yield figures calculated by Bellerby¹ were used.

Following the work of T.W.Fletcher,² the quantities of oats and hay "sold off" farms has been revised. As he mentions, the population and volume of trade increased by about fifty per cent during the depression. In Essex it is known that farmers grassed down fields in order to sell hay from the farm, and tenant farmers did achieve greater freedom of cropping. Accordingly, I have assumed a steady rise in the quantities of oats, rye and hay "sold off" proportionate to a fifty per cent increase in demand over the period 1870/72 to 1910/12.

2. Hay

Hay prices have had to be calculated. Prices used by Ojala are obviously too low judging from figures given in the agricultural returns, by contemporaries and by the *Essex Standard*. For 1870/72 the agricultural returns give the average annual price of clover hay as £4 a ton and meadow hay as £3 a ton. This figure was used, but it should be noted that it is lower than the spring prices quoted by the *Essex Standard* (clover hay £4-£6; meadow hay £3-£4), and Caird's estimate³ which implies a price of £4 a ton for all hay and which Bellerby used. It is possible, therefore, that my figures underestimate the value of hay output in 1870/72. Hay prices for 1910/12 and for 1900/02 are given in the agricultural returns, those for 1893/95 come from Matthew's evidence to the *Royal Commission*. Hay yields for 1870/72 have been calculated

¹Rural History Centre, Reading, Papers of J.R.Bellerby, D84/8, No. 12, U.K. Gross Agricultural Output and Farm Net Income.

²Fletcher, 'Great Depression', p.31.

³Caird, 'General View', p.283.

from Druce's figures for Essex. These are slightly higher than the national yields given in the agricultural returns for 1870/72 (1 ton per acre for clover hay and 18 hundredweights an acre for meadow hay) but slightly lower than the figures assumed to be an average for Essex given in the 1893 returns.

3. Beans and Peas

Druce gives yield figures for several estates and farms in Essex. These are similar to, but slightly higher than those suggested by Ojala, and have been used for 1870/72. Prices are calculated from the series given in the 1903 Return on Wholesale and Retail prices by constructing an index based on the import prices given in that series. The home grown prices (which overlap the import prices for 1854 to 1859 and which cease in that last year) were then projected forward using the index. The result of these bold procedures produced prices which were slightly lower for 1900/02 than those of Tunnel Farm in south Essex. For 1910/12 it became necessary to project the prices forward using an index based on Ojala's work.

4. Potatoes

Druce's statistics suggest that average yields in Essex in the period before 1878 were between five and seven tons per acre. Although the evidence is slim, it is true that yields varied between five tons and seven and a half tons in the period 1885 to 1896, 1900 to 1902 and 1910 to 1911. As a result six tons was used as the yield for 1870/72. Prices for 1870/72 and 1910/12 were obtained from the agricultural returns

(those for 1870/72 being in the 1881 return). Those for 1893/94 and 1900/02 came from the returns of purchases at Claybury Asylum, given in the Return of 1903.¹

5. Flax and Hops

Yields of hops and flax for 1870/72 come from Ojala, as do prices except that for 1910/12 it has been possible to use hop prices given in the agricultural returns.

6. Other Crops

For the purpose of the calculation it is assumed that all root crops were consumed on the farm. This is not strictly accurate, but there are no estimates of how much was consumed, or of farm prices before 1908. The amount involved was small in any event. Assuming a quarter of the mangold, swedes and turnips grown in Essex was sold in 1910/12 this would represent £51,808, a mere 1.5 per cent of total county farm output. It is also assumed that all 'artificial grasses' and cattle feed such as lucerne, kohl rabi, vetches and tares were consumed on the farm. The calculation does not include straw, which may again slightly reduce output values, especially for the years 1870/72 when the cereal acreage was high and straw fetched between £2.75 and £3 a ton. It was not possible to calculate fruit and vegetable output for 1870/72 and so this was omitted from the calculation. Indeed, the type of fruit and vegetables grown varied and aggregate values can be misleading.

¹*Return on Wholesale and Retail Prices in the United Kingdom in 1902 with Comparative Statistical Tables for a Series of Years*, (B.P.P., 1903 lxviii), p.91.

7. Milk

Milk prices vary with the season. For 1910/12 it is possible to use the Liverpool Street station and Stratford station prices given in the agricultural returns (main destinations for Essex milk). These are remarkably close to figures cited in the *Essex Standard* and to the price paid for milk by St. Bartholemew's Hospital. For both 1870/72 and 1894/96 the St. Bartholemew's series has been used. It is very similar to prices paid by St. Thomas' Hospital at both dates, and to prices paid by the Bedlam Hospital in the 1890s. Interestingly the Bedlam prices are substantially higher for the early 1870s. Butter and cheese production was limited and the proportion of milk used unknown. Since no information on output has survived, it is assumed that all milk 'sold off' was liquid milk.

8. Meat

Meat prices vary with quality, season and, no doubt, particular markets. For the purpose of this calculation, the average annual price of second quality meat (beef, mutton and pork) sold at the Metropolitan meat market has been used. This is given in various parliamentary papers (in units of 8 lbs. sinking the offal) and means that one series can be used for the whole period. No attempt has been made to calculate the dearer lamb meat, nor to include separate prices for more expensive porkers and the cheaper bacon: obviously a proportion of Essex pork was cured and sold as bacon, but the proportion is unknown. The value of bones and hides have not been estimated.

9. Wool

Wool prices are those of Lincoln Wool half hogg as given in the 1903 return (page 52) and extended by Mitchell and Deane.¹

10. Orchard Fruit

Prices and also the yields for 1870/72 are those used by Ojala.

¹Mitchell and Deane, *Abstract*, p.496.

ESSEX FARMS: GROSS OUTPUT 1870/72											
Crop	Acreage or Number	Yield	Produce on farms	Percentage sold off the farms	Output from farms	Price per unit	Value of output from farms	Totals	1910-12 Price per unit	Value of output from farms at fixed 1910-12 prices	Totals
				%		£	£	£	£	£	£
Wheat	191811	4	767244	90%	690520	2.676	1,847,830		1.635	1,129,000	
Barley	101692	5	508460	93%	472868	1.801	851,635		1.35	638,372	
Oats	40427	6	242562	38.50%	93386	1.186	110,756		0.961	89,744	
Rye	1446	0.63	911	38.50%	351	7.8566	2,756		6.33667	2,222	
CEREALS								2,812,977			1,859,338
Beans	48709	3.857	187871	50%	93935	2.12125	199,260		2.5317	237,816	
Peas	29126	3.7143	108183	55%	59500	1.96134	116,701		2.535	150,834	
Potatoes	12164	6	72984	70%	51089	5.70	291,206		5.30	270,771	
Flax	382	26.2	10008	100%	10008	0.45	4,504		0.29	2,902	
Hops	73	8.62	629	100%	629	6.16	3,876	615,547	7.25	4,562	666,885
Hay [Rotational]	53680	1.5	80520	38.50%	31000	4	124,001		4.725	146,476	
Hay [Permanent Grass]	82713	1.1	90984	38.50%	35029	3	105,087		4.45	155,879	
HAY								229,088			302,355
TOTAL CROPS								3,657,612			2,828,578
Milk	21371	334	7137914	90%	6424123	0.0356666	229,127		0.0381944	245,366	
Beef	44381	1.289	57207	100%	57207	3.4611	198,000		3.091667	176,865	
Mutton	365898	0.2	73180	100%	73180	3.7333	273,201		3.363889	246,168	
Wool	365898	3.6	1317233	100%	1317233	0.0885416	116,630		0.0421875	55,571	
Pork & Bacon	96246	2.121	204138	100%	204138	3.0917	631,133		3.025	617,517	
TOTAL LIVESTOCK								1,448,090			1,341,486
Orchard Fruits	1663	1.86	3093	100%	3093	17.61	54,471	54,471	10.61	32,819	32,819
TOTAL OUTPUT								5,160,173			4,202,883

ESSEX FARMS: GROSS OUTPUT 1881

Crop	Acreage or Number	Yield	Produce on farms	Percentage sold off the farms	Output from farms	Price per unit	Value of output from farms	Totals	1910-12 Price per unit	Value of output from farms at fixed 1910-12 prices	Totals
				%							
Wheat	156562	3.9	610592	90%	549533	2.27	1,247,439		1.635	898,486	
Barley	122917	3.92	481835	72%	346921	1.6	555,074		1.35	468,343	
Oats	41058	6.04	247990	45.00%	111596	1.0875	121,360		0.961	107,243	
Rye	1273	0.58	738	45.00%	332	7.22	2,399		6.336667	2,105	
CEREALS								1,926,272			1,476,178
Beans	37522	3.99	149713	50%	74856	2.0072085	150,252		2.5317	189,514	
Peas	26070	3.97	103498	55%	56924	1.841319	104,815		2.535004	144,302	
Potatoes	10254	5	51270	70%	35889	7.23	259,477		5.30	190,212	
Flax	610	26.2	15982	100%	15982	0.45	7,192		0.29	4,635	
Hops	16	7.1	114	100%	114	6.16	700	522,436	7.25	824	529,486
Hay [Rotational]	50026	1.48	74038	45.00%	33317	5	166,587		4.725	157,424	
Hay [Permanent Grass]	90922	1.27	115471	45.00%	51962	3.5	181,867		4.45	231,231	
HAY								348,453			388,655
TOTAL CROPS								2,797,161			2,394,319
Milk	24784	362	8971808	90%	8074627	0.0395833	319,620		0.0381944	308,406	
Beef	54480	1.289	70225	100%	70225	3.558333	249,883		3.0916667	217,111	
Mutton	329360	0.2	65872	100%	65872	4.433	292,011		3.363889	221,586	
Wool	329360	3.6	1185696	100%	1185696	0.0515625	61,137		0.0421875	50,022	
Pork & Bacon	82844	2.121	175712	100%	175712	3.5	614,992		3.025	531,529	
TOTAL LIVESTOCK								1,537,644			1,328,654
Orchard Fruits	1317	1.86	2450	100%	2450	17.61	43,138	43,138	10.61	25,990	25,990
TOTAL OUTPUT								4,377,943			3,748,963

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ESSEX FARMS: GROSS OUTPUT 1891											
Crop	Acreage or Number	Yield	Produce on farms	Percentage sold off the farms	Output from farms	Price per unit	Value of output from farms	Totals	1910-12 Price per unit	Value of output from farms at fixed 1910-12 prices	Totals
				%							
Wheat	144664	4.34	627842	85%	533665	1.85	987,281		1.635	872,543	
Barley	102866	4.72	485528	66%	320448	1.408	451,191		1.35	432,605	
Oats	47690	6.25	298063	51.00%	152012	1	152,012		0.961	146,083	
Rye	1404	0.76	1067	51.00%	544	6.63	3,608		6.33667	3,448	
CEREALS								1,594,092			1,454,680
Beans	34440	3.73	128461	50%	64231	1.6650705	106,948		2.5317	162,613	
Peas	24387	3.65	89013	55%	48957	1.6248275	79,547		2.535	124,106	
Potatoes	9605	6.84	65698	70%	45989	6.47	297,394		5.30	243,740	
Flax	76	26.2	1991	100%	1991	0.45	896		0.29	577	
Hops	0	6	0	100%	0	6.16	0	484,785	7.25	0	531,036
Hay [Rotational]	64346	1.507	96969	51.00%	49454	5	247,272		4.725	233,672	
Hay [Permanent Grass]	109064	1.1445	124824	51.00%	63660	3.5	222,810		4.45	283,287	
HAY								470,082			516,960
TOTAL CROPS								2,548,959			2,502,676
Milk	31670	382	12097940	90%	10888146	0.0354166	385,621		0.0381944	415,866	
Beef	55753	1.289	71866	100%	71866	3.033	217,968		3.091667	222,185	
Mutton	332886	0.2	66577	100%	66577	3.675	244,671		3.363889	223,958	
Wool	332886	3.6	1198390	100%	1198390	0.040625	48,685		0.0421875	50,557	
Pork & Bacon	110673	2.121	234737	100%	234737	2.275	534,028		3.025	710,081	
TOTAL LIVESTOCK								1,430,973			1,622,647
Orchard Fruits	1595	1.86	2967	100%	2967	17.61	52,244	52,244	10.61	31,477	31,477
TOTAL OUTPUT								4,032,176			4,156,799

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ESSEX FARMS: GROSS OUTPUT 1893/95

Crop	Acreage or Number	Yield	Produce on farms	Percentage sold off the farms %	Output from farms	Price per unit	Value of output from farms £	1910-12 Price per unit	Value of output from farms at fixed 1910-12 prices £	Totals £
Wheat	111978	3.391667	379792.087	85	322823.274	1.20417	388734.102	1.635	527816.053	
Barley	103445	3.81875	395030.594	66	260720.192	1.2	312864.23	1.35	351972.259	
Oats	63882	4.92875	314858.408	54	170023.54	0.83889	142631.048	0.961	163392.622	
Rye	2033	0.67333	1368.87989	54	739.195141	5.54	4095.14108	6.33667	4684.03567	
CEREALS				0	0		0	848,325	0	1,047,865
Beans	22864	2.91958	66753.2771	50	33376.6386	1.35673	45283.0868	2.5317	84499.6358	
Peas	25590	2.76125	70660.3875	55	38863.2131	1.34909	52429.9722	2.535004	98518.4007	
Potatoes	11695	6.34	74146.3	70	51902.41	3.45	179063.315	5.3	275082.773	
Flax	143	26.2	3746.6	100	3746.6	0.31	1161.446	0.29	1086.514	
Hops	0	0	0	100	0		0	7.25	0	
GREEN				0	0		0	277,938	0	459,187
T/Grass hay	63075	1.252165	78980.3074	54	42649.366	3	127948.098	4.725	201518.254	
PP Hay	104010	0.8481666	88217.8081	54	47637.6164	2.8	133385.326	4.45	211987.393	
HAY				0	0		0	261,333	0	413,506
TOTAL CROPS				0	0		0	1,387,596	0	1,920,558
				0	0		0		0	
Milk	31287	380	11889060	90	10700154	0.0375	401255.775	0.0381944	408685.962	
Beef	48485	1.289	62497.165	100	62497.165	2.99444	187144.011	3.0916667	193220.404	
Mutton	296490	0.2	59298	100	59298	3.538889	209849.04	3.363889	199471.89	
Wool	296490	3.6	1067364	100	1067364	0.0449652	47994.2357	0.0421875	45029.4188	
Pork and Bacon	90851	2.121	192694.971	100	192694.971	2.595833	500203.965	3.025	582902.287	
TOTAL LIVESTOCK				0	0		0	1,346,447	0	1,429,310
				0	0		0		0	
Orchards	1871	1.86	3480.06	100	3480.06	11.46	39881.4876	39,881	10.61	36923.4366
TOTAL				0	0		0	2,773,924	0	3,386,791

ESSEX FARMS: GROSS OUTPUT 1900/02

Crop	Acreage or Number	Yield	Produce on farms	Percentage sold off the farms	Output from farms	Price per unit	Value of output from farms	Totals	1910-12 Price per unit	Value of output from farms at fixed 1910-12 prices	Totals
									%	£	£
Wheat	111258	3.89	432794	80%	346235	1.3625	471,745		1.635	566,094	
Barley	83390	4.33875	361808	67%	242412	1.2625	306,045		1.35	327,256	
Oats	62893	5.895	370754	58%	215037	0.9361	201,297		0.961	206,651	
Rye	1389	0.7533	1046	58%	607	6.21333	3,771		6.336667	3,846	
CEREALS								982,857			1,103,846
Beans	23680	3.55125	84094	50%	42047	1.67267	70,330		2.5317	106,450	
Peas	18472	3.315	61235	55%	33679	1.63546	55,081		2.535004	85,377	
Potatoes	9857	4.84	47708	70%	33396	3.625	121,059		5.3	176,996	
Flax	70	29.92	2094	100%	2094	0.31	649		0.29	607	
Hops	0	9	0	0	0	0	0	247,119	7.25	0	369,430
Hay [Rotational]	65117	1.387	90317	58%	52384	4.55	238,347		4.725	247,515	
Hay [Permanent Grass]	99028	1.0635	105316	58%	61083	4.225	258,078		4.45	271,821	
HAY								496,425			519,336
TOTAL CROPS								1,726,401			1,992,612
Milk	34732	392	13614944	90%	12253450	0.03333333	408,448		0.0381944	468,013	
Beef	51295	1.289	66119	100%	66119	2.8972221	191,562		3.0916667	204,419	
Mutton	271550	0.2	54310	100%	54310	3.519444	191,141		3.363889	182,693	
Wool	271550	3.6	977580	100%	977580	0.0291666	28,513		0.0421875	41,242	
Pork & Bacon	73993	2.121	156939	100%	156939	2.5958333	407,388		3.025	474,741	
TOTAL LIVESTOCK								1,227,052			1,371,107
Orchard Fruits	2521	1.86	4689	100%	4689	11.46	53,737	53,736	10.61	49,751	49,750
TOTAL OUTPUT								3,007,189			3,413,469

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Abbreviations used:

<i>Agricultural History</i>	<i>Ag.H.</i>
<i>Agricultural History Review</i>	<i>Ag.H.R.</i>
<i>Country Life</i>	<i>C.L.</i>
<i>Economic History Review</i>	<i>Ec.H.R.</i>
<i>Essex Farmers' Journal</i>	<i>E.F.J.</i>
<i>Journal of the Board of Agriculture</i>	<i>J.B.Ag.</i>
<i>Journal of the Royal Agricultural Society of England</i>	<i>J.R.A.S.E.</i>
<i>Journal of the Royal Statistical Society</i>	<i>J.R.S.S.</i>

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