



# Midgey Gill

## 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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>	Midgey Gill
<b>Location:</b>	Whitehaven
<b>Grid reference:</b>	NX980177, OS 1:50,000 Sheet No. 89
<b>Area:</b>	3.59 hectares (8.87 acres)
<b>Designations:</b>	Ancient Semi Natural Woodland, Planted Ancient Woodland Site

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

Situated on a steep slope, this wood is highly visible from Whitehaven town centre. There is a short pleasant walk through the wood on a permissive footpath. A circular route can be completed on the adjacent public footpath.

## 2.2 Extended Description

Midgey Gill is situated to the east of Whitehaven town centre, just off the Loop Road South. The wood is on a steep slope and is an intrinsic feature in the landscape, highly visible from the town. The wood is roughly triangular with its base along Whitehaven Loop Road to the north-east and its apex some 300 metres to the southwest. The site slopes south-westwards and there is a fall in elevation of approximately 40m.

There are houses to the north and west and garden allotments to the south. To the east across the Loop Road remnant ancient woodland flanks the Gill. Midgey Gill itself is deeply incised and has many of the characteristics of a flashy watercourse. Adjacent to the southern entrance is an open area, which when the capacity of the culvert is exceeded by the storm flow of Midgey Gill tends to flood. In the north western corner of the wood is an electrical sub-station.

Midgey Gill 3.60ha although varying in structure and species composition, is treated as one compartment for the purposes of management. This small ancient semi-natural oak woodland has been planted and colonised by Scots pine and sycamore with some larch. The wood is dominated by sycamore (*Acer pseudoplatanus*) with sessile oak (*Quercus petraea*), English elm (*Ulmus procera*), ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), Scots (*Pinus sylvestris*) and Corsican pine (*Pinus nigra ssp.laricio*). The under storey includes holly (*Ilex aquifolium*), elder (*Sambucus nigra*), rowan (*Sorbus aucuparia*) and hawthorn (*Crataegus monogyna*). Rhododendron (*Rhododendron ponticum*) has been controlled but occasionally still regrows or regenerates in small pockets. There is also some regeneration of rowan, ash, sycamore and beech. The ground flora is indicative of the dense shade with male fern (*Dryopteris filix-mas*) and bramble (*Rubus fruticosus*) being the major species; also mosses, bryophytes, wood sorrel (*Oxalis acetosella*) and bracken (*Pteridium aquilinum*). However, also to be found are bluebell (*Hyacinthoides non-scripta*), enchanter's nightshade (*Circaea lutetiana*), herb Robert (*Geranium robertianum*), creeping buttercup (*Ranunculus repens*), wild raspberry (*Rubus idaeus*) and willowherb (*Chamerion angustifolium*).

There are several areas, particularly along the north western boundary, where large amounts of garden rubbish has been dumped and the consequent colonisation of the margins of the wood by exotic plants, particularly Montbretia (*Crococsmia x crocosmiiflora*), has occurred.

Access to the wood can be gained direct from the Loop Road South and from the southerly entrance opposite Castle Close, where there is limited roadside parking. There is a short pleasant walk through the wood on approximately 350m of permissive footpath and a circular route can be completed on the adjacent public footpath (431044) along the southern boundary. The wood is in an urban location and is heavily used by local people for recreation and as a through route into the town.

## 3.0 PUBLIC ACCESS INFORMATION

### 3.1 Getting there

Midgey Gill is in the town of Whitehaven in West Cumbria. The wood is to the south of Park Drive and the west of the Loop Road South; which is the main trunk road serving Whitehaven the A595.

Parking is limited to nearby streets or town centre car parks. The C2C Hadrian's Wall National Cycle Route passes through Whitehaven and along Coach Road to the west of Midgey Gill. For more information on cycle routes contact [www.cycleroutes.org/hadrianscycleway](http://www.cycleroutes.org/hadrianscycleway) or contact Sustrans 0845 113 00 65.

Access to the wood can be gained direct from the Loop Road South and from the southerly entrance opposite Castle Close, where there is limited roadside parking. There is a short pleasant walk through the wood on approximately 350m of permissive footpath this is quite steep in places and stepped. A circular route can be completed on the adjacent public footpath (431044) along the southern boundary; this is surfaced and has no barriers to access. The wood is a short walk from the centre of Whitehaven where there are many facilities available.

Whitehaven Railway Station is a stop on the scenic Cumbrian Coast Line 63 km (39½ miles) between Carlisle and Barrow-in-Furness and is operated by Northern Rail. Many trains on the route from Carlisle terminate here. There is generally a regular service from Carlisle and an infrequent service from Barrow-in-Furness to the south. Please note there are two stations in the town and the nearest to Midgey Gill is the stop at Corkickle. From the station turn right onto Coach Road. At the traffic lights cross straight over and go up Park Drive. The wood is on the right just after Castle Close.

The nearest bus stop to the wood is on Flatt Walks served by local route 17 and for buses to/from Carlisle the bus stop is on Lowther Street. Traveline Cumbria provides comprehensive timetable and fare information for all bus, coach, rail and Lakeland ferry journeys to/from and within Cumbria & the Lake District. A journey planner will help you plan your journey regardless of who operates the services Tel: 0871200 22 33 or [www.travelinenortheast.info](http://www.travelinenortheast.info)

There are numerous public toilets in the town centre including facilities on Irish Street and full facilities at the main railway station. For local information try [www.whitehaven.org.uk](http://www.whitehaven.org.uk) or [www.copelandbc.gov.uk](http://www.copelandbc.gov.uk) and [www.visitcumbria.com](http://www.visitcumbria.com) or the Whitehaven Tourist Information Centre, Market Hall, Market Place, Whitehaven Telephone: 01946 598914.

### 3.2 Access / Walks

## 4.0 LONG TERM POLICY

It is the Trust's aim to enable the woodland to develop naturally thereby protecting the continuity of the ancient woodland and the biodiversity of the whole ecosystem; as well as increase people's awareness and enjoyment of this ancient habitat.

The Trust aims to maintain the overall high forest continuous-cover structure of this mixed woodland retaining both native and non-native canopy species. Thereby upholding the variety and character of this ancient woodland and sustaining the landscape value of a continuously wooded system. Species regeneration and development of the understorey through natural processes will be monitored to ensure succession. Rhododendron has been removed and regrowth controlled as it is altering soil conditions, preventing regeneration of tree seedlings severely affecting ground flora. In line with the Woodland Trust management principles rhododendron continue to be controlled with the aim of eradicating it

The Trust aims to enhance the biodiversity of the ancient woodland characteristics by supporting the natural woodland development which includes conserving old growth, deadwood communities, mosses and lichens and good aquatic conditions by adopting working practices that do not impact adversely on the integral environment and protecting the ancient woodland from adverse practices and degradation from tipping of garden waste.

The Trust will maintain the informal access to the woodland on the permissive paths with provision of welcome signs at entrances. Public access will be encouraged with paths and structures maintained and improved where necessary so that local users and visitors can continue to share in the wood's beauty, gain an understanding of the woodlands importance in the landscape and it's rich wildlife habitat, which is irreplaceable. Public information and promotion of the woodland both nationally through the Trusts publications and directory's and locally will be enhanced where possible to inform and involve visitors with the woodland.

It is anticipated that this approach will safeguard and enhance the existing environmental value of the wood and maintain and enhance the level of public access in the woodland.



## 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 Informal Public Access

#### Description

Midgey Gill is well used by local people as a route into Whitehaven town centre but is not known to attract visitors from further afield. There are two entrances to the wood from the major Loop Road South with a third entrance at the south western tip of the wood leading into the centre of Whitehaven. At the south west entrance limited roadside parking is available. At the entrances Woodland Trust signs welcome visitors to the wood. Through the wood the path is steep with several steps in places. This permissive route runs parallel to the Gill through the wood, extending to some 350m. The internal landscape to the woodland is interesting and varied. A surfaced, easily accessible public footpath runs along the southern boundary of the wood and meets the permissive route at the extreme western tip.

#### Significance

Midgey Gill provides informal recreation opportunities for the local community. Providing access to quiet accessible and welcoming woodland is one of the Trust key outcomes and a cornerstone to the vitality of the woods. Encouraging access to Midgey Gill can be particularly instructive given the importance of its habitat on both a local and national scale. The woods intrinsic qualities make it an important local resource and an informal educational resource for visitors and organised groups. Public appreciation of ancient woodlands is good for the well being of those visiting the wood and ultimately, good for the wood itself through increased public understanding of the plight of ancient woodlands. Midgey Gill is a small but significant feature within the town's landscape.

#### Opportunities & Constraints

The footpath network at Midgey Gill is limited by the size of the wood. Although limited the woodland attracts many local users and is a well-used route taking people from the houses to the east directly into Whitehaven town. In winter the ground conditions may become muddy and this may deter through users going into town, although the adjacent public footpath offers an alternative surfaced route. There is an opportunity to inform the public of management practices and the importance of this ancient wood through posters, local leaflets and other local initiatives.

#### Factors Causing Change

Fly Tipping. Note: ash is not a significant component of the canopy or regeneration, and ash dieback (which reached the area in 2017) will have limited impact.

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

The Trust will maintain the informal access to the woodland, with welcome signs at entrances. Public access will be encouraged with paths and steps maintained so that local users and visitors can continue to share in the wood's beauty, gain an understanding of the woodlands importance in the landscape and it's rich wildlife habitat. Public information and promotion of the woodland both nationally through the Trusts publications and directory's and locally will be undertaken where possible and posters will be used to inform and involve visitors with the woodland. The Trust will continue to promote the woodland amongst people in the region and members nationally so long as the primary objective of 'no further loss of ancient woodland' (in terms of both quality and quantity) is not compromised.

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

Clear litter and garden waste annually and as necessary. Maintain three entrances and path network annually to the Woodland Trusts Maintenance Specifications.

Undertake regular safety inspections at defined intervals (see Site Risk Assessment database) and clearance of roadside vegetation to Highways guidelines, working with the local Council where they maintain responsibility.

## 5.2 Ancient Semi Natural Woodland

### Description

Midgey Gill 3.58ha (8.85acres) varies in structure and species composition. The wood slopes to the south-west and there is a fall in elevation of approximately 40m. There are houses to the north and west and garden allotments to the south. To the east across the Loop Road remnant ancient woodland flanks the Gill. Midgey Gill itself is deeply incised and has many of the characteristics of a flashy watercourse. Adjacent to the southern entrance is an open area, which is prone to flooding. This small semi-natural ancient oak woodland has been planted/colonised by Scots pine and sycamore with some larch and could be classed as PAWs (planted ancient woodland). The wood is dominated by sycamore (*Acer pseudoplatanus*) with sessile oak (*Quercus petraea*), English elm (*Ulmus procera*), ash (*Fraxinus excelsior*), beech (*Fagus sylvatica*), Scots (*Pinus sylvestris*) and Corsican pine (*Pinus nigra ssp. laricio*). The understorey includes holly (*Ilex aquifolium*), elder (*Sambucus nigra*), rowan (*Sorbus aucuparia*) and hawthorn (*Crataegus monogyna*) and minor regeneration of rhododendron (*Rhododendron ponticum*). Rhododendron was present in large patches on acquisition, it has been controlled and is much reduced. There is also some regeneration of rowan, ash, sycamore and beech. The ground flora is indicative of the dense shade with male fern (*Dryopteris filix-mas*) and bramble (*Rubus fruticosus*) being the major species, with mosses, bryophytes, wood sorrel (*Oxalis acetosella*) and bracken (*Pteridium aquilinum*). However, also to be found are bluebell (*Hyacinthoides non-scripta*), enchanter's nightshade (*Circaea lutetiana*), herb Robert (*Geranium robertianum*), creeping buttercup (*Ranunculus repens*), wild raspberry (*Rubus idaeus*) and willowherb (*Chamerion angustifolium*).

### Significance

The woodland is designated as ancient semi natural and has been wooded for many, many years although more recently has been planted with broadleaves and conifers. Sites of ancient woodland provide a continuous habitat for our native species and are protected through national and regional forest strategy. Many of these species can live nowhere else and the continuity of their woodland habitat is crucial. Some plants and animals have very specialised requirements and spread very slowly, if at all, into new woods. Midgey Gill is an important semi-natural resource and within Whitehaven there is remnant ancient woodland extending east up the Gill across the Loop Road and also the within Crow Park (also managed by the WT). However the sites exist as island habitats separated by roads. It is increasingly important therefore that threats to the ancient habitat from excessive garden waste tipping and pollution are minimised to allow the ecological communities still surviving within the wood to thrive.

### Opportunities & Constraints

Midgey Gill is an ancient woodland site and classed as PAWs with rhododendron being a particular threat to ancient woodland communities rather than the conifers which are scattered pine so low shade bearing properties and scattered population. Rhododendron control has been undertaken to conserve and enable expansion of the ancient woodland communities with the aim of eradicating it. Rhododendron was present in large patches on acquisition, it has been difficult to access and control especially on the gill sides as no chemicals can be used on the steep slopes close to the stream.

There is an opportunity to retain old growth native and non-native; sycamore and English elm are naturalised species and Corsican pine, brought and planted by previous owners is a legacy and a living heritage. All will be retained where safe to do so for their own ecological value. All are important to the continuity of the wooded canopy. Wind damage has occurred in the past and managing the risk may constrain the retention of some trees.

Standing deadwood has ecological importance but retention may be constrained in places by safety. Excessive garden waste is posing a threat to the continuity of ground flora particularly in tipping hotspots off Park Drive along the northern boundary, at the southern entrance and down into the Gill. It is particularly noticeable that the population of bluebells decreases in areas of tipping possible due to the smothering effect of the waste, increased fertility of soil conditions and colonisation of nettles and brambles more adept to the altered conditions. Also invasive exotic garden species particularly Montbretia (*Crococsmia x crocosmiiflora*) are colonising the northern boundary. This continuous activity is the single biggest constraint to the restoration of the woodland. Opportunities to work in partnership with the local Council, local community organisations and local people are necessary to reduce this problem.

The Gill running through the woodland has suffered from pollution (sources unknown) in the past leaving the sides of the Gill can be quite thick with sludge. This constrains the maintenance of a good riparian habitat but steps taken by the Environment Agency have improved the water quality in recent years. There is an opportunity to continue to work with the EA to enable this to continue.

### **Factors Causing Change**

Invasive Rhododendron, Fly Tipping, Risk of Wind Damage, climate change, pest & diseases.

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

The long term aim is to maintain the continuity of this ancient woodland and through natural processes enable the woodland to develop good structure with a well developed shrub layer, regeneration and a good ground flora communities. Management will seek to reduce and control any threats which may result in an on-going loss of habitat of this ancient woodland in line with the Woodland Trust management principles.

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

The steps to achieving the vision include:

Continued control of rhododendron with the aim of eradicating it.

Control of Montbretia (*Crococsmia x crocosmiiflora*) with the aim to maintain the population at near 0% density.

Work with the local Council to reduce the impact of garden tipping and improve the aquatic habitat. Retention of mature trees to promote longevity and retention of deadwood both standing and fallen, where safe to do. Monitor woodland conditions throughout and the impact of any management works or factors causing change.



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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	3.60	Sycamore	1920	High forest	Gullies/Deep Valleys/Uneven/Rocky ground	Ancient Semi Natural Woodland, Informal Public Access	Ancient Semi Natural Woodland, Planted Ancient Woodland Site

Compartment 1a, the whole wood, is roughly triangular with its base along Whitehaven Loop Road South to the north-east and its apex some 300 metres to the southwest. The site slopes south-westwards and there is a fall in elevation of approximately 40m. There are houses to the north and west and garden allotments to the south. To the east across the Loop Road remnant ancient woodland flanks the Gill. Midgey Gill itself ancient woodland is deeply incised and has many of the characteristics of a flashy watercourse. There is a gabion wall to the east of the wood, above the Gill and a sluice gate to the west. Adjacent to the southern entrance is an open area, which when the capacity of the culvert is exceeded by the storm flow is prone to flooding. In the northern corner of the wood is an electrical sub-station.

This small ancient semi-natural woodland has a central core dominated by sycamore, which is naturalised throughout, an understorey of holly and elder and a sparse ground layer of bramble and fern. On the upper slopes to the northwest and northeast the canopy also includes sessile oak, English elm and ash with an understorey of hazel, holly and rowan. Within the deep valley, which is heavily shaded the ground layer is composed of mosses, bryophytes, wood sorrel and bracken. Along the eastern margin the more open canopy includes sycamore, Corsican and Scots pine with an understorey of elder, hawthorn, hazel and holly. As a consequence of higher light values the ground flora is composed of bluebells, wild raspberry and willowherb. Rhododendron was present in large patches on acquisition, it has been controlled but is difficult to access and control especially on the gill sides as no chemicals can be used on the steep slopes close to the stream. Occasional regrowth or regeneration occurs and needs regular control.

The permissive route through the wood extends to some 350m and links with the public footpath along the southern boundary. The paths are stepped in places and there are some steep drops down to Midgey Gill. There is a small lay-by at the southern entrance.

## 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.