Woodland Archaeology Surveys in the South-East: Informing Conservation Plans for the Woodland Trust

Nicola R. Bannister AIFA: Freelance Landscape Archaeologist

Summary

This paper presents the results of a number of archaeological surveys undertaken on Woodland Trust properties in Kent and Surrey. The objective was to identify and record the archaeological resource for each property in order to inform the preparation of integrated Conservation Plans being undertaken by the Woodland Trust. Archaeological features recorded, ranged from prehistoric field systems to modern wartime earthworks. The most common feature found were wood banks, many of which probably dated from the medieval period or earlier when the wood was first enclosed. The surveys highlight the fact that most woods contain some features of historical interest, the result of either the management of the wood for its resources or other land use activities.

Introduction

The subject of archaeology of woodlands and the archaeology in woodlands is enjoying a raised profile today, the result of increasing awareness of the importance of our woodlands not only from a historical perspective but also from an economic, recreation and wildlife aspect. Archaeologists especially those working in the field of landscape archaeology are becoming increasingly aware of the archaeological record preserved in woods and the need to heighten awareness of woodland managers and owners to the fragility of many of the sites in the light of woodland management practices.

Some woodland owners are already pro-active - in identifying archaeological sites and undertaking sympathetic management to preserve them. The Woodland Trust, a key woodland owner is fully aware of its responsibility towards the historic element of its land holdings. Through its Woodland Managers the Trust prepares integrated conservation plans for its properties in order to achieve an integrated approach to their management. In order to prepare and inform each plan, where necessary, the Trust commissions baseline ecological and archaeological surveys to identify and record features of interest. These surveys also act as a baseline by which to monitor progress of the plan. The surveys record the features are present, .the processes by which they were created and how the wood in question has arrived at its present condition together with its relationship with the wider landscape.

From the information gained from the surveys “Key Features” are identified for each wood, for which that site is actively managed under the umbrella of sustainable woodland management. Day to day management undertaken by the Trust’s woodland managers is also informed and enhanced by the results of the surveys. Targets are set for each key feature so that the effectiveness of any management work can be measured. Part of the integrated management philosophy is the provision for visitors to many of the woods of high quality interpretative material in the form of leaflets and information boards which describe the features of interest and the wood’s history. Each wood is graded depending on its level of access use with high category sites having

display boards and leaflets whilst medium and low category may have more limited interpretation.

The value and recognition of historic features in woodland is also very important when looking at plantations on ancient woodland sites (PAWS). These are ancient woodland sites, which are in danger of loosing their native flora due to the dense shade cast by conifers. The Woodland Trust is gradually removing the conifers to allow the remnants of the native flora to move back in. Part of the initial survey work is to locate floral 'hotspots', ancient trees, standing dead wood and any cultural features, which will need protecting during periods of subsequent harvesting of the conifers. Hammonds Copse, described below is one such wood.

This paper presents the results of several years archaeological survey work of Woodland Trust property in Kent and Surrey. The work in Surrey is a three-year archaeological assessment project with the final year to be completed. The assessments provide a focused snap shot of history of wooded areas in the wider landscape.

The Method

Surveying woodland can be notoriously difficult struggling through dense undergrowth, the gloom of conifer plantations and loosing direction in large stands, making measured surveys a viable option only when an area has been clear-felled or coppiced. The advent of hand held GPS machines has certainly made life easier in accurately positioning features but sketch plotting in the field is the only way to work out complex relationships of earthworks, especially when their full extent cannot be seen all at once. Researching the history of woods through archives can also be very difficult and time-consuming.

Therefore the aim of the assessments for each property is to undertake a limited amount of archive research based on cartographic sources and a systematic field survey to identify, record and sketch plot extant archaeological and historical features in the woods.

The method of survey is a combination of Level 2 for the archive research and Level 3 for the field work following English Heritage and. National Trust standards and guidelines.[1] This method has been adopted because the Woodland Trust requires the assessment to inform management rather than be a detailed, definitive account of the history of wood. The managers need to know where important and relevant archaeological sites are to be found on the site so that measures can be taken during periods of active management to ideally avoid them or to undertake management, which minimizes any disturbance. For example such as extracting timber over a sensitive area during the summer rather than in winter when the ground conditions are wet. The sites,

1 RCHME (1999) Recording Archaeological Field Monuments. A descriptive specification. 16p. RCHME (now English Heritage). National Trust (2000) Archaeology and the Historic Environment Historic Landscape Survey Guidelines. Estates Dept Archaeology Section 8-9.

their condition and recommendations for management can be incorporated into the conservation plan.

The archive research is confined to collating all the cartographic evidence, together with a limited amount of research into original archives in order to establish ownership and/or past management. Maps checked include the various editions of the Ordnance Survey 6" and 25", Tithe and Enclosure Maps, Ordnance Surveyors Draft Drawings, 18th century county surveys and any estate maps.

The field work by comparison is more detailed with the aim of producing a 1:2,500 sketch plot of the wood showing all man-made features and cross-referencing them with the Trust's working compartment numbers. From the cartographic sources a working map showing all archived features of interest is produced. An initial walk around the wood to guage extent and feel for the archaeological resource is subsequently followed by systematic walking to produce the detailed sketch plot. The working map is then checked by walking all the rides, paths and tracks together with the perimeter and any internal boundaries. Where linear features cross route ways they are followed into the wood and where possible tied in with other recorded features. Where paths are few and undergrowth light 50m transects are traversed across compartments. However there are often some areas where recent re-growth of coppice or dense undergrowth in pine plantations makes survey work very difficult. These areas are marked on the map for future survey work and any cartographic information is annotated for future reference, when woodland management takes place.

A detailed written record of each new feature is made following county Sites and Monuments Record [SMR] format. With complex earthworks such as drainage networks only one record is made for that complex instead of itemizing each earthwork separately. Grid reference, physical description, condition, archive information are given for each feature together with recommendations for management and an assessment of its archaeological status.

The results are presented in a full colour report with accompanying maps. Each record for a feature is entered into an inventory (similar to that for a county SMR) together with a photograph if relevant. This format is used to facilitate ease of entry of the survey on to the county SMR at a later date. Copies of the report for each wood are sent to the Woodland Trust with further copies deposited with the county SMR and county record office.

The Results

The majority of the woods already surveyed for the Woodland Trust by the author are predominantly ancient semi-natural but several comprise a mosaic of ancient woodland, secondary woodland and other associated semi-natural habitats such as chalk grassland. The woods are located on very differing geology; some are in the Weald on intractable wealden clay with very poor drainage. Whilst others are on the chalk and clay-with-flints of the North Downs, or at the base of its dip slope on London Clay. The differing geology gives rise not only to differing woodland cover and floral diversity but also to the archaeology depending on past land use activities.

Table 1. is a summary of the woodlands surveyed. None contain any archaeological features scheduled under the 1979 Archaeological Areas Act. However Great Church and Marden Park are statutorily protected as a Site of Special Scientific Interest [SSSI]. Whilst the others are designated as Sites of Nature Conservation Interest [SNCIs]. This reflects their ecological importance as sites of ancient semi-natural woodland, whilst Marden Park contains pockets of nationally important chalk downland.

The range of archaeological and historical features is varied both in age and form but with linear features, such as ditches and boundary banks forming, the most frequently occurring earthwork. The reason being that in order for the woods to function within an enclosed farmed landscape they too need to, be enclosed. Also many woods occupy soils less tractable for cultivation and thus need complex drainage systems. The management of any particular wood may at sometime in history have been in the hands of several people and there would have been the need to mark internal divisions of die wood leading to the digging of boundary banks and ditches:

Table 1 . Summary list of the surveyed woods discussed in this paper

Name of Wood *Description*	**Dering Wood**[2]	**Hammonds Copse**[3]	**Great Church & Marden Park**[4]	**Great Ridings Wood**[5]
Location	Pluckley, Kent	Newdigate, Surrey	Marden, Surrey	Effingham, Surrey
Area	124.34ha (307acs)	30.4ha (74.9acs)	67ha (165.6acs)	31.93ha (78.9acs)
Geology	Wealden Clay	Wealden Clay	Chalk	London Clay
Grid Ref	TQ 890445	TQ 212440	TQ 372540 & TQ 362535	TQ 102540
Summary of Features	Complex of drains Wood banks Sawpits, 19th Rides	Parish & manor boundaries, slit trenches, wood banks, hollow way	Prehistoric fields, rifle range, chalk & flint pits, parish boundary	Wood banks, field banks, hundred parish & manor boundaries

2 Bannister, N.R.(2000) Dering Wood; Historical and Archaeological Assessment Unpublished Report. The Woodland Trust; Bannister, N.R. (2002a) The Management of Dering Wood, Smarden since the Medieval period. Archaeology and Documentary Evidence. Archaeologia Cantiana vol. CXXII, 221-236.

3 Bannister N.R (2002b) Hammonds Copse, Newdigate, Surrey, Archaeological Assessment Level 2. Unpublished Report The Woodland Trust

4 Bannister, NA. (2002c) Marden Park Woods, Woldingham, Surrey. Archaeological Assessment Unpublished Report The Woodland Trust

5 Bannister, N.R; English, J. & Stonehouse, G. (2002) Great Ridings Wood, Effingham, Surrey. Archaeological Assessment Unpublished Report The Woodland Trust.

Table 1 (continued)

Name of Wood / *Description*	**Dering Wood**[6]	**Hammonds Copse**[7]	**Great Church & Marden Park**[8]	**Great Ridings Wood**[9]
Ecological status	Ancient Semi-natural and a little secondary Oak and Hornbeam with some Sweet chestnut coppice. 19th century planning of Red Oak, Turkey Oak & Rhododendron	A SNCI. Ancient Semi-natural. Oak and Hornbeam with conifer plantations some Hazel coppice	Part of the Woldingham & Oxted SSSI. Ancient Semi-natural & Secondary Hazel coppice, Hawthorn scrub, Ash, Oak and Beech Wood	Ridings Wood itself is an SNCI. Ancient Semi-natural and Secondary Hornbeam and Oak, Sweet Chestnut

The location of the woods in relation to other landscape and territorial features also influences the type of archaeological features to be found within the respective woods. All the woods discussed in this paper are either located adjacent to a parish boundary or straddle a parish boundary. This graphically illustrates the fact that many woodlands were located towards the periphery of settled areas on land not suitable for clearing and cultivating but for growing trees. Woods do not need to be visited each day for their management as for example stock in a pasture field and therefore could be located at a greater distance from the home stead. The margins of settlement were often the last to be cleared and thus if land was not needed it remained as woodland and was enclosed for the production of timber and underwood.

Territorial Boundaries

Earthworks defining territorial boundaries tend to be larger, more substantial and with a more rounded profile than the following boundary types. All the woods surveyed had parish boundaries either running through the wood as at Dering or Great Ridings or forming part of the external enclosure boundary of the wood, as at Great Church, Marden or Hammonds. The territorial boundary at Great Ridings is not only a parish boundary dividing the parishes of Effingham and East Horsley, but also a manor boundary dividing manors of the same names. In addition it is also a hundred boundary between that of Woking and Copthorne. The earthwork comprised a large bank, in some places symmetrical in others retaining with a corresponding ditch, now much silted up (Figure 1). A few ancient trees were located on top of the bank. Where the earthwork ran through the wood it also bounded an ancient drove way linking common land in the north to sheep pastures on the North Downs to the south. The manor and parish

6 Bannister, N.R.(2000) Dering Wood; Historical and Archaeological Assessment Unpublished Report. The Woodland Trust; Bannister, N.R. (2002a) The Management of Dering Wood, Smarden since the Medieval period. Archaeology and Documentary Evidence. Archaeologia Cantiana vol. CXXII, 221-236.

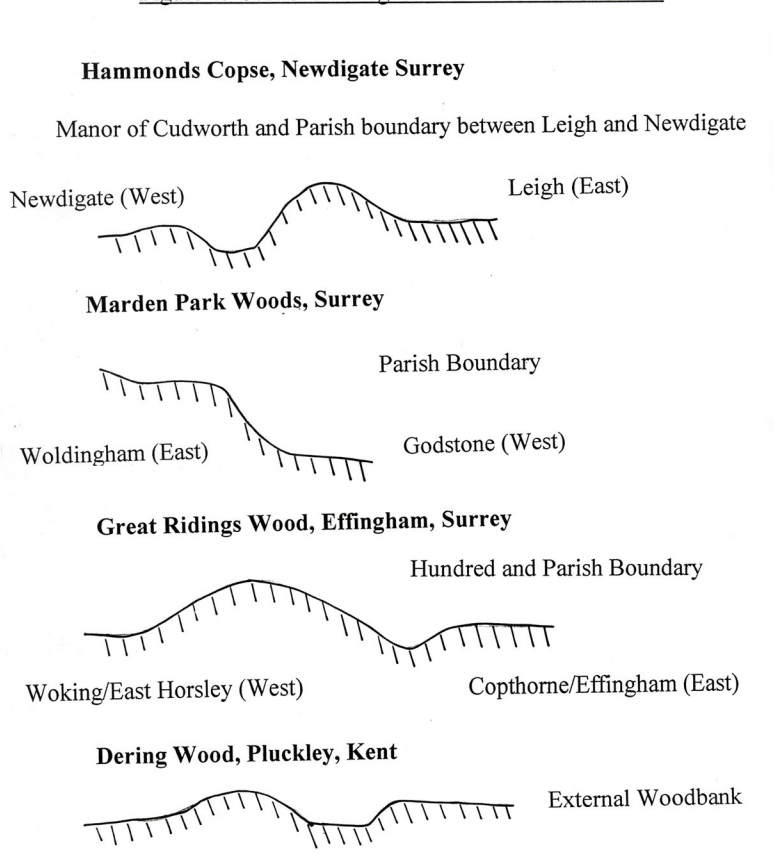
7 Bannister N.R (2002b) Hammonds Copse, Newdigate, Surrey, Archaeological Assessment Level 2. Unpublished Report The Woodland Trust

8 Bannister, NA. (2002c) Marden Park Woods, Woldingham, Surrey. Archaeological Assessment Unpublished Report The Woodland Trust

9 Bannister, N.R; English, J. & Stonehouse, G. (2002) Great Ridings Wood, Effingham, Surrey. Archaeological Assessment Unpublished Report The Woodland Trust.

boundary at Hammonds Copse in the Weald is also a large well-defined earthwork topped by boundary marker trees of stubbed hornbeam and yew. The character of this bank is more like a wood bank with the profile tending towards a more asymmetrical shape. The previous two woods were on clay on fairly level ground. In contrast the parish and manor boundary bank at Great Church, Marden on the North Downs comprises a large lynchet with traces of a silted ditch on the up-slope side. Running at right angles into and beneath this lynchet are shallow banks (see below; Figure 3).

Figure 1. Sections through some territorial boundaries



Dating these boundaries is very difficult from both field and archive evidence. In the case of Great Ridings Wood, Effingham formed part of a land grant in a charter of AD 727 to Chertsey Abbey[10] and East Horsley the same in 1036 to Christchurch Priory[11], suggesting that both were settled areas. Perhaps there was a need for such a large earthwork because two powerful religious landowners were neighbours. Effingham was still with Chertsey in the 11th century. Within Effingham (le leigh) was the smaller 'lost' manor of Dritham (alias Byfleet cum membris) recorded in Domesday as was Effingham and East Horlsey[12]. The southern part of the droveway where it enters Riding Wood is

10 Sawyer, P.H. (1968) Anglo-Saxon Charters. An annotated list and bibliography. London No. 1181.
11 Sawyer ibid No. 1222
12 Morris, J. ed (1975) Domesday of Surrey. Phillimore Chichester

called Dritham Lane. Thus it is suggested that the large earthwork boundary running north to south through the complex of Great Ridings Wood could be over 1000 years old. This line of reasoning may also follow for Great Church Wood in Marden which lies in the manor and parish of Woldingham recorded in 1086[13]. It lies adjacent to the manor of Walkhampstead alias Godstone alias Lagham and Marden recorded in a will of AD 968[14]. The interesting feature about this earthwork is that some shallow banks appear to run at right angles beneath it, suggesting that the main parish boundary lynchet post-dates these others.

Hammonds Copse is bounded by a substantial bank and ditch on its eastern side, the parish boundary between Newdigate and Leigh and also the Manor boundary between Cudford and Leigh. The manor of Cudford is first recorded .in the 13th century suggesting a post-conquest origin.[15] Many wealden settlements have origins much earlier when they formed part of the territories of the hownland or upland manors to the north, but go unrecorded as they are not differentiated from their parent manors. When Walter de Poyle died seized of the Manor of Cudford in 1298-9 he held the demesne and capital messuage from the Abbey at Chertsey whilst the lands were held from various overlords who held the adjacent manors, suggesting that Cudford was created out of grants from these manors.[16]

All the Wealden woods were bounded by distinct large asymmetrical wood banks with corresponding ditches, mostly silted, on the on-woodland side of the bank. The banks were often topped with outgrown stubbed hornbeam as at Dering or beech as at Hammonds and Great Ridings.

Internal Boundaries

Each of the woods discussed here consisted of not just one wood enclosed by a single wood bank but a complex of woods, each bounded by its own wood bank. Hammonds is the most complete wood where its boundaries have not altered in over 200 years. But it too has internal wood banks probably dividing up individual coppice areas. The earthworks defining these boundaries are less pronounced than external wood banks. Dering Wood only acquired this appellation in the 19th century when Sir Edward Dering of Surrenden Park near Pluckley had purchased the majority of the woods in the complex and laid out his network of rides and carriage ways. Prior to this Dering Wood was known by the individual names of the woods, such as Fagotter's, Burnt, Birch, Harmons, Tufton etc.[17] Each of these woods has a clearly defined wood bank often topped with outgrown stubbed hornbeam pollards and accompanied by a silted ditch.

An interesting feature at Dering is the succession of wood banks bounding the former early medieval swine pasture drove way linking Pluckley and Srnarden, and running

13 Morris ibid
14 Sawyer ibid No. 1485
15 Surrey Feet of Fines; Gover, J.& B; Mawer, A. & Stenton, F.M. (1934) Place-names of Surrey. English Place-names Society. Vol. II Cambridge University Press
16 ibid
17 Bannister (2002a) ibid

through Dering and its neighbour Frith Wood to the north (Figure 2.) The nature of wealden clay is that it is almost impassable in winter due to the water-logged and muddy conditions underfoot, and is like concrete in the summer when the clay dries out. Thus before roads were metalled many wealden routes were very wide and braided as travellers sought drier footing along the tracks. Thus the larger medieval wood banks of Dering lie at least 10m within the wood and parallel with the road. Even in the late 18th century this stretch of road was not metalled[18]. However by the mid 19th century a hard surface had been laid and new wood banks dug to define the edge of the wood by the roadside. These are still asymmetrical in profile but are much smaller than the earlier banks.

Prehistoric and other Boundaries

Great Church Wood at Marden is located on gently sloping ground overlooking a dry valley in the dip slope of the North Downs. The. field to the east was called 'Barrowleys' and is now occupied by a golf-course. In the 17dh century it formed part of the manor of Woldingham owned by Byne Family who resided in Northumberland. A "Book of Evidence" produced by a subsequent owner, William Bryant an attorney at law in Reigate when in litigation with the former steward of the manor over Tithes, records Barrowleys Field. This is on a sketch of a map on the flyleaf copied from an estate map by Richard Brown[19]. The map also records at least three barrows in this field with several more to the south on the crest of the Downs escarpment. Within the locality of Great Church Wood numerous Neolithic and Bronze Age flints have been found. This evidence indicates a strong prehistoric land use presence in the locality. Within the wood itself are low rounded banks made of surface gathered flints and topped with soil (Figure 3, & 4). The banks generally lie at right angles to the parish boundary and wood bank, and appear to run beneath them. The boundaries enclose areas of approximately 1 acre and have the appearance of the remains of a prehistoric field system. The author has also found surface-gathered flint boundaries in ancient woodland on other parts of the North Downs dip slope further east in Kent at Wormshill, near Sittingbourne[20].

[18] Hasted, E. (1797-1801) The History and Topographical, Survey of the County of Kent. Vol VII, 455-63.

19 SHC 856/1

20 Bannister, N.R. (1994) Historic Landscape Survey of Womashill Estate, Sittingbourne, Kent. On behalf of the late
Michael Nightingale of Crornarty. Unpublished Report for English Heritage.

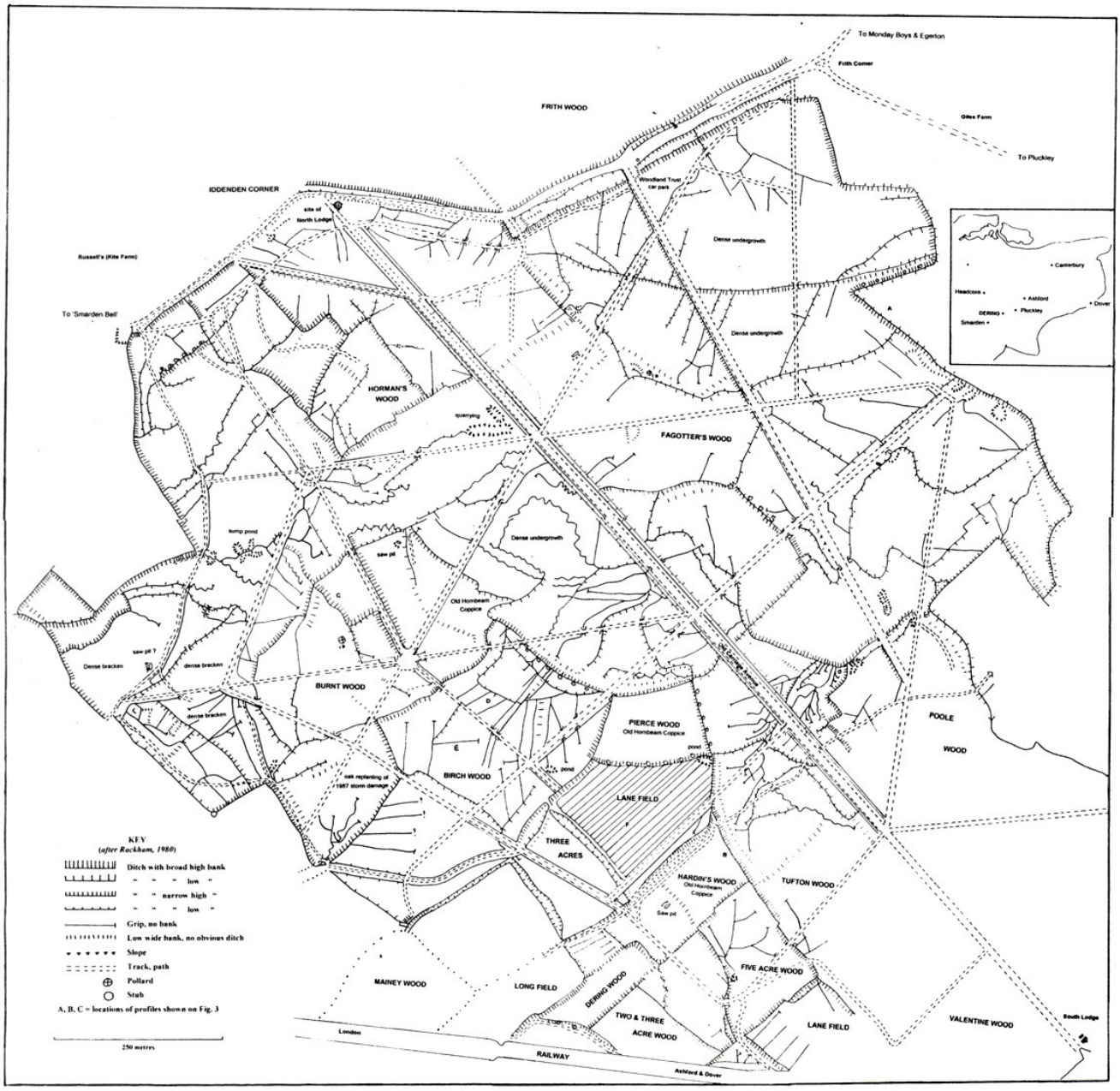


Figure 2. Dering Wood Pluckley, Kent

Sketch Plot of Features

First published in Archaeologia Cantiana (2002) Vol. CXXII. p224-5.
Reproduced with permission of the Kent Archaeological Society.

* Rackham O (1980) Ancient Woodland. Edward Arnold

Figure 3. Some examples of sections through internal linear boundaries

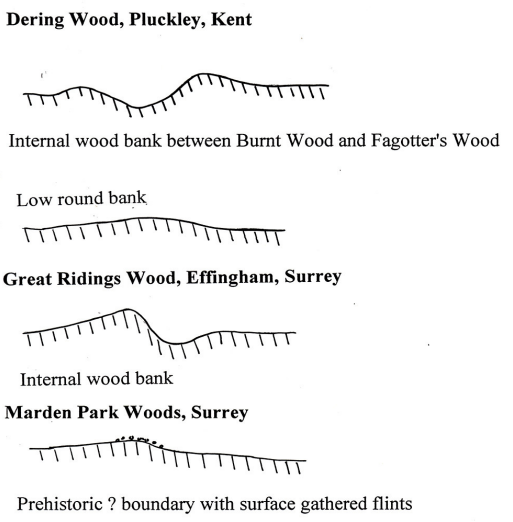
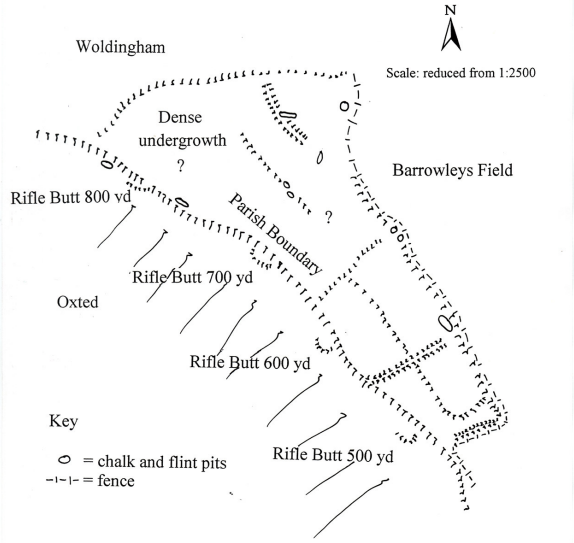


Figure 4. Great Church Wood with remains of possible prehistoric field system



Chalkland woods are not the only ones to preserve former enclosure systems. Similar low rounded earthern banks (without flints) were recorded in Dering Wood deep in the heart of the low weald in Kent[21]. These banks appeared to have no relationship with the wood banks and in some instances were truncated by the wood banks and by drainage ditches. The origin of this network of shallow banks has yet to be established.

Drainage networks and Ponds

Complex drainage systems are a feature of woods on clay. Some systems simply link up with existing small streams and rills, whilst others are well-planned and symmetrically laid out ditches feeding into the main natural drainage network of the wood. No such systems were found in Marden Park Woods which is to be expected of a wood on chalk. Hammonds and Great Ridings had small ad hoc drainage ditches associated with the internal boundaries. However it is Dering which preserves the most complex network of ditches, grips, streams and ponds (Figure 2) of any of the woods recorded so far by the author. The name of Burnt Wood derives from Bourne meaning wet wood or wood with many streams, not from having been burnt in the past[22]. It is probable that Sir Edward Derin laid out many of the regular drainage networks when he brought many smaller woods under one woodland holding. They appear to over-ride earlier ditches, linking with the ditches draining the rides and then discharging into natural streams flowing out of the wood. However some of the grips instead of being straight are sinuous, curving around trees suggesting that they were dug in an attempt to improve drainage once the

21 Bannister (2002a) ibid

22 Wallenberg, K.P. (1931) Kentish Place-names, Uppsala, Wallenberg, JX (1934) The place-names of Kent, Uppsala.

oak plantations had been planted. Within one small area is a distinct drainage network of parallel ditches feeding into boundary ditches and then into a pond in a comer before it discharges into a main ditch which runs northeast through the wood. This area was an arable field in 1839, a former assart bounded by narrow woodland strips, sometimes called 'shaws'[23]. After Dering's acquisition in the 1860s he returned this field to an oak and ash plantation, and prior to doing so dug parallel ditches 8 metres apart in an attempt to improve the drainage. In the comer of the field was a former marl pit (where calcareous clay was dug out to 'improve' the soils) and it is this which became a sump pond collecting water prior to discharge into the main woodland drainage network.

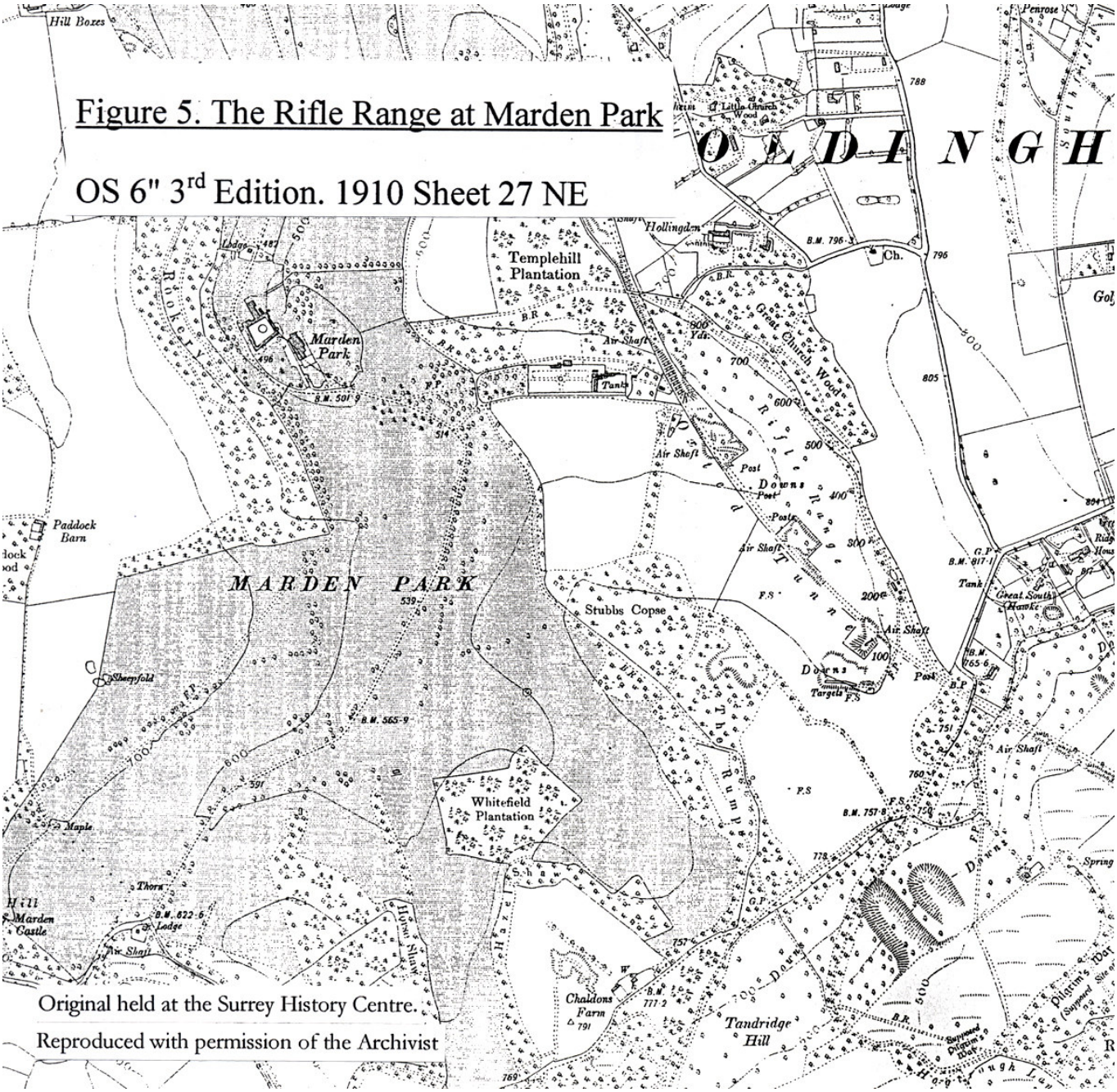
Sump ponds occur elsewhere in Dering Wood. One good example lies in Burnt Wood where the drainage ditch runs through a four-armed pond before discharging into the main ditch running into the adjacent field. The sump ponds tend to be located close to the edge of the wood in order to prevent water flooding out into the adjacent cultivated fields.

Military Remains

Many woods in the South East and especially Surrey were used for military training either by allied troops or by the Home Guard. Military remains can often be difficult to identify and easily confused with features of woodland archaeology. For example, fox holes or small slit trenches can be confused with saw pits and vice versa.

At Hammonds Copse there is both a saw pit and two 'fox holes'. The latter are slightly larger than a saw pit being 4m in length with the spoil mound reaching nearly 1m in height. The 'fox holes' are more sharply defined than, the saw pit and although located close to route ways often command wide reaching views across the landscape when the coppice is newly cut. Adjacent in Parkgate Wood was a Second World War ammunitions depot.

23 CKS IR 30/17/332 1839-41 Smarden Tithe Map



In contrast the dry valley running through Marden Park gave an ideal terrain for the construction of a rifle range (Figure 5.). It was long with in the 19th century clear sight lines. Today much of the valley is now overgrown with hawthorn scrub. In 1888 the 1st Volunteer Battalion of the Queen's Royal West Surrey Regiment leased part of Marten Park for the construction of a rifle range[24]. Seven butts were constructed at 100-yard intervals commencing at 200 yards from the targets located at the head of the valley. The 200-yard position was where all the ammunition huts and other facilities were located in 1889[25]. By 1912, the shooting positions had been enlarged with more

24 SHC 608/15/21;61/16/141
25 OS 25" 2nd Edition Sheet 27:7,8 (1A9)

substantial earthworks and small ammunition huts added[26]. The targets had also been enlarged to accommodate greater firepower from rifles prior to the First World War. The ranges were still in use in the 1930s -and probably during the Second World War as well. All that remains on the ground today are remnants of the brickwork foundations of the huts at the 200-yard position and the earthworks of the butts themselves; levelled areas with buttressing banks. The earthworks for the targets lie partially hidden in thorn scrub but are gradually being cleared as part of a downland recreation project.

Saw pits

Saw pits were dug in woods where it was necessary to process the timber on site rather than remove whole trunks to be processed elsewhere. Where saw pits occur they are usually single or a wood may have up to five or six. However in the Chilterns, Piggots Wood near High Wycombe has over 30 which averages one saw pit to the acre, indicating that the processing of the timber evidently took place on the site. To find saw pits in wealden woods is quite rare due to the heavy nature of the soil and the water-logged conditions in winter and which sometimes extended well into the Summer. Generally, timber tended to be hauled out as trunks to be processed in permanent timber yards on nearby estates or villages.

Identifying a saw pit positively can be difficult as they are easily confused with slit trenches, eroded tree root plates and other shallow diggings. Generally, saw pits are located on gently sloping ground and close to a main access route out of the wood. This route may now be out of use so a knowledge of how the wood was formerly managed together with dates of the creation of new rides is often a key to identification. The spoil from the pit was generally thrown out on the down slope side in order to create a level platform on which to build the support frame on which, the tree trunk was fixed. The pit at Hammonds lies close to the entrance to the wood on sloping ground but deep in undergrowth. It is about 3m long, elliptical in shape and 0.5m deep. The mound is reduced in height and fairly dispersed.

Surprisingly for such a wet wood, two saw pits were recorded in Dering Wood in the Kentish Weald. One lay within a clearly bounded coppice wood called Harmons whilst the other lay in Burnt Wood close to two overgrown extraction tracks. Both were waterlogged and were probably used in the summer to cut planks for a specific job. When any saw pit was dug and for how long they were in use is difficult to ascertain without excavation, and even then there may not be any datable artefacts preserved within stratified deposits.

Integration with other woodland activities

The archaeological assessments have highlighted the historical importance of many features in the Woodland Trust properties. For example, at Great Church Wood the confirmation of the probable prehistoric origins of an extant field system has ensured that no vehicles will be used in the wood. Essentially, it is a hazel coppice and will be cut in rotation by volunteers when the ground conditions are firm. The rifle butts lost in undergrowth are gradually being cleared and the targets revealed by cutting back the

26 OS 25" 3rd Edition Sheet 27:7,8 (1912)

thorn growth. The subsequent large glades are grazed by sheep corralled using a temporary electric fence as part of the Downlands Countryside Management Project and complements the grazing of chalk grassland on other parts of this site.

In Hammonds Copse, active management of several conifer plantations is already talking place with the extraction routes and lines of thinning already established. Therefore where they cut across linear features, thick layers of brash will be laid across and the timber removed when the ground conditions are dry in- order to minimise any damage to the earthworks.

A similar procedure takes place at Dering Wood, where it is virtually impossible to avoid drainage ditches, routes of minimal damage are selected. Coppicing and extraction takes place in the summer as in the winter the wood is almost inaccessible to forwarders or any other tracked vehicles. In fact in woods on weald clay the passage of too many feet can also cause serious damage to earthworks.

In all of the woods interpretation is important with the development and erection of low key high quality information boards and small self-guided leaflets.

Conclusion

What has been highlighted by the archaeological assessments discussed is the high degree of preservation of parish, manor and other territorial boundaries. Many of these earthworks are contemporary with the earliest phase of the local parish church and in some cases are likely to pre-date it. And yet they are afforded little if no protection. Few if any parish boundaries are scheduled. Those earthworks located in Woodland Trust woods can be sure of a secure future but where they traverse woods in private ownership the situation may be very different.

Dating many features in woods can be very difficult. There have been very few if any excavations of archaeological features relating to the management of woodland in the South East. Thus it is not possible to ascertain dates of any by identifying stratified deposits. Nor can any conclusions be drawn on the construction and use of features such as saw pits and charcoal hearths as was done at Lower Wood in Wetmoor in Gloucestershire[27]. In addition few such features are recorded in the archives.

Each of the archaeological assessments undertaken for the woods revealed a wealth of features pertaining to the management and past land use of that wood. Some elements were readily identified but others such as some boundaries, depressions could only be recorded and described; their function and origin to be discovered in the future. However now recorded as features they can be integrated with the management of the wood and where possible avoided by machinery and by the careful routing of extraction tracks. In addition presenting them to the public through interpretation enhances people's experience when visiting the woods.

27 Hendry, G.AF, Bannister, N.R. & Toms, J. (1984) The earthworks of an ancient woodland, Bristol and Avon
Archaeology, voL3, 47-53

Acknowledgements
The views and opinions expressed in this paper are the author's own and do not necessarily reflect those of the Woodland Trust. The author would like to express her appreciation for the opportunity to survey these woods on behalf of the Woodland Trust. Acknowledgement is given to the following Woodland Trust staff for their continued support and valued comments during the surveys; Gordon Pfetscher and Clive Steward Woodland Managers and John Tucker South East Operations Manager who also kindly commented on the draft of this paper. Finally a thank you is extended to Angus Foad who has also walked many of the wood providing companionship and a willing hand to hold the tape!

Questions

If vehicles need to cross earthworks in order to undertake woodland management operations, do you recommend that wheeled or tracked vehicles are used?
I would generally recommend that tracked vehicles (or horses) are used, and that management operations are undertaken in the summer months when the ground is dry.

If you recommend that woodland management operations are undertaken in the summer months, does this cause conflict with groups with an interest in the protection of nesting birds?
Any potential conflict of management interest would need to be discussed with all interested parties and an appropriate compromise worked out.

The woodland managers in southeast, where you have undertaken your surveys appear to have a very sympathetic attitude to the management of the archaeology in the woods. Would you say that this was unique to this area?
Not really, this attitude is found throughout the country.