THE ARCHAEOLOGY OF THE WEALD—A SURVEY AND A REVIEW

by Mark Gardiner

The identification of archaeological sites in the Weald poses considerable problems. The history of the study of archaeology in the Weald suggests that knowledge of sites has grown rather unevenly and the existing records may be unbalanced. A survey of the Weald in 1987–88 was undertaken to increase the number of sites recorded. Considerable numbers of earthworks were found to survive. Recent studies of aspects of Wealden archaeology and the results of the survey indicate the need for further work.

Until recently the archaeology of south-east England has to a large degree been written from the excavations and finds made on the North and South Downs. Sites on the chalk downland are relatively easy to discover and have formed the basis of the study of the prehistoric period and, to a lesser extent, of the Roman and medieval periods. Latterly, excavations within towns and studies of other areas, such as the Coastal Plain in West Sussex (Bedwin 1983) and the marshlands in Sussex and Kent (Eddison and Green 1988) have helped to give a more comprehensive picture. The Weald, however, remains little studied by archaeologists.

For the current purpose, the Weald is defined as the area between the chalk escarpments of the North and South Downs, excluding the marshes of Pevensey, Walland and Romney. The reasons for the paucity of research in this region, about one half of the area of the counties of East and West Sussex, Surrey and Kent, is substantially attributable to the problems of locating archaeological sites. Although the Weald was, and largely remains, a pastoral area, and therefore destruction by the ploughing should not be extensive, standing earthworks are less common than on the downland. The small area under arable cultivation has made field-walking more difficult in this part of the South-East. Even in recent years when a larger acreage has come under the plough, there is limited scope for field-walking. The heavy soils of the Weald need to be left for a considerable period before field-walking may be undertaken to allow them to weather and facilitate the collection of artefacts. The ploughing and sowing of the heavy soils almost invariably takes place in the autumn and there is only a short period after the soil has adequately weathered before visibility is reduced with the growth of crops.

A further constraint has been the area covered by woodland: East Sussex is the most densely wooded county in England. Fieldwork within woodland is complicated by the problem of visibility, especially in conifer plantations where the foliage may be dense, although there have been considerably successes in locating sites in broad-leaf forests. The tree cover in the Weald restricts the identification of sites by aerial photography; comparatively few sites have been detected by this means. Even in open fields, the heavy soils are not very productive of crop or soil marks. In spite of these limitations, there are some grounds for considering that the potential of aerial survey has not been realised. Aerial photographs taken by Margary in the 1920s and 1930s, and discussed below, suggest that more sites may be identified than have generally been appreciated.

THE LIMITS OF ARCHAEOLOGICAL KNOWLEDGE

The location of sites in the Weald presents particular problems and for this reason it has until recent years attracted only a small number of field-workers. Among the pioneers in this area were Ernest Straker and Ivan Margary. The former is best known for his work on the iron industry, but he had wider interests which included moats and other sites. His copious unpublished papers held by the Sussex Archaeological Society have been hardly studied, but contain details of further discoveries (Brandon 1974, 136). Margary's interest in routes and trackways of all periods developed from the discovery of a length of Roman road on his estate at East Grinstead. Aerial photographs commissioned in the pursuit of the line of roads incidentally revealed other sites in the Weald. A breadth of interest also characterised S. E. Winbolt's work. He undertook numerous excavations principally on the hillforts at Piper's Copse, Saxonbury, Hascombe and Dry Hill, on Roman sites at Alfoldean and Wigginholt, on the medieval castle at Sedgewick and on many Wealden glass-working sites. Latterly, the most important single contribution to Wealden archaeology has been that of Fred Tebbutt. He, with other members of the Wealden Iron Research Group, built on the work of Straker and has cast further light on that industry.

The disproportionate contribution made by a limited number of individuals has resulted in an unevenness in fieldwork. The level of knowledge of archaeological sites in the Weald is different in each of the four counties. The basis of the four Sites and Monuments Records (SMRs) maintained by the county archaeological officers is the record of sites compiled by the Ordnance Survey before responsibility was taken over by the Royal Commission on the Historical Monuments for England (RCHME). During the 1970s and 1980s the record has been enhanced to varying degrees by the county councils according to the resources available. In West Sussex, where enchancement has been most comprehensive, all

major printed sources have been searched, informants have been interviewed, aerial photographs studied and the Minutes of the Archaeological Committee of the Sussex Archaeological Society, which form a valuable source of sites discovered in the 1950s and 60s, have been examined. Enhancement is planned in Surrey where the SMR is essentially that compiled by the Ordnance Survey with additions from the Surrey Archaeological Collections during the 1970s. In East Sussex the situation is similar with further work on the SMR envisaged. The history of the Kent SMR is somewhat different. Unusually, the county council has not until recently employed a county archaeologist, and in 1987 the RCHME was commissioned to compile a record. At the time of the survey of the Weald discussed below this had not been completed, and the review of archaeological sites, perforce, largely excludes Kent.

A crude measure of the limits of archaeological knowledge at the start of the survey is to take the number of sites on the county SMRs. In Fig. 1 the density of sites in each five-km. grid square has been plotted. In those squares which include also downland or marshland, the sites outside the Weald have been excluded and the figures for the Weald increased proportionally to reflect site density. Squares for which half or more of the area lay beyond the Weald were not considered. A clear picture of site distribution is apparent. There is a high site density at the margin of the Weald, that is at the foot of the North and South Downs and on the Upper Greensand. This is less evident in East Sussex where the Wealden margin lay in squares excluded from the analysis since the greater part of their area was downland. More sites are known on the sandy soils in the middle of the Weald than in the clay vales to the north and south.

It may be questioned if this distribution of known sites is an accurate reflection of past human activity. In statistical terms, this is a problem of determining if the sample of sites available is representative of the whole

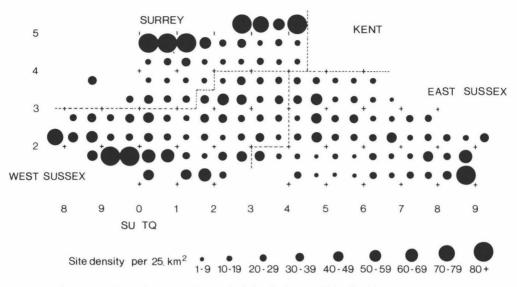


Fig. 1. Density of known archaeological sites in the Weald by five kilometre squares.

population. In this case, the population is the total number of sites for which archaeological remains survive. From these archaeologists will need to draw inferences to determine how surviving sites relate to the totality of past activity (Cherry et al. 1978, 5-6). Hamond (1980) has pointed to some of the biases in archaeological distribution maps. Using an area of West Germany he has suggested that the sites known there are affected by the location of active archaeologists, the extent and nature of their fieldwork. A distortion in known Wealden sites due to these factors is immediately evident from Fig. 1. The isolated area of high site density in the south-east corner of the Weald is attributable to the addition to the East Sussex SMR of prehistoric sites located by members of the Hastings Area Archaeological Research Group (HAARG).

Distortions such as these may be proportionately greater when the number of known sites is low. As the level of fieldwork increases so variation due to data collection will tend to be ironed out. To determine the validity of site distribution maps it is necessary to examine the way in which knowledge of Wealden sites has grown. In unsystematic fieldwork it is probable that the most conspicuous sites will be recognised at an early stage and only later will the less evident sites become known as the level and detail of fieldwork increases. Many of the sites discovered at an early stage will be those with evident earthworks or copious traces and only a few inconspicuous sites will be noticed. As the level of knowledge grows, less evident remains will be located. Finally, it is possible to envisage a state when only the more obscure sites will remain to be found.

The changing view of Mesolithic site distribution is a reflection of such a growth in fieldwork (Fig. 5). Clark (1932) noted that Mesolithic sites in the Weald tended to be concentrated on sandy soils, but recent work discussed below suggests that this distribution is partly a function of observation biased towards these areas. If sample bias is only likely to be reduced as the level of fieldwork increases, can archaeological knowledge yet be said to be adequate? One way of considering this problem is to examine the growth in the number of known sites. With certain categories of highly conspicuous sites the total number may be discovered at a fairly early stage in fieldwork. The examination of hillforts, one of the most evident types of archaeological site, suggests that the overall knowledge of archaeology in the Weald is still extremely rudimentary.

In the Weald discoveries of new hillforts have been made throughout this century. The first volumes of the Victoria County History for Kent, Surrey and Sussex all published in the decade before 1910 include lists of known sites. Later discoveries recorded mainly in the county journals have been added to this. A site is considered here to be 'discovered' when knowledge of its presence is widely known in the archaeological community. The site at Philpots (West Sussex) was identified by the landowner in the 1890s, but did not become widely known until 1932 (Hannah 1932, 158, n.2). A graph of the number of hillforts in the Weald known against time (Fig. 2) suggests that although a number of hillforts had been discovered by 1910, new sites continue to be found. The rate of discovery has been virtually linear throughout this century giving no reason to suggest that the limit may be being approached. This is true for other fairly visible sites. Brandon has drawn attention to the increase in the number of

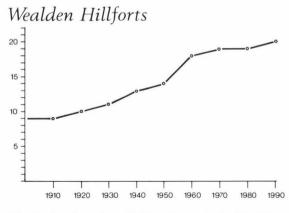


Fig. 2. Total number of hillforts known in the Weald by decade.

medieval moated sites recorded in Sussex. In 1908 more than 60 were known, Ernest Straker added another 38 and the total known to Brandon in 1974 was 235 (Brandon 1974, 136). New discoveries continue to be made and were recorded during the present survey.

A SURVEY OF THE WEALD

Aware of the limitations in archaeological knowledge, in 1987 the Historic Buildings and Monuments Commission asked the London University Field Archaeology Unit to undertake a survey of the Weald to augment the number of known sites. The area involved was so large that with limited resources available a survey could only hope to examine a very small part. To avoid duplicating the work of the county council archaeologists, work which was envisaged as part of the general enhancement of the SMRs was avoided. East Sussex and Surrey proposed to examine their aerial photographs at a future date, while work of this nature was under way for Kent and West Sussex. Aerial photographs were therefore not studied. No journals were searched as this work was planned in those counties where it had not already been completed.

The survey design was therefore determined partly by the present and future work of others. A further consideration was the results of previous systematic field-walking programmes. These suggested that such surveys could only hope to identify small numbers of sites. The Cuckmere Valley fieldwalking programme in 1982-3 examined areas on the South Downs and northwards into the High Weald. The number of artefacts located per hectare walked fell off markedly in the Weald and the density of located sites declined to a fifth of that on the Downs (Garwood 1984). A survey by D. J. Freke of Wadhurst parish in the High Weald similarly produced a low site density for the area examined (Tebbutt 1981, 113; Freke pers. comm).

Since the purpose for which the survey was commissioned was specifically to increase the *number* of sites, it was decided that this should be a priority, even though this might be perpetuating the unrepresentative nature of the sample or introduce other distortions. The discussion above suggests that knowledge of archaeological sites in the Weald is so limited that it is arguable that at this stage the greatest contribution may be made by collecting basic information on sites and their location, rather than being over-concerned about sample quality. Such a view goes against the usual practice in field survey in Britain, in which a systematic methodology is considered to be important. In a discussion of survey design Schiffer et al. (1978), however, suggested that a three-stage approach should be adopted. In the first stage existing sources are searched providing information for the second stage of reconnaissance in the field. Only when these are completed can an appropriate strategy for intensive survey be devised.

On this basis, it was decided to concentrate on searching existing sources and reconnaissance: intensive survey was not envisaged. Lists of sites already recorded on SMRs were compiled to prevent repetition. From West Sussex and from Surrey this information was available in the form of computer print-outs. The SMR data from East Sussex was assembled from the written records. but for Kent no data was available at the time of the survey. Since only the West Sussex SMR had been enhanced to any substantial degree, it seemed likely that a substantial number of sites might be known to local field-workers, but not recorded on the county files. Letters sent to field-workers, however, elicited a poor response. It was therefore decided to interview selected people active in the field and this produced a large number of sites. Indeed, it is evident that a great deal more information remains to be gathered in this way. Unpublished sources held by the Sussex Archaeological Society were also searched.

The final element in the survey was an examination of sample areas in the field. The areas to be examined were selected using a number of criteria. Firstly, areas were preferentially chosen lying within a series of north-south 5 km.-wide bands running across the Weald and defined by the Ordnance Survey grid (Fig. 3). Secondly, a variety of different geologies were selected to give a broad range of environments. An examination of the Brede and Tillingham valleys, for example, helped to balance the work which has been done on the higher land in the Weald. Thirdly, areas with different land-use histories were chosen. Among these was the area of Parham Park (West Sussex) which was selected, because its probable history of exploitation may have preserved sites lost elsewhere. Areas of commonland and of woodland were examined for the same reason.

At this stage it was decided not to undertake a great deal of systematic field-walking and only a limited number of fields were examined in this way. Larger areas were examined more superficially to identify upstanding earthworks and artefact concentrations brought to the surface by ploughing, animal or other disturbance. Where possible areas were searched by walking 50 metre-wide transects, but in many environments this was impractical and necessarily it was those areas adjacent to paths and roads that were studied.

SURVEY RESULTS

Interviews and correspondence led to the recording of a large number of sites. The informants are acknowledged below, but the sites discovered by the Hastings Area Archaeological Research Group (HAARG) at the east end of Sussex and by the Robertsbridge and District Archaeological Society, particularly in the parish of Ewhurst, deserve special mention. In both cases relatively small areas had been examined fairly intensively to produce a very broad range of sites.

Fieldwork indeed seems to have been particularly actively pursued in East Sussex during the last decade or two leading to the discovery of a considerable number of sites in



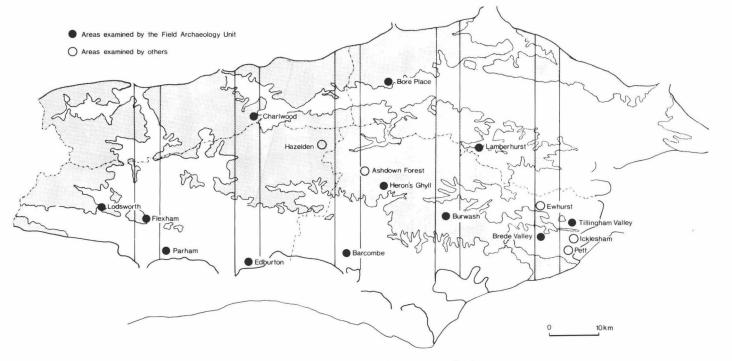


Fig. 3. Survey strategy and other areas examined.

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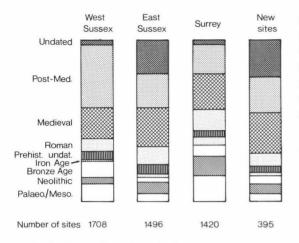


Fig. 4. Proportions of previously recorded and newly discovered Wealden sites by period.

that county. It was through work in East Sussex that Fred Tebbutt was able to argue in a seminal article that prehistoric activity in the Weald was more widespread and more permanent than had been previously realised (Tebbutt 1974). Through fieldwork he identified large numbers of flint-scatters himself and recorded the finds of others in the vicinity of Ashdown Forest. Further unpublished finds are recorded in notes held by the Sussex Archaeological Society. These list further finds made after the publication of the article.

Fieldwork for the survey was carried out during 1987 and 1988 and mainly in East and West Sussex and to a lesser degree in Kent; only a small area of Surrey lies in the Weald and this county was not covered in detail. The nature of the survey to a substantial degree determines the type of sites discovered and the emphasis in the present work was not to cover a small area in detail, but to examine fields in a less concentrated fashion. The sites discovered were generally those with upstanding remains. Small artefact scatters were not specifically sought and were rarely noted. About half the sites found were either medieval or post-medieval, though this is similar to the figures for the existing SMRs (Fig. 4). A substantial proportion of sites were not

dated, though it is reasonable to assume that generally they are post-Roman rather than earlier. In total 395 sites were found during the survey or recorded from other fieldworkers. The number of known Wealden sites in East Sussex was increased as a consequence by 17 per cent and that in West Sussex by 4 per cent.

Conclusions drawn from the sites discovered are detailed under the various period headings below. It is appropriate to mention here one of the more surprising results of the survey, the number of upstanding, and often very conspicuous earthworks, which still survive. Curiously these are not well represented in the SMR files, although they have been noted by a number of field-workers. Tebbutt (1975; 1981, 115) has drawn attention to groups of platforms, some of which have been shown to be the sites of buildings of medieval date. Others have noted earthworks of various types on the heathlands of Ashdown Forest (Pam Combes pers. comm.) and in woodlands (Gwen Jones pers, comm, and in prep.).

REVIEW OF THE ARCHAEOLOGY OF THE WEALD

The archaeology of the Weald has been recently discussed in a general study of southeast England to AD 1000 (Drewett *et al.* 1988). It is useful here, however, to emphasize some of the conclusions which may be drawn from the sites recorded during the present survey and from other research done in the last few years.

Environment studies

The Weald, like the South-East of England generally, has not been well covered by environmental research. The analyses, such as they are, mostly come from Sussex; within that county there has been a particular emphasis on the Lower Greensand heathlands in the west and on the river valley peats and inorganic sediments to the east. Surrey and Kent are even less well served, with only a few, isolated studies to suggest parallel developments.

The Lower Greensand was a particularly 'brittle' environment, in which minor disturbances may have resulted in substantial changes in vegetation. The possibility of creating clearances in the woodland relatively easily may have been the attraction of such areas to prehistoric hunters. The physical problems of clearing woodland have not been emphasized by archaeologists, who have attributed large-scale destruction to burning. This mechanism is not accepted by Rackham (1980, 130) who has commented that unmodified woodland 'burns like wet asbestos'. By whatever means it was achieved, it is evident that Mesolithic populations had the ability to affect the vegetation, as studies of the pollen and soils at West Heath (West Sussex) have shown (Drewett 1985). Clearances were local in extent: at Rackham (West Sussex), for example, the initial clearance of the vegetation did not take place until the Late Neolithic with more general clearance later still, perhaps in the Bronze Age (Dimbleby and Bradley 1975).

The degree of soil movement which might be initiated by the activities of prehistoric people is evident on a local scale from the deep deposits of colluvium around the West Heath barrows caused by the stripping of turf to construct the burial mounds (Drewett 1989). On a larger scale studies of the Wealden river valley sediments appear to indicate human intervention. By cutting down trees and reducing woodland cover the rate of surface water run-off is increased, while at the same time fewer roots bind the soil. The dates given to the alluvial fill deposits and the magnitude of disturbance they represent are difficult to relate to the archaeological evidence for human activity.

For the present survey it is interesting to consider the effect of colluviation on archaeological remains. Soil movement on the valley sides can have the effect of removing artefact scatters, as Scaife (1987, 153) has suggested might have happened to Neolithic material, for example. It can also bury sites near the valley bottom. There is considerable evidence

for this happening to Roman and post-Roman sites. Near Bodiam Bridge (East Sussex) finds from the 1st century AD were buried under 1.8 metres of alluvium; and even blast furnace slag, which cannot be earlier than the end of the 15th century, was found at a depth of 0.45 metre below ground surface. In the upper part of the Rother valley little sedimentation seemed to have occurred and blast furnace slag was found on the surface of the floodplain (Burrin 1988, 50). Even on moderate slopes sites may be buried beneath soil washed downhill. Overlying the site of a medieval grange at Park Farm, Salehurst lying just above the floodplain floor, a depth of about 0.8 metre of colluvium had accumulated. This must have been deposited after the demolition of the grange, probably in the 1530s (Gardiner and Martin, in prep.).

Upper Palaeolithic and Mesolithic Periods

Few significant Palaeolithic sites are known in the Weald: the major finds are to the north at Swanscombe and to the south at Boxgrove. Finds from probable rockshelter sites are known from 'Beedings', near Pulborough (West Sussex) and Oldbury Hill (Kent) (Curwen 1949; Collins 1970; Woodcock 1978).

The Mesolithic exploitation of the Weald may have been similar in nature to that of the Upper Palaeolithic, but rising temperatures after the end of the last glaciation gradually transformed the environment with the arrival of thermophilous species. The collections of worked flint discovered appear to be largely the products of itinerant hunter-gatherers. The excavated early Mesolithic site at Rackham (West Sussex) may stand for other scatters of flintwork found in the ploughsoil. It is interpreted as a short-stay camp visited perhaps only once and producing no structural remains (Garton 1980). Mesolithic hunters, like their Palaeolithic predecessors, used the shelter given by rock outcrops. Excavations at a number of places have suggested intermittent use of these sites.

Early work in the Weald had indicated that

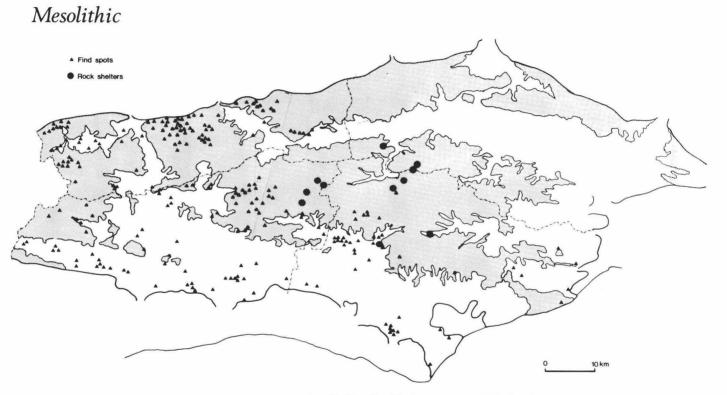


Fig. 5. Mesolithic sites in the Weald. (Details of find spots not available for Kent).

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Mesolithic activity was concentrated on sandy soils (Clark 1932, map 2), but more recent studies have suggested that this distribution has been biased by the areas searched by fieldworkers (Fig. 5). The higher visibility of flintwork on the sandy heathlands has been a significant influence on the location of findspots (Evans 1975, 103). In the Horsham area discoveries by Standing show that finds extend beyond the Upper Tunbridge Wells Sand on to the Weald Clay (Holgate 1987) thereby reinforcing the impression from finds in Surrey (Ellaby 1987, 58). Work during the present survey and that by the Hastings Area Archaeological Research Group supports the ubiquity of Mesolithic activity in the Weald (Holgate and Woodcock 1988; Woodcock 1988). Most recently, an examination of finds has indicated that early Mesolithic activity may have been concentrated on the Lower Greensand soils, but the areas exploited spread later in the Mesolithic to a broader range of habitats (Gardiner 1984, 17).

The ability of the early hunters to effect significant changes in the environment has become apparent from a number of excavations. At Iping Common (West Sussex) the destruction of hazel woodland has been associated with human activity and this led to the impoverishment of the soil, creating a heath environment and leading to wind erosion (Keef et al. 1965). To the west of Iping, at West Heath, similar changes to the soil have been recorded and likewise are connected with Mesolithic activity found there (Drewett 1976; 1985). The influence of these disturbances to the environment are reflected by alluviation as recorded at Sharpsbridge, which appears to be the result of localized forest clearance (Scaife and Burrin 1983, 9).

The implications of this for the location of sites are considerable for it suggests that the activities of Mesolithic period may be buried or removed by the environmental changes that they precipitated. Mesolithic flint work found during the survey in a field near to Fitzleroi Farm, Fittleworth (West Sussex) at the bottom of a slope was buried beneath colluvium beyond the reach of the plough and only exposed by gullying. It is interesting to speculate how the positions in which Mesolithic finds have been discovered may be more determined by their topographic location than has been recognized (cf. Tebbutt 1974, 36).

Neolithic and Bronze Age

The division between the Late Mesolithic and Early Neolithic is an artificial one in the context of the Weald. Excavations at High Rocks and Stone Rocks, East Grinstead suggest that Early Neolithic hunters may have continued to exploit the Weald and occupy rock shelters (Money 1960; Oliveira and Tebbutt 1985; Harding and Ostoja-Zagorski 1987; Drewett et al. 1988, 46-7). The discovery of Neolithic flintwork often in association with Mesolithic artefacts reinforces the impression that their activities were essentially similar. It is possible that Neolithic hunters reused the locations which had already been cleared during the Mesolithic (Gardiner 1984, 36). Arrowheads have been recorded across the High Weald (Field and Cotton 1987, 77-78) and further examples are noted in the unpublished papers of C. F. Tebbutt.

During the Neolithic people in the Weald were making a significantly greater impact on the environment. The not inconsiderable numbers of polished stone axes now recorded in the Weald are evidence of the means by which the woodland was cleared (Bell *et al.* 1982; Woodcock and Woolley 1986, Fig. 1). The very substantial alluvial deposits in river valleys show the effect of this clearance on the valley-side soils. Of particular interest is the presence of cereal pollen and that of *Gramineae* and *Plantago lanceolata* in a core taken at Mayfield and dated to the Neolithic or post-Neolithic, suggesting the practice of agriculture (Scaife and Burrin 1987).

There is growing evidence for Wealden agriculture in the Bronze Age, with hunting presumably being continued in parallel with farming. A pollen diagram from Rackham (West Sussex), for example, shows a small clearance in the Late Neolithic, a period of regeneration and the more extensive clearance leading to the formation of heathland. Cereal pollen occurring intermittently indicates arable agriculture in the vicinity (Dimbleby and Bradley 1975).

The discovery of a number of barrows in the Weald is further evidence of the exploitation of this area. Barrows on Ashdown Forest and in Ewhurst can be added to those known on the heathlands in West Sussex and Surrey (Corcoran 1963; Tebbutt 1974, 42; Jones 1980). The enigmatic site at Mockbeggars, Playden has been reinterpreted as a ploughed-out round barrow and the discovery of other circular cropmarks in Playden raises the possibility of further levelled barrows here (Cleal 1982; Drewett et al. 1988, 78; Dickinson 1981). The growing impression is of extensive Wealden usage, with farmsteads being established in areas of cleared woodland. The period of greatest exploitation appears to lie in the Late Neolithic and Early Bronze Age, which may suggest that the soils became exhausted and settlement retreated subsequently (Needham 1987).

The Iron Age

Reserch on Iron Age sites in the Weald has been centred on hillforts in the region and little attention has been given to the less conspicuous sites. Indeed, remarkably few others are known from this period (Fig. 6). Although further sites may yet be identified, as suggested above, the distribution of hillforts does not appear to be even. Two groups may be identified, one lying on the Lower Greensand of Surrey and Kent and extending into West Sussex to include Hammer Wood, Piper's Copse and Henfield, and a second in the centre of the High Weald. In the east of Kent and of East Sussex, except for the rather uncertain evidence from Hastings Castle, there were, apparently, no hillforts (Cunliffe 1982, 44; Barker and Barton 1978).

Excavations on Wealden hillforts have been consistent in indicating that they were not occupied until late in the Iron Age (Drewett *et al.*

1988, 157–59). The only exception to this is Castle Hill, Tonbridge which controls routes into the Weald, where the two enclosures were dated to the 4th and 3rd centuries BC (Money 1978). The Late Iron Age date of the hillforts is mirrored in the other dated sites. In West Sussex production of querns at Lodsworth, though beginning earlier, reaches its peak at the end of the Iron Age and at the beginning of the Roman period (Peacock 1987). Ritual activity at the Money Mound in Lower Beeding began in the Late Iron Age (Beckensall 1967). In Surrey, however, it is argued that the Weald was not used intensively until even later, the beginning of the Roman period (Hanworth 1987, 159).

The most significant evidence of an expansion of activity in the Late Iron Age has been found in East Sussex. On Ashdown Forest, preserved on the uncultivated heathland, is a little known and almost unrecorded fossil landscape. Aerial photographs, particularly those commissioned by I. D. Margary during the 1920s (in Barbican House, Lewes) show an extensive system of enclosures and field boundaries. Three of the enclosures have been investigated by excavation and all have been dated to the Late Iron Age (Margary 1930a, 1930b; Wickenden 1986). That these were contemporary with the field banks seems likely, but is not proven. A settlement which was possibly not enclosed has been found at Eridge Park situated 1 km. from the hillfort at Saxonbury (Money 1979). It is significant that pollen evidence from High Rocks places the hillfort not in a clearing in the woodland, but suggests that it was constructed in an area already used for arable agriculture, and the soil between first and second phase defences show that crop-raising continued in the vicinity (Money 1968).

Other enclosures have been identified elsewhere in the East Sussex Weald, at Ewhurst (TQ 361165) and at Tottingworth Park (TQ 614224). The discovery of the former was also due to Margary who had aerial photographs taken (held by Battle and District Historical

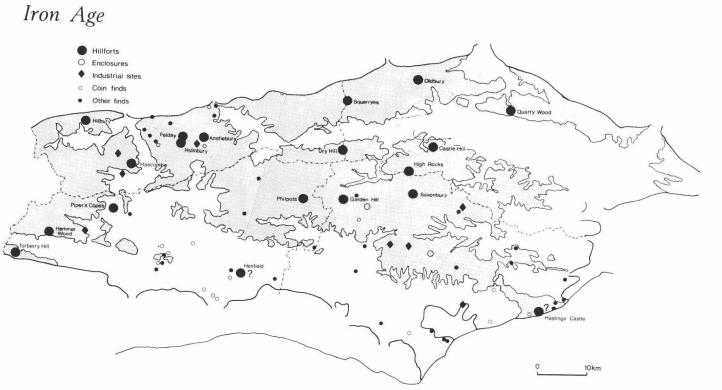


Fig. 6. Iron Age sites in the Weald. (Hillforts only recorded in Kent).



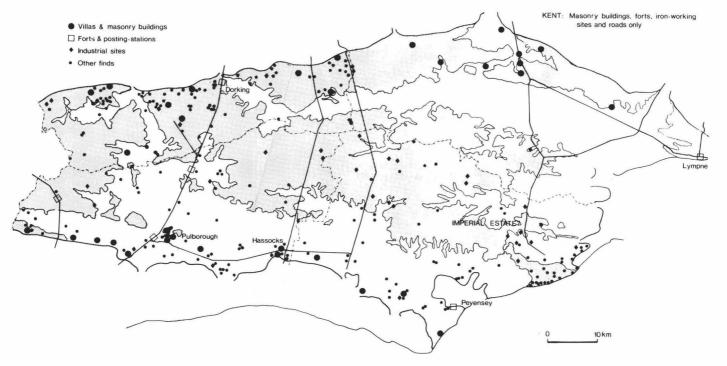


Fig. 7. Roman sites in the Weald.

Society) revealing an oval enclosure now only detectable as a soil mark. The site at Tottingworth is similar, and although it had a prominent bank and ditch, it was unlikely to have been defensive as it is overlooked by higher ground. Little now remains as it was substantially levelled in the late 19th century (Dawson 1902, 174). The dating of the Ewhurst and Tottingworth enclosures to the Iron Age is presumptive and not based on dated finds.

Survey work in the Hastings area has uncovered a substantial number of sites and these also seem to be of Late Iron Age date with finds of East Sussex Ware common. A concentration of activity around the heads of springs has been noted by Vahey (pers. comm.). It seems probable that the more extensive fieldwork in this area has led to the discovery of a greater number of sites, which may be typical of other parts of the Weald.

The Roman Period

Perception of the Weald in the Roman period is largely coloured by knowledge of the remains of the iron industry. The area exploited for iron-working is, however, a comparatively small part of the whole region. The sites lay in two main areas, a coastal group near Battle and a group in the High Weald extending as far west as Broadfield near Crawley. On four sites, Bardown, Beauport Park, Bodiam and Little Farningham (Sissinghurst) tiles have been found marked with the stamp of the Classis Britannica, the British Fleet. It has been suggested that much of the Weald was held by the emperor as an estate, restricting civilian exploitation of the area (Cleere 1978; Cleere and Crossley 1985, 66-9). Certainly there seems to be a near absence of non-industrial sites in this part. A corn-drying kiln at Uckfield (East Sussex) is one of the rare examples of finds indicative of agricultural activity (Tebbutt 1968).

Most of the Roman finds have been made at the periphery of the Weald (Fig. 7). Along the Upper Greensand at the foot of the South Downs in West Sussex a string of villas and other

sites have been discovered extending from Harting and Elsted in the west to Bignor. New discoveries of villas further east at Plumpton and Beddingham in East Sussex have merely confirmed this pattern (Allen 1984; Rudling 1988). The pattern in Kent is similar. Villas or other substantial buildings have been identified at Eccles, Boxley, Tovil to the south of Maidstone, at Maidstone itself. Chart Sutton, Thurnham and Boughton Monchelsea, all places in or near to the Medway valley and close to the North Downs escarpment (Detsicas 1983, 95-6, 120-26, 142-43). The concentration of Roman activity in this area is particularly striking, especially when contrasted with the few large sites further east (ibid., Fig. 7; Blagg 1982, 56). Likewise, in Surrey Roman sites generally lie near to the Downs (Bird 1987, 178).

Although Roman settlement seems to have been mainly peripheral, villas have been discovered nearer the centre of the Weald at Chiddingfold in Surrey, and at Wigginholt and possibly at Holmstreet, both in the Pulborough area of West Sussex. There may have been small towns at Pulborough and at Hassocks to the east (Cunliffe 1973, 69–73). Recent work has identified an extensive scatter of material around the posting station at Alfoldean, where there was an extensive extra-mural settlement to the south (English and Gower 1985).

The nature of the economy supporting these settlements has yet to be explained. Bird (1987, 180) has proposed that the Chiddingfold villa was the centre of a forestry estate, but some areas of the clayland within the Weald seem to have been cultivated. Evidence from Essex suggests that the heavy clay soils were perfectly workable with Roman and earlier ploughs, and were indeed used for agriculture (Drury and Rodwell 1980, 59-64; Williamson 1984). Margary (1940) has identified an area of possible centuriation at Ripe (East Sussex), but certain proof is lacking. In Surrey a concentration of Roman material has been found in the area between Farnham and Guildford with a villa at Compton (Clark and Nichols 1960). The presence of Roman villas here and elsewhere on the clay soils in the Weald does imply that the area was worked by more than peasant farmers.

The Anglo-Saxon Period

If tracts of the Weald had come under cultivation in the Iron Age and Roman Periods, they seem to have reverted to woodland during the Anglo-Saxon period. Sparse documentary evidence suggests that the Weald was extensively wooded, as indeed the very name of the area indicates (Mawer and Stenton 1929, 1-2). Charters, particularly for Kent, show that the Weald was an important area of grazing for pigs and other animals. The degree to which it was permanently occupied remains in dispute (Brandon 1974, 81; Sawyer 1976, 2; Brandon 1978, 86). Associated with this argument is the question of the process by which the Weald came to be colonized. It has been suggested that the Weald was progressively penetrated from the peripheries and that it was only in later centuries that the centre was reached (Witney 1976, Map 7; Brandon 1978, 84-5). There is, however, very little evidence to support this interpretation (Drewett et al. 1988, 291).

The small number of known archaeological sites hinders any firm conclusions being drawn of the exploitation of the Weald during this period. Anglo-Saxon sites in any environment are difficult to detect and in the Weald this is especially so. In Kent most of the known sites are Early Anglo-Saxon cemeteries, which are more easily identified than their contemporary settlements. The cemeteries are concentrated at the foot of the North Downs and in the Chart Hills, areas which had earlier been cultivated by Roman villas (Fig. 8). Excavations at one Roman site, the villa at Eccles to the north of Aylesford, located an Anglo-Saxon cemetery dating from about 650 onwards. The villa buildings, which had been occupied until the late 4th or early 5th century, would have been ruinous by the time a community settled nearby and debris from them was used to pack the post-holes of a small timber building (Detsicas and Hawkes 1973; Detsicas 1976).

These Early Anglo-Saxon sites, presumably the precursors of the later medieval spring-line villages at the foot of the Downs, may be traced westward from Kent into Surrey. Sporadic finds have been made at the north edge of the Weald including most recently a 7th-century glass jar (Morris 1959; Youngs and Clark 1982, 208–9). If there was a similar pattern on the south of the Weald in Sussex, it is not clear. Grass-tempered pottery from the graveyard at Harting (West Sussex) and the recent discovery of a 5th-century cemetery on the scarp slope of the South Downs at Keymer, however, may suggest that this area was similarly occupied (Welch 1983, 508).

Middle and Later Anglo-Saxon finds are even less common. A notable discovery has been the iron-working site at Millbrook on Ashdown Forest for which a radiocarbon date of 745 +90/-65 AD was obtained. The crude furnace without facilities for tapping the slag suggests that production was on a very small scale (Tebbutt 1982). New sites recorded during the survey include a number of pieces of Late Anglo-Saxon or Saxo-Norman potterv discovered at various places at the east end of East Sussex by HAARG and a Saxo-Norman cooking pot from close to the site of the Domesday vill of Drisnesel near Park Farm, Salehurst in the same county.

Medieval and Post-Medieval Periods

From the 13th century onwards the increasing quantity of documentary evidence aids an understanding of the settlement and exploitation of the Weald. The extensive woodlands made it a suitable location for a number of fuel-using industries, but the absence of major population centres meant that the availability of resources had to be balanced against the costs of transport. The medieval iron industry seems to have been small in comparison with the scale of operation in the 16th century. The Tudeley bloomery furnace near Tonbridge is known to have produced between 1,520 and 3,160 kgs per year in the mid-14th century

Anglo-Saxon

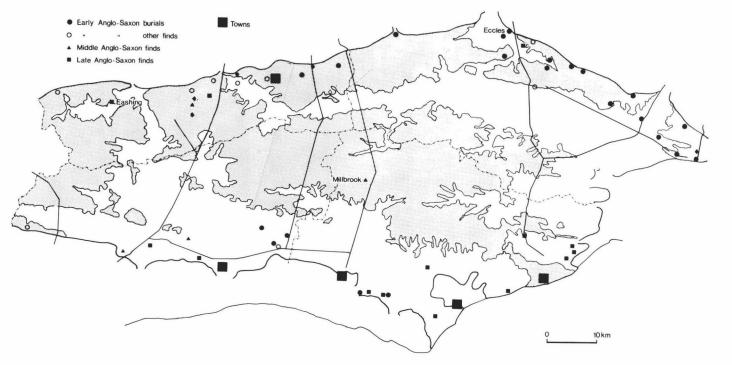


Fig. 8. Anglo-Saxon sites in the Weald.

(Crossley 1981, 33). Water power was used from the first half of the 14th century at Chingley (Kent) in a forge for hammering blooms run by Boxley Abbey (Crossley 1975) and there is documentary evidence for other water-powered hammers at Burwash and Ticehurst in Sussex (Brandon 1969, 151, n. 62).

The extensive areas of clay within the Weald, together with abundance of wood meant that the raw materials for pottery and tile production were available in abundance. The 13th- and 14th-century pottery kilns all lie on the margins of the Weald near to their local markets, but 16th-century kilns served a larger area and were situated at more remote locations nearer the centre of the Weald (Streeten 1981). Less is known about tile production, though there are documentary references to it at Reigate (Moorhouse 1981, fig. 89) and at Battle Abbey itself (Searle and Ross 1967, 46) and on its lands at Alciston (Brent 1968, 90) and Snape Wood, Wadhurst in East Sussex and at Wye in Kent (VCH Kent 3,392). Amongst the excavated tile kilns are those at Bohemia (Hastings) (Lower 1859) and Rye in East Sussex (Barton 1979, 193, 216-17), Shulbrede Priory (Ponsonby 1934, 34-37) in West Sussex, Addington (Philp 1977) and Hartley (Philp 1973, 220-23) in Kent and Limpsfield in Surrey. Fieldwork by Gwen Jones has located the probable site of a 13th-century kiln near Robertsbridge Abbey producing nibbed roof and glazed floor tiles.

A rural cloth industry is indicated by occupational surnames and by documentary references to fulling mills. The probably site of one of these was located during the survey. A large dam, now breached lies across a valley in Wiston parish, West Sussex (TQ 15321585), its function suggested by the name of a wood to the north, Fullingmill Copse. Some mills may have served both for fulling and grinding corn such as that at Wynhamford in Brightling (TQ 65602255). A detailed lease of 1474 refers to corn and fulling mills here, but there was already a mill in 1315 when a grant was confirmed to Robertsbridge Abbey (Historic Manuscripts Commission 1925, 154; British Library, Egerton Ch. 399). Earthwork remains survive at this site, but at Wreckery Bridge in Ticehurst (TQ 67082610) the identification of a 13th-century mill is dependent on documentary sources (East Sussex Record Office, XA3/19, ff. 110r.-v.). There is little trace of the mill there, though the subtle topography of the mill bay is fortunately picked out on maps by the 25-metre contour.

Boundary earthworks are common in the Weald. These vary from simple woodland banks to park pales and even complete field systems. Woodland banks, although frequently found, are often of uncertain antiquity. More detailed studies are necessary to date the complicated pattern of boundaries which survive. Brandon (1974, 107–109) has noted the park earthworks at Michelham and Ashdown Forest. One of the most impressive banks with a characteristic internal ditch was found on the west side of Flexham Park (TQ 002217), while others were noted during the survey in West Sussex at Parham, North Park in Fernhurst and possibly at Woodmancote Place.

Lynchets on the downhill side of fields are also common in the Weald, but few, if any, have been dated by excavation. Most may be presumed to be medieval or modern. Even quite substantial lynchets may have formed during short episodes of ploughing due to the degree of soil movement evident on many Wealden fields. Ridge-and-furrow earthworks were noted in a number of places and are recorded in notes compiled by C. F. Tebbutt. The ridges, which are often broad in width may be the product of improvement in the 19th century, rather than indicative of earlier cultivation. Agricultural writers commented on the practice in Kent, for example, where it seems to have been most common on the heavy soils in the Weald (Mead and Kain 1976).

Comparatively little work has been done on the minepits which are probably the most common earthwork in the Weald (Swift 1983; Cleere and Crossley 1985, 15–30; Worssam and Swift 1987). Some are evidently the results of

digging for iron-ore, but similar pits occur in areas of the Weald where ore is not present. The quarries in the West Sussex area for extracting 'Petworth Marble' or Paludina Limestone have been identified by Kenyon (1961, 102-6). This was mainly used for building, but might also have been burnt as lime for fields as indicated by the number of lime kilns in that area. Minepits near Brightling were dug for the extraction of lime used to reduce the acidity of the land. Mining there continued up until the 19th century and documentary sources mention 'chalk' coming from Rounden Wood in the same parish in the 16th century (Dawson 1898; Martin 1989, 122). 'Marl', often calcareous clays for dressing fields, was extracted from pits from the medieval period onwards and perhaps earlier. Quarrying for building stone at many periods must have been common across the Weald, but little systematic work has been done to locate the sites.

During the survey an extensive area of minepits were noted in Rounden Wood (TQ 681218) and these were probably connected with lime extraction. The extremely large quarries cut into the hillslope to the east of Doozes Farm, Mayfield (TQ 630275) may be tentatively associated with the Roman iron-working site nearby (Cleere and Crossley 1985, 204). Further fieldwork will be necessary to identify the product of the great majority of pits.

The glass industry has been investigated by Kenyon (1967) and Winbolt (1933) who showed that it was concentrated around the Surrey-Sussex border, particularly in the vicinity of Chiddingfold. Finds in Worthing Museum show that it may have extended further east that has been appreciated, with sites at Billinghurst and Horsham.

PROSPECTS FOR ARCHAEOLOGY IN THE WEALD

Although archaeology in the Weald has been relatively undisturbed by the expansion of arable agriculture which has affected other parts of England, in recent years new areas have come under plough. With the decline of traditional patterns of woodland management old areas of coppice and broad-leaf trees have been cut down and replanted with conifers which has been thoroughly destructive to earthworks and other remains. The threats to the archaeology are considerable and without continuing survey work in the Weald, the need for which is evident in the discussion above, sites will be destroyed without any knowledge of their existence. The present survey could only hope to establish the bare outlines and further large-scale work is now needed.

The present survey was conceived as covering two parts of a three-stage research programme. The third stage, intensive survey, needs now to be initiated. This would include both detailed field-walking and a more superficial survey to identify upstanding earthworks. Areas of old woodland need to be investigated and upstanding sites identified before they are destroyed by modern forestry. On the heathlands the cessation of grazing at the beginning of this century has allowed woodland to regenerate (Yates 1955) and the survey of earthworks in this environment will become increasingly difficult unless undertaken soon. On the positive side, the growth of ploughing will bring to the surface remains previously hidden and make a greater area available for fieldwalking.

Increasingly, it has become clear that the Weald was not an uninhabited waste until cleared in the medieval period. It was used and exploited for many millenia beforehand. Further study of Wealden archaeology is necessary as a complement to work carried out on the downland if a full understanding of past human activity in south-east England is to be gained.

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