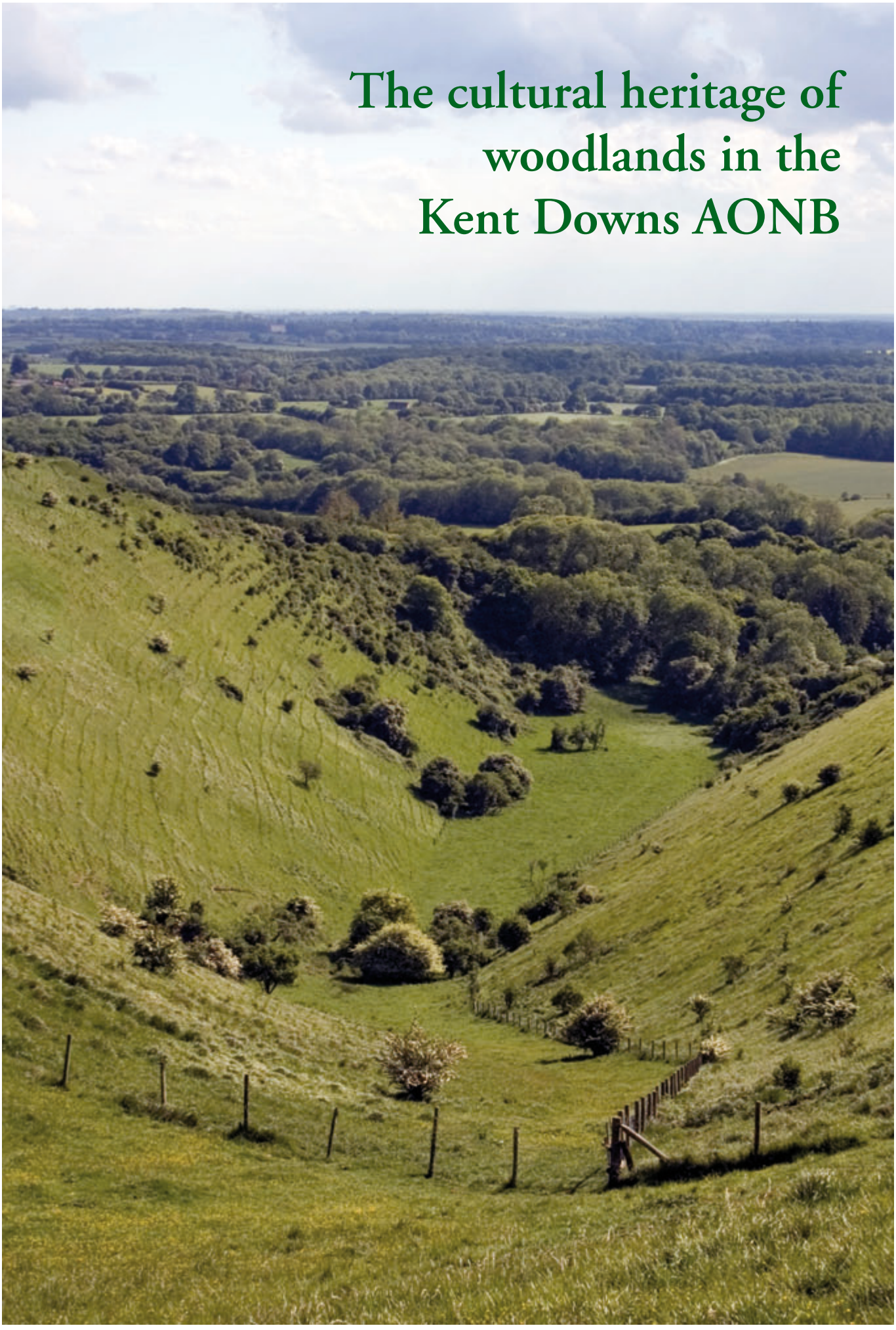
The cultural heritage of woodlands in the Kent Downs AONB



View across the Devil's Kneading Trough at Wye in the Kent Downs (Photo - PM)

The Cultural Heritage of Woodlands in the Kent Downs AONB

Description of the Kent Downs AONB
The Kent Downs AONB was designated in 1968 and covers 878 square kilometres. The AONB stretches from the Surrey and Greater London boundary in the west (and is contiguous with the chalk escarpment of the Surrey Hills AONB), to the Straits of Dover in the east. The Kent Downs AONB lies wholly in Kent (except for a small area in the London Borough of Bromley) and occupies 23% of the county [1]. Although the Kent Downs is dominated by the chalk hills, at its western end the AONB extends south into the Greensand Hills (known locally as the Chart Hills) and the Weald Clay which forms part of the river catchment area of the Medway. At the eastern end of the AONB, a small arm extends west to include the countryside which forms the backdrop to Folkestone and includes the Old Saxon Shoreway around Lympne.

Geology and Soils
The Kent Downs form the eastern half of the North Downs – a ridge of chalk forming the rim of the Wealden anticline created about 65 million years ago when the layers of chalk were laid down over a marshy plain inundated by the sea. These sedimentary layers were subsequently uplifted by earth movements which also created the Alps. The anticline or dome was raised high above sea level. Its long axis (215 kilometres) stretched from the Bas de Boulonnais in France through Kent into Surrey, Sussex and Hampshire [2]. Over the last 20 million years the Wealden dome has been eroded rather like an onion, revealing a very varied east-west banded geological structure. The oldest exposed rocks - the Hastings Beds - lie in the centre of the Weald and dominate the High Weald AONB, and the youngest lie around the outer marked by the chalk escarpment and dip slope of the Surrey Hills and Kent Downs AONBs. On the top of the North Downs escarpment are Drift deposits dominated by a capping of Clay-with-Flints, and an iron-rich sandy deposit known as the Lenham Beds.

Topography
The landform of the AONB is varied and dominated by the North Downs escarpment, with long dry valleys extending northwards along the dip slope. The Greensand or Chart Hills to the west give rise to the highest point at Toys Hill near Sevenoaks. The rivers of the Medway and the Stour have made deep breaches through the chalk hills, the latter giving rise to a lush, scenic winding valley, where from the high hills northward views reveal the spire of Canterbury Cathedral. Where the boundary of the AONB extends

Map 6. Woodland cover in the Kent Downs AONB

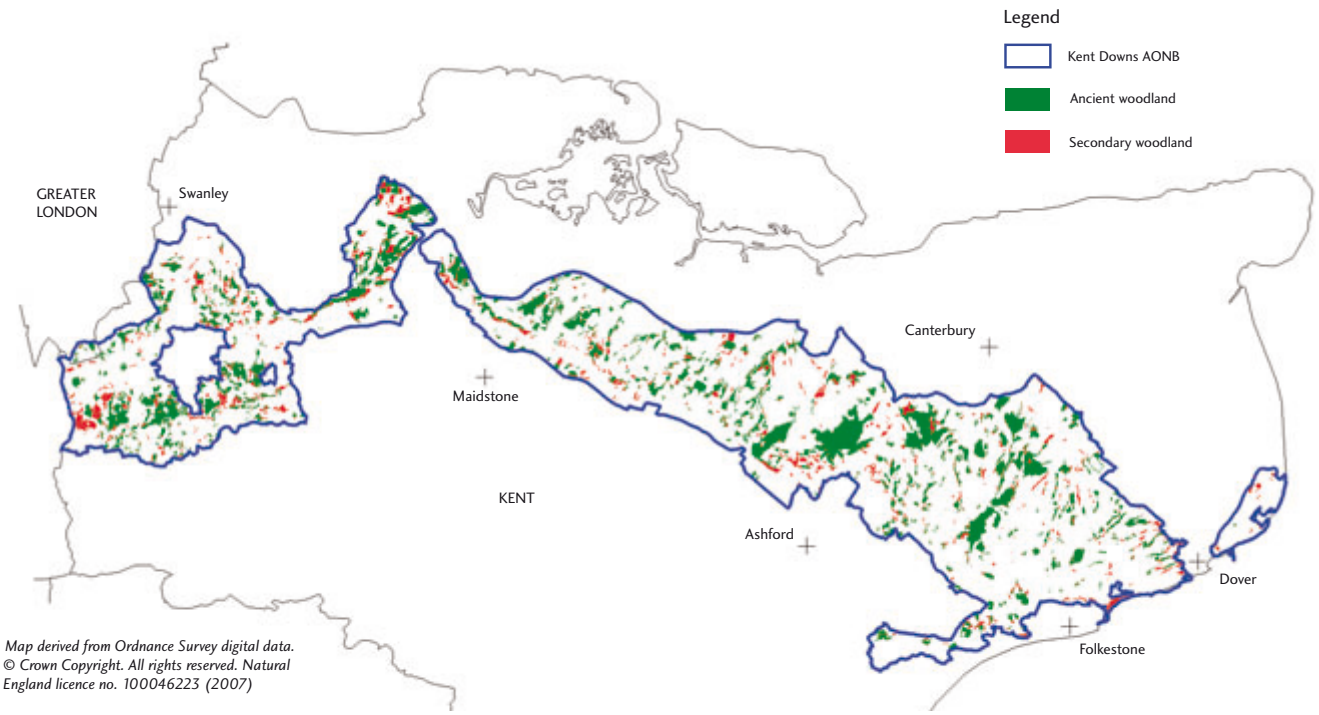


Table 2. Woodland types in the Kent Downs AONB (woodlands > 2 hectares)

Woodland type	Area (hectares)	% of AONB woodland resource
Broadleaved	7,196	47.2
Mixed	2,822	18.5
Coppice	1,839	12.1
Felled	1,073	7.0
Coniferous	941	6.2
Young trees	664	4.4
Shrub	479	3.1
Ground prepared for planting	124	0.8
Coppice-with-standards	117	0.8
Total	**15,254**	**100.0**

Source: Derived from the National Inventory of Woodland and Trees, Forestry Commission, 2000

into the Low Weald the landform is gently undulating with narrow winding streams.

Extent of woodland type and distribution

Woodland covers some 20% of the Kent Downs, of which over 70% is recognised as ancient woodland. This is 3.4% of the total national resource of ancient woodland and is the second highest (10%) area of ancient woodland in an AONB, after the High Weald [3].

Ancient woodland is identified as one of the special characteristics of the landscape of Kent Downs AONB along with the rich legacy of the historic and built heritage. There are several large areas of woodland, for example at Kingswood near Challock, Denge Wood overlooking the Stour Valley and West Wood near Lyminge, mostly owned and managed by the Forestry Commission. However, the majority of woods are in fragmented and diverse ownership.

Woodland Landscape Character

The woodland character of the Kent Downs is determined by the geology, with the claylands dominated by ash, hornbeam and oak in small woods and narrow shaws. The chalk hills support ash, beech and yew in both large and small woodlands linked by woody shaws. Oak and hornbeam also occur on the chalk hills where there is a covering of Clay-with-Flints. The sandstone hills have oak, birch and beech in larger tracts of woodland often colonising areas of former commons and heaths. Large blocks of plantation, mostly conifer woodland planted in the early part of the 20th century, occur in the eastern part of the AONB.

Bluebells under chestnut coppice with oak standards at Kings Wood in the Kent Downs (photo - PM)

The greatest concentration of woodland is on the Greensand Ridge, where there is a mix of both ancient woodlands and also secondary woods on former heathland. Along the chalk escarpment, large tracts clothe the hill tops and overlook the Stour valley at Challock, Kings Wood, and Denge Wood, with further areas over the East Kent Plateau.

A characteristic feature of much of the dip slope of the chalk hills are the narrow shaws or shaves. These are generally narrow strips of woodland bounding the margins of fields, some of which show characteristics of an ancient woodland origin whilst others are woodland encroachment on to former cultivated ground.

Introduction

The woodlands on the North Downs preserve evidence of thousands of years of human activity on the chalk and sandstone hills. Evidence occurs in the form of earthworks, monuments, place names, the consequence of farming and settlement but also ritual practices, many of which survive deep in woodland.

The Prehistoric Legacy

There is a growing body of environmental evidence supporting the prehistoric clearance of 'wild wood' from the Downs. The idea of a dense, unbroken swathe of woodland covering the whole of the early prehistoric landscape has been replaced by the concept of a more open 'wood-pasture' type woodland created and maintained by large and smaller grazing and browsing herbivores [4]. The process of clearance was possibly initially one of extending and creating glades to attract wild herbivores to pasture in order to hunt them, then exploiting the open areas for farming – cultivation and stock rearing – and for settlement.

The evidence for prehistoric land use has been found either from buried head deposits in coombes and valleys, or from ancient soils preserved beneath prehistoric monuments.

Two important sites are firstly, Brook near Ashford, where cores taken from hill wash in the "Devil's

Kneading Trough" (see title page photograph at the beginning of this section) revealed evidence for a former predominantly wooded environment, with birch, yew and other hardwoods [5]. Some open ground was also present. However, by circa 300 - 500 BC the land was open grassland, with the shells of snails introduced by the Romans appearing towards the top of the core. The second site is nearby "Juliberries Grave", in the Stour Valley. This is a Neolithic long barrow, one of several in this part of the Kent Downs. The ancient soil beneath the burial mound revealed an assemblage of molluscs which once lived in a more open environment rather than a woodland, indicating that the barrow was constructed in open ground [6]. This process of clearance is also recorded at Wingham and Frogholt towards the eastern end of the Kent Downs, where pollen evidence from the valley soils show that woodland clearance on the adjacent Downs had taken place by the Early Bronze Age [7]. Beech then as now formed part of the woodland canopy. By contrast, in the western part of the Kent Downs woodland was still covering much of the area.

At Caesar's Camp at Keston, pollen from the soil profile indicated that the camp had been constructed (c. 300 - 150 BC) in dense oak woodland [8]. Squerryes Hill Fort, on the Chart Hills at Westerham, preserved evidence from ancient soils which indicated a high forest intermixed with cultivation and also scrub woodland at the time of its construction (c. 150 BC - AD 43). This suggests that areas of arable were possibly reverting to scrub as the sandy soils became impoverished through continuous cultivation [9]. However, the role of grazing herbivores, both wild and domesticated in keeping tree growth suppressed and maintaining open areas should not be underestimated.

It is possible that some woods on the Downs and Chart Hills today preserve evidence of former prehistoric fields, especially near to known prehistoric burial mounds. Low linear boundaries formed by lines of flints have been recorded in an ancient woodland site, Trundle Wood near Wormshill, and at Hucking [10]. Similar features have been recorded in Surrey and are closely associated with prehistoric finds and other field monuments [11].

On the top of the Downs escarpment are drift deposits - the Lenham Beds - which are rich in iron. These deposits appear to have been exploited in the Iron Age as a source of ore. Irregular shallow diggings and quarrying indicate this activity, for example at Hucking in the wooded shaws bounding a hollow way running up the scarp from the vale below, and also further east at Wye near the prehistoric enclosure and chalk hill figure of the 'The Crown' [12]. It is probable that further evidence of such diggings may be found in woods along the crest of the chalk escarpment.

The Kent Downs has a rich legacy of Neolithic monuments and sites such as the megalithic long barrows overlooking the Medway Gap on Bluebell Hill. There are also earthern long barrows located in the Stour Valley. Juliberries Grave has already been mentioned; another long barrow lies well preserved in woodland on the edge of Kings Wood near Boughton Aluph. More frequent in the landscape are the round burial mounds erected during the Bronze Age (c. 2,000 - 1,000 BC). These were earthern mounds erected over one or more cremations and/or inhumations. Burial mounds were often located on high open ground or in prominent positions, many of which have now become covered in woodland. Examples of prehistoric round barrows are well preserved in Kings Wood, near Challock and Iffen Wood, near Chartham, and there are some fine examples in West Wood, near Lyminge. Such earthworks are rarely found in isolation and there may be additional burials close by which were not covered by a mound.

"Julieberries Grave", a neolithic long barrow near Chilham in the Kent Downs. The earthern and turf covered chalk structure is 44 metres long, 15 metres wide, and 2.5 metres high. It is the only long barrow in Kent without a stone burial chamber. (photo - PM)

Hill forts date from the Iron Age c. 600 BC to AD 43. These are large enclosures, occupying high ground, surrounded by one (univallate) or more (multivallate) earthern ramparts. Bigbury hill fort overlooking the Stour Gap near Canterbury is partly covered by woods and is where Caesar in 54 BC with his Seventh Legion reputedly attacked the British [13]. Oldbury Camp, near Ightham and Squerryes

Bronze Age round barrow at Eggringe Wood in the Kent Downs (photo - PM)

Hill fort near Westerham are located on the Chart Hills overlooking the Weald and form the eastern end of a chain of hill forts on the Greensand stretching from Hascombe in West Surrey. The fact that these hill forts now lie in woodland is probably due to the uneven ground and poorer soils of the land - the sites would have come to be managed as a heath or common, and then become wooded in the 20th century as the land was considered only suitable for growing trees.

Hill forts, together with many burial mounds of all periods and most other extant prehistoric sites are recognised to be of national importance and are thus protected by scheduling [14] (see Guidelines for Preserving Cultural Features in Woodlands section).

Medieval Woodlands

It is very probable that there was an ebb and flow in the coverage of woodland across the Kent Downs throughout the prehistoric and Roman period. After the collapse of the Roman administration, the native population of Romanised Britons probably reverted to aspects of the late Iron Age method of land management.

The early medieval period probably saw the enclosure of woodland specifically for the production of wood products. Enclosure in the form of banks and with live hedges and 'dead' hedges (hurdles), meant that the regeneration of coppice stools could take place without damage by grazing stock. This need to enclose and define woodland was also probably driven by the spread of settlement and the division of land into ever smaller divisions and territories. It is at this time that parishes began to evolve as formal territories, allowing the church to exert its pastoral care over land and settlements from which tithe could be claimed. Thus, wood banks enclosing ancient woodland and parish boundaries in both ancient and recent woodland are likely to be medieval in origin. As the better soils were cleared, woodlands were confined to the margins of parish and manorial territories, often abutting or straddling these boundaries.

Territorial earthworks such as manor, parish and hundred boundaries generally tend to be quite large in size (at least several metres wide), with more often a rounded profile to the bank and with one or possibly two ditches associated with them. On the chalk hills, where the ground is often steeply sloping this boundary may take the form of a large step or lynchet. The alignment of the earthwork may also tend to be sinuous, rather than straight.

The Downland was essentially a wooded and 'wood-pasture' landscape, which was being cleared in the early medieval period for pastoral farms, formerly seasonal holdings linked to farmsteads in the Vale of Holmesdale or on the North Kent Plain [15]. 19th and 20th century field rationalisation combined with grubbing of smaller woods removed much of the woodland/ farmland patchwork, which originated in the medieval period. The countryside around Hucking, however, still retains this wooded character.

Many of the place names in the Downlands have their origins in the early medieval period, and their meanings indicate a wooded and pastoral country, where farms were carved from woods for rearing stock and many woods were used as wood-pasture. Such names are those originating from 'stock' or 'vaccary', 'hay', meaning enclosure for pasture; 'den', the woodland swine pasture, and 'lees' and 'minnis', intercommonable woodland pasture on parish boundaries [16].

A rare feature sometimes found within woodlands are small, earth banked stock enclosures. They may have been used as a small pound to hold stock over night. The enclosures appear rectangular and are enclosed by

a large bank and ditch with the latter on the outside of the enclosure. One such enclosure is located in sweet chestnut coppice at Wormshill.

The remaining woodland was in all probability traditionally managed as coppice or coppice-with-standards enclosed by laid hedges on wood banks or lynchets (see below). The small farmsteads needed timber and underwood, not just for fuel, but also for fencing. Hazel coppice makes very good hurdles, tools and equipment, and building material, especially 'wattles', the framework on to which 'daub', a clay and straw mixture was adhered to create walls and infilling of partitions in timber-framed buildings.

Many field and wood boundaries on the chalk comprise a step-like earthwork known as a 'lynchet' (see Figure 4, page 51). These can form at any time on sloping ground by the down slope movement of soil. As the soil accumulates it preserves in stratified deposits small artefacts such as pot sherds. It is possible that some of these boundary lynchets may have prehistoric origins. The characteristic shaws and shaves on the chalk hills are often accompanied by one or more lynchets suggesting that the woodland has encroached on to former cultivated land and has since been actively managed by coppicing. More field work and detailed research is needed on woodland boundary earthworks of all types and not just lynchets in order to ascertain their origins and function, and to place the boundaries within their landscape context.

A feature of this Downland landscape are the small, winding lanes or hollow ways which run up the scarp slope from the Vale of Holmesdale and across the chalk hills towards the North Kent Plain. In some places where the ground is sloping, the lanes have worn into deep hollow ways bounded on either side by knarled and twisted yew and beech trees. The medieval character of these former drove ways can easily be appreciated where they run through woodland and wooded shaws, forming dark tunnels.

Post-medieval Woodlands

By far the majority of cultural features found within and associated with woods are likely to date from the post-medieval and modern period. Unlike the rich prehistoric legacy which survives on the South Downs, the North Downs, due to the extensive covering of drift – Clay-with-Flints – have many more woodlands surviving into the post-medieval period. The conversion of the upland fields to extensive sheep walks did not occur to the same extent as it did on the South Downs. However, stock were pastured on areas of downland turf and like the South Downs provision of a water supply was necessary.

On the chalk hills, water was a scarce commodity, with springs, winterbourne streams, and wells being the main supply. However, artificial ponds or dew ponds were constructed for stock. An impervious liner made of layers of puddled clay, straw and crushed chalk was laid down in a circular depression and water obtained from precipitation. Where scrub and woodland has spread on to former pasture these ponds now lie hidden in the undergrowth, their clay seals broken by tree roots. John Boys, a local farmer, recorded in the late 18th and early part of the 19th century that "*the fences* (or boundaries) *in the uplands consist of old hedges, such as Nature has formed; quickset hedges raised from berries of whitethorn, and dead hedges, made from the spare bushes from old hedges-rows*" [17]. He suggests that the 'old hedges' were cut down from ten to twenty years and the fences made anew. This suggests that the 'old hedges' correspond to the shaws or shaves which were coppiced and then made stock proof again by either laying shrubs or erecting a bound 'dead' hedge.

Banks of a medieval enclosure at Denge Wood in the Kent Downs (photo - PM)

Woodlands and Industry

On the chalk hills, archaeological features associated with industrial processes are dominated by numerous chalk pits, dene holes and flint quarries. These are of varying size and density. Chalk was dug as a source of building material called 'clunch', but mostly for burning and turning into lime. This was used in mortar for building, as lime wash for painting and sealing walls, and as an improver for clayey soils. In the late 19th century chalk was then used as lime in cement and the large chalk quarries in the Medway valley are the result of modern intensive industrial exploitation. However, elsewhere the chalk quarries are much smaller, as at

Wye. Also associated with them are lime kilns, where the chalk was heated up and turned to lime. Kilns were built of local stone and brick and generally comprised one hearth, fed with chalk from the top.

Lime kilns were built by many farmers, who needed lime to improve soils. The kilns were located close to the wood fuel and where possible, the chalk. But as the finished product, lime, or rather 'quick-lime' was inherently unstable, transporting it long distances was not a sensible option and thus the raw chalk was generally transported instead.

Another way of extracting chalk was by the digging of 'chalk wells' or dene holes. These were shafts dug into the chalk about 10 metres deep, with chambers at the bottom radiating outwards, often in a 'clover leaf' pattern. The chalk diggers were after unpolluted or undegraded chalk with which to spread on fields to 'sweeten' and improve soils. There were two main periods of 'dene hole' digging. The first was in the 13th and 14th centuries, coming to an end with the 'Black Death' [18]. These holes had narrow shafts with foot holes dug into the walls, so avoiding the need for ladders. The second period began in the 17th century, when a further expansion of farmland took place. Where woods had been cleared from heavier clayey soils, chalk was added to improve drainage and aid in the fragmentation of clumps. The deneholes were located close to field boundaries or within woodland edges so that they did not interfere with cultivations. These later deneholes had wider shafts. Evidently deneholes were still being dug into the early part of the 20th century. Once a hole had been sufficiently mined out, the top of the shaft was sealed in one of several ways. A tree or bush could be thrown in, which lodged part way down, with the remainder of the shaft then backfilled. Alternatively, a brick dome or cap was constructed over the shaft and then the remainder backfilled. Today, deneholes appear as circular depressions of varying depths, with diameters of between 3 and 5 metres. However, the capping can fail and deneholes appear dramatically when the seal falls in [19].

Deneholes provide very valuable habitats for bats as hibernation and maternity roosts. The Kent Underground Research Group (KURG) has successfully explored, recorded and sealed with metal frames numerous deneholes as habitats for bats (see Useful Contacts section). There are examples of capped deneholes at Hucking and at Iffen.

Flint, a hard grey stone made from silica is found in the Upper Chalk in nodules, layers or tabular sheets. When it is first quarried from the ground it can be worked easily but hardens off in contact with air. Flint was first used by humans for tools; the technique of 'knapping'

Denehole in woodland near Hucking in the Kent Downs (photo - PM)

- striking a flint core in various ways to fashion a 'blade' or cutting tool - reached its perfection with the delicate scrapers, burins and blades of the Mesolithic period. The use of flint for tools declined with the development of metal working. However, flint was still knapped in the medieval and post-medieval period, to make building material, flints with smooth surfaces to face buildings and also as 'flints' used for striking guns and tinder. As a hard wearing stone it was also favoured for 'metalling' roads. Surface collection of flints from the downland soils was a hard job and often undertaken by women and children. Small flint quarries are a very common feature of woods and shaws on the chalk hills. They appear as irregular depressions of varying sizes, some of which are dug into the natural slope, following the line of a flint deposit.

Management of Coppice

A picture of how coppice was cut and to what uses the poles were put is given in John Boys' 'General Account of Agriculture in Kent', published in 1795 [20]. It is clear that little wood was wasted, with all going for different markets and uses. The standing coppice was sold to a purchaser by the landowner and once the leaves had fallen, the workmen employed by the purchaser were allocated their places in the wood.

Hurdle rods cut from coppice (photo - PM)

The shrub and small growth around the stools (called stocks) was cut back first. The material was made into 'winter kiln bavins' and tied with two wists (or bands). Measuring 6 feet long and 2 feet in diameter at the wists, the bavins were sold in the wood for 6 shillings per hundred. Once the stocks were cleared they were cut down and the poles thrown into 'ranges' wide enough to allow a team (of horses) to pass. As the poles were cut they were sorted or graded into the following:

First Best Poles - chestnut, ash, willow, maple of 18 feet.
Second Best Poles - as above but 15 to 16 feet long.
First Ordinary Poles - oak, gascoign (i.e. cherry), red birch, beech, and hornbeam (the latter two inferior wood) of 17 to 18 feet.
Second Ordinary Poles - as above, 15 to 16 feet.
Use-poles - ash, chestnut, willow oak, asp and gascoign which were too large for hop poles.
Stakes and binders (for hedge laying) - hazel, ash, oak, willow and maple bound in bundles of 25 each. A stake measured 5 feet and a binder 15 to 18 feet.
Thatching rods - these were cut from the same as stakes but were lengths not suitable for either of the above. They were bound up in bundles of 50 measuring 6 feet long.
Austry rods were used to bind billet wood for the London market - cut from hazel and bound in bundles of 100 with a length of 5 feet.
Hurdle rods were cut from hazel to make hurdle gates for folding sheep and smaller binders measuring 5 feet and made into bundles of 100 rods.
Wheel-timber was cut from large beech of two or three falls' (coppice rotation) growth. It was used in making the fellies for wheels and was not less than 7 inches in diameter at the narrowest end. It was cut into 3 foot lengths for a penny. Smaller wood was cut for axle trees, plough cheps and wrests.
Piles - cut out of hornbeam and beech and used to prevent the tide washing away chalk at the foot of the sea walls. Cut at varying lengths.
Props were, according to the author, used in the coal mines in Newcastle and cut from oak and birch at 6 feet 4 to 5 inches long. One would imagine that the coal fields in East Kent would also have demanded a ready supply of pit props as well.

In the spring what was left in the ranges was made up into 'summer kiln bavins' of 6 feet in length and bound with two withies. These were usually the smallest wood. 'Household bavins' were 6 feet long and two feet over the band. The remainder was cut into cord wood three and half feet long, with the length of the cord 14 feet and stacked 3 feet high.

Replacement of decaying stocks or stools was either undertaken by planting with nursery grown stock or by a technique called 'layering' where a stem was bent over and pegged into a previously dug hole which was back filled with top soil. The branch then rooted and a new stock was established.

Sweet Chestnut Coppice and the Hop Industry

From the 1650's Kent had about a third of England's hop acreage, with hop grounds increasing throughout the 17th century, especially around Maidstone, Canterbury and Faversham. In 1867, the acreage was 40,762 reaching a peak of 46,600 in 1878, producing 65% of the national output. By 1897, the acreage declined to 31,661 and thereon downwards due to foreign competition, lower prices and a shift to light beers, which required fewer hops [21].

Hop bines needed a framework to grow up. Initially, three or four poles were erected like a wigwam over a growing 'hill'. The number of 'hills' per acre varied with ground conditions, and thus so did the number of poles, ranging from 2,000 to 3,600 per acre. The cost of poles was second only to the labour bill (excluding hop duty tax) to a hop grower. During the period 1835 to 1878 it was probable that over sixty million poles were needed for the new hop gardens. Every six years all poles needed to be replaced as they rotted out. It is estimated that 60,000 acres of coppiced woodland were needed to supply the industry at this time [22].

In 1795, John Boys of Betteshanger wrote in his review

to the Board of Agriculture that the woods of the eastern part of Kent, between Watling Street and the North Downs Scarp slope, supplied the country with fire wood, tillers for husbandry uses, and timber of the dockyards, but by far the greatest product was the immense quantity of hop poles [23]. They were not only used in the immediate locality but transported as far as Maidstone [24]. Originally, hop poles came from oak and alder coppice, however, such was the demand and need for clean, straight poles, that sweet or Spanish chestnut was preferred due to several factors. The species grows well on poor soils but not heavy ones, and has little sap wood so it does not rot so readily. Its fibrous strength also meant that tall but slimmer poles could be grown around which the bine could climb more readily [25]. Woodland owners quickly grubbed up the old oak, hazel, hornbeam coppice and replaced it with sweet chestnut. They also planted up areas of poorer agrarian fields to chestnut.

There are numerous sweet chestnut coppice woods across the Kent Downs, some of which are still actively managed as chestnut makes good fencing (post and rail, and paling). Around the margins of these coppices and in the more inaccessible areas, evidence of the former oak, hazel, birch, ash and hornbeam coppice woodland may still survive.

Also expanding in acreage at this time were the fruit orchards, sometimes intermixed and in rotation with the hop gardens. In 1872 there were over 11,000 acres of orchards, which doubled to 25,050 acres, with a further 20,080 acres of soft fruit [26]. As with hops, underwood was needed for fencing, stakes, ladders, and other tools.

By the beginning of the 20th century the hop industry was in decline and with changes in the way of growing hops, using a system of fixed poles, wires and strings (up which the bine grew) the demand for chestnut poles was also severely reduced. However, many of the newly planted chestnut coppices were becoming well established.

Landscape 'Gentrification'

The 18th and 19th centuries saw changes in woodlands, not just from a purely commercial aspect but also for aesthetic and recreational reasons. The creation of formal landscapes around large and smaller country houses saw the planting of specimen trees, shelter belts, roundels and other formal plantations. In addition, game - especially pheasant shooting - was seen not only as recreation but also a valuable form of income (especially as the coppice market was in serious decline) and woodland cover was developed as habitat for this non-native bird.

Formal parkscapes occur in considerable number in the eastern part of the Kent Downs, for example at Goodnestone (pronounced 'Gunston'), Waldershare and Fredville. Many of the plantation woodlands often preserve former field boundaries and routeways. Godmersham Park in the Stour Valley, formerly the home of Jane Austin's brother Edward, has the sinuous edge of the Kings Wood as its backdrop. The smaller woods in the park itself preserve traces of a prehistoric field system (c. 600 BC to 1st century AD), which once extended across the whole of the dry valley in which Godmersham Park is situated.

Military Features

Woodlands played a crucial role during the two World Wars, not only as a supply of timber and underwood, but also as screens and cover for ammunition stores, hideaways for the secret army of saboteurs trained up in the event of invasion.

Two First World War 'stop lines' traverse the Kent Downs, one at Maidstone, from Detling to the Swale, the other North from Fort Halstead to Dartford. Anti-tank and other defences were erected along it. The valley behind Godmersham Park hid the moorings for an airship, which in the Second World War became the site of a Resistance Army Bunker. Today, a large rectangular depression lies in open scrub and woodland marking this site.

Deer leap at Godmersham Park in the Kent Downs, lying between the park boundary and Kings Wood. The leap is 1.5 metres high, and its ditch, on the park side, is 1.5 metres wide. (photo - PM)

Second World War defence lines included a line from Dover, past Canterbury to Whitstable, the Royal Military Canal, and the River Medway. At Goodnestone, evidence for one of these lines survives as former slit trenches in a pocket of woodland close to a couple of pill boxes. The remains of bomb craters are frequently found in woods. These are circular depressions, not unlike deneholes, but without the evidence of spoil and diggings.

Management issues and threats concerning the cultural heritage of woods

The main issue concerning the cultural heritage of woodland and the long term conservation of woods in the Kent Downs is the cessation of traditional coppice management due to a lack of demand for woodland and coppice products. The Kent Downs AONB Management Plan lists the main issues and threats to woodlands and trees [27]. All those identified can have an impact on the cultural and archaeological value of woodlands.

Fragmentation of Ownership

The motivation of woodland owners is not fully understood and increased fragmentation in ownership of woods, especially the smaller ones means that many woods are being inappropriately managed or not managed at all, leading to a decline in biodiversity and damage to the archaeological resource.

Lack of understanding of wood and tree care

Other non-woodland activities which are introduced into woodland can have a negative effect on the cultural resource, especially as owners and managers may not be aware of the impact. Game bird shooting, whilst providing a valuable income to many woodland owners, is often intensely managed, resulting in physical damage to earthworks and veteran trees. Use of woods as extensions to gardens, particularly where farmsteads are being developed into residential dwellings can also have a negative impact.

Policies for enhancement of conservation of the woodland cultural resource

These are taken from the policies set out in the Kent Downs AONB Management Plan 2004-2009:

- Creation and promotion of new markets for woodland products, working within the Forestry Certification Scheme for sustainable management of woodland.
- Establishment of supply chains and a network for small woodland owners in order to address economies of scale.
- Education of owners, especially new owners and small wood owners on the cultural importance of woodland [28].
- Education of woodland managers, game managers [29], and coppice workers on the cultural importance of the AONB's woods, including the role played by veteran trees in woods and in the landscape as a whole.
- Replanting with local provenance species, with natural regeneration, and with due regard for the landscape character of woods within the vicinity [30].

Footnotes

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