



Longbeech North

Management Plan 2017-2022

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THE WOODLAND TRUST

INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland. Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
10. Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site - their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

1.0 SITE DETAILS

Site name:	Longbeech North
Location:	Challock, Ashford, Kent
Grid reference:	TQ986511, OS 1:50,000 Sheet No. N/A
Area:	103.84 hectares (256.59 acres)
Designations:	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Longbeech North in the Kent Downs Area of Outstanding Natural Beauty is one of the Trust's latest acquisitions. Since its purchase in 2016, we've started work to restore this ancient woodland site, currently dominated by conifer, to its former glory and ensure it's a haven for wildlife in the future.

2.2 Extended Description

Longbeech North (103.84 hectares) is located between the villages of Charing and Challock in Kent on the North Downs and within the Kent Downs Area of Outstanding Natural Beauty. The Woodland Trust acquired the site in spring 2016. Longbeech North is the northern part of a larger woodland complex known as Longbeech Wood (342.06ha) which is designated as a Local Wildlife Site supporting up to forty-five ancient woodland indicator species. Longbeech Wood is in multiple ownerships and it is also bisected by the A252 and Monkey Lane. Longbeech Wood is situated within an intensively farmed landscape with large hedge bound fields and distinct woodland areas which is typical of the landscape on the North Downs. Woodland cover as a percentage of land use on the North Downs is high at 20%.

Longbeech North is designated as ancient woodland and as a planted ancient woodland site

(PAWS). This site was converted mostly to pure sweet chestnut coppice sometime in the 18th and 19th century and then approximately 70% of the sweet chestnut coppice was converted to mixed conifer plantations between 1950 and 1965 with the planting of Japanese larch, Douglas fir, Norway spruce and Corsican pine. Pure sweet chestnut coppice remains in two distinct blocks covering approximately 30% of the site. There are no veteran trees present on site. The specialist ancient woodland ground flora is much depleted and is confined to ride edges for many of the conifer rich areas, although bluebell is more widespread with bramble and bracken being the dominant ground flora plants. There are small areas of relict semi-natural ancient woodland dominated by hornbeam with some ash, field maple, dogwood and hazel.

On 14th August 2012, an outbreak of *Phytophthora ramorum* was detected within an area of larch and as a result a Statutory Plant Health Notice was issued to the previous owner requiring the compulsory clear felling of approximately 28ha of larch. This was carried out during the winter of 2012/2013, followed by restocking in the winter of 2015/2016 using natural regeneration and coppice regrowth for some areas, and planting of broadleaves and Douglas fir in others.

The soils are predominately acidic clay with flints which are categorised as being slightly acid loamy and clayey soils with impeded drainage. The solid geology beneath this is chalk which forms the North Downs.

Longbeech North has a good network of permissive paths, with a bridleway which crosses the site at the northern end. Public access is off Monkery Lane, with entry into the site managed by all-access kissing gates.

Longbeech North is one of a suite of Woodland Trust Demonstration sites around the UK, which aim to showcase the approach the Woodland Trust is taking to restore planted ancient woodland and improve resilience. A self-lead waymarked trail in place since autumn 2017 takes in a range of different stand types, to illustrate the different challenges presented by the restoration of planted ancient woodland and the various techniques and options available. (The Demonstration Plan for this site contains specific details about the how the restoration process and monitoring of this work will be carried out.) Forestry work at Longbeech North started in autumn 2017 to begin the restoration to native species, a process that will take many decades. A key part of this project will be to demonstrate the conversion of sweet chestnut coppice into a more species diverse stand type; sweet chestnut occupies over 10,000 hectares (24,700 acres) of woodland within the SE of England and all of it is at risk of tree diseases such as chestnut blight and species of *Phytophthora*.

Longbeech North supports a number of notable bird species, 10 species on the UK Red List and 5 species on the UK Amber List.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus: There is a limited bus service from Ashford to Charing.

By train: The closest train station is at Charing, about 4km (2.6 miles) from the wood.

For up-to-date information on public transport, visit traveline.org.uk (0871 200 22 33).

By car: From the M20 Junction 8, take the A20 towards Charing. From Charing, take the A252 towards Canterbury and at the top of Charing Hill turn left towards Throwley Forstal. After 1.5km (one mile), turn right into Monkery Lane. The entrance to the wood is around 230m (210 yds) on the left where parking is available in a small car park. The nearest postcode is TN27 0NR.

3.2 Access / Walks

The wood is accessed from Monkery Lane on the southern boundary. There is a network of forest tracks and rides including a public right of way which crosses through in the north east of the site.

4.0 LONG TERM POLICY

In fifty years' time, Longbeech North will be a resilient habitat retaining its relict semi natural ancient woodland areas and with the majority of the PAWS areas now restored ancient woodland. The wood will have a diverse structure providing a good range of different habitats typical of native broadleaved woodland in Kent. There will be a mosaic of actively coppiced areas alongside high forest managed using continuous cover forestry (CCF) techniques and areas of minimal intervention. Linking up the active coppice areas will be a wide ride habitat centred on some of the main tracks whose edges are coppiced on a short rotation.

The restoration of over 73ha of planted ancient woodland (PAWS) since 2016 will have seen these areas transformed. Through their active management by selective and variable density thinning and conversion to CCF, there will have been a shifting of the structure and composition of the canopy within each stand from even aged uniform stands to ones that are predominately of native species and with more structural complexity, whilst ensuring that the ancient woodland remnants and the wider ecological continuity are protected and enhanced. The PAWS will have a good range of tree ages, from young seedlings acquired through mainly natural regeneration and some introduced by planting, to maturing broadleaves and a limited number of conifers. Those non-native conifer species acquired through natural regeneration during the conversion to CCF will occupy only a small part of the canopy and should be in the process of being removed prior to them generating seeds. Acceptance of some natural regeneration of non-native conifers during the restoration process can benefit species of birds, invertebrates and other fauna, as well as the levels of moisture, shelter, and management of light levels required by other processes such as decomposition in the soil, or even desired regeneration.

Monitoring the transformation of PAWS areas to CCF stands should have yielded a lot of information to demonstrate how commercial stands can be managed in a way which increases their wildlife value. Recording the wildlife response linked to the habitat change through the use of fixed-point sample plots and random plots for condition assessments will be part of the monitoring information available. In particular, the forest inventory using fixed-point sample plots should still be yielding information on yield for comparisons with other sites within the demonstration programme.

The long term study into increasing the resilience of sweet chestnut within the coppice areas, having been set up in 2020 will have provided valuable data to inform management choices.

There will be a significant number of trees selected as future veterans, which will have been opened up and will be starting to show veteran characteristics.

Through the active management of selected coppiced areas, habitat will have been provided for a range of invertebrate, bird and mammal species, including woodland specialist species which rely on temporary open space.

The areas managed with minimal intervention will allow natural processes to occur, that in time will lead to diverse habitat structures. The trees will have got older and the accumulation of dead wood will be helping to support a large range of invertebrates and fungi. In addition, as the trees senesce there will be an increasing prevalence of coppice stools and older single stemmed trees splitting and falling apart. This will not only help to generate further deadwood but also allow the regeneration of an understory as older trees collapse and allow in more light.

Invasive trees and shrubs such as rhododendron will be absent, or at a level that does not impact on the site. Deer will be present but their numbers will have been monitored and control exercised, such that their effect on the woodland habitat is low enough to all regeneration.

Although the site will have retained its tranquil character, it will be visited by a moderate number of visitors each year who appreciate and respect walking in a wooded landscape with diverse habitats

and archaeological features, along a well-maintained network of paths.

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing people's understanding and enjoyment of woodland to help create a UK rich in native woods and trees, for people and wildlife.

Many of the Tree Charter principles are brought to life at Longbeech North, such as "sustain landscapes rich in wildlife", "grow forests of opportunity and innovation", "protect irreplaceable trees and woods", "make trees accessible to all", "combat the threats to our habitats" and "strengthen our landscapes with trees".

5.0 KEY FEATURES

The Key Features of the site are identified and described below. They encapsulate what is important about the site. The short and long-term objectives are stated and any management necessary to maintain and improve the Key Feature.

5.1 Planted Ancient Woodland Site

Description

The areas of planted ancient woodland (PAWS) at Longbeech North extend to 70.4% of the site (73.35ha) - see sub compartment details and accompanying maps. Planting of non-native conifer species (Douglas fir, Japanese larch, Norway spruce, and Corsican pine) occurred between 1955 and 1965 whilst owned by the Forestry Commission. Subsequent restocking with 2nd rotation conifer crops occurred in 1985, 2002 and 2015 whilst the woodland was in private ownership. All conifer areas have been thinned. The 1st rotation conifer species were planted into chestnut coppice which was partially eradicated through herbicide treatments, however, sweet chestnut coppice and other broadleaves species often survived or re invaded these conifer plantations as they established themselves.

In the early years of this century great spruce bark beetle was found in an area of Norway spruce which resulted in a small area of Norway spruce being clear felled and restocked with Douglas fir in cpt. 1a (part). The predator of this bark beetle, *Rhizophagus grandis* was released as a biological control at around this time and is presumed to be still on site.

On 4th August 2012 a ground survey team from the Forestry Commission discovered visual symptoms of *Phytophthora ramorum* including dieback, resinous bleeds and lesions within several locations amongst Japanese larch plantations in cpts 2g and 3b. A Plant Health Notice was issued to the owner at the time and 28.3ha of Japanese larch was clear felled in 2013 from the southern part of Longbeech North. Forestry Commission funding through their EWGS and claimed and paid to the previous owner enabled the partial restocking during the winter of 2015/16 of some of the affected areas. Restocking occurred with a combination of pure broadleaves and mixtures of conifer/broadleaves as well as leaving areas to natural regeneration. This was completed prior to the sale of the woodland to the Woodland Trust and with it a legacy to comply with the grant specification.

The PAWS areas, like the whole site, are situated on acidic clay with flints and would normally support a ground flora vegetation community of NVC (National Vegetation Classification) W10; oak woodland with bramble and bracken. Instead, the ground flora is dominated by bramble with a scattering of bluebell plants under the conifers. A small area of W8, ash-field maple-dog's mercury woodland is present at the northeast end of the site where the soils are thinner on the shallow slopes of the dry valley. Ancient woodland flora appears seriously depleted from many of the PAWS areas, although bluebell is well represented under the mid rotation larch areas and occasional examples of herb paris, yellow archangel and dog's mercury. Compartments in the north (1d, 1e, 1h) have partly retained a semi-natural ancient woodland component and support a mix of native trees and shrubs including hornbeam, field maple, ash, hazel and dogwood. Compartment 3b supports a remnant heathland flora which presumably has germinated from buried seed during the 2013 clear fell process. Plants occurring here include ling, heath milkwort, lousewort and pill sedge.

Annual surveys started in 2016 to build up baseline information on ground flora, invertebrates and bird communities. A 2016 survey of the 3 deer fenced enclosures (cpts.2d and 3b part) recorded 85 species of plants in spite of the harsh ground preparation each area was subjected to. Of these, eight are classed as ancient woodland indicator species: wild service tree, bluebell, creeping soft grass, slender St. John's wort, field maple, hornbeam, greater burnet-saxifrage and yellow pimpernel. A total of 129 plant species was recorded across the wider site, with 15 ancient woodland indicators present, the most important being herb paris found in cpt. 1d.

38 bird species were recorded during a 2016 whole site survey of PAWS areas. Of these 10 species are categorised on the Red List of bird species under conservation concern: cuckoo, hawfinch, marsh tit, mistle thrush, song thrush, skylark, tree pipit, linnet, lesser redpoll and yellowhammer; 5 species are on the amber list: bullfinch, dunnock, house martin, tawny owl and willow warbler. BTO have established woodcock monitoring point in Km square TQ9851 which covers the central part of Longbeech North. Nightjar are present near southern edge of cpt. 1f/3b.

Permanent monitoring plots have been established in cpt.2e to enable a comparison with a similar PAWS management area at the Woodland Trust's Fingle Wood site in Devon.

There are a number of significant rides adjacent to areas of PAWS. Currently (2017) none of these rides have been managed as wide ride habitats, resulting in a ride network that is largely dark and shaded.

Significance

Given the site's prominence within a protected landscape and as a significant PAWS site in the SE of England, Longbeech North will be used to demonstrate best practice in our approach to Ancient Woodland Restoration (AWR) in the South East. Up until 2016, Longbeech North was a typical commercial PAWS site within the Kent Downs AONB with a range of different even aged conifer stands with planned restoration to broadleaves through clear felling the conifers followed by replanting with mixed conifer/broadleaved stands. A significant approach at Longbeech North will be to demonstrate a more sympathetic and resilient method of restoration with measured outputs for financial and wildlife values which will be publicly available.

Restoring PAWS by encouraging the increase in site native species is a key national objective for the Woodland Trust thereby increasing the area of native broadleaved ancient woodland.

Longbeech North is part of a significant and much larger predominately PAWS site called Longbeech Wood whose area extends to 342.06ha. Longbeech North contains the most commercially managed PAWS plantations within this complex. The restoration process will therefore be a significant habitat gain for Longbeech Wood as a whole.

Opportunities & Constraints

Opportunities:

- to use the varied PAWS compartments to demonstrate and monitor the process of restoring plantation ancient woodland through the transformation of even-aged stands to continuous cover forestry.
- to show that woodlands or systems with greater genetic, species and structural diversity are likely to be more resilient.

- as a

Demonstration site Longbeech North will help convey the principles of PAWS restoration to the Forest Industry and landowners in the southeast.

- to demonstrate how even aged commercial stands can increase their ecological resilience (following the principles set out in the Woodland Trust's AWR Module 4 guide) and to measure the response of wildlife during the conversion process to Continuous Cover Forestry (CCF) by monitoring and surveying. This will provide a gap in our knowledge of how wildlife (birds, invertebrates and ground flora) react to the silvicultural interventions in a measured way.

Constraints:

- the clay soils which become especially wet in winter make extraction and harvesting of timber problematic and make some of the taller and denser conifer stands more prone to windblow.
- the European Protected Species status of dormouse, which are assumed to be present (but presence will be established) could further restrict the seasons in which active management work can be accomplished.
- ash is rare at Longbeech North but ash dieback will have a probable long term effect on the wood by killing what few ash trees there are. It is unlikely that Ash will become established as one of the main native broadleaved species at this site.

Factors Causing Change

Deer browsing: Annual deer impact assessments will be used to monitor the effectiveness of the annual culling programme.

Ash dieback: Ash dieback fungus identified on site since 2016 will have a long term effect on the wood through killing ash trees, although ash forms a very minor component within the canopy.

Other potential tree diseases eg Sweet chestnut blight, ink disease (Phytophthora spp), oak decline: monitoring of tree diseases through the woodland condition assessment and PAWS assessment.

Grey squirrel damage: damage to potential timber trees particularly broadleaves will seriously reduce the commercial value of individual trees should damage become wide spread and endemic.

Damage to be monitored during the plan period to gauge whether any action is required.

A Woodland condition assessment and PAWS assessment are completed during every plan period to assess these threats as well as annual key feature monitoring observations.

Long term Objective (50 years+)

To secure and enhance the ancient woodland components of the site; aim to achieve a resilient woodland with structural diversity containing the following distinct and well represented areas:

- all PAWS areas are restored so that the canopy of each PAWS area is predominately native broadleaves and all ancient woodland remnants secure and expanding in area;
- conversion of all PAWS areas to CCF stands are stable and continue to develop greater structural complexity without compromising remnant features. Use of selective and variable- density thinning techniques will have helped to create structural complexity across the woodland which will benefit the ecosystem recovery.
- a managed wide ride network.
- areas left to develop through natural processes.
- to demonstrate how even aged commercial stands can increase their ecological resilience (using the Module 4 AWR guide) and to measure the response of wildlife during the conversion process to CCF by monitoring and surveying. This will provide a gap in our knowledge of how wildlife (birds, invertebrates and ground flora) react to the silvicultural interventions in a measured way.

Short term management Objectives for the plan period (5 years)

This section should be read in conjunction with the PAWS assessment and strategy maps.

All mid rotation aged conifer areas totalling 30.95ha in cpts.1a, 1c, 1d, 1e, 1g, 1h, 2a, 2e and 2f are thinned by single tree selection as part of the conversion to a continuous cover system on a 3-5 year cycle. First intervention is due in 2018.

To monitor the response of natural regeneration by creating two group fell areas in the southern part of cpt.2e in 2018, each approximately 30m diameter.

Upgrade internal tracks covering 4.6km (2.9 miles), to improve access for haulage and harvesting operations.

To develop a range of "demonstration" techniques to share with the wider forest, conservation industry and private landowners at events and through a self-lead way marked trail; to design and produce in 2017 an accompanying site leaflet "Demonstrating restoration", with further print runs and modifications to occur during the plan period.

Using 6no. fixed point positions to monitor the changes in ground flora and bird communities within the 3 deer fenced enclosures in cpts.2d and 3b and 2 fixed point positions within 2e. Surveys to start in 2017 and be repeated every 3 years with the baseline ground flora survey in cpt.2e being carried out in 2018.

Use 16no. fixed point photography points (starting in 2018) to monitor the changes to the PAWS stands. Photos to be taken before, during and after each intervention.

In 2017 to establish 25no. fixed-point mensuration sample plots in cpt.2e and carryout mensuration survey; repeat mensuration survey 3 years along with a repeat floral survey in every 3rd plot.

To monitor deer impacts every year. In 2018 to construct 6no small 7m diameter circular deer free enclosures in cpts.1c, 1d, 1e, 1g, 2a and 2f to help monitor deer browsing.

Ride edge management - see ASNW key feature for details.

5.2 Ancient Semi Natural Woodland

Description

The areas of ancient semi- natural woodland (ASNW) at Longbeech North extend to 29.6% of the site (30.87ha). These are the areas which were not converted to conifer plantations in the 20th century but had been converted to sweet chestnut in the 18th or 19th centuries. Since then the sweet chestnut has been managed for its coppice products on regular rotations. All the sweet chestnut is currently very even aged with 5.4ha cut in 2003 and 21.64 cut in 2005. The compartments covered by ASNW are cpts.1b, 1f and 3a. The area in cpt.1b (3.71ha) contains less sweet chestnut and has a more typical makeup of ASNW tree species with hornbeam, ash and birch along with sweet chestnut.

The ASNW areas, like the whole site, are situated on acidic clay with flints over chalk and would normally support a ground flora vegetation community of NVC (National Vegetation Community) W10, oak woodland with bramble and bracken. In reality, the ground flora is dominated by bluebell and bramble under the chestnut with little in the way of specialist plant communities, except for the presence of greater stitchwort, lords and ladies and wood sorrel along ride edges. Further surveys in 2017 and 2018 will provide more information about other species in the ground flora.

There are a number of significant rides which pass through the blocks of sweet chestnut coppice. Currently (2017) none of these rides have been managed as wide ride habitats, and as a result much of this ride network has become dark and shaded.

Throughout the ASNW there are relic historical features such as chalk pits, shallow quarrying sites and ancient boundaries or woodbanks.

BTO have established woodcock monitoring point in Km square TQ9851 which covers the central part of Longbeech North. Nightjar are present near southern edge of cpt.1f.

Significance

Ancient semi-natural woodland (ASNW) is a dwindling and irreplaceable habitat and as such all remnants of ancient woodland needs to be protected from further loss. On the North Downs the ASNW areas are predominantly within an intensive farmed (arable) landscape, with little habitat connectivity.

Protection of ASNW is a key objective of the Woodland Trust.

Opportunities & Constraints

Constraints:

ASNW ground flora is generally species poor due to the acidic soils at Longbeech North. An additional limitation to species diversity is the long term effect of a monoculture and dominance of the chestnut canopy in densely-stocked, managed coppice cants.

Factors Causing Change

Deer browsing: Annual deer impact assessments will be used to monitor the effectiveness of the annual culling programme.

Ash dieback: Ash dieback fungus identified on site since 2016 will have a long term effect on the wood through killing ash trees, although ash forms a very minor component within the canopy.

Other potential tree diseases eg Sweet chestnut blight, ink disease (*Phytophthora* spp), oak decline: monitoring of tree diseases through the woodland condition assessment and PAWS assessment.

A Woodland condition assessment and PAWS assessment are completed during every plan period to assess these threats as well as annual key feature monitoring observations.

Long term Objective (50 years+)

The long term objective is to achieve a resilient habitat and structural diversity with actively managed coppice and retained standards allowed to become veteran trees, a managed ride network and areas left to develop by natural processes all well represented within this woodland. The ASNW areas will also contain a patchwork of in-rotation sweet chestnut coppice and an area set aside to demonstrate different methods of enriching and diversifying monoculture sweet chestnut set up in 2019.

Short term management Objectives for the plan period (5 years)

The short term objective is to contribute towards the creation/ maintenance of structurally diverse woodland within a resilient habitat and to set up a demonstration study of diversifying monoculture sweet chestnut.

This will be achieved by:

- Coppicing

Approximately 18.6ha of sweet chestnut coppice to be felled from cpts. 1f, 2c and 3a during the plan period with successful regrowth of cut stools, supplemented with planting or layering of sweet chestnut to maintain a full stocking density where coppice stools have died.

- “long term chestnut study”

Establish 6 trial areas in 2019 within cpt. 1f in cant 1f9, each to be 0.4-0.5ha in size.

- Ride edge management (for ASNW and PAWS Key Feature)

Establish a 3 zone wide ride habitat along approximately 5.0km of selected rides in 2017 and 2018 by initial coppicing works.

Maintain this habitat through cyclical cutting with zone 1 areas cut annually, zone 2 areas cut on a rotation of 3-5 years, and zone 3 areas cut on a rotation of 10-12 years, and all cut in a piecemeal fashion.

- Woodland archaeology:

To commission an archaeology survey for the whole site in 2018.

5.3 Connecting People with woods & trees

Description

Longbeech North is classified by The Woodland Trust as a category A site, where we are expecting a high level of public access (15-20 visitors using one entrance every day). As a Demonstration Site, Longbeech North will also be important for demonstrating our planted ancient woodland restoration techniques and chestnut diversification study to landowners, foresters and to other professional members of the timber industry.

Longbeech North has a mainly flat topography with a small dry valley running north east through the site. The paths could become muddy with high use during the wet winter months although parts of the path network have a rough stone surface. The main views through the site from Monkery Lane are of conifer plantations and sweet chestnut coppice, with long straight tracks leading off into the wood. Other neighbouring parts of Longbeech Wood are privately owned with much of it lotted up.

Public Engagement

The public has access to the wood from 4 main formal access points off Monkery Lane, 2 access points on the bridleway way at the north end of the site and 1 access point from the Wagon and Horses pub. The main Woodland Trust parking area is at the westernmost gate off Monkery Lane. Public access infrastructures were installed in autumn 2017 along with improving the parking area. All the entrances lead the visitor onto an extensive path network through Longbeech North totalling approximately 6.4km (4.0 miles). Each entrance has a small the standard freestanding wooden welcome sign giving visitors the confidence that they are in the right place. The main parking area has the large main entrance welcome sign and an information board is to be installed in 2018. Longbeech North is expected to become a well-used site by visitors from the surrounding villages of Charing (pop 2,766) and Challock (pop 920) which are within 3.2km (2 miles) of the site and from other villages further afield.

Forest Industry engagement

As an aid to providing information to Forest Industry personnel, there is a way marked trail installed in Autumn 2017, the Demonstrating Restoration Trail (2.4km) which starts from the main Woodland Trust car park. An accompanying site leaflet detailing this Demonstration trail is also available on site and online. Once on site, visitors will be able to see the extent of the conifers planted on this ancient woodland site and how these areas are being restored, plus work to make sweet chestnut coppice more resilient. Due to its planted ancient woodland history and intensive management much of the ancient woodland ground flora has been suppressed and weakened, but through our restoration works, this will be reversed.

Events

As a Demonstration Site, there will be events in most years during the plan period where invited professionals will be visiting the site. We will also be holding an annual public meeting where interested local residents and owners of neighbouring parts of Longbeech Wood will be invited to review progress and discuss restoration techniques. This site is less likely to host larger general public engagement events due to constraints of access via Monkery Lane (see below) and its focus as a demonstration site.

Volunteers

There will opportunities for engaging volunteers to help monitor the site.

Other Woodland Trust sites in the area are: Park Wood near Chilham 7.4km (4.6 miles) and Dering Wood 12 km (7.5 miles) from Longbeech North.

Significance

Public access to this woodland helps fulfil some of the Woodland Trust's corporate objectives such as to “connect with urban audiences, engaging with potential supporters and protecting ancient woodland and restoring whole landscapes”. Public access enables the visitors to see an important planted ancient woodland site which is also a Woodland Trust Demonstration site and gives an opportunity for the Woodland Trust to promote the message of ancient woodland habitats and the importance of its protection and restoration. A significant part of the Longbeech Wood complex is privately owned and lotted into small areas and these contain similar tree species and conditions as Longbeech North. There will be opportunities to engage and provide advice and help with woodland management within the neighbouring woodland.

Opportunities & Constraints

Opportunities:

This is a large Woodland site with the potential to attract a wide group of visitors but the two main groups are those who visit to learn about demonstration and the local community. Some visitors may fall into both groups. As this is a new site for the Woodland Trust many of the initial visitors will never have walked through the site. The provision of new public access infrastructure, while at the same time preventing access by motorbikes and 4x4's, will allow peaceful recreation and also help protect the woodland habitat from misuse.

Spring flowers will help attract more visitors to the site aided by advertised self-lead and guided walks.

The facilities offered by the Wagon and Horses pub adjacent to the site are a great asset for Longbeech North and through advertising events at the pub will widen the audience who learn about the Woodland Trust and what the Woodland Trust can offer.

Constraints:

The clay with flint soil tends to make winter walking muddy and slippery on well used paths. Some parts of the permissive path network contain slopes down into and out of the dry valley. A small section of the permissive paths has a rough stone surface which makes wider wheel chair access difficult.

Monkery Lane is a single track lane from which access to the wood is gained. A high volume of cars at peak times of the year or events could be a problem with limited passing spaces along the lane. Ashford Borough Council placed an Article 4 Order on this site in 2006 to prevent the site being easily lotted and similarly to inhibit subsequent development. Planning permission was therefore required from Ashford Borough Council (and received in July 2017) to install all public access infrastructure, signs and all site entranceway improvements referred to in this document. Any additional requirements which may be needed in future years will also be subject to planning permission approval.

Factors Causing Change

Fly tipping - Monkery Lane is a quiet secluded lane and has attracted fly tipping in the past in gateways into the wood.

Anti-social behaviour - such as motorbikes and quads could try to gain access to the wood.

Long term Objective (50 years+)

A well established and safe network of paths for informal public access throughout Longbeech North where responsible visitors can appreciate and respect this wood with its different habitats, archaeology and wildlife interest. Its key role as a Demonstration Site will remain like this for many decades as the restoration process takes place.

The visitor numbers to be in line with its category A status with provision for parking on site in a small parking area. The provision of way marked routes, interpretation structures, a site leaflet and information boards to be available on site if required.

The site will still contain many more large trees and active coppicing and forest management will be regularly taking place, helping to engage visitors with active woodland management.

The large open areas created by the 2012 sanitation felling will have established mixed woodland habitats, showing visitors how woodland habitats change over time.

Volunteering opportunities will still be relevant and important in helping to monitor the changes through the restoration process.

Short term management Objectives for the plan period (5 years)

During this plan period, the short term objective is to provide public access at Longbeech North for the first time (as a new Woodland Trust site) which is safe and enjoyable and also to provide site based information accessible to Forest Industry professionals. How this will be achieved:

- Path mowing

All rides and paths within the site 6.4km (4.0 miles) will be maintained annually through an appropriate cutting regime. For the plan period two cuts, in June and September, are proposed with the September cut including ride verges.

- Public access entrance furniture and facilities

To provide and maintain secure site entrances which are accessible to the public via all access infrastructure next to metal lockable vehicle barriers at the 4 formal access point off Monkery Lane. To achieve this, one additional vehicle barrier is to be installed in autumn 2017 and 4 all access kissing gates. In autumn 2017, each entrance will also have post and rail fencing installed to create a secure bell mouth along with coppicing road edge trees to make each entranceway more visible. An annual maintenance programme of cutting back vegetation at each of these 4 entrances will occur thereafter. To block up 7 other entrances off Monkery Lane in autumn 2017.

Woodland Trust signs to be installed in autumn 2017 and maintained at each of the 7 access points into the wood. All site infrastructure and signs will be inspected annually and any remedial work undertaken in the appropriate timescale.

To provide safe parking off Monkery Lane at the westernmost gateway for approximately 5-6 cars by expanding the existing hard standing by approximately 64sq.metres in Autumn 2017. A maintenance programme in subsequent years will include vegetation control and litter clearance as necessary coinciding with the path cuts. The need for any surfacing repairs will be assessed annually.

- Monitoring of antisocial behaviour

To monitor the car park and the surrounding woodland for signs of antisocial use and liaise with Kent Police when this occurs to try and prevent it from reoccurring.

- Site based information and enjoyment

For Forest Industry professionals, a leaflet is to be designed in 2017 which provides information on the Demonstrating Restoration Trail 2.4km (1.5 miles). This is to be available from a dispenser at the Woodland Trust parking area off Monkery Lane. Further copies of this leaflet will be printed during the plan period when required.

8no positional posts to be installed along the Demonstration Restoration Trail in autumn 2017 and maintained throughout the plan period.

- Volunteering

During 2017 and 2018 to recruit volunteers for 4 opportunities.

- Tree safety

Annual Zone A tree safety inspection. A fungal survey is to be carried out once in every 24 month period in the autumn with a summer survey in between to check trees' crowns.

Zone B tree safety inspections are to be carried out biannually. Arboriculture work to be carried out when necessary.

- Site boundary management

Woodland vegetation to be cut annually along the edge of Monkey Lane to achieve a minimum height clearance above the full width of the highway to 5.1m.

During 2018, mature coppice stems along Monkery Lane within cpts.2a, 2c and 2f are to be singled and thinned to promote well-structured and safe trees.

- Demonstration events

To hold up to 2 events each year during the plan period and invite both public and professionals to view and contribute where relevant in the development of the demonstration project and provide greater awareness of the Woodland Trust's ambition for this site.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	4.13	Birch (downy/silver)	1985	PAWS restoration	Archaeological features	Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
<p>Predominately un thinned and failed NS/CP/DF plantation, (NS and CP P'85 and DF P'2002) with high broadleaved content of mostly birch, hornbeam and sweet chestnut. hazel and goat willow. A small amount of the NS has been line thinned up from the main track through the valley. Where light levels permit ancient woodland ground flora is very sparse with bluebell the most obvious plant present plus bramble. Very little tree regeneration present.</p> <p>1a1, 1a2, 1a3 and 1a4 are subdivisions of cpt.1a which are due to be coppiced as a way of restoring this PAWS area. 1a5 is the better stocked NS PAWS area which will be restored through thinning.</p>							
1b	3.74	Hornbeam	1900	Min-intervention		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
<p>A mixture of hornbeam and birch managed previously by coppicing plus single stem trees originating through natural regeneration. Rich ground flora with dog's mercury, wood anemones and bluebells present. This sub compartment contains a plateau position with deeper soils and a valley side position where the chalk is more exposed and allows a slightly different ground flora mix. A large historic quarry/hole is situated in the northeast corner of this sub compartment.</p>							

1c	4.64	Japanese larch	1965	PAWS restoration	Archaeological features	Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
<p>P'65 JL plantation, well stocked and line thinned as well as selectively thinned,(earmarked for clear felling by previous owner). There is a significant broadleaved content but mostly in the sub canopy and mainly birch and hornbeam. Some hazel found in the understorey but no evidence of tree regeneration. Bluebell present and covers most of the zone thinly along with some moss and fern species; bramble almost absent. Along the track edge on the north western side there are more ground flora species like wood sage, fern and yellow archangel although rare. Deer tracks are very evident through this zone. There is a wood bank along southeast boundary.</p> <p style="text-align: right;">Soils are slightly acid</p> <p>loamy and clayey soils with impeded drainage. This zone has a slope down to the northwest.</p>							
1d	3.42	Douglas fir	1950	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order

P"50 DF plantation with substantial broadleaved sub canopy dominated by hornbeam and birch but with sycamore, ash, wild cherry and field maple and the occasional spindle tree present. On the north side of the valley the broadleaves have been left to grow and are in the sub canopy; on the south side of the valley the broadleaves have been coppiced or felled 3-4 years ago and are less obvious. DF is well spaced but forms the dominant canopy. This zone is situated on the north and south sides of a shallow valley with a short steep slope. Ground flora is rich (compared to elsewhere at Longbeech North) with common dog-violet, wood sorrel and wood anemone present in isolated places with moss. Dogs mercury and bluebell are well represented but scattered through this zone, but less obvious on the south side of the valley. A consequence of the broadleaves being felled on the south side are that light levels are higher and therefore bramble dominates the ground flora being knee high. Wood sage, Wood sorrel and fern species are found towards the valley bottom. Bramble is present but rare in the valley bottom. No tree regeneration present.

Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a short and steep slope up to the north.

1e	3.13	Japanese larch	1960	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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P"60 JL plantation with sweet chestnut coppice understorey with the occasional hornbeam and hazel coppice stool and single stem birch, beech and Norway maple. Ground flora of bramble with bluebell existing under it, with bracken appearing under gaps in the canopy. Fern species and wood sage appears along the east side of zone.

Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a slight slope down on its eastern side.

1f	17.72	Sweet chestnut	1900	Coppice		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Site of Local Nature Conservation Importance, Tree Preservation Order
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Sweet chestnut coppice with scattered oak and sweet chestnut standards. Large even aged cants of sweet chestnut all in rotation and approximately 15-17 years old. Retained standards of oak are rare and are not of significant size or age; sweet chestnut standards are recruits from previous coppice rotation so are 35-40 years old and most of them are situated in the north of this sub compartment. Bramble is the main ground flora with bluebell.

A wood bank runs along the western side of this sub compartment parallel to the boundary with cpt.1c. A probable saw pit location has been identified near the south west boundary opposite cpt.2g.

1g	4.24	Norway spruce	1965	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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The main part contains P'65 NS plantation which is well stocked and line and selectively thinned in the past, and nearing maturity (due to be clear felled in 2017 by previous owner). Broadleaves almost absent within the central and southern parts. In the north and western parts of this zone birch and sweet chestnut coppice and singled stems make up the canopy with the occasional NS.

Bramble is dominant across this zone although no more than knee high with bracken appearing under gaps in the canopy. Bluebell is occasionally seen but critical under the bramble; some fern species and moss occur too. Tree regeneration not widespread and very localised. Deer tracks can be seen through this sub compartment and along neighbouring rides.

A small area of P'65 JL (0.4ha) plantation with a sub canopy of sweet chestnut, birch and hornbeam but dominated by sweet chestnut is located in the extreme north east of this sub compartment. Bramble is knee high across the zone with bluebell present under the bramble but threatened. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a no slope.

1h	4.10	Norway spruce	1965	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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Poorly stocked P'65 NS plantation south of bridleway path. This zone is situated in a shallow valley running north-south, and the NS has probably suffered wind blow damage in the past. This zone contains areas where the canopy is dominated by NS, but the majority of the zone is an open matrix of small open areas dominated by bramble/bracken with birch regenerating within them, alongside areas of older hornbeam and birch coppice with the occasional singled stem of sweet chestnut. Under the thicker broadleaved areas bluebell and wood sage are dominant and fern species appear; yellow archangel appearing on the edge of the bridleway. Open glades are dominated by bramble with some bracken, willow herb and elder. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a slight slope up from the valley both to the northwest and northeast. A large historic quarry/hole is situated in the northeast corner of this sub compartment, as is a chalk hole just beyond our woodland boundary.

2a	2.20	Japanese larch	1985	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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P'85 JL plantation which has been lined thinned 1 in 5 and selectively thinned at least once and reasonably well stocked with JL. Also contains significant amount of broadleaves - birch and sweet chestnut with some hazel and hornbeam as a sub canopy with the occasional sweet chestnut in the canopy. Extraction racks are knee high in bramble with some fern and foxglove present. Between the racks bramble is less dominant and bluebell and wood sage are present. No young tree regeneration seen. Strip of approx. 10m wide along the edge of Monkery Lane contains the original broadleaved coppice stand type of sweet chestnut, birch and hornbeam. A small shallow quarry or hollow is situated on the north eastern edge which contains 100% mixed broadleaved coppice of hornbeam, birch and sweet chestnut. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has no slope to it.

2b	5.36	Birch (downy/silver)	2013	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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Previously a P'85 JL plantation with chestnut coppice, but clear felled in 2013. Very scattered sweet chestnut standards have been left of P'85 origin. Stand now consists of regenerating coppice stools of sweet chestnut with occasional hornbeam, hazel and sycamore. Between these stools is a mass of bramble plus seedlings of birch, larch, goat willow but birch is the dominant species. Bramble dominated vegetation although in places there is common rush, broom, fox glove, wood sage, fern and bluebell which is "rare". Tree regeneration will restock the zone but still species poor. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has no slope to it.

2c	4.24	Sweet chestnut	1985	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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Remnant of plantation crop type; previously a P'85 JL/DF plantation with an extensive broadleaved component of similar age, but all conifer removed in 2013 (apart from one small area). Broadleaves were retained with mature coppice stems forming > 75% of the canopy with sweet chestnut mainly and some hornbeam, and singled stems of sweet chestnut, oak and birch. Under stocked areas between the coppice stools are knee high or less with bramble. Bluebell remains under the bramble with some fern, and fox glove along the track edge. 3no significant large open areas remain which are dominated by bracken, bramble and willow herb with scarce tree cover. Within these open areas you will find some young hazel coppice and birch regeneration, and bluebells hanging on under this dense weed growth. Pole stage broadleaves left are mainly sweet chestnut with some birch and oak. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has no slope to it.

2d	3.99	Oak (sessile)	2016	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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Larch clear felled in 2013; ground preparation pre re stocking carried out by previous owner consisted of mulching lop and top and all stumps. Following mulching area was deer fenced and then planted in Dec'15/Jan'16 with 50% DF and 50% oak and sweet chestnut. In winter of 16/17, beating up operation reduced the percentage of sweet chestnut by replacing with hornbeam, pedunculate oak, yew, rowan and small leaved lime.

2e	5.35	Douglas fir	1985	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
<p>P'85 DF plantation is well stocked and split either side of main track through the middle. 1 in 5 line and selectively thinned. SE of the track there is the occasional birch, hazel and chestnut stem which is in the sub canopy. Seedling tree regeneration of birch, hornbeam and DF are present but rare and mostly on the edge of the racks. NW of the track the amount of broadleaves in the sub canopy and within the canopy with DF is much greater although most of the broadleaves are similar in age. Bramble is the dominant species present. Other species present in the ground flora are: foxglove, wood sage and broom is found along the south eastern edge too. Under the bramble is a well-developed grass sward. Between the racks under the DF light conditions are poor and as a result there is little ground flora present apart from some bramble and moss and isolated patches of bluebell under areas of broadleaves in the sub canopy. NW of the track the ground flora, takes on a more ancient woodland appearance to the flora with no grass present, a substantial moss layer, bluebells, fern species and wood-sorrel. The track edge of this plantation in the valley bottom on the south eastern side has suffered small pockets of wind blow extending up to 20m in places into the plantation. The resulting increase in light has caused a similar ground flora to develop as within the plantation racks.</p> <p>Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a moderate slope down towards the south east.</p>							
2f	7.14	Douglas fir	1965	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order

P'65 DF plantation, well thinned in the past and mixed with singled coppice stems of sweet chestnut and a few oak. These broadleaved stems are scattered through the sub compartment with a greater concentration of them in the centre where the DF has been completely removed by thinning. In the gaps under the canopy following tree removals there is a developing understorey of mixed broadleaved tree regeneration showing a range of heights and DF regeneration which is all mostly of a similar height (less than 2m). Tree regeneration is scattered through this zone, although there are areas where there is no regeneration. Bramble is knee deep across most of this zone. Bluebell is present under the bramble, but no other ancient woodland remnant seen. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a moderate slope down towards the north west.

2g	6.68	Birch (downy/silver)	1985	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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Larch removed during 2013 to leave the remnant mixed broadleaves consisting mainly of sweet chestnut, birch and some hazel. North west side of this sub compartment contains less broadleaves and a higher amount of bracken infested open areas with regenerating birch; the south east side contains a predominately closed canopy woodland of birch, sweet chestnut and some oak with a bramble and bluebell ground flora. Soils are slightly acid loamy and clayey soils with impeded drainage. This zone has a moderate slope down towards the north west. A wood bank cuts through the north east corner of this sub compartment - the same feature as seen in cpt.1f.

3a	8.99	Sweet chestnut	1900	Coppice		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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Sweet chestnut coppice with scattered oak standards. Large even aged cants of sweet chestnut all in rotation and approximately 15-17 years old. Retained standards of oak are rare and are not of significant size of age. Bramble is the main ground flora with bluebell.

3b	14.79	Oak (sessile)	2016	PAWS restoration		Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site, Site of Local Nature Conservation Importance, Tree Preservation Order
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A large restock area following the clear felling of phytophthora infected larch in 2013. Ground preparation and re stocking was carried out by the previous owner as follows:

East of main track: 2.6ha at the northern tip was felled, and stumps of sweet chestnut allowed to regenerate along with natural regeneration of birch, willow and some hornbeam; Remainder of area east of track had lop and top raked and burnt plus stumps mulched; 4.11 ha area on the eastern edge was deer fenced and then planted in Dec'15/Jan'16 with 50% DF and 50% oak and sweet chestnut. In winter of 16/17, beating up operation reduced the percentage of sweet chestnut by replacing with hornbeam, pedunculate oak, yew, rowan and small leaved lime.

1.92 ha area was restocked with mixed broadleaves in 1.5m high tree shelters at 3m x 3m spacing. Mixed broadleaves consisted of sweet chestnut, rowan, wild service, wild cherry, small leaved lime, birch and oak.

West of main track: 2.46 ha area where the broadleaved stumps were allowed to re coppice following clear felling. This was then gapped up with mixed broadleaves in 1.5m high tree shelters at 3m x 3m spacing. Mixed broadleaves consisted of sweet chestnut, rowan, wild service, wild cherry, small leaved lime, birch and oak.

1.82 ha had the chipwood, lop and top and stumps all mulched to leave a thick layer of mulch prior to restocking. This was deer fenced and then planted in Dec'15/Jan'16 with 50% DF and 50% oak and sweet chestnut. In winter of 16/17, beating up operation reduced the percentage of sweet chestnut by replacing with hornbeam, pedunculate oak, yew, rowan and small leaved lime.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2018	1a	Thin	1.00	63	63
2018	1c	Thin	1.00	99	99
2018	1g	Thin	4.37	52	227
2018	2a	Thin	2.20	36	80
2018	2e	Thin	4.85	47	230
2018	3a	Coppice	2.83	124	350
2020	1d	Thin	3.42	29	100
2020	1e	Thin	3.13	30	95
2020	1f	Coppice	1.36	118	160
2020	1f	Thin	0.45	44	20
2020	1f	Coppice	2.10	119	250
2020	1f	Coppice	1.20	112	135
2020	1f	Coppice	3.50	123	430
2020	2c	Coppice	1.40	150	210
2020	2f	Thin	7.14	21	150
2020	3a	Coppice	2.60	129	335
2020	3a	Coppice	2.40	119	285
2021	1a	Thin	1.00	20	20
2021	1c	Thin	4.64	30	140
2021	1f	Coppice	3.60	124	445
2021	1h	Thin	4.10	12	50
2021	2a	Thin	2.20	32	70
2021	2e	Thin	4.85	39	188
2022	2g	Thin	2.00	20	40
2022	3a	Coppice	1.60	125	200
2023	1a	Selective Fell	0.40	75	30
2023	1g	Thin	4.37	39	170
2024	1f	Coppice	1.60	125	200
2025	1a	Thin	1.00	20	20
2025	1c	Thin	4.64	30	140
2025	1d	Thin	3.42	29	100

2025	1e	Thin	3.13	30	95
2025	1f	Coppice	1.40	89	125
2025	1g	Thin	4.37	39	170
2025	2a	Thin	2.20	32	70
2025	2e	Thin	4.85	39	188
2025	2f	Thin	7.14	21	150
2026	1a	Clear Fell	0.80	38	30
2026	1f	Coppice	0.50	250	125
2027	1f	Coppice	0.40	175	70
2028	1a	Clear Fell	0.40	75	30
2030	1a	Clear Fell	0.40	75	30

GLOSSARY

Ancient Woodland

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

Ancient Semi - Natural Woodland

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

Ancient Woodland Site

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

Beating Up

Replacing any newly planted trees that have died in the first few years after planting.

Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

Clearfell

Felling of all trees within a defined area.

Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

Continuous Cover forestry

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

Field Layer

Layer of small, non-woody herbaceous plants such as bluebells.

Group Fell

The felling of a small group of trees, often to promote natural regeneration or allow planting.

Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

Mixed Woodland

Woodland made up of broadleaved and coniferous trees.

National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

Native Species

Species that arrived in Britain without human assistance.

Natural Regeneration

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

Re-Stocking

Re-planting an area of woodland, after it has been felled.

Shrub Layer

Formed by woody plants 1-10m tall.

Silviculture

The growing and care of trees in woodlands.

Stand

Trees of one type or species, grouped together within a woodland.

Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

Tubex or Grow or Tuley Tubes

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.