WOODLAND TRUST

Bitholmes Wood

Management Plan 2017-2022

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MAPS

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:	Bitholmes Wood, Firth Wood
Location:	Oughtibridge, Oughtibridge
Grid reference:	SK293964, OS 1:50,000 Sheet No. 110 SK291959, OS 1:50,000 Sheet No. 110
Area:	28.80 hectares (71.17 acres) 6.84 hectares (16.90 acres)
Designations:	Ancient Semi Natural Woodland, Ancient Woodland Site, Community Forest, County Wildlife Site (includes SNCI, SINC etc) Community Forest, Planted Ancient Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

This semi-natural ancient woodland lies on steep valley sides. There is a pleasant circular walk. An energetic climb to the top end of the wood is rewarded by fine views across the Don Valley. Limited parking facilities keep visitor numbers low.

2.2 Extended Description

Bitholmes Woods are an amalgamation of three formerly separate sites: Bitholmes Wood, Wantley Dragon Wood & Firth Wood. The woods are geographically linked, hence the Trust's reason to manage them under one single management plan. The 3 separate woods were acquired by The Woodland Trust at different times: Bitholmes and Wantley Dragon were purchased in 1997 and 2000 respectively, and Firth Wood was leased from Sheffield City Council in 2004 (until 2029). The site is partly ancient semi-natural woodland and it lies on steep valley slopes, sandwiched between Sheffield and the Peak District National Park

Bitholmes Wood (compartment 2) is mature ancient broadleaved woodland composed of mainly ash, oak, sycamore and beech, with sycamore being very dominant in parts. Firth Wood (compartment 3) contains younger secondary woodland but also an element of planted ancient woodland site (PAWS) with the main conifer species being larch together with oak, birch, hawthorn and rowan. Wantley Dragon (compartment 1) was planted in 2001 and the majority of its composition consists of ash, oak and birch. There is also some open ground habitat in this part of the site, which was retained within the planting design. In particular an old meadow towards the top of the slope provides stunning views towards Sheffield and over the surrounding landscape.

The woods were once part of a large hunting forest that later became a focus for mining, quarrying and industrial activity, and the varied terrain in parts of the site is a record of these past activities. The River Don straddles the eastern boundary of the site, which must have given the woodland strategic importance in the past. Drifts of bluebells and other woodland flora can be seen in Spring and some of the old field boundaries within the site contain old stone walls and veteran trees.

The woods are quiet and visitor numbers are probably low, due to the very limited parking facilities. However, there is a good network of paths within the site, to the west of the Manchester Road, and the site provides an interesting and varied experience for the visitor. Very limited car parking is possible on More Hall Lane next to the southern edge of the site.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

ACCESS TO THE SITE
The woodlands lie adjacent to the A6102 (Manchester Road) approximately 7miles north of Sheffield and two miles south of Stocksbridge. When heading north from Sheffield the A6102 runs through Oughtbride and then Wharncliffe Side. Approximately half a mile past Warncliffe Side a small lane on the left hand side of the road is signed posted for Bolsterstone. Follow this lane (More Hall Lane) up a hill for approximately 250metres. The road then levels out and roadside parking for a small number of cars is available on the right-hand side of the road, near the junction with a small green lane. A welcome to the wood greets visitors at this entrance. The lane, called Hare Hills Lane, provides footpath access to into the site

ENTRANCE AND FOOTPATHS
A Woodland Trust information board can be found at the junction of More Hall lane and Hare Hills Lane which illustrates the circular walks available through the woodland. Most paths within the wood are un-surfaced and there are some very steep sections along them.
A squeeze stile is found at the entrance to Hare Hills Lane, which is a moderately steep old grass track. This leads to two circular paths one northwards through Wantley Dragon and Bitholmes Wood and the other though Wantley Dragon and Firth Wood. The paths are steep in places and contain wet sections and also some steps and foot bridges.

PARKING
Roadside parking on More Hall Lane as described above is very limited.

PUBLIC TOILETS
None known within 5 miles.

BUS STOPS
Nearest bus stop on the A6102 in the village of Wharncliffe Side, approximately 0.5 miles to the south of the wood.

TRAVEL INFORMATION
For further information about public transport please contact Traveline on www.traveline.org.uk or phone 0871 200 22 33

3.2 Access / Walks

4.0 LONG TERM POLICY

The long term intention is for the woods to remain largely broadleaved in character and to contain a good mixture of native tree species throughout the site, together with a proportion of sycamore and beech. The age structure of the wood will also be diverse throughout the woods, with a good level of natural regeneration occurring. Periodic silvicultural intervention may be necessary to ensure that no one single tree species is dominant (eg sycamore). A healthy deadwood habitat will also be present. In achieving these aims the woods will be resilient and able to best absorb changes imposed on them in the future.

The planted ancient woodland (PAWS) area within Firth Wood will be restored and larch and red oak will not make up more than 20% of the tree mixture within it. The ancient woodland components within the stand, such as woodland flora, will be secure and not under threat as a result of this.

An element of open ground will be present and appropriately managed in Wantley Dragon Wood, to conserve un-improved grassland habitat and associated species and also to retain landscape views. The scattering of old and veteran trees located on former field boundaries will be retained for as long as biologically possible, subject to any safety considerations.

Threats to the woodland habitat will be monitored and managed if possible. Hence, the population of deer using the wood will be managed to a level where their impact on the natural regeneration of trees and native woodland flora is minimal. The woodland will be monitored for the presence of tree diseases, in particular ash dieback as it becomes more prevalent in the wood.

The Woodland Trust has given Bitholmes a Category C access designation which equates to a low useage site. In recognition of this facilities for the public will be fairly low key. A network of paths will nevertheless be managed and kept open for use and entrances will be accessible and clearly signed. The wood will be made as safe as practical for visitors through regular tree safety inspections in high risk zones.

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 Ancient Woodland Site

Description

Over 75% of the woodland area on the site is ancient semi-natural woodland, which covers the majority of Bitholmes wood and Firth wood. These areas were once hanging sessile oak woodland overlooking the Don and Ewden valleys. 19th century plantings and rock and mineral extraction over the last two centuries have left their mark, with a great deal of site disturbance, resulting in the bulk of the wood now being dominated by sycamore. However significant areas of ancient mixed woodland remain particularly along the crags and in the upper reaches of the wood and the lower shoulders. Despite being sycamore dominated, the lower wood still retains essentially ancient woodland character in its ground flora with many specialist woodland species still present, including bluebell, dogs mercury, ramsons, wood mellick, wood millet, opposite leaved golden saxifrage, cow wheat, and wood sorrel. Most of the wood consists of NVC (National Vegetation Classification) W10 oak/bracken/bramble woodland. However within this matrix, smaller scattered areas of other habitat types exist along streams and wet flushed area. On the wetter ground the NVC type approximates to W7 alder/ash/yellow pimpernel woodland with a dominance of the grass 'Deschampsia caespitosa' and low growing herbs. A large area of this type of woodland exists between the main road and the river with a varied canopy of ash, alder, goat willow, birch, wych elm and also some hornbeam. Various areas of NVC W16 acid oak/birch woodland occur along the crag tops, some dominated with bracken. The crags themselves and some areas of the upper wood have a more varied tree canopy than the rest of the wood with yew, holly, rowan as well as some occasional small leaved lime and wild cherry. The wood overall appears to contain a fairly complex matrix of woodland types, largely dependent on soil moisture and the movement of water through the woodland, overlain with the rocky crag features. Several significant areas of bracken (including the power line way leave) and additional planting in 2001 add further to the diversity of the site. Approximately one third of Firth Wood is planted ancient woodland (PAWS), with the principal conifer species being European larch as well as non-native red oak.
The ancient woodland area is scattered with historical mining and quarrying features and signs of other early industrial activity such as charcoal platforms and hearths.

Significance

Bitholmes woodlands form part of an extensive concentration of ancient semi natural woodland that lies to the north of Sheffield and close to the River Don. Ancient woodland is irreplaceable resource and holds the greatest diversity of species over any other habitat.

Opportunities & Constraints

There is an opportunity to increase the area of ancient semi-natural woodland by restoring the PAWS area in Firth Wood.
Large-scale management works involving the extraction of timber could be difficult due to very poor access, steep slopes and very undulating terrain.

Factors Causing Change

Browsing damage by deer, having an impact on flora and natural regeneration. Squirrel damage to early-mature trees. Small areas of invasive/ noxious weeds

Long term Objective (50 years+)

The long term objective is for the ancient woodland to remain largely broadleaved in character and to contain a good mixture of native tree species throughout the site such as oak, birch, alder and rowan, together with a proportion of sycamore and beech. The age structure of the wood will also be diverse throughout the woods, with a good level of natural regeneration occurring. Periodic silvicultural intervention may be necessary to ensure that no one single tree species is dominant (eg sycamore). A healthy deadwood habitat will also be present, and management works will continually add to this. The proportion of ash within the wood is likely to decrease over the next 20 years as a result of ash dieback, further increasing the deadwood habitat and creating canopy gaps for natural regeneration.

The planted ancient woodland (PAWS) area within Firth Wood will be restored, with larch and red oak not making up more than 20% of the tree mixture within it. The ancient woodland components within the stand, in particular the woodland flora, will be secure and not under threat as a result of this.

Threats to the woodland habitat will be monitored and managed if possible. Hence, the population of deer using the wood will be managed to a level where their impact on the natural regeneration of trees and native woodland flora is minimal. The woodland will be monitored for the presence of tree diseases, in particular ash dieback as it becomes more prevalent in the wood, and guidance will be sought on the best form of management required as a result of any disease affecting the wood. The wood will be free from non-native invasive species.

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

The short term objectives during this plan period are to continue the PAWS restoration work in Firth Wood and to create better conditions for natural regeneration to occur. This will be achieved by:

- Carrying out a thinning operation in Firth Wood during 2019. 1.5 hectares of larch dominated woodland will be thinned, together with a proportion of red oak and sycamore, to encourage the development of native broadleaves such as oak and birch. The thinning intensity will be 15-20% of the standing volume. With the low timber volume generated and the difficult access arrangements, it is likely the trees will be felled to waste, but local markets and possible extraction will be explored when the contract is prepared.
- Continuing with a programme of annual deer management. A deer impact assessment will be carried out in 2018, and be repeated every 2 years to monitor the effectiveness of the deer control, and the results of this will be fed back into the deer management contract so appropriate cull levels can be set.
- The small patches of Japanese knotweed and Himalayan balsam in Bitholmes Wood will be treated by annual chemical spraying and continuous cutting respectively, until they have been eradicated.

5.2 Natural Secondary Woodland

Description

The secondary woodland area is known as Wantley Dragon Wood, and it covers approximately 20% of the area of the site. The woodland was planted in 2001. The main tree species planted are oak, ash and birch, together with minor proportions of rowan, field maple, aspen, hazel and hawthorn. A number of the planting blocks are dominated by a single species (ash). Significant natural regeneration has also occurred on the margins with the ancient woodland, some of which is now quite mature and includes oak, sycamore, rowan, wild cherry with an under-storey of elder and hawthorn. A significant element of open space has been built into the design of Wantley Dragon including wide rides between the planting blocks, and most importantly an old meadow on the south facing slope. The old meadow is un-improved acid grassland, and is therefore an important semi-natural habitat. It also supports a good variety of wild plants including wavy hair-grass and heath bedstraw.

Significance

The secondary woodland acts as buffer to the neighbouring ancient woodland and forms an ecological link in the landscape. The meadow is un-improved acid grassland and as such it is an important semi-natural habitat, within the woodland complex.

Opportunities & Constraints

The south facing meadow is an important ecological asset to the site, and it also contributes to public enjoyment of the site through the landscape views it offers. The continuation of conservation grazing on the meadow, to maintain its quality, has proved very difficult in recent years. If another sustainable and practical way can be found to manage the meadow it will remain an asset.

Factors Causing Change

Natural processes of tree/scrub colonisation on the smaller pockets of open ground.

Long term Objective (50 years+)

To create a mature broadleaved woodland which is diverse in tree species and in structure, enabling it to be resilient to change. Some silvicultural intervention may be required to achieve this. To maintain a proportion of open space within Wantley Dragon Wood (approximately 20%), which will include ensuring the old meadow is kept in appropriate management.

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

The short term objectives during this plan period are to manage an element of open ground and to add diversity to parts of the plantation:
- Retain approximately 1.5ha of open ground in appropriate conservation management. This will entail the annual cutting and clearance of vegetation from the old meadow.
- Carry out a 15% thin (approximate) in 2 blocks of the plantation which are dominated by ash. The total area is 1.5ha and the thinning will be done progressively over the 5 year plan period. Ash dieback is likely to affect the wood at some point, and the aim of this work is to release other broadleaved trees which are currently being suppressed by the ash. The resulting thinned stands will be more robust to the impact of ash dieback when it starts to take effect.

5.3 Informal Public Access

Description

Bitholmes woods provide a large area for informal recreation on the outskirts of Sheffield and close to the Peak District National Park. There is an extensive network of pedestrian paths, totalling over 3km. The site provides a varied and interesting experience for the visitor, with different woodland types, steep climbs, rocky outcrops and impressive views over the surrounding countryside. An open meadow to the south of the site (Wantley Dragon) is good place for visitors to enjoy the landscape views, where there is also a bench and a dragon sculpture (installed when the planting took place in 2001).
Visitor numbers are thought to be quite low, probably due to the difficult local parking. The 2 main visitor entrances into the site are off More Hall Lane, and there is a further entrance off a public right of way to the north of Firth Wood. There is an additional entrance into the site, off the busy Manchester Road, but this is mainly for management vehicles. An information board is provided at the entrance to Wantley Dragon, off More Hall Lane. An ancient walled lane, Hare Hills Lane, forms the major public right of way through the wood, linking to the road on southern boundary (More Hall Lane).

Significance

The site provides a quiet area for informal recreation on the edge of the large city of Sheffield.

Opportunities & Constraints

Due to the difficult local parking, regular visitor numbers are likely to remain low. There is the potential to increase community engagement at the wood through the holding of conservation volunteer activities. Bitholmes could be featured within a longer distance promoted walk, as it is possible to reach the site from Stocksbridge using the rights of way network.

Factors Causing Change

changes in level of visitor use

Long term Objective (50 years+)

Low key public access will be provided in perpetuity, and as appropriate for the category 3 access designation. This will include a network of managed paths and entrances. The site will be kept as safe as practical with regard to visitors, neighbours and adjacent road users. Continued efforts will be made to encourage greater engagement with the site by the local community.

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

The short term objectives during this plan period are to maintain safe and low key public access and to increase community engagement with the wood. This will be achieved by:
- Annual management of the 4 main entrances and the 3km network of paths, to keep the site open for use.
- Regular safety inspections of trees in high risk zones, to include an annual inspection of trees along roadsides.
- Working in partnership with the Steel Valley Project to hold at least 2 volunteer activities at the wood each year.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	8.63	Mixed native broadleaves	2001	High forest	Very steep slope/cliff/quarry/ mine shafts/sink holes etc	Ancient Woodland Site, Informal Public Access	
This sub-compartment is the majority of Wantley Dragon Wood. It is predominantly a broadleaved plantation, planted in 2001, together with small areas of more mature secondary woodland, and former grassland areas which have since colonized with trees. The species for the 2001 planting were chosen to replicate those found in Bitholmes Wood to the north (excepting sycamore). Namely ash (30%), birch (20%), sessile oak (20%), cherry (5%), rowan (5%), field maple (5%), aspen (5%), together with thorns and hazel (10%). The mature secondary woodland on the flanks consists of oak, sycamore, rowan, wild cherry, with an understorey of elder and hawthorn. On the former grassland hawthorn appears to be the initial colonizer followed by oak and ash. Wide grassy rides are present between the woodland blocks. The sub-compartment is traversed by overhead electrical powerlines which run north-south, and there is also a public right of way which starts at the More Hall lane entrance.							
1b	1.42	Open ground		Wood pasture	No/poor vehicular access to the site	Ancient Woodland Site, Informal Public Access	Ancient Semi Natural Woodland, Ancient Woodland Site, Community Forest, County Wildlife Site (includes SNCI, SINC etc)
An un-improved meadow retained within the planting area of Wantley Dragon. It contains a good diversity of plant species, and was grazed periodically up to 2010.							
2a	28.80	Mixed native broadleaves	1900	Min-intervention	No/poor vehicular access to the site, Services & wayleaves	Ancient Woodland Site, Informal Public Access	Ancient Woodland Site, Community Forest, County Wildlife Site (includes SNCI, SINC etc)

This sub-compartment occupies the entirety of the original Bitholmes Wood from its craggy summit along the western boundary to the River Don which forms the eastern boundary some 200 metres below. It is divided north-south by two man-made features, the A610 and a line of electricity over-head cables. The nature of the woodland habitat varies considerably across the sub-compartment. Towards the river Don and the east, the woodland is dominated by beech. It also includes oak, sycamore, ash, lime and wych elm and lime, with a sparse understorey of suckering elm, hazel, holly and elder.

In the highest part of the wood (on the western side) the canopy is not continuous and there are large areas of open ground covered with bracken. This open woodland contains sessile oak, sycamore, rowan, birch, beech and yew together with scattered small leaved lime (on the crag tops), holly and the occasional cherry. Regeneration of oak, birch, rowan and yew does occur in places. Further downslope of the crags there are numerous boulderfields, spoilheaps and other remnants of former mineral extraction activity. Here the canopy is dominated by sycamore which appears to have been partly coppiced in the past. Yew, lime, beech and elm are also present, and regeneration in this area is very sparse.

The section between the powerlines and the road is dominated by young goat and crack willow, together with birch, young wych elm and hornbeam. There are also a number of mature beech, alder and sycamore. Along the roadside here is abundant ash regeneration.

3a	5.10	Mixed native broadleaves	1900	Min-intervention	Mostly wet ground/exposed site, No/poor vehicular access to the site	Ancient Woodland Site, Informal Public Access	Ancient Semi Natural Woodland, Community Forest, County Wildlife Site (includes SNCI, SINC etc)

This sub-compartment is the bulk of Firth Wood. It varies considerably in character which reflects its recent history. The upper section, which prior to acquisition was used to run pigs, has a more open character with scattered trees and areas of bracken and gorse. The major tree species are oak, sycamore, birch and rowan which are slowly re-colonising the open areas. On the intermediate slope is a large area of what was grassland. Over decades hawthorn has re-colonised and created an almost mono-culture of thorn woodland with a ground layer of grass and bluebell. The lower section which extends up-slope from More Hall Lane is composed mainly of oak, ash and sycamore.

Many of the trees are multi-stemmed and scrubby in nature. An electricity overhead powerline cuts through the western end of the sub-compartment, and there is also a public right of way.

3b	1.74	Mixed conifers	1970	PAWS restoration		Ancient Woodland Site, Informal Public Access	Community Forest, County Wildlife Site (includes SNCI, SINC etc)

This sub-compartment forms the eastern side of Firth Wood and it is plantation on an ancient woodland site (PAWS). The semi-natural woodland was felled in the early 1970s by the Forestry Commission and planted with American red oak and larch. The stand does have however contain some native broadleaves regenerating within it, such as English oak, birch and rowan, and there is good woodland flora characteristic of ancient woodland.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2022	3b	Thin	1.50	133	200

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.