

# Pepperboxes Wood

# Management Plan 2019-2024

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a> 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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a>. 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.
- 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: Pepperboxes Wood

Location: Hampden Bottom, Great Missenden
Grid reference: SP865019, OS 1:50,000 Sheet No. 165

**Area:** 13.40 hectares (33.11 acres)

**Designations:** Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty,

Planted Ancient Woodland Site

# 2.0 SITE DESCRIPTION

# 2.1 Summary Description

Pepperboxes Wood is a quiet wood close to the village of Great Missenden in the Buckinghamshire Chilterns. The wood gets its name from the two round gatehouse buildings to the northeast of the site.

There are large mature beech trees dotting the site, mixed with younger oak, birch, rowan and hazel. The wood is a planted ancient woodland site (PAWS) because it was planted with conifers in the 1970's. The wood is in the process of being restored to native broadleaved species but you can still see blocks of larch and spruce trees. There are also large sweet chestnut and lime trees and if you look carefully you may see an (uncommon) wild service tree.

Pepperboxes wood has a good network of pedestrian-only paths, some of which are rights of way and link to the surrounding woods and countryside. The wood is most easily accessed from the north, via a right of way off Rignall Road, but it is possible to walk to the wood from Prestwood village via the local rights of way network.

# 2.2 Extended Description

Pepperboxes Wood is a 13.5 hectare / 33 acre site located within several miles of the villages of Prestwood and Great Missenden in Buckinghamshire, and is within the Chiltern Hills Area of Outstanding Natural Beauty (AONB). It was purchased by The Woodland Trust in 1991 through a private sale. It was formerly owned by the nearby Hampden estate and more latterly Hampden House. Its name derives from the Lodge House structures located to the north-east of the wood. The wood is also known as 'Lodge Wood' on some maps.

Pepperboxes is an ancient semi-natural woodland (ASNW) dominated by beech and typical of the Chilterns landscape, with a good variety of ground flora present. The site was partially planted in the 1970's with a mix of conifer species and hence there is a 4ha (10 acre) element of planted ancient woodland (PAWS). The 1990 storms blew over many of the mature beeches, so they are now thinly scattered with younger mixed woodland (birch, oak, beech & rowan and a minor component of ash) growing in the gaps created. The conifer plantations are mainly Japanese larch with minor components of western hemlock, Norway and Sitka spruce.

Overall the wood approximates to a National Vegetation Classification (NVC) of W14: beech-bramble woodland. Bedrock is largely Holywell Nodular Chalk Formation and New Pit Chalk Formation (undifferentiated). The majority of the site is on lightly acid loamy and clayey soils with impeded drainage with a moderate to high fertility suited to a wide range of woodland types. The soil changes to the north of the site where more freely draining slightly acid but base-rich soils emerge with high fertility suited to deciduous woodlands.

There are the remnants of an old avenue on the northern boundary, which has large old lime and sweet chestnut trees. These avenue trees have connections with the very long open ride (owned by the adjoining estate) and known as 'The glade', which is a long grassy vista leading to Hampden House.

The wood has a good network of pedestrian-only paths, some of which are rights of way and link to the surrounding woods and countryside. The wood is most easily accessed from the north, via a right of way off Rignall Road, but it is possible to walk to the wood from Prestwood village via the local rights of way network.

# 3.0 PUBLIC ACCESS INFORMATION

# 3.1 Getting there

Getting there: the nearest bus stop is at Prestwood (Village Hall). From there, it is about a mile to reach the wood via roads and public rights of way. Great Missenden has a train station which is on the line to London Marylebone and buses run from Great Missenden and High Wycombe to Prestwood. Car parking is possible in a lay-by off Rignall Road (near Lower Honor End Farm) to the north of the site. From there Pepperboxes Wood is a short walk via a public footpath, which first goes south through a privately owned wood and then crosses 'The Glade' before entering the wood via a stile.

There are 4 other main entrances into the wood and 2 of these have stiles as well. There is a good network of permissive paths and rights of way but all paths are un-surfaced and can become muddy in wet weather. The site is on a sloping valley side and rises up towards the southern end of the site.

Public conveniences: The nearest public conveniences are in Prestwood High Street (maintained by Chiltern District Council 01494 732053).

All distances and times are approximate.

For further information about public transport, contact Traveline - www.traveline.org.uk or phone 0871 200 22 33.

# 3.2 Access / Walks

# 4.0 LONG TERM POLICY

The long term intentions for Pepperboxes Wood will seek to realise two of the Woodland Trust's three key aims:

- to protect native woods, trees and their wildlife
- to restore damaged ancient woodland

It is intended that over time the wood is gradually restored to semi-natural broadleaved woodland which has a minor percentage of conifer and a good diversity of locally native broadleaved species. Ancient woodland is one of our most valuable terrestrial wildlife habitats, and in England is defined as woodland sites with evidence of continuous wooded cover since 1600 AD. Pepperboxes Wood is a Planted Ancient Woodland Site, where in this case conifers have been planted in the early 1970's following felling. Approximately 35% of the site remains conifer plantation in compartments 2a, 2b, 2c, 2d and 2e (2019).

Restoration of PAWS provides the only opportunity to increase the area of ancient woodland with semi-natural characteristics. In general and in line with best restoration and reversion practice, the site has and will continue to be gradually converted to predominantly native broadleaf woodland, which will also provide suitable conditions for native and threatened ground flora to be safeguarded.

Practically this means that the conifer and a minor broadleaf plantation component mostly comprising beech, where identified after assessment as a threat to diverse broadleaf regeneration and/or forming dense shade suppressing ground flora, will be gradually thinned. The intention is to achieve more semi-natural broadleaved conditions over time. In subsequent continuous-cover (where there will be no loss of woodland cover) operations to thin stands to robust levels, (where the threat from plantation species to remnant features is minimal) the management will consider practice which may provide an economic return. A minor component of conifer, no more than 20% and scattered distribution, will be retained long-term to provide increased biodiversity and woodland resilience.

As the woodland matures, operational management will diversify the overall age and stand species structure. Some broadleaved trees will be identified and left to reach old age and decline naturally. Deadwood, both standing and fallen will be maintained to provide important niche habitats within the wood, particularly for invertebrates and fungi, except if they pose a significant tree safety risk. Full restoration of the wood is not likely to occur until around 2050. The PAWS stands are then likely to be a mixture of beech, birch, oak, rowan and hazel, with a minor component (10-20%) of conifer.

Ride / path management at Pepperboxes Wood will help to create lighter conditions within the wood which will enhance the edge vegetation, as well as helping to dry out the surface for visitors which tend to remain damp. This management will also be aimed at the enhancement of habitat for butterfly populations such as speckled wood and large skipper that have been identified at the site.

Observations will be carried out to record any factors causing change that may be detrimental to the vitality and structure of the woodland. For example there should be no damaging invasive species present on the site, and the likely colonisation by ash dieback (Hymenoscyphus fraxineus) and other pests and diseases monitored and managed where necessary. Ash occurs occasionally at the site,

and there is good regeneration of a mix of other species such as birch, oak and cherry making the requirement for replacement planting unlikely.

The public's enjoyment of the woodland will be enhanced by improving and maintaining an accessible and safe network of paths and rides. Entrances, boundary fences, and benches will be maintained as necessary and the access provision will be monitored and provided in line with the designated category C access (low usage site where we do maintain paths).

# 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

Pepperboxes wood is predominantly ancient semi-natural woodland (ASNW). Just over one third of the site is further classed as PAWS (planted ancient woodland site) due to an area of approx. 4.1ha being felled and replanted with conifers in the early 1970's. The conifer stands are split into 5 blocks with Japanese larch being the major tree, as well as smaller components of western hemlock and spruces. The conifer stands also contain a variable broadleaved component, with the main species being beech, cherry, rowan and birch.

The majority of the wood is a mixed-structure, beech woodland. Mature beeches (which pre-date the last re-planting est. 1930) are spread throughout, but are not closely spaced on the whole. Beneath and between the mature beeches is a mixture of semi-mature trees, composed of birch, rowan, hazel, oak, beech and cherry. This varied structure is the result of regeneration following the 1990 storms which blew over many mature beeches and opened the canopy. The boundaries of the wood contain old coppiced trees (hornbeam, cherry and hazel) on top of very old boundary wood-banks, and the northern boundary has a line of old sweet chestnut and lime trees which are believed to be the remnants of an old tree avenue. Wild service trees are also present in the wood. There are also a number of old guarry pits and historic track-ways through the wood.

Specialist woodland flora such as woodruff, wood sorrel, bluebell and wood spurge are present, and especially abundant towards the northern boundary. The ground vegetation also contains more coarse and dominating species such as bracken and bramble, with the bracken forming small occasional glades.

Soils are mildly acidic and of clay with flints (with underlying chalk bedrock). Overall the wood approximates to a National vegetation classification (NVC) of W14: beech-bramble woodland.

Approximately 20% of the conifer plantation composition was managed in 2014; PAWS stands (2a, 2b, 2c & 2d over 4.1ha). A mixture of ring barking and felling was used, and timber was not extracted. In early 2019 compartments 2b, 2c and 2d (3.5ha) have been thinned, removing around 80% of the standing dead ring-barked trees, a further 20% of living trees and a proportion of the felled timber that was still viable from the ground. The timber was extracted via the north east management access.

# Significance

Buckinghamshire is a county where 45% of ASNW has been lost since the Second World War with only 4000 ha remaining. ASNW is irreplaceable, and the amount in Britain has been drastically reduced over the last century. ASNW is very important due to the continuity of woodland cover over hundreds of years which allows for a diverse range of wildlife and vegetation to develop over time that cannot be found in new woodland creation sites, and a key aim of the Woodland Trust is to prevent any further loss of ancient woodland.

Restoration of ancient woodlands, by removing the shading effects from conifers, is the only way the area of ancient semi natural woodland can be increased. Pepperboxes Wood is part of one of the largest concentrations of ancient woodland in the UK (The Chilterns AONB), where over 13% of the land area is ancient woodland.

# **Opportunities & Constraints**

#### Constraints:

- Most of the rides/paths can be wet for much of the year round due to the local topography and soils, so any management work has to be carefully timed with drier site conditions. Management access is also across privately owned land and therefore extraction must be carefully timed to avoid ground damage
- Low timber quality and volumes make thinning works largely uneconomical

# **Factors Causing Change**

- Mammal damage (deer, squirrel) currently medium risk; monitoring scheduled and culling programme in place
- Increasing shade and loss of structure in minimum intervention stands Low risk medium impact monitoring and management scheduled
- Changes in structure and gaps in canopy due to wind-blow and disease/dieback e.g. Hymenoscyphus fraxineus in ash High risk, low impact due to ash comprising Circa 10% naturally regenerating composition

# Long term Objective (50 years+)

In the long term the PAWS areas within Pepperboxes Wood should all be predominantly broadleaved in character, with all other major ancient woodland components in a secure and improving condition, including old growth trees, ground flora, archaeological features, and a diverse deadwood component. The PAWS stands will then be a mixture of naturally regenerating native broadleaves such as beech, birch, oak, rowan and hazel, with only a minor component (10-20%) of conifer remaining.

The broadleaf dominated parts of the site will continue to develop with all major ancient woodland components in a secure and improving condition including old growth trees, ground flora, archaeological features, and a diverse deadwood component. The likely colonisation by ash dieback (Hymenoscyphus fraxineus) will affect the species composition of the wood over time, and the resulting mixed stands (oak, cherry, birch, rowan and hazel being the most common species) of high forest will be being managed on a continuous cover silvicultural system to produce uneven-aged, self-regenerating stands of high conservation and amenity value. The likely colonisation by ash dieback (Hymenoscyphus fraxineus) will affect the species composition of the wood, and the deadwood habitat will become very well developed as ash and the old coppice stools in particular collapse and die.

Any threats to the biodiversity or historic features of the wood will be monitored and resulting action taken, i.e. deer damage to the broadleaf trees will be monitored and action taken if the damage becomes unacceptable.

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

### PAWS restoration:

- There will be no management operations to thin the PAWS stands within this management plan period (last intervention 2019, next due 2026/2027)

# ASNW management:

- No silvicultural management will take place in the rest of the wood (the broadleaf dominated areas) during this plan period. This affects over 9ha of the site.

# Monitoring:

- Monitoring inspections will take place over the plan period to assess the success of the recent thinning works, and make recommendations for future management 2022
- A full woodland condition assessment and PAWS assessment will be undertaken to inform 2024 management plan 2023
- Deer control will take place at the wood and the cull level will be dictated through the monitoring of deer damage annual

# 5.2 Connecting People with woods & trees

# Description

Pepperboxes wood lies in the heart of the Chilterns AONB. Prestwood (population 8000) is the closest town and is 1.4 miles (2.25km) to the south. Great Missenden (population 2192) is 3 miles (4.8km) to the east.

There is no car park but parking is possible at a layby on Rignall Road, to the north of the wood, which can park 2-3 cars. There are 7 pedestrian access points to the wood and these all link to rights of way in the surrounding landscape, and a network of public rights of way and permissive paths cross the site. In total there are approximately 1.5 miles (2.5km) of paths, which are just for pedestrian use.

Overall visitor facilities are low key and the visitor numbers are not high, however the wood offers the visitor a peaceful place in which to which to enjoy the natural environment, and has a path network covering the majority of the wood which allows a variety of circular walks for the visitor.

Pepperboxes Wood is categorised as a 'low usage site', where less than 5 people are using one entrance each day, but where paths are maintained.

In 2016 all 7 access points were reviewed and in 2018 improvements made such as replacement of signage and vegetation management in line with recommendations and guidance for the category C grading of the site and subsequent use.

# Significance

This relatively remote site provides a quiet area for walking and recreation for some people living within walking distance of the woodland, within easy reach of Prestwood and Great Missenden, and is a site of interest for some local naturalists.

One of the Woodland Trust's main objectives is the promotion of public access to, and enjoyment of, woodlands.

The site has a variety of habitats and historic features that can be used to engage the public, including children, in appreciating the landscape on a wider scale.

# **Opportunities & Constraints**

#### Constraints:

- Most of the woodland paths can become very muddy during wet weather
- Vehicular parking is limited to a roadside verge
- Un-surfaced paths, entrance stiles and some steep slopes might limit access for less-abled visitors

# Opportunities:

- Path widening will help to create more open, drier path surfaces for visitors

# **Factors Causing Change**

Changes in vegetation along rides

# Long term Objective (50 years+)

Public access for informal and quiet recreation will be maintained in perpetuity. The woodland will be kept as safe as practical for visitors and there will be a managed network of paths, together with visible and clearly signed entrances.

An on-going programme of maintenance will ensure as much as possible safe and uninhibited access along clearly defined routes for quiet recreation. Provision of infrastructure will be kept low key as appropriate for the grading of this site: Category 'C' 'low usage site'

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

Visitor and access management:

- There are no further improvements proposed to entrance infrastructure within this plan period
- Routine management for access including ride/path maintenance and remedial works will be undertaken annually in June each year
- Annual tree safety inspections along high amenity areas and increased annual survey along zone b (path network) due to the presence of ash affected by dieback

# Monitoring:

- Monitoring inspections will take place over the plan period to assess the access and visitor provision, and make recommendations for future management - 2022

# 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	8.17	Beech	1930	High forest	No/poor vehicular access to the site, Site structure, location, natural features & vegetation	Ancient Woodland Site, Connecting People with woods & trees	Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty

Beech high forest which has suffered from past storm damage. Mature beech trees are thinly scattered and the intervening matrix is composed of young birch, rowan and beech which have naturally grown up after the 1990 storm. Wild service and wild cherry is also present. Ground flora includes bluebell, yellow archangel, wood-sorrel, wood goldilocks, dog's mercury, yellow pimpernel, wood sedge, wavy hair-grass, marsh willowherb and wood meadow-grass.

				1	1		
2a	0.66	Norway	1970	PAWS	Site structure,	Ancient	Area of
		spruce		restoration	location, natural	Woodland Site,	Outstanding
					features &	Connecting	Natural Beauty,
					vegetation	People with	Planted Ancient
						woods & trees	Woodland Site

Mixed plantation of mainly Norway spruce and Sitka spruce, with minor component of Japanese larch. Minor component of oak, beech and birch. This sub-compartment was last thinned in 2015.

2b	2.20	Japanes	1970	PAWS	Sensitive	Ancient	Area of
		e larch		restoration	habitats/species	Woodland Site,	Outstanding
					on or adjacent to	Connecting	Natural Beauty,
					site	People with	Planted Ancient
						woods & trees	Woodland Site

Plantation of Japanese larch with a minor broadleaved component of birch, beech, holly and hazel. The sub-compartment was last thinned in 2019.

2c	0.76	Japanes e larch	1970	PAWS restoration	Woodland Site,	Area of Outstanding Natural Beauty,
						Planted Ancient

Plantation of mainly Japanese larch with a minor component of Western hemlock on the edges (west and east). Minor broadleaved component of beech, birch and holly. Pockets of specialist woodland flora are present, including woodruff and wood spurge. This sub-compartment was last thinned in 2019.

2d	0.55	Western hemlock	1970	PAWS restoration	Ancient Woodland Site, Connecting People with woods & trees	Area of Outstanding Natural Beauty, Planted Ancient Woodland Site		
This is a plantation of European larch and western hemlock, mixed with beech, oak and cherry. This sub-compartment was last thinned in 2019.								
sub-d	compartr	nent was l	ast thir	nned in 2019.				

A former plantation of Japanese larch which is now restored. Broadleaved trees are therefore now dominant with beech and sycamore being the main species. Older and mature sweet chestnuts and limes are also present, especially towards the northern boundary. Specialist woodland flora is especially notable in this sub-compartment, including woodruff, bluebell and wood sorrel.

# Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2019	1a	Thin	2.00	50	100
2019	2b	Thin	2.22	90	200
2019	2c	Thin	0.74	82	60.4
2026	1a	Thin	2.00	33	65
2026	2b	Thin	2.22	36	80
2026	2c	Thin	0.74	45	33
2035	1a	Thin	2.00	33	65
2035	2b	Thin	2.22	36	80
2035	2c	Thin	0.74	45	33

# **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.