The Reconstruction of Late Medieval Woodland in the Whittlewood Area

Introduction

The Whittlewood study area is made up of twelve parishes straddling the Northamptonshire and Buckinghamshire county boundary. To the south-east is the town of Old Stratford, to the south Buckingham, to the north-west Brackley and to the north Towcester. The modern rural landscape is comprised of four principal elements: arable fields, pasture, woodland blocks, and settlement. This paper deals with only one of these elements, woodland. However, the symbiotic relationship between all four landuses forces any study of a single landscape component to take account of the other three. If, for example, one wished to establish the maximum extent of the medieval open field systems, one approach might be to identify areas of woodland and meadow, that is, areas that lay outside the open fields themselves, since these would define by default where arable land could or could not have been located. And, as we shall hope to show here, the approach works in reverse. Define the open fields and you begin to define the woodland.

Today, the landscape of the study area is divided in roughly equal parts between woodland, arable fields, and pasture. These landuses have a clear spatial distribution. Pasture is predominant along the flood plain of the Great Ouse to the south and around the principal settlement centres. Woodland is largely restricted to the heavy glacial boulder clays on the Great Ouse/Tove watershed in the northern half of the project area, whilst it is in the intermediate zone where the majority of arable fields are now located. In broadly defining these zones, it must be recognised that these landuses are non-exclusive. Pockets of arable production or pasture are found in the northern wooded zone, isolated stands of woodland are found in the intermediate arable zone alongside fields laid out to pasture and so forth. The system of mixed farming is not a modern phenomenon, but the current mosaic of ploughed fields, pasture and woodland has been created in large part as a result of modern land management. Pasture for grazing, for example, is often located close to the farms, since livestock require almost daily attention, while arable fields and woodland, less intensive land uses, are located at the peripheries of the farm. This arrangement shows scant regard for the quality of soils. Lighter soils which provide potentially better cereal and leguminous crop growing conditions might be laid out to pasture if located close to the farm, whilst heavier soils might be under the plough if located away from the farm centre.

There would appear to be little relationship, therefore, between the modern landscape and the medieval landscape. Indeed large parts of the study area have been substantially altered by non-agricultural activities, for instance eighteenth-century parkland creation, notably at Stowe and the on Wakefield Lodge Estate, both 'Capability' Brown enterprises, and by twentieth-century developments such as the aerodrome at Silverstone, open cast gravel extraction at Passenham, and the golf course at Whittlebury. Of the agricultural land, any surviving medieval elements are now largely masked below the hedges laid out by eighteenth- and nineteenth-century surveyors following the Parliamentary Enclosure Acts. And even where medieval evidence does survive, ridge and furrow being the most notable, this is a product of landuse change, in this case arable to pasture, and not landuse continuity.

Methodology

Laying to one side questions of settlement pattern, of the four landscape elements, perhaps the most conservative is woodland. As this paper will show, wooded areas which survive today can generally be shown to have been woodland in the medieval period. Understanding continuity and change in woodland cover, therefore, provides the key to a more general understanding of the whole landscape. Thus, in attempting to reconstruct medieval woodland, the archaeological research is two-fold: to demonstrate that surviving woodland has medieval origins, and to identify areas of former woodland which have now been lost to arable fields or pasture. In order to achieve these ends the whole archaeological repertoire must be brought to bear and it is perhaps worth initially identifying what sources of information are available, what techniques can be used, and what they may or may not tell us about medieval woodland. Only then can the validity of the reconstruction be measured.

• Cartographic Evidence

Early maps perhaps provide the best evidence for the extent of former woodland. The 1608 Whittlewood map, covering the Northamptonshire parishes of Silverstone, Whittlebury, Potterspury, Passenham and Deanshanger, shows extensive areas of woodland which have now been lost. This source can be supplemented by a 1611 estate map for Lillingstone Dayrell, a 1717 estate map covering Wicken parish and a survey of Potterspury parish drawn up around 1725. Together they cover approximately two-thirds of the study area. In addition to depicting woodland itself, these maps also show areas of open field, assart, early enclosure, and former woodland rides or plains. Whilst strongly suggesting an earlier landscape dominated by woodland, they remain a record of landscape use later than that which is being reconstructed here. Essentially, before they can been used with confidence, the features which these maps depict must be shown, via other archaeological means, to represent features that were present within the medieval period.

Aerial Photographs

One of these other methods is the use of aerial photography. Areas of early woodland rarely leave a positive imprint on the ground which can be identified from photographs. But judicious use of negative evidence can help to suggest where these areas of former woodland might once have been found. The absence of ridge and furrow over large areas might suggest that these once lay outside the medieval open field system. Absence of evidence, however, does not equate to evidence of absence. Modern ploughing might obliterate these ridge and furrow and it should be noted that this would be equally absent in areas of medieval meadow. Furthermore, in trying to understand former woodland cover, it must be appreciated that woodland can expand as well as contract. Greater tree cover can obscure other evidence for other former landuses from aerial reconnaissance, thus without ground level observation, few assumptions can be made from study of photographs alone. But the combination of early maps and aerial photographs may certainly suggest areas for targeted fieldwork, for example fieldwalking.

Fieldwalking

Using a quantitative analysis of surface finds recovered from ploughed fields, early landuses can be suggested. Where low-density medieval pottery scatters are identified, these can generally be demonstrated to result from manure scatters, spread on former arable land. High-density scatters are likely to be encountered only on or immediately adjacent to habitation sites, while fields which produce no medieval pottery can be considered to have former lain below either meadow or woodland. Again other sources of information must be added before the division between meadow and woodland can be made with certainty. Nevertheless, this method has the clear potential to identify non-arable sites, and used in tandem with early cartographic evidence and aerial photographs, it can prove a strong indicator for medieval woodland.

Earthwork Survey

Ground observation of earthworks of woodland or non-woodland origin provides conclusive evidence for former landuse. Medieval coppice banks and ditches associated with the management of woodland survive within the modern landscape, just as ridge and furrow survives from the open fields. By surveying the woodland features on the ground and comparing them with the coppice systems depicted on the seventeenth-century maps, the accuracy of these sources can not only be demonstrated, but it can be shown that they often depict a woodland scenario that predates the drawing of these maps by some centuries. Conversely, the identification of ridge and furrow, for example, below modern woodland can be used as evidence for post-medieval woodland regeneration or plantation.

• Sites and Monuments Record

Finally, the listing of single finds, pottery scatters, and settlement sites of all periods, recorded on the Sites and Monuments Record, provides good evidence for the changing nature and

extent of woodland over time. Notably, the presence of significant finds of late prehistoric and Roman date, lying below areas of former woodland which have now been cleared might suggest that woodland was less extensive at this date. And equally the absence of early medieval finds from these areas may indicate a date by which woodland had regenerated.

Reconstruction of Late Medieval Woodland in the Whittlewood Project Area

Having identified the resources available, we now turn to their application. What is attempted here is the reconstruction of the extent late medieval woodland within the project area. This is not restricted to Whittlewood Forest, but seeks to identify areas of woodland outside the forest bounds. Nor is an attempt made here to assess the nature of this woodland – was it true woodland or woodland pasture for instance? The woodland described is that which had survived the creation of the open field systems and periods of assarting. It represents, therefore, the most restricted coverage of woodland during the medieval period, at the point when woodland resource management had become fully developed. The reconstruction as presented here, largely depends on demonstrating that later cartographic evidence depicts the medieval state of woodland, and that it is an accurate depiction.

Over the period of eleven days, all surviving woodland on the Wakefield Lodge Estate, lying in the north-eastern quarter of the study area, was systematically walked and all earthworks recorded. The survey extended over seventeen named copses. By far the most commonly encountered features were low, wide, banks with external ditches which appear to delimit blocks of woodland. These banks were between 3-4m wide and rarely exceed 0.75m in height and formed a shallow inverted 'U'-shaped profile. No original breaks within these banks were identified. In only one instance, however, did the bank and ditch survive intact – Bear's Copse. In all other instances these blocks of woodland had been truncated, either by the creation of open parkland, or by linear vistas running from the Lodge itself, the product of Capability Brown's redesigned landscape. These eighteenth-century features are also defined by banks and ditches, but they are typologically distinct from others identified during the survey, following straight courses, being between 1-2m in width, and often with a acute inverted 'V'-shaped profile. The vistas and associated earthworks paid no regard to the other earthworks, often cutting straight through the heart of the woodland blocks, clearly demonstrating that these were chronologically earlier than the parkland redesign.

The area of the Wakefield Lodge Estate is incorporated within the woodland surveyed and mapped in 1608. The line of all the substantial banks identified during the survey are shown in their full extent on this map and demonstrate that the coppice system, for which they remain the only evidence, was already established by that date. Their scale, irregular course, and distinctive profile all point to a medieval construction date. Comparative study of these banks and ditches with documented examples from other parts of the country, and with the banks and ditches in neighbouring Salcey Forest, the subject of a similar survey undertaken by David Hall, who identified them as of medieval date, strengthens the supposition that the 1608 Whittlewood map not only depicts the seventeenth-century state of the woodland, but a woodland management system which has its origins in the medieval period. Where historical evidence can be brought to bear, for instance as Mark has shown for Wakefield Lawn, it is clear that some medieval woodland had already been removed by the time of the seventeenth-century survey so this survey remains far from complete.

The major coppices were separated by broad rides or plains between 30-40m in width. Again it can be shown that the earliest rides follow irregular courses while the post-medieval rides have been driven straight through the woodland. These rides are also identifiable on the 1610 map and many must in origin have been the stallages, or routes by which inhabitants of those settlements with common rights within the Forest, drove their animals to pasture. Philip Riden, for example, has identified the stallages from Yardley Gobion and Potterspury with parallel rides running west of Watling Street. Similar routes can be seen leading from settlements such as Paulerspury, Puxley, Deanshanger, Wicken and Leckhampstead. It would appear that many of these routeways coincide along some of their course with parish boundaries. The question arises whether the parish boundaries were dictated by existing routeways or whether the routeways followed established boundaries. Unravelling this issue

will help to understand not only the spatial relationship between territorial divisions of the project area, but also when these boundaries were created.

Only one area of current woodland on the estate is not shown on the 1608 map. This is Oakley Spinney, abutting Watling Street north-west of Potterspury. This is shown as an area of regular rectangular enclosures, already described by Mark, which appear to have formed part of the Yardley Gobion field system. Our survey identified ridge and furrow under the woodland which corroborates the cartographic observation, and again attests to the accuracy of the seventeenth-century survey.

The importance of this earthwork survey then, lies not only in demonstrating the accuracy of the 1608 map but also in proving the antiquity of the features which it presents. In places where earthworks have disappeared, but whose line is suggested by the 1608 map, it is further possible to identify their position on the first edition OS map and thus accurately locate these on modern maps. Since this is the case for the central surveyed area, it might be safely assumed that it is also the case for the western and eastern sections of the 1608 map. Thus the reconstruction of medieval woodland for that part of the project area covered by the Whittlewood map – the parishes of Silverstone, Whittlebury, Potterspury, Passenham and Deanshanger – can be confidently undertaken.

Further corroboration of the medieval origins of the Whittlewood map coppices comes from fieldwalking evidence. Fifteen fields across the project area have been systematically line walked. Only two of these fields, close to Forest Farm in Deanshanger parish, lie in areas of woodland (Long Copse and New Ditch Quarter) shown on the 1608 map. These are the only two fields which have so far failed to produce any medieval pottery, indicative, as we identified earlier, of woodland usage at this date.

There are two anomalies on the 1608 map which need explanation. The first is that only one small area east of Watling Street is surveyed. This is Coule Grove, lying between Furtho and Old Stratford. Other evidence, for example, surviving ridge and furrow around Furtho, and a 1725 survey of Potterspury parish, however, suggest that this was in fact the only wooded section of the parish to lie east of the Roman road. Certainly the crenellated parish boundary, clearly following the medieval furlongs between Yardley Gobion and Potterspury, townships which shared a common field system, also suggest that this area was free of woodland by the late medieval period. The other anomaly is a large area immediately west of Watling Street next to Potterspury, which was not included in the survey and left blank on the map. This piece is named Browne's Wood Green, a name which might indicate woodland origins. This area forms a detached part of Cosgrove parish, the probable reason for its omission from the survey. Cosgrove village is situated on the Great Ouse, north-east of Old Stratford. Like other valley-bottom settlements, for instance Passenham, the immediate parish would have largely been wood free in the medieval period. A detached wooded portion of the parish would have resolved this resource shortage, just as Passenham, with Deanshanger, held woodland in the northern part of the parish. Thus for the purposes of the reconstruction, Browne's Wood Green is considered to have been wooded in the medieval period. Fieldwalking has been undertaken in the southern part of this area. Conducted by Birkbeck College, as part of its Towcester Hinterland Project, the fields walked failed to produce artefacts of any period. The absence of medieval material mirrors our experience at Forest Farm, Deanshanger, and points towards, as we have already suggested, its woodland state in the Middle Ages.

The field systems of Passenham, Deanshanger, Whittlebury and Silverstone area all shown on the 1608 Whittlewood map, and can safely be assumed to be tree free by the late medieval period. Here the distinction between woodland, what it being considered here, and forest, areas falling under forest law but not necessarily wooded, is seen most clearly. Various assarts are also shown, notably to the south of Silverstone parish, where many woodless parcels carry sart names on the 1608 map, and around Puxley in Deanshanger parish where early enclosed fields appear to have been carved from former woodland.

The 1608 map is complemented by two further estate maps for the neighbouring parishes of Wicken and Lillingstone Dayrell. In fact some of the northern woods of Wicken parish are

shown on the Whittlewood map, however, the 1717 map of the parish shows a greater extent of woodland. These woodlands have also been surveyed by David Hall, who identified medieval coppice banks and ditches demarking the various blocks of woodland. Further to the south and west of the parish there are isolated pockets of woodland, notably Park Copse and woodland around Elm Green. Ridge and furrow was found by the Royal Commission below Park Copse, so it must be assumed that this woodland is a post-medieval creation. Those woods around Elm Green, including Oaken Copse, Rabbit Wood, Bedlam Copse and Jack's Copse, may also be late additions. They lie within a series of early enclosed fields which may originally have been assarted out of woodland, cleared, abandoned and then left for the woodland to regenerate. Certainly Elm Green remained outside the complex Wicken field system, but the date of assarting, if this was proved, or the date of abandonment, is not yet known and requires further archaeological investigation. For this reason, they have been left out of our reconstruction. The situation in Lillingstone Davrell is less complicated. The 1611 map shows extensive areas of coppiced woodland along the whole of the northern periphery of the parish, extending down the western side of the parish to Tilehouse Wood. Only the area around Chapel Green and a central portion containing ridge and furrow evidence, appear to have been clear of woodland.

The remaining four parishes within the project area – Lillingstone Lovell, Leckhampstead, Akeley and Stowe – have no extensive pre-nineteenth-century cartographic sources to help in their reconstruction. Here the reconstruction relies largely on the identification of their field systems, offering an opportunity to identify areas which potentially remained outside arable cultivation. Akeley has good earthwork evidence in the east of the parish, in the form of ridge and furrow, to suggest that this half of the parish was in cultivation during the medieval period. To the west, however, such evidence is more scant. Indeed it is totally absent in the extreme western part of the parish. Clues to former landuse might be gained from investigation of the modern field systems and road networks. To the east the fields are irregular in shape and the roads follow angular courses to their destinations. Coupled with the ridge and furrow evidence this is indicative of hedge lines being laid out with some consideration of the former furlong patterns, whilst the roads too appear to respect the medieval field systems. By contrast, to the west the fields are regular and the road network laid out along on a linear north-west south-east alignment. These fields, the product of Parliamentary enclosure, do not appear to have been encumbered by earlier systems. Indeed, their regularity might suggest that the eighteenth and nineteenth century surveyors were working on a blank canvas. Disafforestation would provide the freedom to develop this logical arrangement. Furthermore, Stockholt Farm, in the north-west part of the parish was assarted from woodland in the thirteenth century, again indicative of landscape which former contained far more woodland than today.

Lillingstone Lovell's field systems were extensive and evidence for their location survives well. With the exception of the north-eastern part of the parish, it would appear that the whole of the parish had been brought into the open field system by the late medieval period. The area immediately north-west of Leckhampstead Wood is, therefore, the only area which might have contained woodland at this period and this may have been shared with Lillingstone Dayrell since a detached part of this parish lay in this area. Located next to known medieval coppices such as Briers Sale (now Briary Wood) and Wicken Wood, a continuation of woodland in this part of the parish would have been logical.

Leckhampstead also appears to have held its woodland resources only in the northern part of the parish. Certainly the whole of its territory to the south of the main settlement foci was all incorporated into its open fields. Leckhampstead Wood survives west of a medieval plain. To the east of this ride, no ridge and furrow is present and sinuous field boundaries suggests that the woodland former abutted the Wicken parish boundary, doubling the current area covered by woodland.

The north-south division between arable and woodland is similarly repeated in Stowe. The parish was divided into the four townships of Stowe, Dadford, Boycott, and Lamport, all located in the southern part of the parish. Whilst much of the medieval landscape has been erased by the creation of parkland, there is good surviving field system evidence in the south of the parish. Woodland survives in the northern part of the parish, and it is probable that this

arrangement mimics its medieval antecedent. Woodland may also have been preserved in the western salient of the parish east of Boycott Manor Farm where again ridge and furrow evidence is lacking and the survival of blocks of woodland immediately west of the parish boundary may be remnants of the greater extent of the medieval coppice system and may form a part of the greater Whittlewood described in the late twelfth century extending to Bernwood.

This reconstruction of the woodscape thus demonstrates that most areas outside the open field systems remained dominated by tree cover into the late medieval period. Even where woodland had been cleared, for example the assarts of Puxley, Silverstone and Wicken, or the deer lawns of Wakefield and Shrob, the woodland origins of these areas are clearly traceable. It can be estaimated that nearly one half of the project area was, or had been woodland, at some point during the post-conquest period.

Earlier Woodland Extents

The reconstruction of the late medieval landscape is the fundamental base from which attempts to reconstruct earlier medieval landscapes can be made. For earlier periods the archaeological and historical evidence is less abundant and any reconstruction relies heavily on understanding the processes of change. Clearly wholesale reorganisation of the landscape was made during the medieval period, notably the laying out of the open field system and the creation of population foci, but the late medieval landscape must owe something to the landscape which preceded it. This is nowhere seen more clearly than in the coverage of woodland, the landscape element least prone to creation or destruction.

All the available evidence points towards a reduction in the area of woodland during the Middle Ages, through the creation of open fields and assarts. It is highly unlikely that the post-conquest period saw an increase in woodland with cleared land given over or abandoned to woodland regeneration. The extensive woodland coverage of the later medieval period was inherited not created. But was this primary woodland, wildwood, or was it secondary woodland?

There is an important body of information to suggest that much of what was to become medieval Whittlewood had been cleared of trees during the Roman period. Several Roman or Romano-British sites have been discovered in areas of now cleared medieval woodland. On the Wakefield Lodge Estate alone, two important Roman buildings, possibly of villa status, have been found, the first during work to extend the lake north of the Lodge itself, and the second close to Bradlem Pond on the northern edge of the estate. Three further settlement sites, the first lying under an earlier extent of Briary Wood and Sumpton's Quarter, and the second and third lying east of Redmoor Copse, formerly within Browne's Wood Green, are known on the estate through metal detecting finds. All three have also produce late Iron Age artefacts. Elsewhere within the project area, recent work on the A43 Silverstone bypass has revealed a further six Roman-British settlement sites, whilst to the north of Stowe, situated close to the Alcester-Towcester Roman road, Roman pottery kilns have been found during tree planting. Indeed Roman pottery is ubiquitous throughout the project area. All fields that have been walked have, without exception, produced Roman pottery and other artefacts. Three new Romano-British farmstead sites have been identified through fieldwalking. The evidence suggests three important facts: that the Roman and native rural population was large and settlement, whilst widely dispersed was densely concentrated; that there was a complex social hierarchy, with villas and farmsteads together occupying the land; and that the area of land under Romano-British cultivation was extensive, never to be paralleled by the medieval open fields.

This chronological development is not unique and has many good local and regional parallels. Bellamy's work in Geddington parish within Rockingham Forest has shown extensive late Iron Age and Romano-British settlement on the heavy boulder clays which was later to be colonised by the royal forest. In Hanbury, Chris Dyer has likewise shown extensive evidence for Romano-British field systems extending over the whole of the parish, some areas of which were to become afforested in the Middle Ages.

For Whittlewood we know that by 1086 woodland had become an important, and in certain places, the most dominant, element within the landscape. Following the Northamptonshire model, it might be suggested that woodland regeneration took place in the two or three centuries following the abandonment of the Roman province. Population reduction and a retreat from the heavy boulder clays in favour of the lighter riverine soils found along the valley bottoms may have offered the conditions conducive to woodland regrowth in the very areas where the majority of medieval woodland would be later located. Whilst the process of woodland growth in the early medieval period must have taken place, there is evidence to suggest that the area was not completely abandoned. Many of the Roman settlement sites have produce early medieval artefacts suggesting a certain continuity of use. Likewise possible early medieval cemetery sites are juxtaposed close to Roman buildings attesting to the survival of a remnant population. Place name evidence also suggests population centres both central and peripheral to the wooded core at this period, for example Dadford, Whittlebury, Puxley, Deanshanger and Passenham all of which contain Anglo-Saxon personal name elements.

Conclusion

It has been possible to reconstruct much of the late medieval landscape, and woodland in particular, using a suite of archaeological techniques, from remote survey to ground observations and artefact recovery. Where early cartographic evidence can be brought to bear in the northern and eastern parts of the study area, map evidence which can be shown to relate to features of antiquity when drawn up, the reconstruction can be made with some certainty. Where there is no map evidence the reconstruction is less solid, relying on the chance survival or destruction of landscape elements which either point towards ploughed and non-ploughed areas. Further fieldwork, in particular fieldwalking, in these areas, will help to support or undermine the areas of late medieval woodland that have been proposed today.

Evidence is emerging for the changing extent of woodland over time. From a landscape almost denuded of trees in the Roman period to a landscape dominated by woodland by 1086, the process of woodland regeneration remains to be fully understood. From its climax in the late pre-conquest period, there is a clear evidence for the contraction of woodland largely due to the creation of open fields, assarting, and the emerging importance of hunting landscapes. So whilst the majority of blocks of woodland within the modern landscape can be shown to have medieval origins, and the modern distribution of a wood-dominated northern part and a wood-free south part of the project area can be shown to mirror the medieval situation, the reconstruction of the true extent of late medieval woodland and that of earlier periods must await further investigation.