Landscapes in transition: the later Roman and early medieval periods

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ABSTRACT

In recent decades new light has been cast upon the impact of the Anglo-Saxons in England. This chapter examines the concept of continuity and discontinuity through the use of documentary, place-name, archaeological and palaeoenvironmental data integrated with evidence from the landscape itself.

KEYWORDS

Continuity, early medieval, land use, late Roman, settlement patterns, settlement types

INTRODUCTION

It has long been argued that the ending of Roman authority over Britain was associated with profound changes in the landscape, with a complex urban hierarchy and civilised countryside of villa-estates being replaced by derelict towns and regenerated woodland. The native population - Gildas' 'wretched survivors' (Winterbottom 1978, XXV.1) - were forced westwards by the Anglo-Saxon newcomers, who then cleared that woodland and created open fields and nucleated villages (e.g. Hoskins 1955). However, this traditional view was based upon three very weak strands of evidence: an exceedingly sketchy documentary record, the interpretation of placename and linguistic evidence, and a very restricted range of archaeological material, notably grave goods from cemetery excavations. The scholarly philosophy was also highly unsatisfactory as the archaeological evidence was used simply to support a documentary-based history of the period dominated by invasion, conquest, kingdom formation and certain legendary (or mythical?) heroic figures (e.g. Myres 1986; and see Garwood

One of the major achievements of landscape archaeology since the 1970s has been to first challenge, and then reject this traditional model. The result was that a paradigm of discontinuity came to be replaced by one of overriding continuity, leading to a certain division in outlook between scholars whose main focus was Anglo-Saxon cemeteries, settlements and material culture, who still viewed the post-Roman period as one of

mass folk migration, and those revisionists who argued simply for a political take-over of the native population and their landscape by a new warrior élite. What this paper hopes to show is that through the careful integration of a wide range of evidence, it appears that the transition from Roman Britain to Saxon England was in practice a complex combination of these two processes.

Interdisciplinary study is the key to understanding this difficult period, and this paper will focus on the contribution that landscape studies have made. Firstly, it will be shown how large-scale fieldwork forced traditional views of the late Roman period to be reviewed, and how various strands of evidence were used to postulate that many aspects of the Romano-British landscape survived into the medieval period. Attention will then turn to a critical assessment of what 'continuity' actually means in the context of rural landscapes, which leads to a consideration of two critical issues: what happened to the native Romano-British communities, and, in southern and eastern England, what were the relationships between native and immigrant populations at a site, local and regional level? Attention will then focus on the wider landscape, with particular emphasis on palaeoenvironmental evidence for any changing patterns of land use.

CHANGING VIEWS OF THE LATE- AND POSTROMAN LANDSCAPE

The 1960s and 1970s saw a profound change in our understanding of the late Roman period, as new techniques that were to become the foundations of landscape archaeology - aerial photography, fieldwalking, open area excavations, and palaeoenvironmental analysis - started to occur on a large scale. The results have transformed our understanding of the late Romano-British landscape. It was realised that the landscape of Roman Britain was more densely populated than previously thought, expanding from Collingwood and Myres' (1937, p. 180) c. 1 million, to Salway's (1981, p. 544) 4-6 million (and see Millett 1990, pp. 181-6). Although some scholars see a relatively simple, two-fold division in the Romano-British landscape (along similar lines to traditional upland/lowland or military/ civilian divide: e.g. Dark & Dark 1997), it is

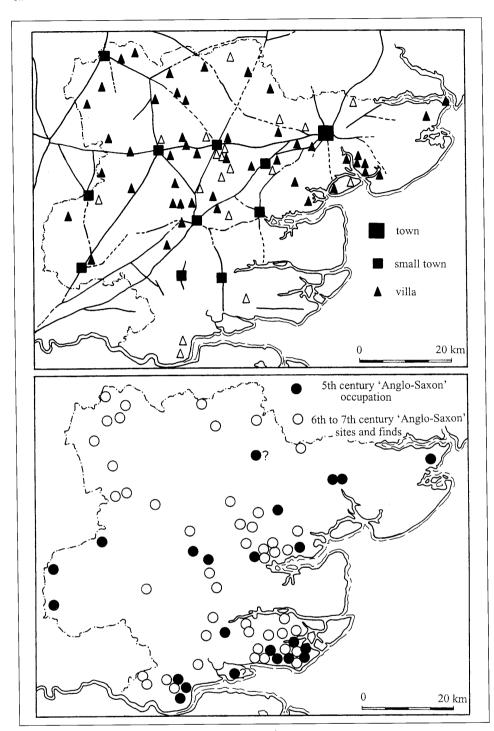


Fig. 4.1a. The distribution of high status Romano-British settlement in Essex, showing its marked bias towards the north and west (after Going 1996). Such local variations in landscape structure can be seen throughout the countryside of Roman Britain.

Fig. 4.1b: The distribution of 'Early Saxon' material in Essex (after Tyler 1996). There is a marked concentration in the south and east, which is particularly clear when only fifth-century sites are considered (*cf.* the distribution of Romano-British villas and towns in Fig 1a).

increasingly possible to recognise that regional variation in economic systems and social structures occurred at a much more local scale. The countryside of Roman Britain was a complex mosaic with, for example, certain areas of even the south-east lacking a strongly villa-based landscape (*e.g.* Fig. 4.1; and see Hingley 1989; Jones & Mattingly 1990; Millett 1990, pp. 197-201). This regional variation in settlement structure was particularly pronounced by the fourth century when, for example, the Cotswold landscape around Cirencester, with its high density of palatial villas, socially and economically articulating with

a flourishing urban centre, was very different to the Essex and Suffolk claylands where a few mainly humble villas could be found in a landscape in which both urban and rural settlements were in decline, and fields were going out of use (see below; and see Rippon in press, chs 5-6).

The traditional model, that nucleated medieval villages had their origins in the early Anglo-Saxon colonisation, was similarly not supported by the growing evidence from large-scale survey and excavation. Work on deserted medieval villages was failing to recover evidence for pre-ninth/tenth

century occupation of a village character (e.g. Wharram Percey, Yorkshire: Beresford & Hurst 1990; Milne & Richards 1992), and where earlier settlements were excavated elsewhere they lacked the size and regularity of medieval villages (e.g. Mucking, Essex: Hamerow 1993; West Stow, Suffolk: West 1985). Fieldwalking supported the evidence from excavation in suggesting that settlements associated with fifth- to seventhcentury pottery formed a highly dispersed pattern which showed a relatively high degree of mobility (Arnold & Wardle 1981; Hodges 1989; cf. Hamerow 1991). In the Midlands and Northeast, this came to be replaced by nucleated villages around the end of the millennium (e.g. Buckinghamshire: Croft & Mynard 1993, pp. 15-18; Northamptonshire: Foard 1978; Brown & Foard 1998; Hall & Martin 1979: Hall 1988; Lewis et al. 1997; Somerset: Aston & Gerrard 1999; Rippon 1997, pp. 159-65), while documentary evidence in the form of charters also suggested a late first millennium A.D. date for village creation in areas such as the West Midlands (e.g. Hooke 1985).

As the origin of medieval villages shifted to the end of the millennium, archaeologists increasingly argued for landscape continuity at the end of the Roman period. The idea that the native population was wiped out by plague was dismissed (Todd 1977). A number of important studies suggested that estates continued to function. Finberg's (1955) seminal history of Withington in Gloucestershire led to a number of other studies which postulated continuity in estate structure based on the relationship between Roman villas, medieval churches and estate boundaries described in early medieval charters (e.g. Fowler 1975). Bonney (1979) used the relationship between pagan burials and parish boundaries in Wessex to postulate that the latter were based upon earlier estates (but see Goodier 1984), while Leech (1982) observed that the early Roman 'Fosse Way' road in Somerset appeared to cut across a number of parish boundaries, once again suggesting they were of considerable antiquity. On a larger scale, some have even suggested that the territoria associated with Romano-British towns survived into the medieval period as administrative units (e.g. Great Chesterford in Essex: Bassett 1989b, p. 25; Verlucio in Wiltshire: Haslam 1984, p. 103). With Jones' (1979) identification of multiple estates (but see Gregson 1985; Jones 1985), and Davies' (1979) work on the Llandaff charters in south-east Wales, continuity in estate boundaries appears to have occurred across much of Britain (and see Bassett 1997, p. 36; Bassett 1989b, pp. 18-19).

For the boundaries of an estate to have survived implies that it continued to function as an agricultural unit, and if this was the case then field systems should similarly have remained in use. Though Taylor and Fowler (1978) noted a number of instances where Romano-British ditches appear

to have been succeeded by the headlands of open fields, the large-scale replanning of these Midland landscapes from around the ninth/tenth centuries means that evidence for any continuity at the end of the Roman period will have been largely swept away (e.g. Brown & Ford 1998, fig. 14). However, extensive areas outside the Midlands never saw this later landscape transformation, and as such have greater potential for landscape continuity.

In areas such as Essex, large-scale excavations in advance of gravel extraction are revealing later prehistoric and Romano-British field systems which, although partly abandoned (and now showing up as crop-marks), appear to follow the general orientation of the medieval and later landscape (e.g. Slough House Farm and Chigborough near Heybridge: Wallis & Waughman 1998). Indeed, areas of East Anglia (Bassett 1982; Rippon 1991; Rodwell 1978; Rodwell & Rodwell 1985; Williamson 1987; cf. Hinton 1997; and Williamson 1998) (Fig 4.2) and the Midlands (Bassett 1985, 1990) have extensive co-axial field-boundary patterns preserved within the historic landscape which in a number of places appear to pre-date Roman roads, or be Roman in date. Great care must be taken in the interpretation of such evidence as abandoned field boundaries can be re-used in later periods, as appears to have been the case around the fringes of Dartmoor, where parts of a reave system were incorporated into the medieval field pattern (e.g. Fleming 1988, pp. 28-9, fig. 30). However, it is unlikely that extensive areas of landscape such as the Scole-Dickleburgh system in Norfolk, which extends for some 14 km, would have been restored had it gone totally out of use and been enveloped by woodland. Rather, for these landscapes to have survived (albeit in a much altered form) implies that the area remained in some sort of agricultural use throughout their existence.

Whilst many archaeologists have increasingly been seeing continuity in the post-Roman landscape, linguists and place-name scholars have retained a more traditional view in arguing that a mass folk migration is the only way of explaining why English came to dominate both spoken language and how features in the landscape are named. In asking 'why aren't we speaking Welsh', Gelling asserts that 'a new language might conceivably be adopted in deference to a new ruling class, but the renaming of the vast majority of settlements is inconceivable without the influx of a mass of peasant settlers' (Gelling 1993, p. 51). However, she later observes that there is no evidence for the wholesale replacement of the native population in western counties such as Devon and Shropshire yet 90 per cent of their place-names are English by the tenth century (and see Hooke 1997). That the replacement of British names with English occurred without population replacement in the west suggests that the same could have been true elsewhere as social



Fig 4.2. Landscapes of continuity and discontinuity in south-east Essex. Following a retrogressive analysis (see Williamson 1987) of the field-boundary pattern, three broad landscape zones can be identified (Rippon 1991). In the central area, an irregular landscape results from the post-Roman clearance of woodland (the area has a fairly high density of Roman sites, and at least some of the woodland is itself post-Roman and even post-Conquest in date; Rippon 1999). To the west lies an area of highly rectilinear landscape, at least one element of which has been dated to the Roman period (Rodwell 1966). The survival of elements of the Romano-British road and field system suggest the landscape has remained in some form of agricultural use ever since. In contrast, the more radially arranged landscape around Shoebury has a *terminus post quem* of the fifth century (as the late Romano-British field system at North Shoebury, which had 'Early Saxon' pottery from its upper contexts, was on a different orientation). There is a *terminus ante quem* of the eleventh century when an enclosure, that conforms to the radial landscape, was constructed to the east of St Mary's church. Clearly, these three adjacent landscapes had very different histories in the post-Roman period.

mechanisms - notably the political supremacy and literacy of the new ruling class – led to the gradual re-naming of the landscape (Härke 1997, p. 149; Hines 1990; Powlesland 1997, p. 90). These various processes of migration and assimilation will have occurred in different ways in different places, resulting in marked regional variation in how the landscape was affected, and there is a need to include topics such as rural dialects in the debate (e.g. Gay 1999). Ultimately, however, the answer may lie with scientific advances. Härke (1990) has already used skeletal evidence to show that both native and immigrant populations are evident in 'Anglo-Saxon' cemeteries, while the study of genetics, for example, is showing that distinctive traits found in Frisia and Schleswig are rare in Britain and does not support the idea that all English speaking areas were largely populated by those who sailed across the English Channel in the fifth and sixth centuries (Evison 1997; Mckie 1993).

This growing emphasis upon continuity came as those scholars who still saw a substantial Germanic (e.g. Welch 1985; 1992; Scull 1992, 1993) or Scandinavian (Hines 1984) folk migration in the fifth and sixth centuries, were seeing an increasingly different post-Roman landscape to those who argued that the new burial rites, styles of dress, and other material culture, may not represent the movement of people, but simply the exchange of objects and transmission of ideas (e.g. Arnold 1984; Higham 1992; Hodges 1989; and see Crawford 1997; Hamerow 1997; and Hines 1997 for general overviews). However, the problem with this often lively debate is that the various strands of evidence – settlements, estates, field systems, burials, linguistics, etc – are all too often discussed in isolation. The contribution of landscape archaeology is to provide a conceptual, temporal and spatial framework into which the wide range of data relating to this period can be woven together and placed in context.

'CONTINUITY' AND THE ARTICULATION OF POST-ROMAN LANDSCAPES

Settlements and cemeteries, which have produced so much of the data for this period, did not exist in a vacuum but were simply domestic and ritual elements of the broader landscape. One key theme is the nature of that much-used phrase 'continuity'. Any landscape consists of a wide variety of articulated components:

- the natural environment (landform, drainage systems etc)
- settlements (where people lived and worked)
- agriculture, including fields (in which agriculture was practised) and other areas of landed resource (such as meadow and woodland)
- non-agricultural resources (raw material procurement and manufacturing)

- roads and other communication routes (which linked communities living in settlements with each other and their resources)
- ritual foci (where religion and burial was practised)
- social structures (including kinship groups)
- territorial structures (economic and tenurial units within which all the above were articulated)
- demography (including the racial origins of the people who lived in this landscape)

It does not appear that the fifth century was one of great environmental upheaval. Many coastal wetlands were inundated at this time, and while this may in part have been due to a failure to maintain flood defences (a cultural phenomena), there does appear to have been a rise in relative sea-level at this time (Rippon 2000; in press, ch. 7). However, a number of coastal marshes appear to have been largely deserted long before the end of the fourth century (e.g. around the Thames Estuary and on Romney Marsh), and while valuable farmland was lost in Fenland and around the Severn Estuary, this formed a small percentage of Britain as a whole. There is also little evidence that lowland Britain suffered a significant climatic deterioration at the end of the Roman period, and if anything the sixth century appears to have been less favourable to agriculture than the fifth (Lamb 1995, p. 165). Overall, any changes seen in most landscapes during the fifth century were, therefore, due to changing socio-economic circumstances.

In a period of cultural upheaval different components of the landscape can experience very different levels of change. Take, for example, a farmstead established by Anglo-Saxon immigrants next to a Romano-British villa which had been abandoned for three months. This would entail demographic discontinuity, but functional continuity of the farmstead, as the three-month gap would have been of little practical significance in landscape exploitation; field boundaries would have survived, crops may still have been in a condition to harvest (and so produce seed for the next year), and livestock may not have wandered too far (and so could have been rounded up). However, if neighbouring villas had also been deserted by their owners shortly before the arrival of the Germanic newcomers, then knowledge of the Romano-British pattern of landownership would probably have been lost, leading to the imposition of a new estate structure on an existing pattern of fields and roads. Thus, agrarian continuity occurred in the context of tenurial discontinuity as the landscape lost only part of its articulation. Indeed, despite all the earlier work on reconstructing continuity in estate structure (see above), the survival of tenurial systems is perhaps one of the landscape features least likely to survive a period of socio-economic disruption as seen at the end of the Roman period.



THE FATE OF ROMANO-BRITISH COMMUNITIES

In viewing the late Roman landscape as a series of articulated components, we must consider two related issues that affected it during the post-Roman period: in all areas of Britain there is the issue of what happened to the native population, and in the south and east of England there is the interaction between any surviving native population and the immigrants (however many there were).

The late fourth/early fifth century is characterised by the collapse of urban culture, manufacturing industry, the market economy, and the need to produce an agricultural surplus to support Roman rule and the non-food producing sectors of society (Esmonde Cleary 1995, p. 20). There is, however, increasing evidence that the landscape of late Roman Britain was changing well before the end of Roman rule. In certain areas there appears to have been a decline in rural prosperity and the intensity of landscape exploitation during the fourth century, as seen, for example, in parts of Hertfordshire (Neal et al. 1990, p. 96), northern Kent (Bennett & Williams 1997), Essex (Going 1996; Hodder 1982; Lavender 1993; Wallace 1995; Wallis & Waughman 1998, p. 53), south-east Suffolk (Newman 1992, p. 31), and Yorkshire (Loveluck 1996, p. 28). Of Mucking, in Essex, Going says 'It is ... hard to resist the conclusion that the landscape was effectively agri deserti by the later fourth century' (Going 1993a, pp. 20-1).

In such areas, the abandonment of settlements and field systems began well before the 'end of Roman Britain', though in other areas large numbers of Romano-British sites have datable material from the very end of the fourth century. Even if these settlements were suffering some decline during the late fourth century (relative to their wealth in earlier decades), the absence of recognisable material culture after that date does not preclude them from having been occupied well into the fifth century or later (cf. Burrow 1981, p. 14). The problem is that with the collapse of pottery production, cessation of coin use (the recently recovered hoard from Patching in Sussex, deposited after A.D. 461, is the latest from 'Roman' Britain: White 1998), and shift from stone to timber methods of construction (see below), it is difficult to determine what happened to these sites after the late Roman period.

The scarcity of distinctive and datable material culture on the few native post-Roman sites that have been excavated (*e.g.* Rahtz *et al.* 1992; Sparey Green 1987; Woodward & Leach 1993, p. 334), suggests that organic materials must have partly replaced the industrial manufacture of metallic and, particularly, ceramic artefacts. What Romano-British material culture survived may also have remained in use far longer than is often thought. On some sites, the worn condition of late fourthcentury coins indicates that money-based

exchange may have continued for several decades into the fifth century, albeit potentially on a very local scale (*e.g.* Miles 1984, p. 14). The continued use of fourth-century pottery and metal artefacts into the fifth century is more difficult to recognise, but why should people stop using existing artefacts simply because manufacturing had ceased (*e.g.* see Farley 1984, p. 229)? All that we can confidently say is that many Romano-British settlements were abandoned some time between the late fourth century and whenever durable and datable material culture was once again in use on rural sites (which in areas such as Somerset is as late as the tenth century).

It is, therefore, essential that we secure more radiocarbon dates from the latest stratigraphic horizons of sites that were occupied into the fifth century. A good example has recently come from Somerset. At Cheddar Showground, an otherwise undated ditch has yielded a radiocarbon date of 1600+/-45 BP (cal A.D. 346-557) from animal bone recovered from the upper fill; a later recut only contained abraded Romano-British pottery and might otherwise have been regarded as dating to the Roman period (Chris Webster, Somerset County Council, pers. comm., October 1999). An iron-smelting site on Exmoor, which based upon the technology of production appeared to be Romano-British, has recently produced a date of 1520+/-60 BP (cal A.D. 415-650) (Gill Juleff, Univ Exeter, pers. comm., October 1999). Similar surprising results can be obtained through dendrochronology. For example, at Slough House Farm, near Heybridge in Essex, two timber wells, which on typological grounds could have been Romano-British, were constructed from timbers felled in the early sixth and early seventh centuries (Wallis & Waughman 1998, p. 57).

The extent of post-Roman occupation on Roman-period settlements may also have been more widespread than previously assumed. In the south-west of Britain, studies of settlement patterns, and the excavation of individual sites, suggest that while there are signs of settlement retraction in some areas there was no widespread desertion during the early fifth century (e.g. Leech 1982; Quinnell 1986; Rose & Preston Jones 1995; Simpson et al. 1989). In the east of England, the continued occupation of Romano-British settlements may also have been more common than has often been assumed. For example, a trawl through the recent literature shows that there are numerous sites in one sample county, Essex, where small amounts of fifth- to seventh-century handmade pottery has been recovered from the latest contexts of Romano-British sites (e.g. Asheldham: Bedwin 1991; Castle Hedingham: Lavendar 1996; Chignall: Clarke 1998; Coggeshall: Isserlin 1995; Great Dunmow: Lavender 1997; Wickenden 1988; Great Sampford: Garwood 1998; Great Waltham: Tyler & Wickenden 1996; Kelvedon: Eddy 1982; Rodwell 1988; North Shoebury: Wymer & Brown 1995).

Such pottery is poorly dated, and its fabric and style bears little resemblance to late Romano-British manufactured wares, and shares some characteristics with material from mainland Europe. However, this does not mean that it was only used by immigrant populations, as it may have been obtained through exchange and used by the native community (particularly if it was the only pottery being produced at that time). The very small amounts of material involved might suggest that it was simply dropped by casual visitors or users of the site, though bearing in mind the scarcity of material culture on well-excavated post-Roman settlements, a few sherds might be all that survives from continuous occupation. It may be that more careful observation in the field, particularly of the latest areas of stratigraphy (and the ploughsoil!) will reveal that post-Roman use of Romano-British sites is more common that has been previously thought.

NATIVES AND NEWCOMERS

A number of Romano-British settlements have produced more substantial evidence for later occupation in the form of what traditionally have been called 'early Anglo-Saxon' buildings. Although post-built structures of this period may contain a substantial native element to their design (Dixon 1982; James et al. 1984; Marshall & Marshall 1993; Powlesland 1997), 'sunken-featured buildings' are generally regarded as being distinctively Germanic. A number of Romano-British structures have been recorded with sunken floors (e.g. Dorchester in Dorset: Smith et al. 1997; Monkton in Kent: Bennett & Williams 1997), and these are also found on what otherwise appears to be a native post-Roman settlement at Poundbury outside Dorchester (Sparey Green 1987). However, the 'Anglo-Saxon' examples are morphologically so different that where they occur during the fifth century associated with distinctive material culture they are best interpreted as having been constructed by communities of direct Germanic decent, with a memory of their homeland (Hamerow 1997, p. 39).

If fifth-century sunken-featured buildings are regarded as indicative of an immigrant population, and they are found on Romano-British settlements. the key question is the relationship between the two communities. At Heybridge in Essex, for example, the earliest Anglo-Saxon occupation appears to have been contemporary with the final stages of native occupation on this substantial rural settlement (Drury & Wickenden 1982; Langton & Holbrook 1997; Wallis & Waughman 1998, p. 229). At Barton Court Farm, Oxfordshire, Miles (1984, p. 52) argued for a 'butt-jointed' sequence with Saxon colonists settling a recently deserted Romano-British farmstead, though the dating evidence we have cannot rule out the possibility that the two populations lived side by side.

Worn late fourth-century coins from the Romano-British farmstead suggests activity there continued into the fifth century (Fig. 4.3). That the stone buildings were then demolished, presumably because the materials were re-used elsewhere (why else bother demolishing a stone building?), implies occupation continued near by even later. The earliest pottery of a distinctive 'early Saxon' style dates to the mid fifth century and is associated with seven sunken-featured buildings suggesting the presence of Germanic settlers. The dating evidence we have cannot show whether they were contemporary with the final phases of native occupation of the farm (wherever its focus now was). Palaeoenvoronmental evidence from Saxon contexts points to a landscape that remained open (seeing very little woodland/scrub regeneration), with both arable and pastoral farming, but which was used less intensively than in the Roman period, reflecting the need to produce less food (for the market, taxation etc).

Up to eight typologically undiagnostic postbuilt structures were also recorded at Barton Court Farm. One (Structure C) was stratigraphically and artefactually dated to the early Saxon period, but postholes of another (Structure A) only yielded worn fourth-century material, while the remaining structures yielded no dating evidence: could at least some of these represent the native successors to the stone farmhouse? Ephemeral traces of stratigraphically late timber structures have been noted at other Romano-British villas (e.g. Brixworth in Northants: Brown & Foard 1998, p. 73; Gadebridge Park in Hertfordshire: Neal 1974; Latimer in Buckinghamshire: Branigan 1971; Rivenhall in Essex: Rodwell & Rodwell 1985: but see Millett 1987; Shakenoak in Oxfordshire: Brodribb et al. 1978), along with a number of urban (e.g. Wroxeter in Shropshire: Barker et al. 1997) and military sites (e.g. Birdoswold on Hadrians Wall: Wilmott 1997, pp. 209-31; York: Phillips & Heywood 1995). On how many early or small-scale excavations were such ephemeral traces of timber buildings overlooked because the focus was on the sequence of stone buildings?

Great care, however, is required in examining the chronology of sites with both Romano-British and 'early Anglo-Saxon' occupation. At the Orsett Cock, Essex, for example, a total of eight excavated sunken-featured buildings occur within and just outside a substantial Romano-British farmstead enclosure. However, the site was largely abandoned by the late fourth century, and the subsequent occupation may date to as late as the sixth century (Carter 1998; Milton 1985; and see Tyers 1996, fig. 2, for the possible extent of the site). Users of the sunken-featured buildings may have been attracted to the site as there were earthworks against which they could tuck their buildings, but there cannot have been functional continuity of this location as a farmstead: the site, and presumably its associated landscape, had lost its articulation as a functioning agricultural system.

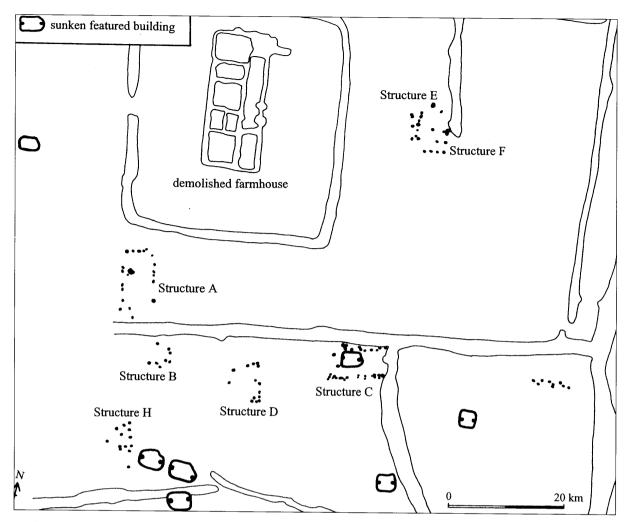


Fig 4.3. Barton Court Farm, Oxfordshire. The Romano-British farmhouse had been demolished before the construction of the 'Anglo-Saxon' sunken featured buildings, though the date of most of typologically undiagnostic posthole structure is unknown. The environmental evidence suggests there cannot have been a long break in the exploitation of the local landscape, though we otherwise know relatively little about other elements to this landscape (such as the fields, roads and territorial structures).

The same appears to have been true with medieval churches that are located on Romano-British sites: in most cases the latter appear to have been in ruins when the former were constructed (Bell 1998; and see Morris 1989; Rodwell & Rodwell 1977), suggesting that these sites were chosen simply for the symbolism that these remains of *Romanitas* possessed (*e.g.* Fulford & Rippon 1994).

On sites such as Barton Court Farm (and Orton Hall Farm near Peterborough: Mackreth 1996), the key question is how any surviving native populations interacted with what do appear to have been the Germanic newcomers (assuming the builders of the fifth-century sunken-featured buildings were immigrants). Our traditional story is of the native and Germanic populations being constantly at war, with the latter soon gaining supremacy. Scull (1992, p. 15), for example, paints a picture of the native population in East Anglia being forced into a handful of unwanted corners and defended sites such as Burgh Castle and the Wighton enclosure. However, in other cases, it is the early Anglo-

Saxon settlements (or at least many of those that have seen large-scale excavation) that were located around the periphery of areas occupied in the Roman period (and which may still have been occupied in the fifth and sixth centuries). At West Stow, Suffolk, for example, the Anglo-Saxon settlement occurs on a gravel terrace with poor soils, in contrast to the Romano-British settlements around the Lark Valley that concentrate along the fertile fen-edge. West (1985, pp. 159-63) has argued that this represents a shift in location, due to climatic or sea-level change, though it could have been that the newcomers were simply forced to occupy an area of poor heathland, beyond the core land of a still-functioning native estate (Bell 1989, p. 278; Murphy 1985; Taylor 1983, p. 119). Due to the agencies of discovery (notably largescale rescue excavations in advance of mineral extraction), there is certainly a marked bias in the distribution of known early Anglo-Saxon settlements towards 'marginal' areas though until other geologies are as thoroughly investigated, it is impossible to say whether the colonists were generally forced to settle poorer land.

Evidence from southern Essex, for example, suggests a more varied picture, as while Mucking appears to lie on an area of poor soil at the fringes of the area settled and farmed during the late Roman period (Hamerow 1992, p. 41; and see Gelling 1976; 1988, pp. 121-3; Going 1996, p. 21), further along the Thames Estuary near Southend-on-Sea the highly fertile brickearths have produced the greatest density of early Anglo-Saxon material from the whole county (Wymer & Brown 1995). Overall, the evidence for fifth-century Saxon occupation in Essex tends to focus in the south and east, notably in coastal areas, away from the villa-dominated boulder clay landscape of northern and western Essex (Fig. 4.1). Is this another example of controlled Anglo-Saxon settlement, as has been argued for in Sussex (Welch 1983)?

Our understanding of this marked spatial variation in the apparent character of the post-Roman landscape in Essex could be pursued by the careful integration of a wide range of evidence. Most large-scale excavations have been carried out in the south and east of the county (the coastal/estuary areas: e.g. Hamerow 1993; Wallis & Waughman 1998; Wilkinson 1988; Wymer & Brown 1995), and it is unfortunate that there has been no large-scale fieldwalking in these areas since where this has been carried out the results have been encouraging. Williamson (1986) has studied an area around Saffron Walden in the north-west of the county, where he found that 35 per cent of pottery scatters suggestive of settlements occupied at the end of the Roman period were within 200 metres of settlements known to have been occupied in the eleventh century (this figure is actually too low as it excludes a number of locations where chance finds and the pattern of manuring suggest that medieval/modern settlements lie directly over Romano-British sites). Clearly there has been considerable settlement mobility over the intervening 500 years, but there does appear to be a broad continuity in prefered settlement location (most notably in the river valleys rather than on the heavier soils of the interfluvial areas). Earlier work has also suggested that elements of the medieval/modern field and road pattern in this area may date back to at least the Roman period. The north-west of Essex also lacks evidence for fifth-century Anglo-Saxon colonisation (Fig. 4.1a), while the place-name 'Waldon' is derived from 'valley of the Britons' (Bassett 1982, p. 10). There appears to be a strong case for the continuous occupation and exploitation of this landscape by the Romano-British/sub-Roman population, in contrast to the strongly coastal/estuarine distribution of Anglo-Saxon settlement (Drury & Rodwell 1980; Tyler 1996).

Overall, the picture that is emerging is of marked regional variation in the relationships between natives and newcomers. In places, the latter may have forcibly replaced the former, or occupied areas that the natives had abandoned due to political insecurity or the cessation of pressure to farm physically less productive areas. However, during the fifth century, and perhaps much of the sixth, the two communities may have lived side by side, either at a very local (e.g. West Stow?), or more regional scale (e.g. Essex, Wessex and Yorkshire?: Eagles 1994; Loveluck 1996): such arrangement may even have been agreed by treaty (e.g. Sussex?: Welch 1983). The impact that this social geography had on the fifth/sixth-century and later landscape is yet to be fully explored (but see Williamson 1988).

THE BIGGER PICTURE: PATTERNS OF LAND USE

Whatever was occurring at the local level, we must not lose sight of the bigger picture: what was going on in the landscape as a whole (irrespective of the origin of the population)? The occurrence of Romano-British settlements in areas that are now wooded illustrates a degree of post-Roman woodland regeneration (e.g. Bellamy 1994). though this need not have occurred during the earlier fifth century (Rippon 1999). Dark (1996) has recently summarised the pollen evidence for this period (and see Bell 1989, pp. 269-70; Bell & Dark 1998). Just thirty-eight sequences were identified with sufficient resolution and dating, most of which were in the north and west: just one (Hockham Mere in Suffolk) lay to the east of a line between Scarborough and Brighton. Despite considerable local variation, some broad regional trends do emerge. In Wales and Scotland most sequences show continuity in landscape exploitation either side of A.D. 400, though around Hadrian's Wall, for example, a recent reassessment of the pollen evidence suggests that there was a phase of abandonment during the earlier fifth century with a reduction of agricultural land use and widespread reversion to woodland (Dark & Dark 1996). However, in an area with a large military garrison this is to be expected, and fits well with the picture that appears to be emerging in lowland Britain in that the more Romanised aspects of the landscape, reliant on social, economic and political links with the Roman empire, were abandoned, whereas the wider rural landscape remained in use. In this respect it is worth stressing that highly Romanised settlements such as towns and villas represented a very small percentage of fourth-century settlements (see Mark Corney, this volume). For example, around Verulamium in Hertfordshire, Neal et al. argue that 'The general picture which emerges is that of once-rich country houses falling into disrepair or being abandoned, but with associated farms continuing in use, albeit on a run down scale' (Neal et al. 1990, p. 96). The whole rationale for the villa-estate system of

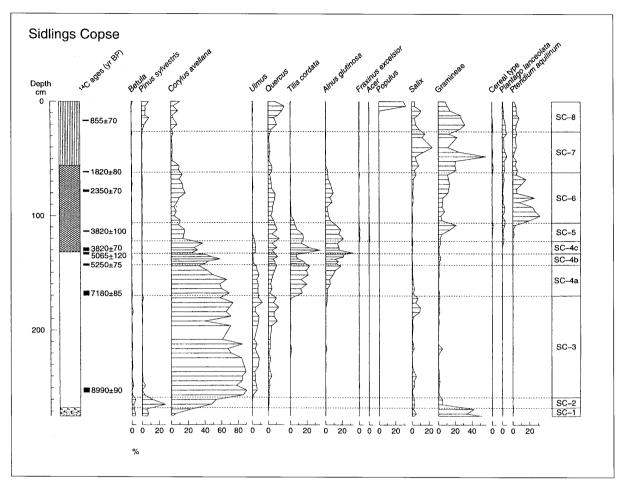


Fig. 4.4: Petra Dark's pollen sequence from Sidlings Copse, Oxfordshire (Bell & Dark 1998, fig. 19.3). There was no post-Roman woodland regeneration though there appears to have been an increase in pastoral activity: the origins of the present, botanically 'ancient', woodland lie after the tenth century.

landscape exploitation had disappeared, resulting in greater dislocation in how the landscape was utilised.

In southern and eastern England there is considerable variation in the pollen evidence, including notable changes in the agricultural emphasis of certain areas (Dark 1996). At Aller Farm, near Stockland in Devon, there was little change. At Hockham Mere in Suffolk there was a minor shift from arable to pasture though the landscape remained open; elsewhere in East Anglia, slight increases in tree/scrub pollen are both brief in duration and poorly dated (e.g. Diss Mere in Norfolk and the Mar Dyke in Essex: Peglar et al. 1989, p. 218; Wilkinson 1988, pp. 109-14). At Snelsmore, in Berkshire, there is firmer evidence for a limited woodland regeneration, whereas at Sidlings Copse just to the north in Oxfordshire there was an increase in pastoral activity (Fig. 4.4). At Banwell, in Somerset, there appears to have been a slight expansion of woodland just as the adjacent reclaimed wetlands were being flooded (Rippon 2000), though the presence near by of Cadbury Congresbury suggests a wealthy élite that must have been supported by continued agricultural production (Rahtz et al. 1992; Rippon 1997, pp. 133-8). Overall, it appears that the landscape of post-Roman Britain remained *largely* open in the post-Roman period, but with localised regeneration in certain areas.

Most of these pollen sequence have come from peat, but in a number of cases (usually colluvial/ alluvial sequences in lakes and river valleys) a more detailed picture emerges from the combination of palaeoenvironmental and lithostratigraphic analysis. In the Chelmer Valley, Essex, the sequence of alluvium and plant macrofossils within a silted-up river channel suggests a continuously-open and cultivated landscape in the surrounding areas, without any woodland regeneration (Murphy 1994, pp. 25-6). At Mickelmere (near Pakenham in Suffolk), the sediments from an infilled lake basin indicate a landscape that also remained largely open during the post-Roman period, and though there was a decrease in cultivation this appears to have been replaced by pasture not woodland (ibid... pp. 29-31). What cultivation there was within the lake's catchment may have shifted from the light Breckland soils to heavier boulder clay, which can be contrasted with fieldwalking evidence in south-east Suffolk (Newman 1992, p. 32), Essex (Williamson 1986), and Northamptonshire which suggests a shift in settlement from the boulder clays towards lighter soils (*e.g.* Bellamy 1994; Brown & Foard 1998; Foard 1978).

A range of palaeo-economic evidence lends further support to this emerging picture of a broad continuity in agricultural practice. On a number of early medieval settlements there are similarities between the range of crops being grown compared to the Roman period. Spelt wheat was still cultivated at the early Anglo-Saxon settlements of Chadwell St Mary, Essex; Gatehampton Farm, Oxfordshire; Mucking, Essex; Springfield Lyons, Essex; Stonea, Cambridgeshire; West Stow, Suffolk; and probably Holloway Lane and Holloway Close in West London, suggesting that there was not a significant break in the cultivation of arable fields (Allen 1995; Lavender 1998; Murphy 1994, p. 27, and see Tyler 1996; Rackham 1994b, p. 126; van der Veen 1993; West 1985).

Animal bone assemblages similarly suggest local changes in the way that what remained a basically open and agriculturally still functioning landscape was exploited. Crabtree (1994) has compared the faunal assemblages from the substantial Romano-British settlement at Icklingham in Suffolk, and nearby Iron Age, Romano-British and early Anglo-Saxon rural settlements at West Stow. At the latter there is a gradual, long term, trend towards sheep and pig: there is no sudden discontinuity, and the killpattern is indicative of a self-sufficient or 'producer' site. A greater contrast can be drawn between West Stow and late Roman Icklingham, where cattle were of far greater importance and sheep and pig were poorly represented. However, Icklingham was a 'consumer' settlement, and the meat 'appears to have been obtained through the large-scale late Roman market system in meat products' (ibid., p. 43). These contrasting sites once again show the different post-Roman experiences of mainly high-status sites, dependent on the money-based market economy which collapsed, and rural settlements where 'a case can be made for local continuity in animal husbandry practices' (ibid.).

At *Hamwic* (near Southampton), the condition of livestock in the eighth century was good, and the size of both cattle and sheep showed no decrease compared to the Roman period (Bourdillon 1994, pp. 122-3). The size of cattle had increased during the Roman period, as was the case throughout Roman Europe (though not beyond the Empire). If there had been a collapse of livestock husbandry in post-Roman Britain leading to a decrease in animal size, stock could not have been introduced from the Germanic homelands since these areas only ever had smaller stock. It could be argued that if there had been a collapse of livestock husbandry in post-Roman Britain, the Germanic colonists could have then worked to improve the quality of stock, although this argument would beg the question of why this was not done in their homeland. Instead, the good

quality of livestock in eighth-century *Hamwic* suggests that there had not been a significant break in the quality of animal husbandry in Britain.

At first sight, the evidence from pollen, which generally suggests a lack of post-Roman woodland regeneration, is at odds with the results of recent tree ring studies (though most of this data comes from east of a line between York and Southampton, being the area without good pollen evidence: Tyers et al. 1996). The value in tree ring studies here is not the date of felling (i.e. when the timbers were used), but when the trees started to grow. In mainland Britain there is a notably high number of trees felled and used as late as the ninth century, that started to grow during the first half of the fifth century (though the same is not true of Ireland). However, this need not indicate that formerly agricultural land was being invaded by woodland during the fifth century; these trees that were being felled in the later first millennium A.D. may have been derived from formerly coppiced woodland that was no longer being managed (ibid., p. 20). The management of woodland is something about which we actually know very little, though it may well have continued in certain areas to sustain the demands for contruction and fuel for both domestic and industrial consumption, including iron production which is now attested on a large scale at a number of sites including Exmoor (G. Julleff, pers. comm.) and the northern banks of the Blackwater Estuary in Essex (Wallis & Waughman 1998, pp. 125-6, 227, 233).

Two key conclusions can be drawn from this seemingly disparate set of environmental data. Firstly, there was no widespread woodland regeneration in the immediate post-Roman period, and secondly, there was considerable local variation in how agriculture developed over this period. In places this did include a decrease in the intensity of landscape exploitation, though in many cases this probably reflects localised changes in specific environments, or the fate of individual estates. Overall, the landscapes of post-Roman Britain remain in use.

REGIONAL VARIATION AND THE POST-ROMAN LANDSCAPE

The fourth to sixth centuries undoubtedly saw a major discontinuity in the cultural history of Britain, with many aspects of the Roman socioeconomic system disappearing and the eventual emergence of early medieval society. The extent to which this was due to mass folk migration or indigenous development under the influence of a small immigrant élite has been much debated, and will probably only be resolved through more advanced scientific methods such as genetics. That is for the future: there undoubtedly was some immigration, and a key theme of this paper is that we need to understand the marked local and

regional variation in how natives and newcomers interacted. This is the key to understanding the post-Roman landscape, and can be achieved through an integrated programme of large-scale fieldwalking, excavation, on- and off-site palaeoenvironmental analysis, and a detailed correlation of crop-mark evidence for deserted landscapes with what survives in the present pattern of roads and field boundaries.

A key issue is the extent to which most of the population would have been embedded in a Romano-British system, and how quickly it declined. Esmonde Cleary sees a sudden, 'catastrophic', change: 'The evidence from the landscape of late Roman Britain is that it was under considerable pressure to produce surpluses to support the army, the bureaucracy, the aristocracy, the townsfolk and others. Quite suddenly, in the early fifth century it stopped' (Esmonde Cleary 1995, p. 22). However, this decline will have impacted most on the more Romanised aspects of the landscape, and there is no reason why the large native population as a whole should have suddenly deserted their landscape during the early fifth century. It is entirely logical that, particularly in more favourable environments, much of the landscape remained in agricultural production for subsistence purposes. Post-Roman native settlement is notoriously difficult to identify, but it is argued here that it may have been far more common for Romano-British settlements to have still been occupied in the fifth or even sixth century than has previously been thought. There was no catastrophe here, just a slight increase in the rate of change in constantly evolving landscapes.

By the mid-fifth century, some Anglo-Saxon colonisation had begun in parts of southern and eastern Britain, though this was far from a simple process of invasion and colonisation (e.g. Hamerow 1993, pp. 93-4). The relationships between native and newcomer were varied: as Scull has suggested 'It may not be too fanciful to argue that every region or locality would have seen its own adventus Saxonum' (Scull 1992, p. 8). In places, the fifth-century migrants appear

to have settled in a landscape either deserted by, or seized from, its native occupants while, elsewhere, the colonists were forced to occupy less favoured parts of the landscape. In a number of regions in southern and eastern England such as central and north-west Essex (see above: Fig. 4.1b), the Chilterns (Bailey 1989; Davis 1982: Hunn 1994), and parts of Sussex (Welch 1971. 1983, 1989) and Wessex (Eagles 1994) substantial areas appear to have been free from fifth-century migration, in contrast to, for example, East Anglia which saw a greater Anglo-Saxon presence from as early as the first half of the fifth century (Carver 1989; Newman 1992). In terms of the debate between those scholars who still see a mass folk migration into Britain during the fifth and sixth centuries (with a residual native population possibly dispossessed and enslaved), and those minimalists who argue simply for an élite takeover, both would appear to be right depending upon which part of the country one is considering.

The immigrant population eventually achieved political supremacy over a landscape which over most of England had remained in agricultural production, though with some changes of emphasis: in places there was a shift from arable to pasture, a trend away from cattle and towards sheep, and perhaps a decline in woodland management. The racial, social and tenurial aspects of landscape may have suffered considerable dislocation, particularly those areas which had been most firmly locked into the earlier political, social and economic system. However, in many cases agricultural production must have been maintained as the landscape continued to evolve until the decision by landowners and communities in the central zone of England to reorganise their landscape through the creation of nucleated villages and open fields. In these areas, it is to this period of transformation that we must look for the origins of the medieval landscape, while elsewhere, the post-Roman period was simply a particularly fluid period in the constantly evolving history of the British landscape.

BIBLIOGRAPHY

- Allen, T., 1995. Lithics and Landscape: archaeological discoveries on the Thames Water Pipeline at Gatebampton Farm, Goring, Oxfordshire 1985-92 (Oxford).
- Arnold, C., 1984. Roman Britain to Anglo-Saxon England (London).
- Arnold, C., & Wardle, P., 1981. Early medieval settlement patterns in England', Medieval Archaeol, 25, pp. 145-9.
- Aston, M., & Gerrard, C., 1999. "Unique, traditional and charming": The Shapwick Project, Somerset', *Antiq J*, 79, pp. 1-58.
- Bailey, K., 1989. 'The Middle Saxons', in *The Origins of Anglo-Saxon Kindoms*, ed. Bassett, pp. 108-22.
- Barker, P., White, R., Pretty, K., Bird, H., & Corbishley, M., 1997. The Baths Basilica Wroxeter, Excavations 1966-90 (London).
- Bassett, S., 1982. Saffron Walden: excavations and research 1972-80. Counc Br Archaeol Res Rep 45 (London).
- Bassett, S., 1985. Beyond the edge of excavation: the topographical context of Goltho, in *Studies in Medieval History Presented to R.H.C. Davis*, ed. H. Mayr-Harting, & R. I. Moore (London), pp. 21-39.
- Bassett, S. (ed.), 1989a. *The Origins of Anglo-Saxon Kingdoms* (London & New York).
- Bassett, S., 1989b. 'In search of the origins of Anglo-Saxon kingdoms', in *The Origins of Anglo-Saxon Kingdoms*, ed. Bassett, pp. 3-27.
- Bassett, S., 1990. The Roman and medieval landscape of Wroxeter', in *From Roman Viroconium to Medieval Wroxeter*, ed. P. A. Barker (Worcester), pp. 10-12.
- Bassett, S., 1997. 'Continuity and fission in the Anglo-Saxon Landscape: the origins of the Rodings (Essex)', *Landscape History*, 19, pp. 25-42.
- Bedwin, O., 1991. 'Asheldham Camp an early Iron Age hillfort: the 1985 excavation', *Essey Archaeol & Hist*, 22, pp. 13-27.
- Bell, M., 1989. 'Environmental archaeology as an index of continuity and change in the medieval landscape', in *The Rural Settlements of Medieval England*, ed. M. Aston, D. Austin, & C. Dyer (Oxford), pp. 269-86.
- Bell, M., & Dark, P., 1998. Continuity and change: environmental archaeology in historic periods', in *Science* in *Archaeology: an agenda for the future*, ed. J. Bayley (London), pp. 179-94.
- Bell, T., 1998. 'Churches on Roman buildings: Christian associations and Roman masonry in Anglo-Saxon England', *Medieval Archaeol*, 42, pp. 1-18.
- Bellamy, B., 1994, 'Anglo-Saxon dispersed sites and woodland in Geddington in the Rockingham Forest, Northamptonshire', *Landscape History*, 16, pp. 31-7.
- Bennett, P., & Williams, J., 1997. Monkton', Current Archaeol, 151, pp. 258-64.
- Beresford, M., & Hurst, J., 1990. Wharram Percy Deserted Medieval Village (London).
- Branigan, K., 1971. Latimer: Belgic, Roman, Dark Age and Early Modern Farm (Bristol).
- Brodribb, A. C. C., Hands, A. R., & Walker, D. R., 1978. Excavations at Shakenoak Farm, near Wilcote, Oxfordsbire, Part V: Sites K and E (Oxford).
- Bonney, D., 1979. 'Early boundaries and estates in southern England', in *English Medieval Settlement*, ed. P. H. Sawyer (London), pp. 41-51.
- Bourdillon, J., 1994. The animal provisioning of Saxon Southampton', in *Environment and Economy*, ed. Rackham, pp. 120-5.
- Brown, T., & Foard, G., 1998. The Saxon landscape: a regional perspective, in *The Archaeology of Landscape*, ed. P. Everson, & T. Williamson (Manchester), pp. 67-94.
- Burrow, I. 1981. Hillforts and Hilltop Settlement in the First to Eighth Centuries AD. Br Archaeol Rep, Br ser 91 (Oxford).
- Carter, G. A., 1998. Excavations at the Orsett 'Cock' Enclosure, Essey, 1976, East Anglian Archaeol 86.
- Carver, M., 1989. 'Kingship and material culture in early Anglo-Saxon East Anglia', in *The Origins of Anglo-Saxon Kingdoms*, ed. Bassett, pp. 141-58.

- Clarke, C. P., 1998. Excavations to the South of the Chignall Roman Villa, Essex. 1977-81. East Anglian Archaeol, 83.
- Collingwood, R. G., & Myres, J. N. L., 1957. Roman Britain and the English Settlements (Oxford).
- Crabtree , P. J., 1994. 'Animal exploitation in East Anglian villages', in *Environment and Economy*, ed. Rackham, pp. 40-54.
- Crawford, S., 1997. Britons, Anglo-Saxons and the Germanic burial ritual, in *Migration and Invasions in Archaeological Explanation*, ed. J. Chapman, & H. Hamerow (Oxford), pp. 15-72.
- Croft, R. A., & Mynard, D. C., 1993. *The Changing Landscape of Milton Keynes* (Aylesbury).
- Dark, K. R., & Dark, S. P., 1996. New archaeological and palynological evidence for a sub-Roman reoccupation of Hadrian's Wall', Archaeol Aeliana, 5th ser. 24, pp. 57-72.
- Dark, S. P., 1996. 'Palaeoecological evidence for landscape continuity and change in Britain ca A.D. 400-800', in External Contacts and the Economy of Late Roman and Post-Roman Britain, ed. K. R. Dark (Woodbridge), pp. 23-51.
- Dark, K., & Dark, P., 1997. *The Landscape of Roman Britain* (Stroud).
- Davies, W., 1979. The Llandaff Charters (Aberystwyth).
- Davis, K. R., 1982. Britons and Saxons: the Chiltern Region 400-700 (Chichester).
- Dixon, P. H., 1982. 'How Saxon is the Saxon house?' in Structural Reconstruction: approaches to the interpretation of the excavated remains of buildings, ed. P. J. Drury (Oxford), pp. 275-88.
- Drury, P., & Rodwell, W., 1980. Settlement in the later Iron Age and Roman periods', in *Archaeology in Essex to AD* 1500, ed. D. G. Buckley, Counc Br Archaeol Res Rep 3+ (London), pp. 59-75.
- Drury, P., & Wickenden, N. P., 1982: 'An early Saxon settlement within the Romano-British small town at Heybridge, Essex', *Medieval Archaeol*, 26, pp. 1-40.
- Eagles, B., 1991. The archaeological evidence for settlement in the fifth and seventh centuries AD', in *The Medieval Landscape of Wessey*, ed. M. Aston & C. Lewis (Oxford), pp. 13-32.
- Eddy, M. R., 1982. Kelvedon: the origins and development of a Roman small town (Chelmsford).
- Esmonde Cleary, S., 1995. 'Changing constraints on the landscape AD 400-600', in *Landscape and Settlement in Britain AD 400-1066*, ed. D. Hooke & S. Burnell (Exeter), pp. 11-26.
- Evison, M., 1997. 'Lo, the conquering hero comes (or not)', Br Archaeol, 23, pp. 8-10.
- Farley, M., 1984. 'A six hundred metre long section through Caerwent', *Bull Board Celtic Stud*, 31, pp. 209-50.
- Finberg, H. P. R., 1955. Roman and Saxon Withington: a study of continuity (Leicester).
- Fleming, A., 1988. The Dartmoor Reares (London).
- Foard, G., 1978. 'Systematic fieldwalking and the investigation of Saxon settlement in Northamptonshire', *World Archaeol*, 9, pp. 357-74.
- Fowler, P. J., 1975. 'Continuity in the landscape: some local archaeology in Wiltshire: Somerset and Gloucestershire', in *Recent Work in Rural Archaeology*, ed. P. J. Fowler (Bradford-on-Avon), pp. 121-33.
- Fulford, M. G., 1992. 'Iron Age to Roman: a period of radical change on the gravels', in *Developing Landscapes of Lowland Britain*, ed. Fulford & Nichols, pp. 23-38.
- Fulford, M. G., & Rippon, S. J., 1994. Lowbury Hill, Oxon: a reassessment of the probable Romano-Celtic temple and the Anglo-Saxon barrow. Archaeol J. 151, pp. 158-211.
- Fulford, M. G., & Nichols, E. (eds), Developing Landscapes of Lowland Britain. Soc Antiq Occas Pap 14 (London).
- Garwood, A., 1998. A late Iron Age and Roman site at Shillingford Field, Great Sampford, Essey Archaeol & Hist, 29, pp. 33-47.
- Garwood, P., 1989. 'Social transformation and the relations of power in Britain in the late fourth to the sixth centuries', *Scott Archaeol Rev*, 6, pp. 90-106.

Gay, T., 1999. 'Rural dialects and surviving Britons', *Br Archaeol*, 46, p. 18.

- Gelling, M., 1976. 'The place-names of the Mucking area', Panorama (J Thurrock Local Hist Soc) 19, pp. 7-20.
- Gelling, M., 1988. Signposts to the Past (2nd edn, Chichester). Gelling, M., 1993. 'Why aren't we speaking Welsh?', in Anglo-Saxon Stud in Archaeol & Hist, 6, pp. 51-6.
- Goodier, A., 1984. 'The formation of boundaries in Anglo-Saxon England: a statistical study', *Medieval Archaeol*, 28, pp. 1-21.
- Going, C., 1993a. 'The Roman period', in *Excavations at Mucking Volume 1: the site atlas*, ed. A. Clark (London).
- Going, C., 1993b. 'The Roman pottery', in *Rivenball, Vol. 2*, ed. Rodwell & Rodwell, pp. 64-7.
- Going, C. J., 1996. 'The Roman countryside', in *The Archaeology of Essex: proceedings of the Writtle conference*, ed. O. Bedwin (Chelmsford), pp. 95-107.
- Gregson, N., 1985. The multiple estate model: some critical questions, *J Hist Geogr*, 11.iv, pp. 339-51.
- Hall, D., 1988. 'The late Saxon countryside: villages and their fields', *Anglo-Saxon Settlements*, ed. D. Hooke (Oxford), pp. 99-122.
- Hall, D., & Martin, P., 1979. 'Brixworth, Northamptonshire: an intensive field survey', J Br Archaeol Assoc, 132, pp. 1-6.
- Hamerow, H., 1991. 'Settlement mobility and the "Middle Saxon Shift": rural settlements and settlement patterns in Anglo-Saxon England', Anglo-Saxon England, 20, pp. 1-17.
- Hamerow, H., 1992. 'Settlement on the gravels in the Anglo-Saxon period', in *Developing Landscapes of Lowland Britain*, ed. Fulford & Nichols, pp. 39-46.
- Hamerow, H., 1993. Excavations at Mucking Volume 2: the Anglo-Saxon settlement (London).
- Hamerow, H., 1997. 'Migration theory and the Anglo-Saxon "identity crisis", in *Migration and Invasions in Archaeological Explanation*, ed. Chapman & Hamerow, pp. 33-44.
- Härke, H., 1990. "Warrior graves"? The background of the Anglo-Saxon weapon burial rite', *Past Present*, 126, pp. 22-43.
- Härke, H., 1997. 'Early Anglo-Saxon social structure', in *The Anglo-Saxons from the Migration Period to the Eighth Century*, ed. Hines, pp. 125-70.
- Haslam, J., 1984. 'The towns of Wiltshire', in Anglo-Saxon Towns in Southern England, ed. J. Haslam (Chichester), pp. 87-148.
- Higham, N., 1992. Rome, Britain and the Anglo-Saxons (London).
- Hines, J., 1984. The Scandinavian Character of Anglian England in the pre-Viking Period, Br Archaeol Rep, Br ser 124 (Oxford).
- Hines, J., 1990. 'Philology, archaeology and the adventus Saxonum vel Anglorum', in Britain 400-600: Language and History, ed. A. Bammesberger & A. Wollmann, A. (Heidelberg), pp. 17-36.
 Hines, J. (ed.), 1997. The Anglo-Saxons from the Migration
- Hines, J. (ed.), 1997. The Anglo-Saxons from the Migration Period to the Eighth Century: an ethnographic perspective (Woodbridge).
- Hingley, R., 1989. Rural Settlement in Roman Britain (London).
- Hinton, D. A., 1990. Archaeology, Economy and Society: England from the fifth to the fifteenth century (London).
- Hinton, D., 1997. 'The "Scole-Dickleburgh field system" examined', *Landscape History*, 12, pp. 5-13.
- Hodder, I., 1982. The Archaeology of the M11: Volume 2. Wendens Ambo: excavation of an Iron Age and Romano-British Settlement (London).
- Hodges, R.: 1989. The Anglo-Saxon Achievement (London).
- Hooke, D., 1985. 'Village development in the West Midlands', in *Medieval Villages, a review of current work*, ed. D. Hooke, Oxford Univ Comm Archaeol Monogr No. 5 (Oxford), pp. 125-54.
- Hooke, D., 1997. 'The Anglo-Saxons in England in the seventh and eighth centuries: aspects of location in space', in *The Anglo-Saxons from the Migration Period to the Eighth Century*, ed. Hines, pp 65-99.

Hoskins, W. G. 1955. *The Making of the English Landscape* (London).

- Hunn, J. R., 1994. Reconstruction and Measurement of Landscape Change: a study of six parishes in the St Albans area (Oxford).
- Isserlin, R. M. J., 1995. 'Roman Coggeshall II: excavations at "The Lawns", 1989-93', Essex Archaeol & Hist, 26, pp. 82-104.
- James, S., Marshall, A., & Millett, M., 1984. 'An early medieval building tradition', Archaeol J. 141, pp. 182-215.
- Jones, B., & Mattingly, D., 1990. An Atlas of Roman Britain (Oxford).
- Jones, G. R. J., 1979. 'Multiple estates and early settlement', in *English Medieval Settlement*, ed. Sawyer, pp. 9-34.
- Jones, G. R. J., 1985. 'Multiple estates perceived', *J Hist Geog*, 11.iv, pp. 352-63.
- Lamb, H. H., 1995. Climate. History and the Modern World (2nd edn, London).
- Lambrick, G., 1992. 'The development of late prehistoric and Roman farming on the Thames gravels', *Developing Landscapes of Lowland Britain*, ed. Fulford & Nichols, pp. 78-105.
- Langton, B., & Holbrook, N., 1997. 'A prehistoric and Roman occupation and burial site at Heybridge: excavations at Langford Road, 1994', Essex Archaeol & Hist, 28, pp. 12-46
- Lavender, N. J., 1993. 'A *principia* at Boreham, near Chelmsford, Essex: excavation 1990', *Essex Archaeol & Hist*, 24, pp. 1-21.
- Lavendar, N. J., 1996. 'A Roman site at the New Source Works, Castle Hedingham: excavations 1992', *Essex Archaeol & Hist*, 27, pp. 23-34.
- Lavender, N., 1997. 'Middle Iron Age and Romano-British settlement at Great Dunmow: excavations at Buildings Farm 1993', Essex Archaeol & Hist, 28, pp. 47-92.
- Lavender, N., 1998. 'A Saxon building at Chadwell St Mary: excavations at Chadwell St Mary County Primary School 1996', *Essex Archaeol & Hist*, 29, pp. 45-58.
- Leech, R., 1982. 'The Roman interlude in the south-west. The dynamics of economics and social change in Romano-British southern Somerset and northern Dorset', in *The Romano-British Countryside*: *studies in rural settlement and economy*, ed. D. Miles, Br Archaeol Rep, Br ser 103 (i) (Oxford), pp. 209-67.
- Lewis, C., Mitchel-Fox, P., & Dyer, C., 1997. Village, Hamlet and Field (Manchester).
- Loveluck, C., 1996. 'The development of the Anglo-Saxon landscape, economy and society "On Driffield", East Yorkshire, 400-750 AD', *Anglo-Saxon Stud in Archaeol & Hist*, 9, pp. 25-48.
- Mackreth, D. F., 1996. Orton Hall Farm: a Roman and Early Anglo-Saxon Farmstead, East Anglian Archaeol, 76.
- Marshall, A., & Marshall, G., 1993. 'Differentiation, change and continuity in Anglo-Saxon buildings', *Archaeol J*, 150, pp. 366-402.
- Mckie, R., 1993. 'Genetic patchwork of an island nation', Geogr Mag, 65(vi), pp. 35-8.
- Miles, D., 1984. Archaeology at Barton Court Farm, Abingdon, Oxon, Counc Br Archaeol Res Rep 50 (London).
- Millett, M., 1987. 'The question of continuity: Rivenhall Reviewed', *Archaeol J*, 144, pp. 434-8.
- Millett, M., 1990. *The Romanization of Britain* (Cambridge).
 Millett, M., & James, S., 1983. 'Excavations at Cowdery's Down, Basingstoke, Hampshire, 1978-81', *Archaeol J*, 140, pp. 151-279.
- Milne, G., & Richards, J. D., 1992. Two Anglo-Saxon Buildings and Associated Finds (York).
- Milton, B., 1985. 'Excavations at Barrington's Farm, Orsett Cock, Thurrock, Essex', *Essex Archaeol & Hist*, 18, pp. 16-33.
- Morris, R., 1989. Churches in the Landscape (London).
- Murphy, P., 1985. 'The cereals and crop weeds', in West, *West Stow*, pp. 100-9.
- Murphy, P., 1994. 'The Anglo-Saxon landscape and rural economy: some results from sites in East Anglia and Essex', in *Environment and Economy*, ed. Rackham, pp. 23-39.

- Myres, J. N. L., 1986. The English Settlements (Oxford).
- Neal, D. S., 1974. The Excavation of the Roman Villa in Gadebridge Park. Hemel Hempstead 1963-8 (London).
- Neal, D. S., Wardle, A., & Hunn, J., 1990. Excavations of the Iron Age, Roman and Medieval Settlement at Gorbambury, St Albans (London).
- Newman, J., 1992. 'The late Roman and Anglo-Saxon settlement pattern in the Sandlings of Suffolk', in *The Age* of Sutton Hoo, ed. M. Carver (Woodbridge), pp. 25-38.
- Peglar, S. M., Fritz, S. C., & Birks, H. J. B., 1989. Vegetation and landuse history at Diss, Norfolk', *J Ecol.* 77, pp. 203-22
- Phillips, D., & Heywood, B., 1995. Excavations at York Minster Volume 1: From Roman Fortress to Norman Cathedral. Part 1: the Site (London).
- Powlesland, D., 1997. 'Early Anglo-Saxon settlements, structures, form and layout', in *The Anglo-Saxons from* the Migration Period to the Eighth Century, ed. Hines, pp. 101-24.
- Quinnell, H., 1986. 'Cornwall during the Iron Age and the Roman period', *Cornish Archaeol*, 25, pp. 111-34.
- Rackham, J. (ed.), 1994a. Environment and Economy in Anglo-Saxon England, Counc Br Archaeol Res Rep 89 (York).
- Rackham, J., 1994b. 'Economy and environment in Saxon London', in *Environment and Economy*, ed. Rackham, pp. 126-35.
- Rahtz, P., Woodward, A., Burrow, I., Everton, A., Watts, L., Hirst, S., Fowler, P., & Gardner, K., 1992. *Cadbury Congreshury 1968-73*, Br Archaeol Rep., Br ser 223 (Oxford).
- Rippon, S., 1991. 'Early planned landscapes in south east Essex', *Essex Archaeol & Hist*, 27, pp. 46-60.
- Rippon, S., 1997. The Severn Estuary: landscape evolution and welland reclamation (London).
- Rippon, S., 1999. 'The Rayleigh Hills in south-east Essex: patterns in the exploitation of a woodland landscape', in *The Essex Landscape: in search of its history*, ed. S. Green (Chelmsford), pp. 20-8.
- Rippon, S., 2000. The Romano-British exploitation of coastal wetlands: survey and excavation on the North Somerset Levels, 1993-7', *Britannia*, 31, pp. 69-200.
- Rippon, S., in press. The Transformation of Coastal Wetlands: the exploitation and management of marshland landscapes in north west Europe during the Roman and medieval periods (London).
- Rodwell, K., 1988. *The Prehistoric and Roman Settlement at Kelvedon, Essex*, Counc Br Archaeol Res Rep 63 (London).
- Rodwell, W., 1966. Wickford: interim report'. *Trans Essex Archaeol Soc*, 3rd ser, 2.ii, pp. 96-7.
- Rodwell, W., 1978. 'Relict landscapes in Essex', in *Early Land Allotment*, ed. H. C. Bowen & P. J. Fowler (Oxford), pp. 89-98
- Rodwell, W., 1993. 'The early Anglo-Saxon pottery', in *Rivenball, Vol. 2*, ed. Rodwell & Rodwell, pp. 73-8.
- Rodwell, W. J., & Rodwell, K. A., 1977. *Historic Churches: A Wasting Asset*, Counc Br Archaeol Res Rep 19 (London).
- Rodwell, W. J., & Rodwell, K. A., 1985. Rivenball: investigations of a villa, church and village, 1950-1977, Counc Br Archaeol Res Rep 55 (London).
- Rodwell, W. J., & Rodwell, K. A. (eds.), 1985. Rivenball: investigations of a villa, church and village, 1950-1977, Vol. 2, Counc Br Archaeol Res Rep 80 (York).
- Rose, P., & Preston Jones, A., 1995. 'Changes in the Cornish countryside AD 400-1100', in *Landscape and Settlement*, ed. Hooke & Burnell, pp. 51-68.
- Salway, P., 1981. Roman Britain (Oxford).
- Scull, C., 1992. 'Before Sutton Hoo: structures of power and society in early East Anglia', in *The Age of Sutton Hoo*, ed. Carver, pp. 3-23.
- Scull, C., 1993. 'Archaeology, early Anglo-Saxon society and the origins of Anglo-Saxon kingdoms', Anglo-Saxon Stud in Archaeol & Hist, 6, pp. 65-82.
- Simpson, S. J., Griffith, F. M., & Holbrook, N., 1989. The prehistoric, Roman and early post-Roman site at Hayes Farm, Clyst Honiton, *Proc Devon Archaeol Soc*, 47, pp. 1-28.

- Smith, R. J. C., Healy, F., Allen, M. J., Morris, E. L., Barnes, I., & Woodward, P. J., 1997. Excavations Along the Route of the Dorchester By-Pass, Dorset, 1986-8 (Salisbury).
- Sparey Green, C., 1987. Excavations at Poundbury, Vol. 1: the Settlements (Dorchester).
- Taylor, C., 1983. Village and Farmstead (London).
- Taylor, C., & Fowler, P., 1978. 'Roman fields into medieval furlongs', in *Early Land Allotment in the British Isles*, ed. Bowen & Fowler, pp. 159-62.
- Todd, M., 1977. *'Famosa Pestis* and fifth-century Britain', *Britannia*, 8, pp. 319-25.
- Turner, J., 1979. The environment of north-east England during Roman times as shown by pollen analysis', *J Archaeol Sci*, 6, pp. 285-90.
- Tyler, S., 1996. 'Early Saxon Essex AD 400-700', in *The Archaeology of Essex*, ed. Bedwin, pp. 108-16.
- Tyler, S., & Wickenden, N.P., 1996, 'A late Roman and Saxon settlement at Great Waltham', *Essex Archaeol & Hist*, 27, pp. 84-91.
- Tyers, I., Hillam, J., & Groves, C., 1996. 'Trees and woodland in the Saxon period: the dendrochronological evidence', in *Environment and Economy*, ed. Rackham, pp. 12-22.
- van der Veen, M., 1993. 'Grain impressions in early Anglo-Saxon pottery from Mucking', in Hamerow, *Excavations at Mucking Volume 2*, p. 80.
- Wallace, C., 1995. 'A Roman rural shrine at Boreham? The Bulls Lodge excavation of 1990 re-interpreted', *Essev Archaeol & Hist*, 26, pp. 264-7.
- Wallis, S., & Waughman, M., 1998. Archaeology and Landscape in the Lower Blackwater Valley, East Anglian Archaeol, 82.
- Welch, M., 1971. 'Late Roman and Saxons in Sussex', *Britannia* 2, pp. 232-7.
- Welch, M., 1983. *Early Anglo-Saxon Sussex*, Br Archaeol Rep. Br ser 112 (Oxford).
- Welch, M., 1984. 'Rural settlement patterns in the early and Middle Anglo-Saxon periods', *Landscape History*, 7, pp. 13-24
- Welch, M., 1989. 'The kingdom of the South Saxons: the origins', in *The Origins of Anglo-Saxon Kingdoms*, ed. Bassett, pp. 75-83.
- Welch, M., 1992. Anglo-Saxon England (London).
- West, S., 1985. West Stow: the Anglo-Saxon village, East Anglian Archaeol, 24.
- White, S., 1998. 'The Patching Hoard', Medieval Archaeol, 42, pp. 88-93.
- Wickenden, N. P., 1988. Excavations at Great Dunmow, Essex, East Anglian Archaeol, 41.
- Wilkinson, T. J., 1988. Archaeology and Environment in South Essex, East Anglian Archaeol, 42.
- Williamson, T., 1986. 'The development of settlement in north west Essex: the results of a recent fieldwalking survey', *Essex Archaeol & Hist*, 17, pp. 120-32.
- Williamson, T., 1987. Early co-axial field systems on the east Anglian Boulder Clays', Proc Prehis Soc, 53, pp. 419-31.
- Williamson, T., 1988. Explaining regional landscapes: woodland and champion in southern and eastern England, Landscape History, 10, pp. 5-14.
- Williamson, T., 1998. The "Scole-Dickleburgh field system" revisited. Landscape History, 20, pp. 19-28.
- Winterbottom, M. (ed. & trans.), 1978. Gildas: The Ruin of Britain and other works (Chichester).
- Woodward, A., & Leach, P., 1993. The Uley Shrines: excavation of a ritual complex on West Hill, Uley. Gloucestershire: 1977-9 (London).
- Wymer, J., & Brown, N., 1995: Excavations at North Shoebury: settlement and economy in south-east Essey 1500 BC AD 1500, East Anglian Archaeol, 75.