The Rayleigh Hills in south-east Essex: patterns in exploitation of a woodland

by Stephen Rippon

This paper examines certain aspects of landscape evolution in south-east Essex, where three broad topographical areas can be identified: the low-lying London Clay basin east of Basildon, an outcrop of the Bagshot Beds forming the Rayleigh Hills at the centre, and lower-lying gravels and brickearths to the east. The Rayleigh Hills are currently well wooded and a range of evidence shows this to have been the case since the Saxon period, though later prehistoric and Roman settlement had been extensive. Following post-Roman woodland regeneration and later Saxon clearance, the establishment of an extensive royal estate, which included three deer parks, transformed part of the region. In contrast, the remaining areas were exploited in a piecemeal fashion as individual smallholders and great monastic landlords alike created a landscape through gradual assarting. The abundance of woodland and common pasture on the Rayleigh Hills was in sharp contrast to surrounding, lowerlying areas and, though land on the Hills had the lowest value in the 11th century, by 1334 they were more highly valued than the London Clay area to the west.

INTRODUCTION

The medieval landscape of Essex was very different from the open fields and nucleated villages of Midland England, and during the 16th century the terms 'woodland' (as in south-east England) and 'champion' (as in the Midlands) were given for these contrasting areas (Rackham 1986a, 1-5; Williamson 1988). Essex typifies a 'woodland' landscape: the mainly enclosed fields were often held in severalty, and the abundant hedgerows gave the countryside a very bosky appearance. The settlement pattern was largely dispersed, with farmsteads and cottages sprawling around greens and commons throughout the parish.

Rackham (1986a) has used the terms 'ancient' country-side (south-east England) and 'planned' countryside (the Midlands) for these same two areas, though this broad classification has rather misleading chronological overtones and fails to recognise the wide range of processes that led to the creation of 'ancient' landscapes. Some areas in the 'ancient' zone were in fact planned with great precision during the Iron Age (Drury 1976), and the Roman (Rodwell 1978), Saxon (Rippon 1991, 55-8), and medieval periods (Hunter 1995, 138), while other areas of 'ancient' countryside were created through the gradual and piecemeal assarting of woodland. It is the last process that is explored in this paper.

While Essex has benefited from a long history of archaeological and documentary research on the Saxon and medieval periods, there has been relatively little enquiry as to the origins of its present landscape. Notable exceptions have included the work of Bassett (1982), Drury (1976),

Rackham (1986b) and Rodwell (1978; 1993) on the surviving planned landscapes of prehistoric and Roman date, while research in south-east Essex has suggested a later Saxon origin for a similarly regular pattern of fields and roads (Rippon 1991), a hypothesis which has received support from the publication of large-scale excavations at North Shoebury (Wymer & Brown 1995). A number of other studies have also shed new light on the medieval field systems of certain Essex parishes, notably Cressing (Hunter 1993b; 1995), Havering (McIntosh 1986), Rivenhall (Rodwell & Rodwell 1985; 1993), Saffron Walden (Cromarty 1966), Thaxted (Newton 1960), Witham (Britnell 1983; Rodwell 1993) and Writtle (Newton 1970). Such work shows a marked bias towards central and northern Essex (see Gray 1915 and Roden 1973 for more general discussions of Essex field systems).

This paper will examine the previously neglected southeast corner of the county, in which the role of a number of major landlords and the local peasant community in shaping the landscape can be compared. It will show how powerful estate owners could radically reshape the countryside, though it was not always possible nor desirable for them to do so. This paper will also show how smallholders in this area tended not to cooperate in creating planned field systems, but worked individually in the clearance of woodland, creating distinctive, irregular landscapes.

THE STUDY AREA

The Rayleigh Hills, between Southend and Basildon, stretch from Hockley in the north, through Rayleigh and Thundersley, to Hadleigh and South Benfleet in the south. The Hills comprise a complex sequence of clays, sands and gravels of the Claygate and Bagshot series, which in places give rise to podsolized heaths, contrasting sharply with heavy London Clays to the west and lighter terrace gravels and brickearths to the east (Scarfe 1942, 448; Wymer &

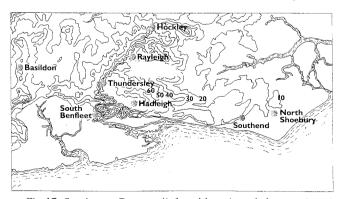


Fig 17 South-east Essex: relief, and location of places referred to by Rippon in 'The Rayleigh Hills in south-east Essex...'.

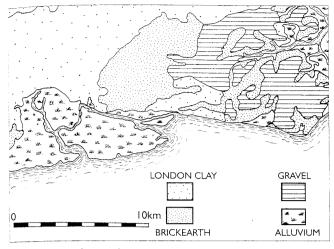


Fig 18 South-east Essex: simplified geology.

Brown 1995, 3). The southern edge of the Hills is marked by a relatively steep degraded cliff, fringed by post-glacial estuarine alluvium along the margins of the Thames Estuary (Figs 18 and 19). The western and northern edge of the Hills is marked by a steep scarp slope, with a much gentler dip slope to the east.

Landscape character on the Rayleigh Hills was summed up by Woodward (1903, 9): 'The land is less cultivated than on other formations, and commons, village greens and much woodland help to diversify the scenes'. At the end of the 18th century there was a great abundance of woodland (Fig 20) and soils were agriculturally less productive than on the adjacent lowlands, such as Shoebury and Wakering to the east (Table 1).

Table 1 Agricultural productivity in Hadleigh, Shoebury and Wakering in 1795

(based on Vancouver 1795, table facing 76).

	value (shillings)		yields (bushels per acre)		
parish	enclosed arable	enclosed pasture	wheat	barley	oats
Hadleigh	12s	12s	24	32	32
Shoebury	16s	16s	28	34	40
Wakering	16s	16s	28	34	40

THE ANTIQUITY OF 'ANCIENT WOODLAND': PREHISTORIC AND ROMAN SETTLEMENT

The well-wooded landscape and lower agricultural productivity in the post medieval period might lead to the assumption that the Rayleigh Hills have never been extensively settled and are a marginal landscape: an area not ideally suited to agriculture and only settled at times of high population pressure (Bailey 1989; Dyer 1990b; Rippon 1997). This impression is certainly confirmed by the report of the Land Utilisation Survey carried out in the 1930s, when it was argued that 'much of the sandy soil turned out to be too poor to cultivate after clearance and became heath and common' (Scarfe 1942, 448).

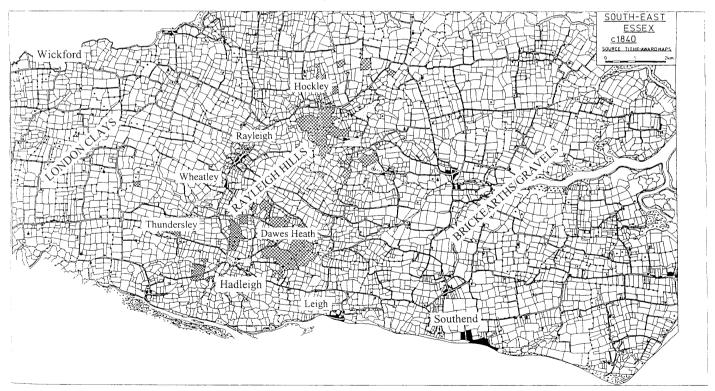


Fig 19 Field boundary patterns in south-east Essex (based on the Tithe Award maps of c. 1840). Note the regularly laid-out landscapes on the London Clay (south of Wickford) and brickearths and gravels (north of Southend), which contrast with the more irregular landscape on the Rayleigh Hills.

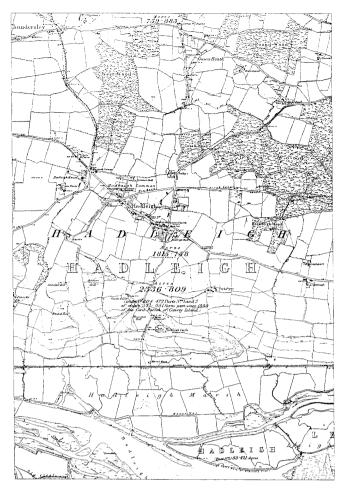


Fig 20 Extract from the Ordnance Survey first edition six-inch map of south-east Essex (surveyed in 1876). This forms the basis for the landscape analysis in Figure 21. For example, recent enclosures, such as the woodland assart from West Wood northwest of Solby's (compare Fig 21) and Hadleigh Common, have a far more regular layout than the earlier fields around the village.

Key issues are the date when this clearance was undertaken and the age of the surviving woodland. If the Land Utilisation Survey was correct then we should expect an abundance of woodland and less settlement on the Rayleigh Hills compared to the adjacent areas (except at times of high population pressure). Unfortunately there has been relatively little archaeological work on the Hills, though bearing in mind that the vast majority of archaeological discoveries are, therefore, antiquarian and other chance finds, there is in fact a remarkable number (Buckley 1980; Pollitt 1953). For example, taking just one parish, Hadleigh (Fig 21), later prehistoric finds include an Early Iron Age enclosure off Chapel Lane (Brown 1987), several Late Iron Age burial urns from Sayer's Farm (ECC SMR 7208-9, 9610; SM TQ 88 NW 74), and the cropmarks of a substantial doubleditched enclosure of a type dated elsewhere in Essex to the Late Iron Age and the Roman periods (Priddy & Buckley 1987, 61-6). Other examples of this type of enclosure are at Mucking (Clarke, A 1993, 20-1), Orsett (Toller 1980), Rainham (Greenwood 1982) and Stansted (Brooks & Bedwin 1989). A substantial Roman settlement existed to the north of Hadleigh at Dawes Heath, at the centre of what is still one of the most wooded parts of the Rayleigh Hills (see below; Delderfield & Rippon 1996; Drury *et al* 1981). A number of unstratified finds have also been found throughout the parish, including a mortar of Purbeck marble from Great Wood (SM TQ 88 NW 7, pottery and a bronze statue from Hadleigh Castle (ECC SMR 9533-4; SM TQ 88 NW 13; Drewett 1975, 135-8), and coins from six locations: Bilton Road (ECC SMR 9754; SM TQ 88 NW 37), Castle Farm (SM TQ 88 NW 21), Church Road (SM TQ 88 NW 39), Meadow Road (SM TQ 88 NW 87), Scrub Lane (ECC SMR 9724; SM TQ 88 NW 51) and West Wood (SM TQ 88 NW 68).

The coastline was also an important focus of activity (Fig 21). To the south of the Rayleigh Hills lay an extensive area of saltmarsh which, in the Roman period, was the setting for at least three 'red hills' used for salt production (Fawn *et al* 1990, 52). On the adjacent fen edge Roman material has been found at the eastern end of the Castle Saddleback (ECC SMR 9579), while a large amount of very

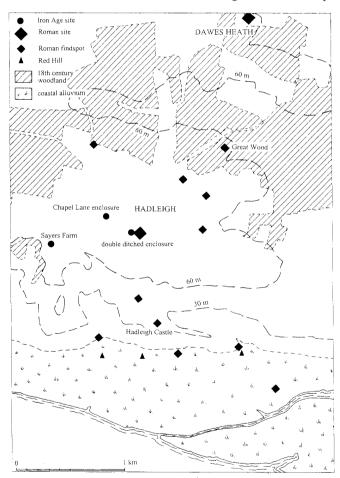


Fig 21 Hadleigh: findspots marking late prehistoric and Roman settlement. The density of findspots is greatest in the southern part of the parish, because this area has seen the greatest urban development. Note that several findspots occur in or on the edge of areas known to have been wooded in the late 18th century (source: ECC SMR and Southend Museum).

poorly fired tile (*tegula*, *imbrex*, and comb-decorated box flue tile), though curiously no pottery, has been discovered on the edge of the marshes at the southern end of Chapel Lane, south of Sayer's Farm (ECC SMR 9718).

This density of late prehistoric and Roman sites and findspots is repeated over much of the Rayleigh Hills and is comparable to most of the surrounding lower-lying areas (Pollitt 1953); this does not appear to have been marginal land. In contrast, however, there is just one findspot of Early Saxon date on all of the Rayleigh Hills: a possible burial from Plumberow Mount in Hockley (Jones 1980, 92; Pollitt 1953, 74) the suggestion that an iron spear and knife point from Dawes Heath are Saxon (Pollitt 1953, 76) is regarded by Jones (1980, 92) as doubtful. This lack of Saxon findspots contrasts sharply with the Southend area to the east of the Rayleigh Hills, which has an abundance of Saxon settlement and burial sites (Crowe 1996, fig 1; Wymer & Brown 1995, figs 99-100).

THE ORIGINS OF THE PRESENT LANDSCAPE: POST-ROMAN REGENERATION

It would seem, therefore, that the Rayleigh Hills were settled by the Roman period, but during the Early Saxon period activity was much less intense. This leads to the critical question of whether the present, well-wooded character of the area derives from a post-Roman regeneration (Day 1993). Botanically, most woodland on the Rayleigh Hills is regarded as 'ancient', though this only proves that it is at least several hundred years old (Rackham 1986b).

In southern England as a whole palaeoenvironmental evidence for post-Roman woodland regeneration is very limited; overall, the landscape appears to have remained open (Bell 1989, 273-7; Murphy 1994; Williamson 1993, 58-9). The closest pollen sequence to south-east Essex, from the Mar Dyke in Thurrock, suggests that there may have been limited regeneration in the post-Roman period in that area (Wilkinson 1988, 125), but too much should not be read into this one diagram.

Several fragments of evidence, however, suggest that some at least of the woodland on the Rayleigh Hills is indeed post-Roman. A possible Roman villa at Dawes Heath was first identified in the 1970s (Drury et al 1981). The structure's character is unclear, though the presence of ceramic roof tiles indicates a villa, or a farmstead of sufficient status to have had a stone-built bath-house (like the recently excavated site at Great Holts Farm, Boreham: Essex Archaeology 1995, 12). Though it cannot be proven that the Dawes Heath site itself was subsequently wooded, the present pattern of field boundaries in the vicinity clearly suggests a woodland assart from Pound Wood to the south and east, and Tile Wood to the west (Fig 22). The assart is called 'Haggatt Lande alias Brett Lande' in 1613 (WAM Lease Book XI, f. 117b) and may equate with the land held in Thundersley by Stephen le Bret in the 13th century (WD temp. Hen. III, f. 609; temp. Edw. I, f. 609). In 1717, 'Brets alias Haggetts' amounted to 28 acres of land and 'a messuage with barns outhouses and several fields of customary

land' (WAM 8039). All trace of this farmstead has now disappeared, and it is not shown on the map of 1777 (Chapman & André), although post-medieval building debris can be found in the field alongside Roman *tegulae*.

By the late Saxon period the Rayleigh Hills appear to have been relatively well wooded, indicated by the almost complete predominance of *-leah* names in Domesday (Fig 19: Hockley, Leigh, Rayleigh, Thundersley, Wheatley, Hadleigh). Most botanically ancient woodlands are not documented until the 13th century, though some, for instance Britcherley (now Potash Wood, Rochford), Fennley (now Pound Wood, Thundersley, Fig 22), Goldingsley (Leigh), Horseley (south of Barnes-juxta-Hadleigh, Fig 22), Kingley (Rayleigh) and Tilehurst Woods (Thundersley, Fig 22), may have pre-Conquest names (Rackham 1986b, 16).

Domesday records surprisingly little woodland in manors on the Rayleigh Hills (Rippon 1991, fig 3), though it is quite likely that woodland recorded on other manors in south-east Essex was actually located in enclaves on the Hills. In the same way these manors had grazing rights on distant coastal marshes (see below: Cracknell 1959, 10-11; Rackham 1986b, 16, fig 14; Rippon 1991; Round 1903, 369).

The well-wooded nature of the Rayleigh Hills may in fact be illustrated through analysing the acreage per population, plough and shilling of value in 1066 (Table 2). This date was chosen rather than 1086 to exclude the effects of any disruption to the landscape caused by the Norman Conquest (see below). The bounds of the numerous Domesday manors is not known, so for this analysis they have been grouped by medieval parishes. Most of the parishes whose centres lay on the Rayleigh Hills also extended onto the surrounding lowlands; only Leigh and Hadleigh were contained wholly on the Hills. Hart's (1957b) identification of Lea(m) as Hadleigh is accepted here. Rawreth is not named in Domesday and is assumed to have been included under Wickford. Table 2 shows that in Domesday the Rayleigh Hills had lower densities of ploughs, population and value per acre compared with areas both to the west (the London Clay) and especially the east (the brickearths).

Table 2 Comparison of agricultural conditions on the Rayleigh Hills and areas to the west and east in 1066 and 1334.

	western area (London Clay)	Rayleigh Hills	eastern area (brickearth/gravels)
acreage	acres	acres	acres
1066 per ploug	h 398	491	294
1066 per tenant	92	171	159
1066 per shillin	ng 21	26	17
1334 per shillin	ng 64	47.	33 -

By 1334, however, the situation had changed (Glasscock 1975), and though the acreage per shilling of value was still much lower than for the area to the east, the Hills were now more highly valued compared to the London Clays to the west. Assuming conditions on the Clay had not deteriorated

in any significant way, this must mark a positive improvement in the value of land on the Rayleigh Hills. The very varied resources on the Rayleigh Hills, including the abundant woodland, thus supported a higher valuation than the wholly cleared areas to the west.

There is no firm evidence in Domesday for clearance between 1066 and 1086. A decrease in woodland between these two assessments has been noted throughout Essex, though this was not necessarily due to clearance for cultivation (Lennard 1945). For example, the change in Eastwood from woodland for 50 swine to that for 30 was matched by a decrease in ploughs from 10 to 7. This may in fact represent wasting after the Conquest (Lennard 1945, 36), and 30 acres of 'wasted wood' are indeed recorded in Fanton Hall, North Benfleet, which were probably located on the Rayleigh Hills (Rackham 1986b, 16).

An indication of active woodland clearance might be found in the region's social structure. Harvey (1979, 107-9) has suggested that the Domesday tenants called bordarii were 'a class of people, perhaps formerly servile, who dwell in cottages on the edge of the existing village and its fields, who had taken in a few acres of land from the waste, common and heathland, to form a small holding'. These holdings might amount to around 5 to 10 acres of land (Harvey 1987, 254). If this hypothesis is correct we might expect far larger numbers of bordarii on the Rayleigh Hills compared to the lower-lying surrounding areas. Table 3 gives the percentages of bordarii on the Rayleigh Hills and surrounding lowland areas in 1066 and 1086. The percentages of bordarii on the Hills in 1066 and 1086 are in fact lower than the regional average, and much lower compared to the areas further east, though higher than the London Clay areas to the west. In Essex as a whole bordarii were 36% of the villeins, bordars and slaves in 1066, and 53% in 1086 (Welldon-Finn 1972, 131). Thus, either Harvey's suggestion as to the nature of the bordarii is incorrect or there was not a particularly significant level of assarting on the Rayleigh Hills during the third quarter of the 11th century.

Table 3 Domesday bordarii as a percentage of bordars, villeins and slaves, in 1066 and 1086, on the Rayleigh Hills and in neighbouring lower-lying areas.

	west	Rayleigh Hills	east	average south-east Essex	
	%	%	%	%	
1066	41	48	54	50	
1086	49	52	71	61	

The extent of woodland on the Rayleigh Hills becomes more evident during the high medieval period. The existence of three royal deer parks suggests that in the late 11th to early 13th century, when the parks were created, there was a concentration of woodland in the area; in England as a whole, wherever licences to impark state former land use in over half the cases this was woodland (Rackham 1980, 191).

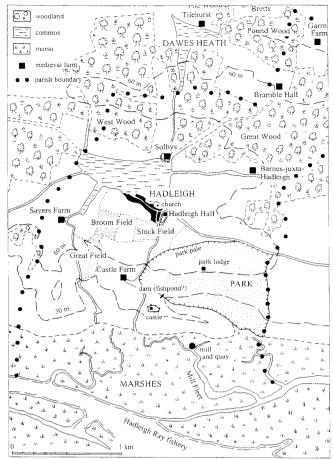


Fig 22 Hadleigh: reconstructed plan of the medieval landscape, including the village and outlying farmsteads. The extent of woodland in the late 18th century is shown: some at least of this may be post-medieval regeneration. (Cartographic sources: Hadleigh Park, (?) late 16th century (HRO M16/54); Hadleigh Marshes, 1670 (HRO M16/54); Barnes [Great] Wood, 1750 (ERO D/Dmq E7/1); Chapman and André (1777); Tithe Map, 1847 (ERO D/CT 154/A); Enclosure Map, 1852 (ERO TS/M 63/9).)

Other woods certainly existed around these parks, recorded for example in Hadleigh (CIPM vol I, Hen. III, 249; CPR Rich. II vol. II, 536-7), Thundersley (FF 1, 232; Burrows 1909, 28; Delderfield 1982, 14) and Dawes Heath (Delderfield & Rippon 1996). In fact, out of twelve Feet of Fines from 1254-5 to 1430 that describe holdings wholly in Hadleigh, six included small parcels of woodland, usually between 3 and 8 acres (see Table 4).

Large areas of woodland existed in the post-medieval period (Figs 20-22). Much of this is probably a direct descendent of the post-Roman regenerative woodland, though some was derived from medieval or later regeneration. For example, the Dean and Chapter of St Paul's had part of West Wood (Fig 22) on the Hadleigh-Thundersley parish boundary, which covered 81 acres in the 18th century (ERO D/DU 560/14/1; ERO D/DHt P51; Delderfield 1982, 14). Of this 64 acres were in Thundersley, which presumably represents the bulk of the 74 acres that St Paul's

held in that parish during the late 1250s; of this just 22 acres were wooded (FF I, 226, 232; Delderfield 1982, 14).

The abundant post-Roman woodland on the Rayleigh Hills is in sharp contrast to the lower-lying areas in the rest of south-east Essex which lack *-leah* place-names. To the west of the Rayleigh Hills the potential survival of a rectilinear Roman field system south of Wickford (Fig 19) (Rippon 1991; Rodwell 1978) suggests that the landscape remained open throughout the Saxon period. To the east of the Rayleigh Hills the carefully planned road and field systems appear at least in part to be of later Saxon origin rather than a survival from Roman times (Fig 19) (Rippon 1991; Wymer & Brown 1995, 170-2). Though there is no evidence that they were created after woodland clearance, there are no *-leah* place-names nor is there abundant evidence for Early and Middle Saxon settlement (Crowe 1996; Jones 1980; Wymer & Brown 1995).

Table 4 Feet of Fines for Hadleigh 1254/5-1430 (source: FF I-IV).

	messuages acres	land acres	pasture acres	wood acres	marsh acres	heath
1254/5	1	8				
1254/5		5				
1261/2	1	20				
1268/9	1	12		5		
1275/6	. 1	15				
1288/9					80	
1305/6				30		
1320/1	1	- 3		3		
1323/4	1	23	1	8		
1324.	1	10		3		
1324	. 1	14	1	3		4 - 4
1430	. 1	4½				

In the post-Roman period, therefore, large parts of the Rayleigh Hills appear to have been abandoned and saw the regeneration of woodland. However, the surrounding low-land areas continued to be occupied and settlements there held grazing rights up on the Hills. An analogy can be drawn with the extensive intercommoned pastures on Tiptree Heath between Chelmsford and Colchester, on which 16 parishes had rights of pasture in 'an unappropriated waste' (Britnell 1983, 52; Hunter 1995, 140; Round 1903, 370). This pattern of continuous occupation in certain lowland areas, and regeneration on the higher hills, is also mirrored in Norfolk where the central watershed appears to have been partly abandoned in the post-Roman period (Williamson 1993).

By the medieval period many lowland farms are recorded as having woodland on the Rayleigh Hills (Rackham 1986b, 16-17, fig 14). For example, in 1462 an estate is recorded as comprising 1 messuage, 240 acres of land, 3 acres of wood and 40 acres of marsh in Paglesham, Canewdon, Great Stambridge (all between the rivers Crouch and Roach) and Hadleigh, about 10 miles to the south-west (FF IV, 58). Presumably the woodland lay in Hadleigh since

the other three parishes do not appear to have contained any ancient woodland: Rookery Wood in Canewdon, and Barton Hall Grove and Steward's Wood in Great Stambridge, are all of recent origin (Rackham 1986b, 103, 107). Some of the detached parcels of woodland on the Rayleigh Hills may date back to the period when the common wood-pastures were enclosed, such as 'Shoebury Grove' which later came into the hands of Prittlewell Priory (ERO D/DMq T3/1; Rackham 1986b, 18). Shoebury manor also retained 30 acres of woodland in Hadleigh (CIPM 1, 249; CIPM VII, 125; CIPM XVI, 179).

THE HIGH MEDIEVAL PERIOD

Clearance of the post-Roman woodland on the Rayleigh Hills appears to have started during the Middle to Late Saxon period: nationally, -leah names are rarely recorded before c. 730 (Cox 1976, 50; Gelling 1993, 198). By Domesday the Rayleigh Hills were clearly well settled, with numerous settlements and plough-teams suggesting extensive open areas. It was during this later Saxon period of clearance that the basic framework of the medieval and postmedieval landscape, including the broad pattern of settlements, roads, fields and commons, came into being (see Warner 1987 for the origins of green-side settlement in Suffolk). However, the subsequent centuries saw a series of major modifications, including the creation of three large deer parks, further erosion of the common land, and the resulting proliferation of dispersed settlements. Together, these amounted to an increased intensity with which the landscape was exploited.

The dispersed settlement pattern of the Rayleigh Hills has not left much in the way of documentation. Reaney (1935) collated the evidence for the date when many of the farmsteads are first documented, though in many cases it is actually a family name that is first recorded; for instance, Garrold's: Walter Gerold, 1324 (Fig 22) (Reaney 1935, 185). It is dangerous to assume that the earliest date when a farm is documented is close to that of its foundation; a farmstead may go undocumented for many centuries. What can be said, however, is that the dispersed settlement pattern on the Rayleigh Hills certainly existed by the early 14th century. Examples are, at South Benfleet, Jarvis Hall, 1254 (Reaney 1935, 143); at Kersey Marsh, Poynett's, 1308, and Reed's Hill, 1285 (Priestley 1984, 23); and at Thundersley, Haresland, 1319 (Reaney 1935, 172).

A number of other farms are not documented until the 15th and 16th centuries, and it is not clear whether they represent earlier farms that had escaped documentation or late medieval assarting of woodland and common land when the already weak manorial authority of this region was further eroded. Examples are, at Hadleigh, Bramble Hall, 1412, and Sayer's, 1491 (Reaney 1935, 185); at South Benfleet, Boyce Hill, (?)1412, 1563 (Reaney 1935, 143); and at Thundersley, Claydon's, 1554 (Reaney 1935, 143).

The estate of Westminster Abbey at Dawes Heath, in Hadleigh and Thundersley, is relatively well documented and has been studied by Bob Delderfield (whom I thank for

allowing me to refer to his unpublished work). Westminster's main holding in south-east Essex was a large compact estate in South Benfleet acquired after the Norman Conquest (DB 6.1; Benton 1867-88, 55). In contrast, the Abbey's lands around Dawes Heath appear to have been obtained in a piecemeal fashion with a number of acquisitions in the 13th century, including lands, woods and tenements in Hadleigh (1222-46: WD f.497) and Thundersley (temp. Hen. III: WD 609, 610; 1222-46: WD f.614; temp. Edw. I: WD f.609; 1283-1307: WD f.616). There were also acquisitions in Wheatley (Fig 19) which give an impression of how the 13th-century landscape may have appeared. A grant in 1253-83 comprised 86 acres, of which 14 acres lay in 'the field called le Westfeld at Wateleye', along with 19 acres in 'le Estfeld', 20 acres in 'le Bernefeld', 33 acres in 'le Medefeld', and 21 acres in an unnamed location (WD f. 616). In c. 1300 Alice Watelege granted Westminster 18 acres of land in Thundersley, which was surrounded by a ditch and called 'Bernfeld', as well as the two roads leading from 'Bernfeld' to 'Pirifeld' and 'Almshale' (temp. Edw. I: WD f. 582). At about the same time Westminster was granted the tenement of 'Thielherst' (Tilehurst) (Fig 22), which was to become the centre of their estates at Dawes Heath (temp. Edw. I: WD f. 609; see Rackham 1986b, 17, for a survey of 1315). The overall impression given by these and other references (and see the discussion of Hadleigh below) is that during the medieval period the Rayleigh Hills were still relatively well wooded with a pattern of dispersed settlement scattered around numerous commons and heaths.

HADLEIGH: LANDSCAPE AND LORDSHIP

The early history of Hadleigh is somewhat obscure as it does not appear to be mentioned in Domesday. Benton (1867-88, 228) and Morant (1766-8, 279) suggest that it was included under Rayleigh, whereas Priestley (1984, 64-7) suggests that Hadleigh is in fact the otherwise unidentified *Atelia*. Hart (1957b) argues more plausibly that Hadleigh was in fact St Paul's manor of *Lea(m)*, although Reaney (1935, 163) and Round (1903, 422) had assumed this was Lee Chapel near Basildon.

The earliest reference to Hadleigh (Haeplege) is in a list of the estates of St Paul's dated c. 995-8 (Hart 1957a, 19). It is recorded as Hadleg in 1121 (Reaney 1935, 185) and Hadlea in 1182, when the church is first referred to (Pipe Rolls vol. XXXI, 103). Unfortunately very little is known of the St Paul's estate. The description in a lease of 1695-6 (ERO D/DU 560/14/1) matches a map of 1750 (ERO D/DMq E7/1) by showing the estate in two almost wholly wooded blocks: West Wood and Barnes (now Great) Wood. However, the estate was formerly more extensive and included several messuages and parcels of land in and around Hadleigh village (FF I, 240; HMC 29, 34, 37).

Sometime before 1217 Hubert de Burgh was granted the honour of Rayleigh, which included Hadleigh and a large number of other manors (Burrows 1909, 253; Helliwell &

Macleod 1980, 6). In 1227 this grant was confirmed (CChR vol I Hen. III, 12), and in 1230 a licence was obtained to build a castle at Hadleigh on a hill overlooking the Thames Estuary (Figs 16 and 22) (CPR Hen. III, vol II, 417). In 1239, however, de Burgh was disgraced and his estates reverted to the crown. In 1250 the royal manor comprised 140 acres of arable, 2 acres of meadow, a curtilage, pasture around the castle and the barns of the castle for supporting a plough, pasture on the marsh for 160 sheep, a water mill, toll of the fair and a park (Sparvel-Bayly 1878, 92). In 1274-5 there is even reference to a vineyard (Colvin 1963, 662).

The earliest reference to a park at Hadleigh is in 1235 (CCR Hen. III, vol III, 57). In addition to sport and recreational use (CPR Hen. III, vol VI, 551), the park was a valuable source of timber (CCR Edw. I vol I, 200), underwood (CPR Rich. II, vol I, 482), and fresh meat both for the king (CLR vol VI, 291) and as gifts to others (CCR Hen. III, vol VII, 325). Horses were reared in a stud there (CPR Edw. II, vol I, 392). Various enclosures and assarts are recorded that would have compartmentalised the park (CFR Edw. I, vol I, 325; Min Acc II, 102), allowing for more intensive management, for example by coppicing woodland (CPR Rich. II, vol I, 482, 487). The earthworks of a dam across the valley north of the castle may indicate a fishpond in the park (Fig 22), and a stank (or fishpond) is recorded in the late 14th century (CPR Edw. III, vol XVI, 63; CPR Rich. II, vol IV, 406). The park also served an important social function as the object of patronage and gift; its keepership was clearly a prized possession with rights of grazing, cutting timber and a quota of deer (CPR Edw. III, vol XI, 96). The royal estate also contained a coastal fishery in Hadleigh Ray (Fig 22) (CPR Rich. II, vol II, 531).

The creation of the deer park represents an important statement about the authority of a major landholder. Just as rising population placed increased pressure on rural resources, a large area of land was devoted to non-agricultural production. It is not known whether arable land was used, although the location of the park, just to the south-east of the village, must make this likely. Much of the land to the west, north and east of the village was either common or part of the St Paul's Cathedral estate, suggesting that most of the arable must have lain to the area south of the village, out of which the park was carved.

A mill (first documented in 1250: CLR Hen. III, vol III, 11), and a small landing-stage lay on the edge of the marshes below the castle, adjacent to a tidal creek later called 'Mill Fleet' (shown on a map of the marsh dated 1670: HRO 1716/54) (Fig 22). During the construction of the railway across these marshes timber planks were recovered at a depth of 12 feet, from a vessel laden with Kentish ragstone (Burrows 1909, 255). This boat may have been delivering stone for the construction of the castle or mill, or subsequent modifications. In 1372 there is even reference to barges being made at Hadleigh, underlining the importance of the maritime role of the royal estate (CPR Edw. III, vol XV, 219).

The largest programme of work on the castle and other elements of the estate was carried out during the 1360s and 70s, when vast amounts of material must have been shipped in (Colvin 1963; Sparvel-Bayly 1878). In 1366, for example, 111 tons of stone were brought by boat from Kent, and 10 cartloads of stone, lime, sand, chalk and 'other necessaries' were carried from the mill to the castle (Min Acc II, 103). At the same time extensive repairs were also carried out on the mill, park lodge and pale (CPR Edw. III, vol XV, 224-6; CPR Edw. III, vol XVI, 340-1, 445, 473; Min Acc I, 78; Min Acc II, 102-7). Clearly this estate was a valued resource thought worthy of considerable investment.

The royal estate included part of the marshes below the castle, such as a marsh called 'Rousande' (CCR Edw. III vol XIV, 38). Other areas of marshland had been granted to two Essex monasteries. 'Russells Marsh' (or 'Rushe Hulles alias Priors Marsh') was held by Prittlewell Priory (CPR Edw. VI, vol IV, 87; ERO T/P 83/2; D/DU 514/29/28), while 'Clerkenwick alias Abbott's Marsh' was formerly held by Stratford Langthorne Abbey (CPR Edw. VI, vol IV, 87). Other marshes were held by smallholders; for example, a grant of 1412 included 'all the lands, marshes, rents and services in Hadleigh called Passages, Mascales and Johns atte Mersshe, and the whole marsh called Wodehammescotte' (CCR Hen IV, vol IV, 395). In common with most of the Essex coastal marshes, the Hadleigh marshes were left unreclaimed and used for grazing sheep (Cracknell 1959, 10; Hart 1957b, 40).

It is curious that there appears to be no evidence for the production of salt on the marshes, since this valuable commodity was certainly used for preserving meat from the deer park (CLR Hen. III, vol IV, 319; CLR Hen. III, vol IV, 350; CLR Hen. III, vol IV, 256). Medieval salterns, quite distinct from their Roman predecessors in having more prominent mounds and larger tanks, and lacking distinctive burnt red earth, are known from around both the Blackwater and Crouch estuaries (Barford 1988a; Christy 1907, 445; Christy & Dalton 1928; Fawn et al 1990, 49; Wilkinson & Murphy 1995, 197), though there is no evidence at all for such sites on the Hadleigh marshes.

The location of the original manor house is unclear, although it probably lay at the moated Hadleigh Hall close to the church (Fig 22). After the royal estate was sold in 1551 (CPR Edw. VI, vol III, 158-9) the manor passed through the Riche, Warwick, St John and Sparrow families (Benton 1867-88, 233-4). By the 19th century the manor and its court was located at Castle Farm (Benton 1867-88, 234). Hadleigh Hall had been owned by the Heber family since the 18th century, though in 1712 the 'manor of Hadleigh Hall' was held by the St John family whose estate also included Castle and Park Farms (HRO DDm 61/19). Thus it would seem that the medieval royal estate was divided into three farms, corresponding to the lands of the castle, manor and park, and when the Heber family acquired Hall Farm in the 18th century the manorial rights were retained by the St John family and so transferred to Castle Farm.

Hadleigh Castle was, therefore, not simply a fortress and occasional royal residence. It lay at the centre of an estate that exploited the varied resources of this rural landscape to the full; there was a demesne farm, a vineyard, a deer park serving a wide range of functions, a fishpond, a coastal fishery, coppiced woodland, a watermill and a quay. Several features that might have been expected are missing; there is no mention of rabbit warrens (although they are recorded in Rayleigh and Thundersley parks: CChR vol II, 27), and meadow was scarce, explained by the decision not to reclaim the marshes as they were already so highly valued for their sheep grazing. The possibility of salt production cannot be ruled out although evidence is lacking.

HADLEIGH: SMALLHOLDERS AND THE LANDSCAPE

The rest of Hadleigh's medieval landscape represents a sharp contrast to the intensively used royal estate. Much of the settlement appears to have been spread along the southern edge of the common, close to the church and moated manor house. Excavations to the south of the church revealed a long sequence of occupation, with the earliest pottery dated to the 12th century (Helliwell & Macleod 1969). In addition there were a number of farmsteads outside the main village that probably existed from the medieval period (Fig 22). Sayer's Farm may date back to at least 1491, when one William Sayer is recorded in Hadleigh (Reaney 1935, 185). Solby's (formerly 'Pollington's alias Strangeman's place'), on the northern side of the common, may be at least 14th-century (Benton 1867-88, 237). It farmed an assart from West Wood and may have been moated (Heygate 1859, cited in Hancock & Harvey 1986, 52). Two farms in the far north of the parish represent other woodland assarts: Bramble Hall is documented in 1412 (CCR Hen. IV, vol IV, 395), while Garrold's may be related to Walter Gerold recorded at Hadleigh in 1324; 'Geroldes heth' (heath) is documented from 1450 (Reaney 1935, 185).

Rackham (1986a, 172, 178) suggests that 'some regions, such as the south-east half of Essex, seem never to have had open fields at all'. However, nomenclature such as 'le Westfeld', 'le Estfeld', 'le Bernefeld', 'le Medefeld' and 'Pirifeld' in Wheatley, and the fact these fields contained at least 20-30 acres (see above; WD f.616), suggest that there may in fact have been a multiplicity of small common fields. Very little is known about the fields that surrounded Hadleigh. Early references are few, although a pattern of small enclosed fields is certainly apparent as early as c. 1700 (1696: ERO D/Ds 128/29; 1732 ERO D/Ds 128/31). The Tithe Map (ERO D/CT 154) shows a wholly enclosed landscape, though the field boundary pattern to the south of the village is rather different from that of the rest of the parish: fields are slightly larger, more rectilinear and there are several examples of two or more adjacent fields having the same name (for example, Broom Field, Great Field and Stock Field; the three 'Stock' names occur on either side of Castle Lane and in total cover a sizeable area south of the village: Fig 22). It is possible that these are the remnants of 'small areas of subdivided arable, often subject to joint or communal regulation' similar to those at Wheatley, which were characteristic of the 'woodland landscape' of southeast England (Hunter 1995; Newton 1970; Williamson 1988, 5).

The average size of landholdings in Hadleigh appears to have been small. In the early 14th century a survey describes 22½ 'terre' and 6 'moneday londs' in Hadleigh (Gray 1915, 392). The Feet of Fines for Essex have been published for 1182-1547 (FF I-IV). There are twelve holdings whose lands were wholly within Hadleigh, dating from 1254/5 to 1430 (Table 4). Each typically consisted of a messuage, between 3 and 23 acres of land, and 3 to 30 acres of woodland. Several holdings also had small parcels of pasture, while there were single examples of marsh and heath. No meadow is listed, which supports the impression that none of the coastal marshes was reclaimed.

In the landscape of Hadleigh a clear division can therefore be drawn between the estate of a single powerful landowner, in this case the Crown, and the remaining areas where the landscape was created through gradual and piecemeal assarting of woodland and heath by smallholders. The same two-fold division between seigneurial and peasant landscapes can be detected also in Cressing (Hunter 1995) and Writtle (Newton 1970), with the areas controlled by the great lords having a markedly more regular morphology and, in certain cases, open fields (Hunter 1995, fig 4; Newton 1970, 31).

DISCUSSION: THE ROLE OF LORDSHIP IN THE LANDSCAPE

The exploitation of the Rayleigh Hills during the post-Roman period demonstrates a number of points with regard to the role of lordship in landscape exploitation and management. The creation of Hadleigh Park clearly demonstrates that during the medieval period major landowners could transform their estates. The resulting landscapes tend to have certain characteristics in common; they were 'grand designs', intended to intensify the exploitation of rural resources for the maximum economic, recreational and sometimes social gain.

Major landlords did not always manage their estates in this way, however. For example, Westminster Abbey and St Paul's Cathedral were both major landowners on the Rayleigh Hills, although the exploitation of their estates was based upon woodland management and the grazing or cultivation of small assarts. The reason why these estates were not simply converted to large arable fields illustrates the value placed by contemporary society on the varied resources of a woodland region, rather than its being in any way a marginal landscape. Woodland itself was a valued resource, as were the coastal Thames-side saltmarshes which, unlike those in the rest of southern and eastern

England, were left unreclaimed (Rippon forthcoming). Clearly, in certain cases, these natural resources were more highly valued than the increased agricultural production achievable through assarting and drainage.

Another reason why the Westminster estates were exploited in this fashion concerns the distribution of their land. The Abbey's estates were acquired piecemeal during the 12th and 13th centuries. Though their original extent is not known, the holdings appear to have been scattered rather than nucleated in one large block, which would clearly limit the scope for large-scale landscape reorganisation (see Rippon forthcoming for similar considerations applying to marshland reclamation).

CONCLUSIONS

In 1915 Gray wrote that 'the early field system of few English counties is so difficult to describe as that of Essex' (1915, 387). The early planned landscapes of Essex have attracted much attention, yet there is a much greater diversity in the Essex countryside: notably, large areas with more irregular patterns derived from woodland assarting. In south-east Essex the Rayleigh Hills, the London Clay region to the west and the brickearths and gravels to the east had markedly different medieval landscapes. Physical factors such as soil quality may have been a factor in the greater woodland regeneration seen on the Hills, for example through podsolisation due to over-exploitation. At a time of rising population, however, the variations in soil quality and resulting arable potential cannot explain why the area remained so wooded; the explanation must in part have been a conscious decision, taken by the numerous landowners, large and small, to leave them that way.

The pattern of landholding and the diversity of rural resources were major factors in determining how this land-scape was shaped. The extensive royal estates saw the creation of three deer parks, reserved for hunting and pleasure. In contrast, the remaining areas had a weak and fragmented manorial structure and landscapes were created in a piece-meal fashion by numerous smallholders.

The way in which a landscape was exploited depended therefore upon a range of natural factors, such as soils, and cultural variables, such as population and landholding. Powerful estate owners could radically reshape the landscape, though it was not always possible or desirable for them to do so because of the scattered nature of their holdings. In sharp contrast, large areas of this landscape were created by smallholders who gradually cleared the woodland and heath, taking advantage of the rich natural resources that this landscape offered.

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