



COED CADW  
WOODLAND  
TRUST

# The Punchbowl

## Management Plan 2015-2020

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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](http://www.woodlandtrust.org.uk) or contact the Woodland Trust ([wopsmail@woodlandtrust.org.uk](mailto: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.

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## 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](http://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.

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## 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

<b>Site name:</b>	The Punchbowl
<b>Location:</b>	Llanfoist
<b>Grid reference:</b>	SO281117, OS 1:50,000 Sheet No. 161
<b>Area:</b>	38.09 hectares (94.12 acres)
<b>Designations:</b>	Ancient Semi Natural Woodland, National Park

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

This spectacular site on the eastern side of the Blorenge Mountain is dominated by a large, wooded glacial cwm containing a man-made lake with some of the trees being over 200 years old. Excellent paths and viewpoints make this wood a must-visit!

## 2.2 Extended Description

Laying on the eastern side of the Bloreng Mountain this spectacular site is dominated by a large, wooded glacial cwm containing a man-made lake. The slopes of the cwm are wooded mainly with wood pasture of old beech pollards, some of which are over 200 years old, in addition to ash, sessile oak and rowan. These wooded slopes are of particular interest as they form some of the highest altitude Ancient Semi Natural Woodland (ASNW) in Britain. Several smaller blocks of more recent planting exist nearer the lake, which were introduced by the National Park around 1980, before the Woodland Trust acquisition in 1987.

The land above the Punchbowl, the open common of the Bloreng with grazing by sheep, is a Site of Special Scientific Interest (SSSI). The surrounding farmland is grazed with some new native woodland directly below the Punchbowl pool, outside the reserve boundary. The whole site lies within the Brecon Beacons National Park (BBNP), and there are small areas of ancient woodland and plantations on ancient woodland sites (PAWS) on the lower slopes of the Bloreng.

The area of land to the south of the cwm mainly consists of acid grassland, although the remains of a block of mature lodgepole pine and planted broadleaves exists near to the main entrance and two small areas of planted broadleaves may be found along the green lane at the south eastern end, extending the area of woodland. The land north of the cwm, formerly hillside pasture, was planted with native broadleaved species between 1987 and 2000 and livestock has been excluded from this area.

Several viewpoints within the site offer views of the Usk Valley and surrounding landscape. The site is a dramatic landscape feature and part of it is clearly visible from a distance to the north and east. A dry-stone wall lies on the western boundary of this site. This wall is to be maintained with periodic restoration works - this will ensure stock from the Bloreng is excluded from the site, and that the feature of the old wall is preserved.

The site has three key features, Wood Pasture (ASNW), Old Growth Stand (with Pollards) and Informal Public Access.

The ASNW/wood pasture is dominated by beech with ash, downy birch and occasional sessile oak, field maple and holly. Many of the beech are veteran pollards up to 6ft in diameter and last pollarded c 1900. The woodland is considered as an old growth stand. This area also includes areas of upland acid grassland (U4) pasture, and open areas of bracken dominated hillside. These areas are considered important within the context of the wood pasture as they provide important areas of grazing.

There are three public access points to the site, including a sunken lane with public access, a regularly used bridleway that exits the site at the extreme northern and south-western ends, and there is an internal permissive path.

The site will be managed to create high forest of predominantly native broadleaved species with a component of beech grown from site sourced seed. This woodland will be managed in the long term as a wood pasture with pollards.

## 3.0 PUBLIC ACCESS INFORMATION

### 3.1 Getting there

General location:

This spectacular site lies within the Brecon Beacons National Park ([www.breconbeacons.org](http://www.breconbeacons.org)), on

the eastern side of the Blorenge Mountain. The site is a dramatic landscape feature and part of it is clearly visible from a distance to the north and east. Several viewpoints within the site offer views of the Usk valley and surrounding landscape. The nearest village is Llanfoist, on the outskirts of Abergavenny. The site can be accessed from Llanfoist by taking the Llanellen road (B4269) southwards to the first lane on the right after the village. Follow the lane steeply upwards for one and a half miles, take the right hand fork and proceed a further mile until the roadside parking area of the Brecon Beacons National Park is reached. The entrance to the Punchbowl is on the right after another half a mile. Parking is best on the edge of the common.

#### Overview of paths and entrances:

The paths through the site are unsurfaced, uneven and can be wet and slippery in places. Paths through the site and particularly down to the lake are extremely steep and are for fit walkers with boots and rain gear.

Several means of public access exist within the site, including a road used as a public path (RUPP), a regularly used bridleway and a permissive path. There are four pedestrian entrances to the site, situated on the southern and eastern boundaries. The main entrance to the site is situated in the south-western corner of the site through a gate and there is a public information board near to this entrance.

The Iron Mountain Trail (part 1), a circular walk running through the major sites of the Blaenavon Industrial Landscape World Heritage Site, runs through the Punchbowl. This is a circular walk starting from Pen-ffordd-goch Pond Car Park (locally known as Keeper's Pond) at SO 254 197. Details can be found on the website <http://www.world-heritage-blaenavon.org.uk/visit/activities/walks/walk-imt-1.htm>, from Blaenavon Tourist Information Centre or by calling the Torfaen Countryside Section on 01633 648006 (information as of Dec 06).

#### The Usk Valley Walk

Follows the Monmouthshire and Brecon Canal at this point

<http://www.uskvalleywalk.org.uk/route.htm>

(Accessed 15th April, 2007).

#### Parking:

There is no car park at the site although there is space on the grass to park 2 or 3 cars at the entrance, and there is a car park for up to around 10 cars maintained by the National Park 0.4 miles down the lane leading up to the site.

#### Public Transport:

Route from Abergavenny Service Number: X4. Provider: Stagecoach

This stops at Briardene, Llanfoist, from which there is a stiff walk uphill to The Punchbowl.

Route from Abergavenny Service Number: 43. Provider: Drakes Travel Services

This stops at Woodland Crescent, Llanfoist.

There is another possibility from Elm Drive Llanellen, (Bus No.43).

Go back to the B4269, turn left, walk past the school, then left again into a small lane.

This road is a no through one. Walk past Heol-gerrig, cross the canal (and the Usk Valley Walk) then the road climbs up through a wood turning left-right-left-right-left. At the end of the road, there is a footpath across a field to another lane (due west). Continue in the same direction for around 200m.

Then when you reach a farm you have to turn right and walk north until you come to a fork in the road. At this point another footpath heads off across the hill in between the two roads. Follow this and it joins the track behind Upper Ninfa. It is about 750m north-west to the Punchbowl.

(Not Walked. Details taken from Traveline Cymru 15th April, 2007 and added to Landranger map) [www.traveline.org.uk](http://www.traveline.org.uk) or 0870 608 2 608

**Public Toilets:**

The nearest public toilet is at Waitrose supermarket approximately 3.2miles from the site at Llanfoist. This includes a designated toilet for disabled people (no RADAR key required) and baby changing facilities.

Information from personal visit December 2006

## 3.2 Access / Walks

## 4.0 LONG TERM POLICY

This woodland will be managed in the long term as a wood pasture with pollards that continues to develop as wood pasture of predominantly native broadleaved species, with a significant component of beech with open grassland areas within and bordering the core woodland and wood pasture areas. On-site grazing will drive the wood pasture management with varying intensities of grazing over time at different grazing locations that will facilitate natural regeneration. A gradual increase in tree cover will take place. Veteran pollards will continue to be an important feature and potential pollard replacements to be identified as younger trees create new pollarding opportunities. The beech trees along the sunken lane will continue to be a feature and replacements will be planted where gaps occur.

Public access will continue to be possible throughout the site, with people mainly using existing public rights of way. Fishing will not be tolerated unless it is administered correctly by one body with minimal site impact.

## 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 Wood Pasture

#### Description

The wood pasture is partly Ancient Semi Natural Woodland (compartment 1d) dominated by beech with ash, downy birch and occasional sessile oak, field maple and holly. Many of the beech are veteran pollards up to 6ft in diameter and last pollarded c.1900. The woodland is considered to be an old growth stand within upland acid grassland pasture (U4). The beech are the dominant tree species on the upper steeper slopes, more patchy on the middle slopes and only occasional descending to the bottom. Areas of Ash-hazel are found on the middle and lower slopes, occasionally reaching the top of the cwm in gullies. There is one pollarded holly. Under the beech, there is little ground flora, with species such as *Descampsia caespitosa*, *Brachypodium sylvaticum* and bracken dominating. On the steeper cliffs, *Luzula sylvatica*, *Calamagrostis epigejos* and *Dryopteris dilatata* are found. It is recorded that there are charcoal hearths within the woodland, but these are not mapped. There are open areas of U4 pasture, often with dominant bracken. In the long term, more recently planted areas will also become part of the wood pasture - currently these areas are excluded from grazing while the trees mature.

#### Significance

This is ancient woodland, and one of the highest areas of ASNW in Britain. The woodland is considered as an old growth stand (see other KF). The woodland is an important component in the landscape, visible from a wide area, and is important in the transition between enclosed land on lower slopes and higher elevation moorland.

#### Opportunities & Constraints

Grazing is traditional on the site, and this is carried out by a grazier with the FBT. The establishment and expansion of tree planting is resulting in the extension of native woodland on the site, with the plan to reintroduce grazing in these areas thus creating new wood pasture.

#### Factors Causing Change

Squirrel damage to beech, grazing levels, and bracken expansion.

#### Long term Objective (50 years+)

The whole site is managed as wood pasture and the area of woodland will increase using planting and natural regeneration. The newer native woodland will become part of the ancient woodland / wood pasture. Lower density 'wood pasture' tree planting will take place on some acid (U4) grassland. Authorised grazing will drive management.

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

Small areas of new native woodland (1a) and wood pasture (1g) will be created within the plan period, aiming to replace wind-blown lodge pole pine in 1a and added wood pasture planting at 5-10/ha protected trees in 1g. Wood pasture management will be maintained by authorised grazing. Natural regeneration will be encouraged by the maintenance of the existing grazing exclosures. Beech will be a significant constituent component of new plantings.

## 5.2 Old Growth Stand

### Description

The site is characterised by the presence of veteran beech pollards. These are found within the woodlands of the Punchbowl and also found along the sunken lane on the eastern boundary, and indeed outside the reserve.

### Significance

Veteran trees characterise the site and provides a historical link with past management of the site, and contribute to the intrinsic appeal of the site and the wider landscape. Old growth woodland often holds valuable biodiversity interest, particularly scarce and relict invertebrate and fungi saprophytes.

### Opportunities & Constraints

The beech are mature and over-mature and last pollarded circa 1900, and mostly too over-mature to consider re-pollarding. Pollarding would also be difficult due to site topography. There is the opportunity to develop the next generation of pollards from the planted younger trees both within the woodland and along the sunken lane, thus reducing the generation gap between old and young trees and the recruitment of suitable fallen and standing deadwood.

### Factors Causing Change

Senescence of the existing veteran pollards leading to collapse.

### Long term Objective (50 years+)

Beech pollards and planted/naturally regenerating trees continue to be a significant component of the site.

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

Continue to plant site-native beech during planting and encourage natural regeneration where it occurs by excluding sheep.

### 5.3 Informal Public Access

#### Description

Several means of public access exist within the site, including a sunken road with public access, a regularly used bridleway and a permissive path within the site boundary. There are three public entrances to the site, situated on the southern and eastern boundaries. The main entrance to the site is situated in the south western corner of the council maintained road and there is a public information board near to this entrance. The Iron Mountain Trail runs through the site.

#### Significance

Objective of the Woodland Trust to promote public access. The site is an important feature within the Bloreng range of the BBNP.

#### Opportunities & Constraints

Unauthorised use of the site for fishing and by other groups results in unauthorised fires, camping and litter. If this group of visitors can be managed successfully, they should be considered as a way of contributing to policing the site. Nearby Blaenavon World Heritage Site, Iron Mountain Trail, BBNP and the site being destination in many walking guide books means the site is very well publicised and popular with walkers.

#### Factors Causing Change

Regular littering around lake, illegal motorbike usage.

#### Long term Objective (50 years+)

The existing network of footpaths and the bridleway are maintained for authorised use.

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

Support prohibition signs at lake edge will be maintained. Opportunities for one fishing club to administer the fishing whilst supporting WT objectives will be considered. The sunken road used as a public foot path is managed so that vehicular access to the rest of the site does not occur. Continue relationship with the Brecon Beacons National Park to further joint activities on the site and help maintain wardening during summer thus reducing litter, fires and motorbike access.

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## 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	0.82	Lodgepole pine	1980	High forest	Landscape factors	Informal Public Access	National Park
<p>Gently sloping, east-facing area of planted lodgepole pine and more recent planted broadleaves at the main entrance where the southern (upper) boundary meets highway. It was originally established to shelter livestock. The broadleaves were planted in 1989 following an accidental fire that damaged several pine trees in 1988. The access track is a bridleway that follows the southern side of compartment boundary fence and leads to the public highway and the rest of site.</p>							
1b	6.12	Open ground	2008	Wood establishment	Landscape factors	Informal Public Access	National Park
<p>Gently sloping area of pasture at the southern (higher elevation) end of the site, adjacent to the main path running from the main entrance at the highway. It is grazed by sheep. The remains of several dry-stone field boundaries are present, remains of an old building and a mature rowan are also found. Ground flora is typical of U4 acid grassland. The lower boundary is characterised by a line of mature beech, which forms part of the boundary to a sunken lane which runs along the southern boundary. This area of grazing that is important within the context of the site, as it makes a grazing unit sufficient in size to be let. The northern boundary with neighbouring mature wood pasture is a livestock-fenced 12m wide area that is planted with native broadleaved trees, and has some natural regeneration of broadleaves. The main bridleway follows the southern boundary of this compartment.</p>							
1c	0.81	Ash	1987	Wood pasture	Landscape factors	Informal Public Access	Ancient Semi Natural Woodland, National Park
<p>Small, gently sloping, east facing area of planted mixed broadleaves at the upper part of the south-eastern end of the cwm and adjacent to the path descending to the base of the cwm. The trees were planted in 1987 and species include ash, field maple, aspen, oak and birch. The main bridleway follows the NW boundary, and also branches into a sunken lane at its western end, following the SW boundary of this compartment and is a bridleway leading off-site.</p>							

1d	21.62	Mixed broadleaves	1980	Wood pasture	Archaeological features, People issues (+tve & -tve), Sensitive habitats/species on or adjacent to site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access	Ancient Semi Natural Woodland, National Park
<p>Moderately to steeply sloping, east facing cwm (Punchbowl). The compartment includes the geological feature of the cwm, and includes areas of U4 grassland, often with bracken. The slopes fall steeply to a small artificial dammed lake at the base of the cwm, which is surrounded by marshy grassland with marginal lacustrine habitats. The compartment also includes the northern most part of the site which is, open ground dominated by bracken with occasional gorse and hawthorn. The Punchbowl is of particular significance, supporting one of the highest native woodlands in the UK. (1,440ft; 439m). Many of the beech are veteran beech pollards. Oliver Rackham (1986, 1999 pers. com.) considered the area to have been managed as wood pasture, possibly together with the common. Ancient beech dominated woodland is widespread particularly on the north-facing slope. The east facing slopes are wetter and support more of a mosaic of ash dominated woodland with beech occurring on dryer soils. Occasional hazel, holly and hawthorn form the majority of the understorey.</p> <p>Several small enclosed blocks of native and exotic planted species are present, that were relocated to adjacent locations to facilitate natural regeneration in new areas. There are scattered beech pollards and areas of hawthorn. Planted species include beech, oak, alder, Sitka spruce, goat willow and sweet chestnut. The bridleway crosses the eastern end of this compartment at the bottom of the slope and across the dam, and a circular permissive path goes around the lake.</p>							
1e	6.29	Mixed broadleaves		Wood pasture	Landscape factors	Informal Public Access	National Park
<p>Moderately sloping, east-facing area to the north of the Cwm, planted with native broadleaves in 2000. The upper part was planted to create a feathered edge to the planting scheme. The compartment also includes an area of downy birch, beech, rowan and ash planted by the national park prior to WT ownership.</p>							
1f	2.57	Mixed broadleaves	1992	Wood establishment	Landscape factors	Informal Public Access	National Park
<p>Moderately sloping, east facing area adjacent to the public bridleway running from the pond to the northern entrance, planted with native broadleaves in 1992. The planting failed to establish fully, and WGS payments not claimed. Main species planted was beech (25%) which were grown from seed collected from the site. On inspection in Aug 2014, despite the early setback, the young woodland is now well established and natural regeneration of ash, beech, rowan and Birch is taking place. Bridleway passes along the bottom of slope on the eastern boundary of compartment.</p>							

1g	6.30	Hawthorn species		Wood pasture	Gullies/Deep Valleys/Uneven/Rocky ground, Sensitive habitats/species on or adjacent to site	Informal Public Access	National Park
<p>Steep open south and east facing slope with occasional scree and rock outcrops. Isolated single trees mostly hawthorn but also occasional cherry and rowan. Some enhancement planting in previous plan period of oaks in 2m netting tubes on lower slopes close to boundary path. Prospect of further enhancement planting. Bridleway passes along the bottom of slope on the eastern boundary of compartment.</p>							

## Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2023	1c	Thin	0.00		0

## 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.