

# **Storeton Woods**

# Management Plan 2017-2022

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a> 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 <a href="www.woodlandtrust.org.uk">www.woodlandtrust.org.uk</a>. 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.
- 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: Storeton Woods
Location: Higher Bebington

**Grid reference:** SJ313849, OS 1:50,000 Sheet No. 108

**Area:** 12.71 hectares (31.41 acres)

**Designations:** Green Belt, Industrial Archaeology Interest, Site of Local Nature

Conservation Importance, Tree Preservation Order

#### 2.0 SITE DESCRIPTION

#### 2.1 Summary Description

Storeton Woods is a popular location for visitors to walk amongst mature oak, sycamore and beech trees to enjoy the wildlife and explore the historical features of the site from when it was a sandstone quarry. It includes a remnant of the old tramway used for transporting stone from the quarry to Bromborough to be transported by barge to be used in construction of buildings all over Birkenhead and Liverpool. The tramline was designed by George Stephenson in 1837 while he was looking for a source of stone for building railway viaducts. The wood was also the location for the discovery by quarrymen in 1838 of footprints belonging to a raptor like dinosaur from the Triassic period and called it 'Chirotherium'.

#### 2.2 Extended Description

Storeton Wood is 12.71 ha secondary woodland which forms part of a belt of woodland running north-south along a sandstone escarpment on the Wirral Peninsula close to the villages of Storeton and Higher Bebington on the edge of Birkenhead. It is a prominent feature in the landscape and can be seen from miles around.

The wood was purchased by the Woodland Trust in 1989 with support from local residents who had formed the Friends of Storeton Woods (FOSW) that year with the aim of protecting the woodland which at the time was badly neglected and being used for anti-social behaviour.

The site had been quarried for sandstone dating back to Roman times and in the 19th century sandstone was quarried for the construction of bridges for the new railway line between Liverpool and Manchester. A number of historical features still exist within the site including quarry faces, sandstone walls and most a section of the old quarry tramway that was used to transport the stone from the quarry down to the docks at Bromborough.

In the 19th century quarry men found a dinosaur footprint in the stone being excavated. These were from a small dinosaur called 'Chirotherium' and are on display in the Liverpool museum. The quarry closed in the early part of the 20th century and was in-filled with spoil from the construction of the first Mersey Tunnel (the Queensway Tunnel) in the 1920's.

The wood contains a mix of mature broadleaves with some Scots pine. Some of the older trees (beech, turkey oak, pedunculate oak, sycamore) were planted around the end of the 19th century and early 20th century to screen the quarry. The rest of the woodland is mainly natural regeneration of silver birch, beech, oak, sycamore and Scots pine.

Other tree and shrub species include holly, yew, rowan, whitebeam, hazel, gorse, elder and hawthorn. The ground flora is reasonably diverse and includes bluebells, broad buckler fern, enchanter's nightshade, wood sage and wavy hairgrass with ground elder, ground ivy, cleavers, nettles, bramble and bracken.

There is parking on the roadside next to the wood along Marsh Lane and Resthill Road with public entrances into the wood from these roads. Higher Bebington village is about 1km from the wood and has a number of cafes, pubs and shops. There is a circular surfaced path around the wood including a section along the old tramway. The Friends of Storeton Woods group work with the Woodland Trust to manage and protect the wood. The wood is very well used particularly by local dog walkers and there is approximately 3.5km of permissive paths including a permissive bridlepath.

#### 3.0 PUBLIC ACCESS INFORMATION

#### 3.1 Getting there

Storeton Woods is located in Higher Bebington, the Wirral. The wood can be accessed via gated entrances from Marsh Lane, Mount Road and Resthill Road. Marsh Lane is considered the main entrance.

There are no public rights of way in the wood, but there is a network of permissive paths including a surfaced circular route which follows part of the old tramway. This path is mostly flat with some slight gradients and is suitable to be used all year round. Other paths on site are not surfaced and can become muddy in winter.

There is no formal car parking although visitors can park on the road alongside the wood on Marsh Lane and Resthill Road.

The nearest bus stop is on Mount Road near to an entrance into the wood. For more information go to traveline on 0870 608 2 608.

There are no public toilets in the local vicinity although the Travellers Rest pub on Mount Road by the junction with Resthill Road offers refreshments and toilet facilities for customers.

#### 3.2 Access / Walks

# 4.0 LONG TERM POLICY

The long term intention is to manage Storeton Woods as a high forest canopy of predominantly mixed broadleaf trees, although a small percentage of historically planted non-native species will be allowed. It will be managed to maintain a diverse structure and species to ensure that it is as resilient as possible to future changes such as tree disease and climate change.

The main drivers for silvicultural management operations will be for maintaining this diversity and for tree and the management operations.

tree safety, otherwise the wood will be managed by minimum intervention. Older trees will be retained across the site as long as safe to do so and this should ensure that some will develop into future veteran and ancient trees.

The open ground habitat of small glades will be maintained with management undertaken to ensure that the glades remain open with good woodland edge habitat which is important for butterfly species. Invasive species in the wood including Japanese Knotweed and Himalayan Balsam will be controlled to prevent them spreading and impacting negatively on the biodiversity of the wood.

Open public access will be retained at Storeton Woods in perpetuity. A good standard of access provision will be maintained to ensure the wood is welcoming for visitors. The network of approximately 3.5km of permissive paths will be maintained and rides will be kept open to enhance visitor enjoyment and biodiversity. Suitable information and signage will be made available at the main entrances to enable visitors to explore and navigate around the wood and to appreciate its inherent qualities. The wood will be made as safe as practicable through regular safety inspections of high-risk tree zones and access infrastructure.

The local community will be encouraged to continue to play an active part in helping to care for the wood through close working with the Friends of Storeton Woods.

#### 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

This site is part of the Welcoming Sites Programme, which aims to improve the visitor experience to this site. The Welcoming Site Programme will lead to a series of lasting upgrades that will improve the visitor experience and will likely increase the number and range of visitors to the wood. An attractive and serviceable network of tracks and paths will further encourage the appreciation of the woodland both on the site and in the locality. The site will be managed to meet the required high standards of the Welcoming Site Programme and will provide a clear welcome: entrances, furniture, signs and other infrastructure as well as sustainable path and track surfaces across the variable ground conditions. Access will better facilitate use by a wider range of visitors. The site is truly valued by the local community.

Its position in the landscape:

Storeton Woods is located on the Wirral peninsula, on the western edge of Bebington. Approximately 3 miles south from the centre of Birkenhead, it is bounded to the east by the B5151, to the north and south by minor roads and to the west by improved pasture grassland. The wood forms the northern half of a larger woodland which is split by Resthill Road and is the only significant area of accessible woodland within the immediate area.

General description of the access:

Storeton Woods has approximately 3500 metres of permissive paths and 5 pedestrian entrances, which all have access gates and welcome signs. There is a surfaced circular path around the wood with most of the other paths being unsurfaced. A permissive bridlepath runs through the wood from north to south following part of the route of the old tramway. There are 3 information boards with notice cases at entrances on Marsh Lane, Resthill Road and Mount Road. The wood does not have a car park, however there is informal roadside parking on Marsh Lane and Resthill Road for visitors. The site is very well used by local people for dog walking.

The visitor profile:

The majority of visitors to the woodland are locals from within easy walking distance or a short car drive, offering very easy access for local people to enjoy informal recreation and access to nature very close to where they live.

Events, activities and volunteering:

There are currently no Woodland Trust run people engagement events planned for Storeton Woods, but it does have a very well established, well supported and active Friends of Group (The Friends of Storeton Woods) who have their own practical task days to help with management work on site. It also has a Forest School group (Douglas Forest School) that runs sessions for children and families at weekends and during school holidays.

Nearby Woodland Trust sites:

Storeton Woods is relatively isolated from other woodland Trust sites, the nearest (and only other on the Wirral) being Upton Meadow, approximately 5 miles to the north west.

#### Significance

In accordance with the Woodland Trusts general aims the site is open to the public for quiet informal pedestrian activities. The location close to Bebington means that it extends the opportunities available for informal recreation locally, in an area that has quite a sparse access network.

#### **Opportunities & Constraints**

A lack of car parking provision at the site will always limit the number of visitors to the wood, however there is some parking on the roadside to the south and to the north of the wood. Visitors are on the whole likely to be local people who have walked or driven from nearby. The site is generally reasonably dry and with a good path network - particularly the historic tramway (also a bridleway). It offers good potential for continued engagement with volunteers and the 'friends of' woodland group. The sites close proximity to a large population coupled with its habitat value and management requirements will provide opportunities for use by local interest, field study, and volunteers. There may be opportunities to develop wider volunteer opportunities, such as at the nearby Woodland Trust Upton Meadow, showcasing the activity undertaken by the Storeton group. There is an opportunity to continue to improve the welcome, with a periodic overhaul of the entire site signage, way marking and entrance furniture. The short term upgrades in infrastructure, trails and on site interpretation would support the needs of the local visitors, as well as providing potential development opportunities for events, volunteering and community engagement. Given the size of the site and range of habitats and areas there is the potential to develop areas dedicated to Forest Schools without having any major impact on the site or other users. Woodland Trust Schools schemes (Green Tree Schools, DEFRA and People Postcode Lottery programmes) should be encouraged to make use of the wood, and there could be potential for developing an onsite education area and resources.

#### **Factors Causing Change**

Anti-social problems, such as litter, fly-tipping, vandalism and illegal camp fires occur occasionally and are difficult to tackle proactively. High visitor numbers on the site are causing compaction of vegetation and soil erosion in places and the creation of informal paths ("desire lines"). Cyclists and horses riding off the bridlepath causing erosion/ damage to other paths and ground flora. Increased numbers of visitors would require significantly improved infrastructure on the site and greater engagement capacity with visitors, volunteers, and community engagement. The wood does require a greater level of annual maintenance, with a periodic (maximum 10 year) refurbishment of the entire welcome facilities, utilising bespoke and robust infrastructure. Development, and increased population locally could well impact negatively on the woodland and the infrastructure.

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

The woodland will provide an extensive area of native broadleaved woodland, for quiet informal recreation to a wide range of users from the local community. The use of the site will be promoted through positive relationships locally, with good signage and interpretation.

Entrances and signage will have a welcoming appearance and there will be a network of well-maintained paths providing a range of circular routes suitable for walkers with access to a range of varied habitat types. Interpretation or way marking that is integrated with, or compliments existing routes could provide visitors with information on directions and points of interest.

The use of the site for education will have increased, and linked with other Woodland Trust sites in the area, will have a sustainable events and schools programme established, including demonstrations and workshops, and as an educational and recreational resource. Volunteering would continue to be very active and the group managing the site semi-autonomously in line with the Woodland Trust management objectives.

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

Access provision will be in keeping with WT access guidelines. Achieved by ensuring that: Entrances & signage are welcoming to visitors and well maintained (annually).

All managed paths are kept well-drained and free from encroaching vegetation by strimming, and that access features (e.g. gates, steps, entrances, boundary features, etc. are kept in good order (annually).

The site is kept safe and welcoming by: repair of vandalism (when needed); clearing of fallen or dangerous trees where necessary for visitor safety; and regular site safety surveys (as per site risk assessment).

The visitor welcome & experience will be further enhanced by the following infrastructure improvements by the end of the current plan period: Minor entrances will be formalised with a consistent access standard (e.g. kissing gate and named welcome and exit signs)

The network of paths will be maintained at least once per plan period, with a more regular maintenance (surfacing/ drainage work, power brushing) of the surfaced routes.

Site furniture including benches, information signs and gates will be maintained annually or as required.

New volunteer activity and volunteer roles will be developed and encouraged, where the opportunities arise.

Identified areas of the woodland will be available for education groups/ Forest Schools and other local user groups suited to the aims and objectives of the Woodland Trust will be encouraged wherever possible.

#### 5.2 Natural Secondary Woodland

#### Description

Storeton Woods is a secondary woodland dominated by natural regeneration of silver birch, sycamore, beech, oak and Scots pine including some quite mature trees on the periphery of the old quarry workings. The mix of trees is varied with the different soils on site resulting from excavation spoil (from the Mersey tunnel) being deposited in the old quarry. The understorey is diverse with holly, yew, rowan, hawthorn, hazel, whitebeam and elder with established birch, oak, sycamore trees coming through. There is frequent natural regeneration throughout the woodland with beech, holly and sycamore saplings present. The ground vegetation is varied with bluebells, broad buckler fern, enchanter's nightshade, cleavers, nettles, ground elder, ground ivy, forget-me-not, raspberry canes, and bracken. There are a few stands of invasive Himalayan balsam, Japanese Knotweed and a single stand of Giant hogweed.

#### Significance

The wood is a prominent landscape feature and part of a wildlife corridor that follows the line of the sandstone ridge running north south along the Peninsula. There are a number of mature trees, standing and fallen deadwood habitat and a diverse range of plant and animal species within the wood making it ecologically important. The wood is designated as a Site of Biological Importance (SBI) and the trees are protected by a Tree Preservation Order.

#### **Opportunities & Constraints**

Constraints: Tree safety next to the busy main road is an important factor, and this limits the trees that can safely be retained.

Opportunities: Regeneration of silver birch, oak, beech, rowan, sycamore is plentiful, and healthy, well-formed young trees can be selected and developed from an early age.

# **Factors Causing Change**

Invasive Himalayan balsam, Japanese Knotweed and Giant hogweed will spread in the wood if not controlled.

The popularity of the wood with visitors and dogs is causing some areas to suffer from trampling which can inhibit natural regeneration and the spread of ground flora.

# Long term Objective (50 years+)

Storeton Woods should continue to form an intrinsic part of the local landscape with a canopy cover of oak, beech, silver birch, scots pine, sycamore and rowan. The woodland will be structurally diverse in terms of age and size classification with a mix of older trees, natural regeneration, well developed shrub layer and diverse ground flora enhancing the biodiversity value. The woodland edge will have a graduated structure and contain gorse, hawthorn, elder, holly. There will be the occasional more unusual specimen tree (e.g. yew) and non-natives such as turkey oak will be retained. Invasive species will be controlled and eradicated from the wood.

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

During the plan period the main short term objectives are to manage the woodland through minimal silvicultural intervention and to prevent the further spread of Japanese Knotweed, Himalayan balsam and Giant hogweed. This will be achieved by:

- 1. Monitoring and controlling Himalayan balsam, Japanese Knotweed and Giant hogweed to stop them spreading within the woodland.
- 2. Carrying out a woodland condition assessment once during the plan period to monitor the health and resilience of the woodland and identify any threats from tree disease, pests or mammals.

# 6.0 WORK PROGRAMME

Year Type of Work Description Due By

#### APPENDIX 1: COMPARTMENT DESCRIPTIONS

	pt lo.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a		12.71	Mixed broadlea ves	1900	High forest	slope/cliff/quarry/ mine shafts/sink holes etc	People with	Green Belt, Site of Local Nature Conservation Importance, Tree Preservation Order

The compartment is bounded by a sandstone wall to the east (Mount Road) and south (Resthill Road). The western boundary is adjacent to pasture fields used for horse paddocks and the northern boundary is a post and rail fence alongside Marsh Road and a short section of the boundary is adjacent to a horse paddock.

The canopy is dominated by mature and semi-mature silver birch, sycamore, oak, beech and Scots pine with occasional turkey oak and yew. There are blocks of older trees (including turkey and pedunculate oaks and a beech grove) which were planted during or after quarrying on the site. Hawthorn, rowan, gorse and elder make up the majority of the shrub layer with some holly, whitebeam and cherry. The ground flora in the areas of spoil deposits is dominated by bramble, nettle and plants favouring highly fertile and disturbed soil conditions including ground ivy and ground elder. In other areas the ground flora includes ground ivy, cow parsley, nettles, enchanter's nightshade, cleavers, bramble and bracken with occasional bluebell, broad buckler fern, forget-menot, raspberry and cow parsley. Natural regeneration is widespread including birch, rowan with some established oak, sycamore and beech in the understory. Small localised patches of Himalayan balsam and Japanese Knotweed and occasional garden escapees are found in the wood. There are several small grassy glades, the largest of which is by the entrance off Resthill Road which is approximately 0.5ha in size with species poor grassland and a shrub edge of gorse, elder and hawthorn abutting the high forest canopy. A small glade to the east of the old tramway path has three holm oaks which were planted by the Friends of Storeton Woods in 1999 to celebrate the millennium.

# Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2017	1a	Selective Fell	0.25	60	15
2018	1a	Ride edge Coppice	0.25	4	1
2021	1a	Ride edge Coppice	0.25	8	2
2025	1a	Ride edge Coppice	0.25	8	2

#### **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.