WOODLAND TRUST

# Swarthmoor Hall Wood

# Management Plan 2015-2020

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## MAPS

# THE WOODLAND TRUST

## INTRODUCTION

The Trust's corporate aims and management approach guide the management of all the Trust's properties, and are described on Page 4. These determine basic management policies and methods, which apply to all sites unless specifically stated otherwise. Such policies include free public access; keeping local people informed of major proposed work; the retention of old trees and dead wood; and a desire for management to be as unobtrusive as possible. The Trust also has available Policy Statements covering a variety of woodland management issues.

The Trust's management plans are based on the identification of Key Features for the site and setting objectives for their management. A monitoring programme (not included in this plan) ensures that these objectives are met and any necessary management works are carried out.

Any legally confidential or sensitive species information about this site is not included in this version of the plan.

## PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.
Please either consult The Woodland Trust website www.woodlandtrust.org.uk or contact the Woodland Trust (wopsmail@woodlandtrust.org.uk) to confirm details of the current management programme.

There is a formal review of this plan every 5 years and a summary of monitoring results can be obtained on request.

## WOODLAND MANAGEMENT APPROACH

The management of our woods is based on our charitable purposes, and is therefore focused on improving woodland biodiversity and increasing peoples' understanding and enjoyment of woodland.

Our strategic aims are to:

- Protect native woods, trees and their wildlife for the future
- Work with others to create more native woodlands and places rich in trees
- Inspire everyone to enjoy and value woods and trees

All our sites have a management plan which is freely accessible via our website www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
10. Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

## SUMMARY

This public management plan briefly describes the site, specifically mentions information on public access, sets out the long term policy and lists the Key Features which drive management actions. The Key Features are specific to this site – their significance is outlined together with their long (50 year+) and short (5 year) term objectives. The short term objectives are complemented by a detailed Work Programme for the period of this management plan. Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. A short glossary of technical terms is at the end. The Key Features and general woodland condition of this site are subject to a formal monitoring programme which is maintained in a central database. A summary of monitoring results is available on request.

## 1.0 SITE DETAILS

| | |
|---|---|
| **Site name:** | Swarthmoor Hall Wood |
| **Location:** | Ulverston |
| **Grid reference:** | SD284774, OS 1:50,000 Sheet No. 97 |
| **Area:** | 1.36 hectares (3.36 acres) |
| **Designations:** | Ancient Semi Natural Woodland, Tree Preservation Order |

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

Swarthmoor Hall Wood is a delightful little peaceful ancient woodland, on the banks of the Levy Beck. In spring the wood has a delightful variety of flowers, with bluebells, wild garlic, and lesser anemone, and it is home to owls and woodpeckers. The path through it leads to a short stroll across adjacent fields to nearby Swarthmoor Hall, the historic founding home of the Quaker movement.

## 2.2 Extended Description

This small (1.36ha) mature broadleaved woodland is situated on the south-western outskirts of Ulverston, Cumbria. Swarthmoor Hall Wood is owned by the Society of Friends (Quakers) and has been managed under lease by the Woodland Trust since 1995. The wood is long and narrow (320 m long and between 65 and 30m wide), running south east to north west, and on a very steep slope facing south west, with a stream, the Levy Beck, running along the bottom of the wood and just inside it's boundary. The wood has a housing estate adjacent at the top of the slope along the north eastern boundary, pasture fields beyond the Levy Beck to the south, and then a short boundary adjacent to Springfield Road to the south. The wood is not directly connected to other woodland, although there are smaller areas of woodland further up and downstream.

The wood has mature, broadleaved trees forming a fairly continuous canopy over the wood; this canopy is dominated by oak with significant amounts of sycamore, ash, elm, beech, and hornbeam. There is a very good age range of all species, although no really old or over mature trees. The under storey is diverse, if a little patchy with a large amount of sycamore and elm as well as hazel, holly, yew, rowan, hawthorn and Norway maple. There is very good natural regeneration where gaps have been created (mainly due to tree safety felling and Dutch elm disease) with beech, elm, ash and sycamore. There has also been some under planting of beech in two distinct areas near the southern end. There is a well-developed, diverse ground flora, of ancient woodland plants such as dog's mercury and bluebell, although human disturbance and dumping has also caused areas to develop with bramble and nettle, especially adjacent to the houses, and entrances. Although the wood is too small to have been included in the Ancient Woodland survey, it has all the characteristics of a semi-natural ancient woodland.

There are 2 entrances to the wood, connected by a very well used, permissive footpath (400m) which runs the length of the wood. The Entrance at the northern end is from off Swarthmoor Lane via a public right of way, and the entrance at the south east end is directly off Springfield Road. The wood is very well used by local people, especially because it is so close to large housing estates, and the path links onto other rights of way. The wood is an attractive feature in the landscape and valued by the local people as an important community resource.

The wood has close historical links with nearby Swarthmoor Hall, built around 1586 and one of the founding sites for the Quaker movement.

# 3.0 PUBLIC ACCESS INFORMATION

## 3.1 Getting there

Swarthmoor Hall Wood is easiest to find and access on foot from Springfield Road through a small squeeze gap in the stone wall. A permissive path runs through the wood parallel to the Levy Beck for 400m. The route is steep and stepped in places. At the northern end there is a kissing gate and the path continues beyond the wood to meet a public right of way known as Swarthmoor Lane and also the route of the Cistercian Way; this runs from Grange-over-Sands to Roa Island for 53km/33 miles.

By road, from the A590 main trunk road in Ulverston, head south onto Prince's Street (this is a traffic light junction, and Prince's St is also signposted to the railway station). After passing the turning to the railway station Prince's Street becomes Springfield Road. The wood is then on the right (west) hand side approx. 500m further on, just as the road dips down and before it crosses the Levy Beck. There is a 5ft wall along the road. Parking is limited to street parking or town centre car parks. For further local information contact Ulverston Tourist Information Centre. Web site http://www.visitulverston.com/ or Tel 0845 6424680.

Numerous buses serve Ulverston from Kendal, Windermere and Barrow. The main train station on Station Approach just off Springfield Road is managed by Transpennine Express and has regular services from Barrow and Kendal (Oxenholme). There are accessible toilet facilities at the station. Traveline NorthEast 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. Contact via web site http://jplanner.travelinenortheast.info/ or Tel: 0871 200 2233.
Swarthmoor Hall Wood is closely associated with adjacent Swarthmoor Hall an historic hall recognised as the birth place of Quakerism, the Religious Society of Friends. Further information on http://www.swarthmoorhall.co.uk/

## 3.2 Access / Walks

## 4.0 LONG TERM POLICY

The aim will be to conserve and enhance this small, ancient semi-natural woodland as mixed, predominantly native, high forest with a continuous canopy, and as far as possible allow it to develop naturally. The woodland currently has a very wide mix of tree species, and a good, varied under storey and shrub layer, with a good variety of ages. Although it is not always possible to leave standing deadwood for safety reasons, fallen deadwood has accumulated and remains undisturbed on the very steep slope. This variety needs to be maintained to retain its resilience as the wood currently faces a number of pressures, and due to its urban fringe location, small size and high levels of use or potential mis-use and it will continue to be vulnerable and face challenges.

The Woodland Trust will maintain the current level of informal public access, which includes 2 entrances and 400m of permissive path. This provides good public access along the whole length of the wood and stream whilst leave the slopes undisturbed. The wood itself is very small, but this route is important because it provides links between the local housing and walks in the wider countryside.

# 5.0 KEY FEATURES

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

## 5.1 Ancient Semi Natural Woodland

### Description

Swarthmoor Hall Wood is mixed, mature, high-forest broad-leaved woodland, with an almost continuous canopy. It most closely resembles ancient woodland NVC type W11 (Upland Oakwood) with oak dominant in the canopy, a well-defined shrub layer of elm, rowan, sycamore, wild cherry, ash and beech and a few non-native trees such as hornbeam (which is well outside it's range) and Norway maple (both planted). The under storey is composed of holly and regenerating beech and sycamore, hazel, elm, Norway maple (again, from planted trees), yew, oak and ash. There is a great deal of natural regeneration of all species in the areas where light levels are higher, as there appears to be no browsing at all. The wood contains a number of indicator species of ancient woodland; however it was too small to be included in the original survey. The ground flora is very and surprisingly rich for a small wood, with bluebell, wood anemone, snowdrop, wild garlic, lesser celandine, lords and ladies, dog's mercury, sedges, field wood rush, and common polypody. Where there has been disturbance (tree safety felling resulting in open areas) and human activity (close to the entrances and gardens) there are a lot of nettles and brambles, and some well-used trampled areas near the stream in the north of the wood are dominated by grass. There is a lot of dead wood throughout both standing and fallen, mainly as a result of tree safety works and Dutch elm disease (which continues to affect elms as they reach 12-15 yrs). The wood covers the steep slope approx. 10m high which rises on the northern side of the Levy Beck (a stream) and flows through the whole wood. This beck has formed many small erosion and deposition features within the stony shallow watercourse. Garden dumping has introduced some non-native species in small quantities in localised areas, particularly Montbretia.

### Significance

The wood has many of the elements of ancient semi natural woodland with a wide range of ancient woodland indicators species. This is despite additional planting of non-native species such as hornbeam, Norway maple and beech, which because they are present in small numbers and so far not particularly invasive have not obviously affected the wood. Indeed, they add additional diversity and structure to the wood and this is one of the few woods in the area with hornbeam. The woodland provides cover, food and nesting sites for a variety of bird species and mammals including woodpeckers and owls. The combination of the stream, mixed woodland with mixed species and varied age classes and the adjacent farmland offers a particularly rich variety of habitats.

### Opportunities & Constraints

Opportunities. The wood has a great variety of trees and shrubs, and a range of ages with very good regeneration. It also still has all the keys elements of ancient woodland, including a good variety of deadwood. It should be possible to continue to conserve and manage it largely through natural processes, and at the same time maintain a high level of public access, and all in an urban setting.

Constraints
Much of the wood is on a very steep slope so any management work is difficult. Vehicle access within the wood not possible. The wood in on the urban fringe, with a busy main road and houses adjacent, plus is also faces the prevailing south westerly wind (and seems to frequently be damaged by it) so tree safety needs are high. Standing deadwood can only be safely left in a few locations.
The wood is very well-used, and in the past has also suffered from mountain biking, causing ground compaction, which has caused root damage and limited regeneration.
Garden waste tipping from adjacent houses is a major, on-going issue; the houses are at the top of the slope and any dumping inevitably affects areas downslope. In places this has smothered indigenous plants such as the bluebell, increased the nutrient status of the soil causing bramble and nettles to flourish, and introduced invasive exotics such as Montbretia. The inaccessibility of the slope also makes it very difficult to monitor and clear up the dumping when it has occurred

## Factors Causing Change

Garden rubbish dumping, introducing invasive non-native species, such as Montbretia. Wind damage and necessary tree safety works.

## Long term Objective (50 years+)

The aim will be to manage this ancient woodland as continuous canopy, high forest with broadleaved, predominantly native species, but accepting non-natives within the mix as long as overall ancient woodland habitat is thriving. It is more important to maintain a continuous canopy with a variety of species that can regenerate, rather than to aim solely for native trees and shrub.
The current mix of age ranges will be maintained or increased. It is anticipated that the wood will largely be managed by tree safety needs, which has so far provided more than sufficient gaps for natural regeneration, and also created much deadwood, but this will be monitored. Regeneration will continue to successfully fill gaps, and be natural. Deadwood will continue to be well-represented, standing where possible.

Damaging activities such as tipping of garden waste, inappropriate use such as mountain biking will be discouraged and kept to acceptable levels, and any additional threats identified early on.

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

Tree safety needs will initiate any silvicultural management required (in Site Hazard actions).
The wood will be formally monitored every 2 years for any factors causing change particularly: compaction, tipping from neighbouring gardens, and making sure that boundaries are secure.
The annual Estate Management Contract will report on key issues whilst on routine maintenance visits, especially any activities requiring immediate follow up such as: garden waste, vandalism, dumping and new areas of non-native invasive plants.
Neighbours will be contacted periodically to remind them of the appropriate disposal of waste.

## 5.2 Informal Public Access

### Description

The wood is situated in the south-west suburban Ulverston, at a juncture between housing and the wider countryside. It has 2 entrances and 400m of a linear, permissive footpath, running the length of the whole wood and adjacent to the Levy Beck. Pedestrian access is either directly from Springfield Road to the south east, or from public right of way that connects with Swarthmoor Lane to the north. The path is steep in places, but provides immediate access to a lovely little wood for local people. Although the route through the wood is short, it is very attractive and provides links from a large areas of housing to the wider footpath network in the adjoining countryside. The wood is very well used, mainly by local people, for short dog-walks, as a play area for children, and also to access these longer walks. There is a seat overlooking the beck in the middle of the wood, and pleasant views over surrounding river and farmland. Parking is limited, but possible in nearby streets.

### Significance

Swarthmoor Hall Wood provides a small area of ancient woodland for informal recreation, but also provides a vital link to the footpath network in the wider countryside, including a long distance route, the Cistercian Way. Although it is small and on the urban fringe, it is very attractive wood and able to cope with high visitor numbers. It is also the only wood of its type open to the public in the locality, and does display a wide range of woodland wildlife for visitors. Until the Trust took over the wood there was no official public access.
The Quaker movement have owned the wood since the 1600's so the wood holds much local cultural significance. It is also an important landscape feature along the beck providing woodland habitat in an urban setting. The whole woodland is covered by a tree preservation order.

### Opportunities & Constraints

Opportunities
The wood is appreciated by many locals and by visitors to Swarthmoor Hall, the Quaker residence near to the wood, giving the Woodland Trust the opportunity to involve people directly with woodland. With time and persistence, the issues have been tackled through contact with locals, and the situation improved.
Constraints
The wood is on the steep bank of the Levy Beck, which undercuts the slope it is on, so the path is in places steep, narrow and has steps. It requires frequent monitoring and management to ensure that the path is safe and accessible. The wood is only very small, limiting its tranquillity when busy. Garden rubbish, litter and occasional vandalism are on-going issues and can make areas of the wood unsightly, especially the entrances. Regular maintenance and contact with local people has seen an improvement in all these issues though.

### Factors Causing Change

Stream erosion of the banks, affecting the paths. Garden waster and litter dumping, creating an unsightly hazard. Heavy use or mis-use e.g. mountain biking causing compaction of ground surface and tree damage.

### Long term Objective (50 years+)

The Woodland Trust will manage the current level of informal public access on foot to the woodland, with 2 entrances with welcome signs and a permissive path along Levy Beck. The exact route of the path may need to vary, depending on safety requirements, erosion, or the need to create areas for regeneration. Public information on the website and promotion of the woodland locally will encourage local people, neighbours and also visitors from further afield; promote greater understanding of the importance of woodland within the environment. Where opportunities arise the Woodland Trust will work with the local community where possible on projects involving the woodland to gain their help and understanding.

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

Annual work in the Estate Management Contract will:
- manage the two pedestrian access points and 400m of permissive path, ensuring safety standards are maintained and that the path is accessible by cutting encroaching vegetation.
- pick litter throughout site, report on and remove garden waste as necessary.
- maintain the bench as long as it remains in good condition.

In addition the south eastern entrance will be modified to add an internal step (2015) to make access less of a climb.
The safety of the path (tree safety, erosion) and infrastructure (such as revetments & steps) will be covered in Site Hazard Actions.
The overall provision of visitor facilities will be reviewed every 5 years. Information and promotion of the wood, plus contact with the local community will also be reviewed once every 5 years, where possible aiming to involve local people.

## 6.0 WORK PROGRAMME

| Year | Type of Work | Description | Due By |
|---|---|---|---|

## APPENDIX 1: COMPARTMENT DESCRIPTIONS

| Cpt No. | Area (ha) | Main Species | Year | Management Regime | Major Management Constraints | Key Features Present | Designations |
|---|---|---|---|---|---|---|---|
| 1a | 1.36 | other oak spp | 1900 | High forest | No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Ancient Semi Natural Woodland, Informal Public Access | Tree Preservation Order |

The wood is composed of mixed, mature, broadleaves, mainly of oak (Quercus sp.) , and with large amounts of sycamore (Acer pseudoplatanus), beech (Fagus sylvatica), ash (Fraxinus excelsior), elm (Ulmus sp.) regenerating from stumps affected by Dutch elm disease, and smaller quantities of wild cherry (Prunus avium). Ash started to show early signs of ash dieback in 2018. Unusually, there are also a few mature, planted hornbeam (it is well outside its natural range here), and Norway maple (also originally planted). These form a near continuous canopy, although there are significant gaps along the north eastern edge adjacent tot the housing where trees have had to be felled for safety reasons. The under storey/shrub layer is composed of holly (Ilex aquilinium), with some hazel (Corylus avellana) and regenerating beech and sycamore, elm, Norway maple, yew (Taxus baccata), oak and ash. There is a great deal of natural regeneration of most species in localised patches throughout the wood where light levels are higher and there appears to be no browsing.
The ground flora is diverse and contains a number of indicator species of ancient woodland indicators including bluebell (Hyacinthoides non-scripta), wood anemone (Anemone nemorosa), wild garlic (Alliuim ursinum), lesser celandine (Ficaria verna), dog's mercury (Mercurialis perennis), sedges (Carex sp.), as well as more common species such as lords and ladies (Arum maculatum), common polypody (Polypodium vulgare), field wood rush (Luzula campestris) and snowdrop (probably of a garden variety and planted). In the more disturbed areas close to entrances and gardens there is rank growth of bramble (Rubus fruticosus) and nettle (Urtica dioica). There is an abundance of both standing and lying deadwood.
The wood is mainly on a steep slope, at the bottom of which is a stream, the Levy Brook, which in places has flat land adjacent.
The wood’s boundaries are well defined, with 1930s housing all along the north-eastern boundary, a fence and hedge beyond the Levy Beck separating the wood from adjacent pasture fields along the south western boundary, and a solid wet-stone wall defining the short eastern boundary next to the Springfield Road. The Levy Beck disappears under the road in a large culvert here.
Access into the wood is very restricted and currently only wide enough for access on foot, either via a squeeze gap in the southern stone-wall and a kissing gate in the northern fence. There is vehicle access over adjacent fields for management purposes but no gate into the wood here.

# 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.