



# Northfield Wood

## Management Plan 2016-2021

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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>	Northfield Wood
<b>Location:</b>	Onehouse
<b>Grid reference:</b>	TM024600, OS 1:50,000 Sheet No. 155
<b>Area:</b>	33.25 hectares (82.16 acres)
<b>Designations:</b>	Ancient Woodland Site, Planted Ancient Woodland Site

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

Moves to restore Northfield Wood to its original native broadleaf cover are proving successful. Other parts remain coniferous, where it is not uncommon to catch sight of deer running through. Beautiful wild flower displays in the summer.

## 2.2 Extended Description

Northfield wood sits adjacent to the Suffolk village of Onehouse. As an ancient woodland site, the wood dates back pre 1600's, however it was extensively modified with the planting of predominantly Norway spruce and western red cedar during the 1960's. Since the 1980's the conifers have been gradually removed from Northfield wood. Although, there is still a conifer presence Northfield wood looks like an ancient broadleaf woodland again. There is still evidence within the wood of a relic coppice structure, which would suggest the site was originally managed as a coppice with standards woodland. Many of the original standards are still present throughout the site as mature ash and oak.

The ground flora throughout Northfield wood varies, but where restoration has taken place the associated ancient woodland species are responding well. With the notable species being spurge laurel, wood spurge, twayblades, butterfly orchid, primrose, herb paris, bluebell and dogs mercury, early purple orchids the oxlip and wood sorrel.

The majority the site is bordered by intensive arable farmland on three sides, apart from the southern boundary, which is developed residential housing. A public footpath runs north to south and east to west through the site linking in with a good and well used network of public footpaths within mid Suffolk.

The wood has many archaeological features relating to past management use, which are still present today. Two charcoal mounds are present within compartment 2a, measuring 3-4 meters across, indicating that the wood was used for, among other products, the production of charcoal. Many of the woodland ditches can still be seen throughout the wood, which would have been used as boundary markers in the past.

## 3.0 PUBLIC ACCESS INFORMATION

### 3.1 Getting there

### How to get to Northfield Wood

Is situated in the village of Onehouse near Stowmarket. Although the Wood does not have a car park vehicles are permitted to use the Village hall car park close to the site. The main entrance to the site is situated at the end of woodland close in Onehouse.

Main Bus service from Ipswich.

87: Ipswich - Stowupland

Via Needham Market

88: Ipswich - Stowmarket (Chilton Hall)

Via Needham Market

88A: Ipswich - Stowmarket (Chilton Hall)

Via A14

link to first buses: [www.firstgroup.com](http://www.firstgroup.com)

The closest known bus stop is off Chilton Way in Stowmarket and can be accessed via the local Public rights of way.

The closest train station is situated just off the centre of Stowmarket (about 2 miles from wood) and is on the main Norwich to Liverpool Lime Street (London) line so has a regular service.

Link to train times: [www.onerailway.com](http://www.onerailway.com)

Nearest public Toilets are situated adjacent to the ASDA store in the centre of Stowmarket.

There are three main pedestrian entrances to Northfield wood off woodland close this is a Kissing gate, whilst the northern entrance and eastern entrance are both squeeze gaps. The site is generally flat with little gradient and all paths are mud and grass tracks that are mown once yearly. The Wood during the winter months becomes very muddy and can be difficult underfoot.

## 3.2 Access / Walks

## 4.0 LONG TERM POLICY

The long term intention for Northfield Wood is to stabilise and develop the ancient woodland remnant ground flora, trees and natural regeneration from the native remnant trees within the wood, whilst reducing the localised coniferous dominance. This will be achieved by gradually removing the exotic conifers species through low impact thinning from the areas of planted ancient woodland (PAWS). Once the conifer dominance has been reduced to where it does not affect the remaining ancient woodland components the long term policy will be to continue to manipulate the woodland canopy to create favourable conditions to allow natural broadleaf regeneration and the ancient woodland ground flora to develop.

The eventual desired condition of Northfield wood being robust multi-structured and multi-aged native broadleaved high forest woodland, with a dominant native ground flora and a rich and abundant deadwood component.

With ash dieback being present within Northfield wood there will be a decline in the overall health of main native broadleaf species within the wood. The long term intention will be to manage the decline of the common ash within the wood and help promote natural regeneration of other native broadleaved species, and continue developing a multi-structured diverse high forest canopy.

### Open ground

The intention will be to maintain the current floristically diverse areas of open ground within the wood enriching the overall diversity of habitats within Northfield wood. The desired condition of the open ground habitat will be to have a wide floristically rich ride with good scrubby edge habit. This will be achieved by annual cut and removal of arising's and rotational ride edge coppicing.

### Public access

The long-term intention will be to maintain a sustainable level of public access by managing the existing access features and paths so they continue to remain in a safe and useable condition, whilst not degrading or damaging the ancient woodland components.

## 5.0 KEY FEATURES

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

### 5.1 Planted Ancient Woodland Site

#### Description

Northfield wood is a diverse ancient woodland site that was planted with conifers and is currently in the process of restoration. Traditionally the majority of the wood was managed as a coppice with standards, but this was cleared and Norway spruce and western red cedar was planted as a commercial conifer crop in the 1960's. Despite the heavy shading from the conifers, the ground flora is exceptional in places, being characteristic of ancient woodland in East Anglia, and has responded positively to the restoration work. Restoration of Northfield wood was started in the late 1980's and the conifers have been removed through a combination commercial thinning initially and the use of volunteers. Through the restoration process the remnant ancient woodland components (ground flora and existing remnant trees) and new natural regeneration has responded well and is beginning to create a structurally diverse broadleaf dominated high forest.

Ash Dieback was confirmed in 2013 within Northfield wood, with the main native broadleaf species being common ash. Northfield wood will see a decline in the percentage of common ash within the site over the next decades. This will include both mature, pole stage and young ash regeneration that will be declining within the species mix.

#### Significance

Nationally Ancient woodland is a scarce resource. In Suffolk Ancient woodland covers approximately 1% of the land area (Spencer and Thomas, 1992), making Northfield wood of regional importance. Given there is little opportunity to link Northfield with other ASNW, the fact that the wood is of a reasonable size, makes it very significant in contributing to the biodiversity value of the local area.

#### Opportunities & Constraints

##### Opportunities:

Conserve and develop the existing ancient woodland components.

Gradually reduce the remaining coniferous element and increase natural regeneration and ground flora

Seek to buffer / extend ancient woodland through adjacent land acquisition / influencing neighbouring landowners

##### Constraints:

High deer pressure, causing heavy grazing

Ash Dieback, killing off the common ash which is the native main species within the site and produces the highest proportion of natural native tree regeneration.

#### Factors Causing Change

Deer browsing causing damage to natural tree regeneration, and grazing on native woodland groundflora resulting in the eventual failure of the ancient woodland plant colonies.  
Ash Dieback causing the major decline of common ash within the wood, which is a major tree comonant within Northfield wood.

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

To protect and develop the key ancient woodland components, whilst diversifying the age and species structure of the woodland through natural regeneration. Creating a diverse multi-structure broadleaved woodland with abundant understory, deadwood structure and ancient woodland ground flora.

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

Maintain and develop the ancient woodland characteristics of Northfield wood by gradually thinning the remaining pockets of shade dominant conifers and managing light levels of the existing restored broadleaved areas of Northfield wood to support development of existing and diverse regeneration where it already exists. This will help to develop a diverse variety of tree species within the wood to make it more resilient to external pathogenic threats, such as Ash Dieback.

To implement this practically, measures can be undertaken to assess and then focus on the most important areas of natural regeneration diverse regeneration that contains a variety of species. Through monitoring utilising the paws assessments to update the restoration plan as the site changes and develops. Any thinning works undertaken will be low key and focused in areas to best support the promotion of diverse regeneration. Thinning locations will be in response to annual observations, and directed at areas where maximum benefit can be achieved.

Annual deer monitoring and culling will continue as part of the on-going control of deer population within the site to reduce browsing pressure on developing natural regeneration. To complement the deer management, areas of the wood will be enclosed in a temporary deer fence to exclude all deer for a minimum of 5 years to allow unhindered development of the natural regeneration. The areas that will benefit the most from this will be the parts of the wood where, the highest deer activity is recorded.

Ride side coppicing will be undertaken to maintain the current floristic diverse ride structure by coppicing ride edge verge woodland scrub on a 5-7 year rotation to keep the ride edges from developing in to mature woodland. This will maintain and develop a thick scrub layer between the high forest and the herbaceous rich rides.

### **PAWS Work Programme**

2018/19 - Compartment 2B and 2E areas 5 and 8 on paws restoration map. Area restocked after wind damage during early 1990's with native broadleaves. Due to heavy shade continue from last plan period to thin area removing conifers where appropriate. Undertake 25% silvicultural thin within the pole stage broadleaf areas to improve light levels for the development of natural regeneration.

2018/19 - Compartment 2B and 2A area 10 on paws restoration map. Some conifers remaining and area has high percentage of ash undertake light thinning operation to reduce ash dominance and favour other species as potential seed trees. Heavier thin along the urban boundary of ash to reduce future tree safety issues.

2019/20 - Compartment 1a and 2a area 4 on the paws restoration map. Conifers only sporadic within this area, but heavy shading of broadleaves restricting natural regeneration. Undertake a 25% thinning operation to manipulate light levels to promoted regeneration and improving conditions for the remnant ground flora within this area.

2020/21 - Compartment 1a area 2 on the paws restoration map. Area dominated by ash that is in slow decline. Little natural regeneration of other species present. Undertake a 25% thinning operation to manipulate light levels to promoted regeneration and improving conditions for the remnant ground flora within this area.

2021/22 - Compartment 1a and 2a area 3 on the paws restoration map. Conifers only sporadic within this area but with a few small pockets remaining, but heavy shading of broadleaves restricting natural regeneration in some areas. Undertake a 25% thinning operation to manipulate light levels to promoted regeneration and improving conditions for the remnant ground flora within this area.

2022/23 - Compartment 2a area 6 on the paws restoration map. Conifers only sporadic within this area but with a few small pockets remaining, but heavy shading of broadleaves restricting natural regeneration in some areas. Undertake up to a 25% thinning operation to manipulate light levels to promoted regeneration and improving conditions for the remnant ground flora within this area.

Compartments 1C 2C and 2D areas 1, 7 and 9 on the paws plan have been recently thinned and will not require any current silvicultural work within this 5 year plan period.

2020/21 - Area 6 on the paws map will have a section fenced that currently has quite an open canopy but is suffering from some browsing damage and will benefit from a greater level of protection. Please see paws map.

## 5.2 Informal Public Access

### Description

Northfield wood has open public access at all times for the pedestrian, with 5 access points and a good network permissive paths throughout the site for people to enjoy the ancient woodland. A public footpath runs through the centre of the wood from Stowmarket. The woodlands topography is flat, and has a variety of open wide sunny rides and narrower woodland paths. During the summer the pathways are dry and firm, but in the winter they can become muddy and slippery under foot.

There is roadside parking nearby in Onehouse village along Ash road and Northfield road which is only a short walk from the site main entrance at the end of Woodland close.

Northfield Wood has a long standing volunteer group that undertakes a significant amount of practical restoration work within the site. The Northfield wood volunteers undertake regular work parties during the winter period from October through to March.

### Significance

Northfield is a large area of woodland with free open public access, which is easily accessible. Being on the outskirts of Stowmarket, adjacent to a housing estate and within 2 miles of the A14 dual carriage way, the site is an important resource to many people, and an area where the public can volunteer and help in the restoration of an ancient woodland.

### Opportunities & Constraints

A great opportunity where local school and nurseries can use the wood as an area of learning. The visitor enjoyment is constrained in the winter as many of the paths become very wet and difficult to pass.

### Factors Causing Change

Ground conditions (wet site)

### Long term Objective (50 years+)

Maintain the existing path network in a safe usable condition.

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

Maintain site as an area of public open access, with all main internal paths being minimum of 2m width (Cut all main paths annually during September to a width of 2 metres), unhindered by ride edge woody scrub and fallen trees. Internal structures (i.e seats and boardwalk) will be maintained in a safe usable condition.

September - Path cut to a width of 1.5 metres to maintain all main rides open to the public.

## 5.3 Open Ground Habitat

### Description

Northfield wood has a long established network of rides. They vary in the amount of shade they receive and in width being typically between 2 to 15 m wide.

Of particular interest is the main ride running North - South; the ride supports a large number of plants including good populations of early purple orchid, oxslip and primrose.

### Significance

The open space provided by the ride network supports many of the important species in the wood, particularly along the ride margins and is therefore an important component in the overall diversity of the wood.

### Opportunities & Constraints

There is an opportunity to maintain and improve the rides through management of the edges and open areas, promoting the continuity of open ground and many of the vascular plants which are important in the woodland.

### Factors Causing Change

Encroachment of woody scrub.

### Long term Objective (50 years+)

Continue to provide a floristically diverse open ground habitat and ride system within Northfield wood.

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

Maintain the floristic diversity within existing open ground habitat within main North - South and East - West rides. Cut main ride to a minimum width of 10 metres after seeding (August/September) removing arising from site.

### Work Programme

2019 -2023 - September - Annually cut the main north/south and east/west open rides to full width and remove all cutting to maintain a floristically rich structure

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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	11.14	Mixed native broadleaves	1966	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Planted Ancient Woodland Site
<p>Norway Spruce 1970 with Norway spruce, with every 6th row planted with broadleaves, mainly ash. Remnants of the ancient woodland ground flora exists in particular dogs mercury, oxslip, primrose, Herb paris and common spotted orchids. Mature broadleaves are now dominant throughout, mainly oak, ash, field maple, mature elms and occasional lime. the understorey consists of common hazel, common hawthorn. The majority of conifers have have been removed and the ancient woodland components are secure.</p>							
1b	1.12	Ash	1966	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Planted Ancient Woodland Site
<p>Compartment 1 b was planted in 1967 with Norway spruce. Having thinned many of the conifers in 1998 part of the compartment contains open spaced, semi mature ash. The ground flora under the ash responded well, in particular the early purple orchid, oxslip, primrose and dog's mercury.</p>							
1c	1.59	Mixed native broadleaves	1995	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Planted Ancient Woodland Site
<p>Running along western boundary. Following conifer clear fell in 1995. Mature broadleaves retained during the clear fell are present, many seemingly tolerant elm, oak, ash, hornbeam field maple, with a sparse understorey of hazel and some hawthorn. ground flora is sparse also with bramble, dogs' mercury, herb robert, primrose, dog violet and wood anemome dispersed through the compartment.</p>							

2a	8.78	Mixed native broadleaves	1963	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Planted Ancient Woodland Site
<p>Planted in 1967, compartment 2a contains Norway spruce and western red cedar stands. This compartment also has relic hazel coppice and old ash stools, surviving from before the conifers were planted. Broadleaved standards are also present as oak, and ash, however they are scarce. Some semi mature oak, ash and hornbeam are present, however they are very drawn up through the conifers. The ground flora, particularly under the western red cedar is patchy, but contain a wide variety of ancient woodland ground flora species, which include spurge laurel, twayblades, early purple orchid, oxslip, primrose, dog's mercury, wood sorrell, wood anemome and dog violet.</p>							
2b	3.93	Mixed native broadleaves	1989	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Planted Ancient Woodland Site
<p>Compartment 2b was originally planted 1961 with western red cedar and Norway spruce. Following excessive wind blow in 1987, the area was clear felled and restocked with native broadleaves in 1990. Oak, ash and hornbeam are the predominant species, with field maple. Natural regeneration has been prolific between the planting, birch and ash becoming established well. The ground flora is predominantly rank grasses and bramble, but in dispersed areas of the compartment there are abundant areas of wild garlic, bluebell and dogs mercury, wood anemome and dog violet.</p>							
2c	2.57	Scots pine	1964	High forest	Gullies/Deep Valleys/Uneven/Rocky ground	Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	
<p>Back in history there is evidence that compartment 2c was open in character, and may have been internal meadows. Presently the area is stocked with Scots pine, planted 1968. The compartment has been thinned several times and natural regeneration is slowly developing. The understory is predominantly dogs mercury with herb Robert.</p>							

2d	1.89	Oak (pedunculate)	1880	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Ancient Woodland Site
<p>Compartment 2d is one of the few areas comprised purely of broadleaved trees. The area has the highest density of mature trees, approximately 80% oak which are thought to have been planted around 1900. A few good mature common ash are also interspersed throughout the compartment. A sparse Hazel and Hawthorn understorey is present. The ground flora consists of mainly bramble and some dogs mercury with some wood anemome.</p>							
2e	2.14	Mixed native broadleaves	1985	High forest		Informal Public Access, Open Ground Habitat, Planted Ancient Woodland Site	Planted Ancient Woodland Site
<p>Compartment 2e is comprised of recent planting, first planted in 1985 and restocked again in 1991. Planting species were oak, ash, field maple with birch regeneration towards the northern end of the compartment. The ground flora is wood anemome, dog violet, with some oxslips and dogs mercury interspersed. Two dry ponds are located along the eastern boundary and in the centre of the compartment.</p>							

## Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2017	1a	Thin	11.14	0	5
2017	1c	Thin	1.59	3	5
2017	2c	Thin	2.57	30	76.14
2017	2d	Thin	1.89	35	65.99
2018	2b	Thin	3.93	1	5
2018	2e	Thin	2.14	7	15
2019	1a	Thin	11.14	3	30
2019	2a	Thin	8.78	5	40
2019	2a	Thin	8.78	2	20
2020	1b	Thin	1.12	71	80
2021	1a	Thin	11.14	7	80
2022	2a	Thin	8.78	7	60

## 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.