



Bellsquarry Wood

Management Plan 2019-2024

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THE WOODLAND TRUST

INTRODUCTION

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

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

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

PLAN REVIEW AND UPDATING

The information presented in this Management plan is held in a database which is continuously being amended and updated on our website. Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations. Please either consult The Woodland Trust website 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:	Bellsquarry Wood
Location:	Livingston
Grid reference:	NT048650, OS 1:50,000 Sheet No. 65
Area:	17.75 hectares (43.86 acres)
Designations:	Tree Preservation Order

2.0 SITE DESCRIPTION

2.1 Summary Description

Bellsquarry Wood is a tranquil woodland in the midst of a built-up area. This easily accessible site is a great place to escape the pressures of urban life, get a breath of fresh air, and practise your wildlife spotting skills as well as hunt for mythical creatures on the sculpture trail.

2.2 Extended Description

Bellsquarry Wood is one of the Woodland Trust's larger sites in Livingston. Situated in the south Livingston, just east of the village of Bellsquarry the site lies between the altitudes of 150m above sea level in the east, to 160m asl in the south-west. The site is surrounded on all sides by busy roads or housing.

The geology of the area is sedimentary sandstones, limestones and shale of the Carboniferous-Dinarian period, which give rise to brown forest soils with gleying; some gleys are non-calcareous or humic. The MLURI climate map identifies the area as fairly warm moist lowland and foothill, being moderately exposed with moderate winters.

The site was acquired by the Woodland Trust in 1996, following a short period of leasing from Livingston Development Corporation. Little is known of the woods history, however the remains of an old limekiln can be found towards the west of the site within the grazed fields with what appears

to be the route of the old railway now used as a Right of Way from Bellsquarry South Road through to the village hall on Calder Road.

The majority of the woodland area appears on OS maps of 1860 as woodland and is therefore classed as Long Established Woodland of Plantation Origin (LEPO) on the ancient woodland inventory. The largest area consists of semi natural birch woodland over a ground layer of ferns and mosses, which has naturally regenerated after the felling of the previous coniferous stand in the 1940's. There are some mature broadleaves, such as beech and oak, mainly in the west of this area and a few scattered Scots pine to the east. The under storey includes a significant amount of young broadleaf regeneration, mainly of beech but with some oak, rowan and holly. To the south of this area and to the south of the Dedridge burn which flows eastwards through the wood, are the remnants of policy woodland formerly associated with Newpark House. This now consists of narrow belts of mature trees, including oak, sycamore, beech, Scots pine, lime and horse chestnut, with some of these overhanging the long narrow pond. In addition to these areas there are small groups of more recent planting. One of these lies on the east side of the wood and was created when the Alderstone road was extended and consists of mixed broadleaved planting. There has also been some planting carried out by the Bellsquarry Community Woodland Group to augment some of the more open areas along the southern boundary with Saltcoats Gardens and Tantallon Gardens.

The Dedridge Burn emerges from a culvert near the western boundary and flows east through fields and then parallel to the southern boundary of the wood through wet woodland. This adds a riparian component to the woodland habitat, however periodic pollution from the Brucefield Industrial Estate reduces the value of this habitat.

A long narrow man-made pond is fed directly from the Dedridge Burn and provides a very attractive feature in the centre of the wood; This was desilted and made into distinct open water and marginal sections in 2011, and the pond inlet was re-engineered so that most of the water flow now bypasses the pond.

Open areas of flora rich grassland are found beside paths to the south of the pond with a small meadow area immediately south of the pond adding to diversity. There is also an old orchard, characterised by scattered old fruit trees, in espalier form located to the south of the wood just west of Pitcaple Gardens. This was opened up and replanted with new trees in 2011.

Three fields to the west comprising approximately 4ha, include both improved and semi-improved grassland with areas, particularly on and around an old limekiln, that are very diverse in wild flowers. At present these fields are leased for grazing horses.

Bellsquarry wood provides an important reserve of natural vegetation within the larger Livingston complex. The combination of different habitats contributes to its diversity. The birchwood is broadly classified as NVC type W16- oak/birch woodland, with a higher than average species diversity. It is likely to be important for bryophytes and invertebrates and supports a good range of fungi. As the wood has become isolated by surrounding development, larger mammals such as deer have become less frequent visitors, but a range of birds and smaller mammals benefit from the woodland cover. Grey squirrels are present, but are not considered to be a threat to the woodland.

Bellsquarry Wood provides excellent public access for a range of users with approximately 2.3km of

managed paths throughout with access from nine entrances. These paths are primarily stone surfaced (approx. 2.1km) and a mown grass Right of Way (ROW) providing good access throughout the year. In 2014 a new Tootflits and Glingbobs trail for young children was installed along with several other artworks to make a visit to the wood more interesting. During 2014 a visitor survey was also started.

The site also provides excellent public access for both short and longer routes when viewed as part of the local network as it ties into the Livingston Greenways. Entrances to the wood are via kissing gates or pedestrian gaps through the grazed fields on the ROW. There is no Woodland Trust car park at the site, though cars are able to park on the roadside of adjacent roads.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus: The nearest bus stops are on Bankton Road, around 300m (330yds) from the northern entrance, and Alderstone Road, a similar distance from the eastern entrance.

By train: Livingston South train station is around 1km (0.6 miles).

For up-to-date information on public transport, visit travelinescotland.com or traveline.org.uk (0871 200 22 33).

By car: From Edinburgh, take the A71 to Bellsquarry. The wood is near the roundabout to Alderstone Road. There is no on-site parking, but parking is available in many surrounding streets, particularly Calder Road and Bellsquarry South Road.

(February 2017)

3.2 Access / Walks

Bellsquarry Wood has excellent public access with nine entrances, either by kissing gates or gaps (1.5m).

There is a good network of paths with several short, circular routes as well as links with the network of paths throughout Livingston. A grassy path through the western end of the site links Newpark Road and Calder Road. It is accessed by kissing gates and leads to a bench beside an open field grazed by horses.

The main entrance routes and those around the pond are surfaced and drained, while other paths have several sections of timber boardwalk over the wet areas. The site slopes fairly steeply down to the burn, which is crossed by two broad, sleeper-type bridges, and there are several flights of large steps. Some sections of the wood can be muddy and wet at times.

A giant beehive sculpture made by woodworker Robin Wood has been installed alongside grassy paths and homes for wildlife including bats, birds and bugs.

There is also a children's trail featuring homes for mythical creatures the Tootflits, a cross between a dragonfly and weevil, and Glingbobs, a cross between woodlouse and bumble bee, which are carved into the trees. Children will also enjoy looking for the oozlum bird, a metal bird designed by David Evan Mackay.

4.0 LONG TERM POLICY

The long term intention is to maintain the area as semi-natural broadleaved woodland under continuous cover while increasing the proportion of native species. Individual examples of some conifers, particularly Scots pine which is featured throughout West Lothian, will be retained but the wood will remain predominantly broadleaved. Along housing and roadside boundaries the intention is to slowly regenerate the woodland edges through individual tree removal and will be replacement of tree species with more suitable species to improve biodiversity and reduce conflict with adjacent land-uses. In addition, standing and fallen deadwood will be retained where it is safe to do so. The area of open ground approx. 4ha which has been grazed by horses will be looked at to explore the condition of the unimproved grassland and subsequent management regime. A community orchard (1ha) was planted in 2016 and it is used frequently by Bellsquarry Primary school and enjoyed by many of the users of the woodland.

Due to the woods location within the central belt and close proximity to large populations, the intention is to use the woods to improve and raise awareness, through education, of the biodiversity, recreation and health benefits woodlands provide.

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 Connecting People with woods & trees

Description

Access/Infrastructure/Events

Bellsquarry wood is well-used woodland in the southern edge in Livingston. Livingston has an urban population of 80,000 approx. (2011 census). The wood is classified as a long established plantation origin which has historical significance in the local area. The name Bellsquarry comes from the local limestone quarry and the owner Mr Bell. In the centre of the woodland there is a small pond as a feature with an array of bluebells surrounding it.

Internally, there are a network of approximately 2.1 km of whin dust surfaced paths and a short loop of grass path with an additional Public Rights of way connecting Bellsquarry South Road and the village itself via the fields. There are no information boards and routes are not way-marked. There is no on site car park, though parking is available on Calder Road and Newpark road. It is estimated that 20 people minimum use the wood daily. One volunteer warden patrols and carries out checks on site every 2 weeks.

There are nine entrances around the wood provide public access for a range of user groups. The paths, as well as providing an internal circular walk, link directly into the wider network of Livingston giving access to long distance routes. Car parking is usually easy on the quiet adjacent roads. There is one information board at the entrance of the orchard in the woodland, designed by Bellsquarry Primary School which has been funded by Players of the Postcode Lottery in 2018. There is an annual apple day event held in October in the village hall.

Significance

Woodland of this size and composition is a rare feature in the urban landscape and therefore the site provides a chance to promote access to a safe, natural environment close to where people live. It forms a key part of the local access network and provides alternative scenic routes as well as linking to longer distance paths. A Tootflits and Glingbobs trail was installed in 2014 along with other artworks that may attract many more younger visitors to the woodland (0-5 year old). This consists of small wooden doors within several trees on a route from Calder road in a circular route back to the start along with a leaflet to guide users around the woodland.

Opportunities & Constraints

Opportunities-

- To further promote and use the woodland as an educational resource. Most paths have already been upgraded along key routes.
- To further develop access facilities within the site, responding reactively to user demand.
- To further promote and use the woodland as an educational resource.
- Upgrading paths and removing the gates and small access points to improve access for buddy/wheelchair-friendly use
- Tree planting opportunities with local community and partners
- Small scale events with community/local schools and community group involvement
- Opportunity to improve infrastructure within woodland by more benches/
- Promotion to TCV green gyms, Park Run and Paths for All to use the area
- Opportunity to have a practical volunteer group that could be self-led.

Constraints

- poorly drained soils make soft surface routes difficult
- Misuse by motorbikes and ATVs not only giving rise to degradation of path surfaces but also to regular vandalism of entrances and boundary fences
- No formal car parking, which can cause problems with neighbours and visitors parking on the local roads
- Squirrel damage is having an impact to the look and feel of the young regeneration occurring on site

Factors Causing Change

Paths edges growing in, reducing visibility and potentially resulting in personal safety concerns by users

Damage to signs, posts, benches and other site infrastructure.

Proposed new housing development at Brotherton Farm/Limefields will increase use of the site, resulting in greater pressure on paths and more litter picks needed.

1) Senescing beech - The ongoing senescence of the large mature mainly beech trees which are such a feature in the West Lothian landscape and tend to be of a similar age. They are becoming increasingly vulnerable to storm damage and disease which is becoming a challenge to deal with in terms of tree safety and also maintenance of the treed landscape and is expected to become even worse in coming years.

2) Windblow - Most of the spruce and larch planted as part of LDC landscaping is reaching its terminal height at which it is vulnerable to windblow.

3) Chalara on ash. Ash is a frequent species and is well suited to the clay soils of West Lothian. Young trees already badly affected and some mature trees also. Removes one of the more suitable species for replanting.

4) Phytophthora ramorum. 2 SPHNs already issued in the Livingston area and likely to spread.

5) Increased development - various schemes have / are being built and large new developments are currently being planned for north, SW and SE Livingston.

6) Squirrels, rabbits and roe deer are all present and likely to prevent trees developing into healthy, mature trees.

Long term Objective (50 years+)

There will be a well-maintained network of paths and rides with a variety of aspects - from narrow shaded paths to open, wide rides allowing safe access across the site.

The site should be well used, appreciated and respected by the local community. It should be known for its wildlife interest, varied landscape, history and habitats. Increased volunteer use either by established volunteer group. New areas where people can enjoy the woodland by new picnic areas and well- maintained paths.

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

During this plan period, the short term objective is to continue to provide public access at Bellsquarry wood which is safe and welcoming. This will be achieved by:

- Two path cuts a year (June & August)
- Litter pick every month and pro-active fly tipping monitoring
- New sign and entrance improvements at the two entrances, Calder road entrances (2018).
- Annual inspection of fences/paths and internal structures
- Regular tree safety inspections
- Re print and design leaflet (2018)
- Recruit and train a volunteer for the community orchard
- Events with local community- annual Apple Day event/ continual involvement of Bellsquarry Primary school

5.2 Long Established Woodland of Plantation Origin

Description

The woodlands LEPO status is confirmed by its existence on the 1860 OS map. Made up of sub compartments a, e and parts of d, the diversity of the wood has been greatly compromised due to past management history and therefore few features of continuous woodland cover remain. However it is a significant natural feature within the local urban landscape, despite previous intensive management and fragmentation by development.

Significance

The amount of ancient woodland left in Britain has been drastically reduced over the last century. The woodland is on the Ancient Woodland Inventory as LEPO, which indicates a relatively high biodiversity potential. The woods are a significant feature of the local landscape and provide screening and shelter between housing developments and industrial estates. They form an integral component of the local landscape.

Opportunities & Constraints

Opportunities - To improve the biodiversity value of the woodland and ground flora by continuing to manipulate the canopy and species composition through removal of non-native species.

Constraints- Fire, natural succession to woodland habitats, rabbit damage
Vandalism (fires), Climate Change

Factors Causing Change

Regeneration of non-native species - Beech, Western Hemlock, Rhododendron, Snowberry and others may become an issue in future. Currently only beech is spreading significantly but this is could be considered a natural progression of the woodland.

Squirrel/deer/rabbit damage

Vandalism (fires)

Long term Objective (50 years+)

To create and maintain a diverse, mixed age and mixed species woodland habitat. Species composition will be varied, being mostly native though a proportion of non-native species such as Weston hemlock, beech and sycamore will be monitored to ensure the ground flora are at acceptable levels throughout the woodland.

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

To maintain the varied composition and structural diversity of the woodland. This will be achieved by minimum intervention in the majority of the wood.

This will be achieved by:

- Japanese Knotweed removal in compartment 41f using herbicide use subject to permit from SEPA as it is beside a watercourse, frequency to be determined by initial survey of site with 2019 and annual review if removal is needed (2019-2022)
- Rhododendron ponticum survey across site (2019) and management regime to follow (2020-2023)
- cut back rhododendron 1m around tree bases in compartment 41d/e for tree safety inspections (2018)
- Assess pond health and resolve leaking issues of the pond and monitor effects on the trees surround the pond (2018-2019)
- The impacts of deer, rabbits, squirrels and tree diseases will be monitored through the Woodland Trust's woodland condition assessment process and monitored annually.
- Fell and restock compartment 41f as per tree safety concerns over mature trees beside pond, restock area of 0.4ha with approximately 500 trees comprising of native broadleaf species, including alder, willow, rowan, cherry and hazel, with 1.2m tubes as protection (2018)

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
41a	9.81	Birch (downy/silver)	1940	Min-intervention	Site structure, location, natural features & vegetation	Connecting People with woods & trees	Tree Preservation Order
<p>Mature downy birch, with occasional sycamore and beech. Understorey includes pendunculate and red oak, beech, rowan, Scots pine, holly and western hemlock. Ground flora is dominated by grasses and ferns with heather, bramble, heath bedstraw, tormentil and sphagnum moss amongst the undulating furrows. Good levels of standing and fallen deadwood. A large amount of silt from the pond was deposited within this area in 2011, so there may be some interesting changes to ground flora diversity on these areas.</p>							
41b	0.73	Mixed broadleaves	2001	Min-intervention		Connecting People with woods & trees	Tree Preservation Order
<p>Area of young mixed broadleaved planting including alder, aspen, downy birch, hawthorn, oak and dog rose. Ground flora of soft grasses, buttercup, thistles and bramble.</p>							
41c	3.51	Open ground	2012	Non-wood habitat	Mostly wet ground/exposed site	Connecting People with woods & trees	
<p>Two small fields to the west of the woodland area which are dissected by the Dedridge Burn. MG5, MG6 and MG10 grassland with better diversity around the Limekiln and towards the east. No rare or notable flora recorded. The fields are under horse grazing regime which is rotated seasonally around the area.</p>							
41d	2.18	Mixed broadleaves	1920	Min-intervention		Connecting People with woods & trees	Tree Preservation Order
<p>Roadside and internal policy tree belts of mature and over mature trees; beech, Scots pine, lime, sycamore, horse chestnut, sessile oak and downy birch, with an understorey of occasional young trees including, ash, beech, sycamore, and horse chestnut. This compartment also includes the pond, and small meadow with clumps of shrubs planted along the southern housing boundary. An area of young planting (2001) also buffers one of the radial mature strips between Tantallon Gardens and Saltcoats gardens. Deadwood is predominantly timber and branchwood left as the result of safety fellings, with some standing deadwood from dieback in lime and beech.</p>							

41e	0.39	Mixed broadleaves	2012	Min-intervention	No/poor vehicular access to the site	Connecting People with woods & trees	Tree Preservation Order
<p>Old orchard area, with scattered fruit trees of mixed age - a dozen new trees were planted in 2011. Older trees generally neglected though pruning has been carried out in 2011 by members of the Bellsquarry Woodland Workgroup. Ground flora of soft grasses and wood sedge, with exotic flowers that are remnants of the time this area was managed by Newpark House.</p>							
41f	1.11	Alder species	1985	Min-intervention		Connecting People with woods & trees	Tree Preservation Order
<p>Stand of mixed broadleaves and conifers. Open ground with some shrub planting to south associated with an early SUDS attenuation pond along housing edge and marshy land to north along the stream edge. Thinning of conifers to favour broadleaves if necessary.</p>							

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.