

# Old Lodge Warren Wood

Management Plan 2020-2025

# **MANAGEMENT PLAN - CONTENTS PAGE**

ITEM Page No.

Introduction

Plan review and updating

Woodland Management Approach

Summary

- 1.0 Site details
- 2.0 Site description
- 3.0 Public access information
- 4.0 Long term policy
- 5.0 Key Features
  - 5.1 Ancient Semi Natural Woodland
  - 5.2 Connecting People with woods & trees
- 6.0 Work Programme

Appendix I: Compartment descriptions

Glossary

# 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 (operations@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:

- I. 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: Old Lodge Warren Wood

**Location:** Rotherfield

**Grid reference:** TQ546310, OS 1:50,000 Sheet No. 188

**Area:** 15.27 hectares (37.73 acres)

**Designations:** Ancient Semi Natural Woodland, Area of Outstanding Natural Beauty

# 2.0 SITE DESCRIPTION

Old Lodge Warren is a long, narrow, woodland extending 2km in length, north to south, and between 15m and 200m in width. It was acquired by the Woodland Trust in 3 stages with the main part of the site being purchased in 1989 and subsequent extensions to the north and south being added in 1993 and 2002 respectively. The total area is now 15.25ha (36.6acres). The initial purchase was partly funded with a donation from Amnesty International. The site is sandwiched between a tributary to the River Medway (known as Crowborough Ghyll) to the east and a main railway line to the west. It is situated approximately 2 miles north-west of Rotherfield, East Sussex, within the High Weald Area of Outstanding Natural Beauty (AONB) and National Character Area (NCA). The surrounding landscape is characterised by extensive, often large woodlands and pastoral agriculture. Woodland accounts for approximately 28% of the AONB, of which 75% is classed as ancient (existing in 1600AD).

This site holds a diverse range of habitats including ancient and secondary semi-natural woodland, unimproved damp neutral grassland and other open habitats. The long river frontage provides a high level of ecological interest with a good lower plant flora characteristic of gill woodlands in the High Weald.

The site has a high concentration of 10 World War Two pill-boxes and an anti-tank ditch in Subcpt 1b. These features were part of the GHQ Stop Line constructed in 1940. The line ran from Newhaven to the River Medway and was designed to block access to London and the rest of the country from the south-east coast. There are also the remains of a sewage pumping station in the centre of the site with 2 deep settling tanks still present. Other archaeological features include woodbanks and old sunken trackways.

The central part of the site (southern section of Subcpt 1c) is designated ancient semi-natural woodland with oak as the dominant canopy tree. It has a highly natural structure with large old trees, fallen and standing deadwood and some areas of open-canopied woodland. Along the river alder dominates the canopy. This is due to the lack of management access since the construction of the railway approximately 150 years ago. Although this area is the most diverse in terms of tree and ground flora species and structure, the ground flora across whole site is dominated by woodland specialist plants such as bluebell and wood anemone.

The river, known as Jarvis Brook or Crowborough Ghyll, is 3-5m wide with a stony bed which has produced a good pool and riffle sequence. The northern part of the river is much stained by iron. Himalayan balsam can be found growing densely along the river banks. This plant is highly invasive and can cause problems by shading out native vegetation. The river floods regularly causing much erosion of the banks. In places bank-side alder coppice stools have been collapsed into the river and have altered its course.

Public access to the site from the north is along a public footpath from Hornshurst Wood to Sandhill Lane. From the south a licensed footpath allows access from Palesgate Lane, Jarvis Brook.

# 3.0 PUBLIC ACCESS INFORMATION

#### General overview of paths & entrances:

At the northern end is a gap and at the southern end is a step over stile. The path between these entrances is often narrow, wet and muddy. There are steps and narrow footbridges en route. There are some gentle to steep gradients.

#### Parking:

There is no parking at the northern end of the site. At the southern end there are lay-bys on Palesgate Lane. Alternative access to the site is from Hornshurst Wood to the east where there is a car park approx  $\frac{3}{4}$  mile from Rotherfield. There is full public access within Hornshurst as well as a public footpath. This footpath crosses a footbridge into Old Lodge Warren at the northern end of the site.

#### Public Transport:

Nearest train station: Crowborough, approx  $\frac{1}{2}$  mile from the southern entrance via the public footpath that follows the railway.

Nearest bus stop: Welcome Stranger PH, Jarvis Brook, approx ½ mile from the southern entrance via the public footpath alongside the railway line. Information obtained from Traveline website on 29/3/2007. Further information on public transport can be obtained from Traveline: www.travelinesoutheast.org.uk or tel: 0870 608 2 608).

#### Public Toilets:

Nearest public toilets: Croft Road car park, Crowborough, approx  $2\frac{1}{2}$  miles from the southern entrance to the site. Baby-changing and disabled facilities available (RADAR key needed). Information obtained from Wealden District council website on 18/1/2007 (www.wealden.gov.uk tel: 01892653311).

#### Other information:

The wood is part of ESCC Paths to Prosperity Route 28: Rotherfield Walk. Leaflet available from ESCC website: www.eastsussex.gov.uk or by phoning 01273 482250

# 4.0 LONG TERM POLICY

The current variety of structure and vegetation within the wooded areas of the site is best maintained by a policy of minimum intervention i.e. no silvicultural operations such as coppicing or thinning. This will enable the processes of natural succession to continue as they appear to have done for most of the last 150 years in some places. Other areas dominated by birch appear to have been cleared during World War Two but not been managed since. The resulting habitats support a large number of species of flora and fauna, some of which are of local and national importance. In particular mosses, liverworts and lichens are abundant due to the warm, moist microclimate of the wooded river valley and are best favoured by minimum intervention which will maintain a predominantly closed canopy. Occasional natural disturbances such as windblow and collapse of old trees will create gaps that will add to the structural diversity of the woodland. Dead or dying trees will be retained to provide important deadwood habitat unless they pose a safety risk.

The biodiversity of the site is threatened by the invasive non-native Himalayan balsam (Impatiens gladulifera), particularly along the river bank. Where practical this will be controlled annually. Eradication of this species is not possible due to lack of control by neighbouring landowners, however annual cutting helps reduce its spread and prevents native ground flora from being shaded out during the summer.

There will be some open grassland and other habitats present, maintained as necessary to prevent them being encroached on by scrub or dominated by species such as bracken. This will be by mechanical means due to the difficulties previously encountered when trying to graze part of the site (Subcpt 1b).

The site will be maintained to provide low key public access (Woodland Trust access category B). Entrances, steps, footbridges, fences and benches will be inspected regularly and maintained as necessary.

# 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

This key feature covers the whole site, both ancient and long-established secondary woodland and open habitats. Only the southern part of Subcpt Ic is classified as ancient semi-natural woodland (ASNW), with the northern part of the subcpt known as Roughetts. The majority of the woodland on this site has received very little management, probably since the construction of the railway in 1868. This has led to a very natural structure within the woodland with many large old trees, predominantly pedunculate oak, occasional beech and one yew with a girth of 4.5m. There is a very mixed understorey including alder, hazel, birch, hawthorn, holly and crab apple. Alder dominates along the river. The woodland equates to National Vegetation Classification (NVC) WIOa - oak/bracken/bramble woodland (typical subcommunity). There are many fallen and standing dead trees and small patches of open ground, dominated by bracken. There are also areas where younger birch dominates, probably as a result of wartime felling and the construction of the pillboxes and other defence structures.

The underlying geology is Cretaceous Ashdown Beds which give rise to stagnogleyic argillic brown earth soils which are slowly permeable and subject to seasonal waterlogging.

The dominating feature of the site is its long river frontage, occasionally deeply incised, which gives rise to a warm, humid Atlantic-type microclimate allowing a rich lower plant flora to develop. These gills are characteristic of the High Weald. There are 60 mosses and 21 liverworts recorded on the site including some nationally and locally rare species. (see Stern, 1990). Old oaks are host to a lichen flora specific to old trees. In addition there are abundant bluebells and wood anemones throughout the site and occasional wild daffodils along the river bank. Other key ground flora species include wood sorrel, wood spurge, wild garlic, yellow archangel, violet spp., dogs mercury and Ribes spp.

The site also contains some areas of open habitat including the relics of former pasture (Subcpt 1b) and damp heath (Subcpt 1d). They form an important element of the habitat diversity of the site. Subcpt 1b is damp neutral grassland and rush pasture with a variety of grasses, rushes, sedges, bracken and flowing plants. Subcpt 1d contain small areas of open ground now dominated by bracken. This part of the site was part of a much larger area extending to the east and west which was designated as a Site of Special Scientific Interest (SSSI) in 1966 for its damp heath habitat. However due to agricultural improvements to the west of the site destroying much of the habitat, the SSSI was denotified in 1986.

The 10 WW2 pillboxes and associated anti-tank ditch are important archaeological features. Other much older features include woodbanks and ditches and sunken trackways (holloways), some of which are truncated by the railway line.

#### **Significance**

ASNW is very important due to the continuity of woodland cover over hundreds of years which allows for a

diverse range of wildlife and vegetation to develop over time on undisturbed soils. The amount of ASNW left in Britain has been drastically reduced over the last century to around 2% of land-use. Approximately 40% of England's ASNW is found in the south-east of England. Old Lodge Warren is situated within the High Weald AONB which has 28% woodland cover with 3/4 being ancient - the highest coverage of any protected landscape in the UK.

The site is important locally as it contains woodland that has not been actively managed for a long time and that is developing very natural characteristics. The open habitats provide a contrast to the wooded areas and are the remains of what was once a widespread habitat of unimproved grassland which has now largely disappeared from the landscape.

The site also preserves important WW2 and older archaeological features that are accessible and visible to visitors.

# **Opportunities & Constraints**

#### Constraints:-

Lack of vehicular access to much of the site limits management options.

Long boundaries with the railway and neighbouring woodland hamper the control of invasive species.

#### Opportunities:-

There is the potential to investigate some of the site's older archaeological features in relation to the wider landscape.

# **Factors Causing Change**

Natural succession including gap formation due to veteran tree canopy collapse and windblow. Invasive Himalayan balsam.

Invasive Japanese knotweed (Subcpt 1b)

# Long term Objective (50 years+)

The woodland will be structurally and species diverse, containing trees with veteran characteristics, standing and fallen deadwood, regenerating canopy gaps and woodland-specialist ground flora. The dominant veteran tree species is likely to be oak with occasional beech, yew and sweet chestnut. Regenerating species are likely to be birch, alder and willow initially along with oak and beech. The site will not be under threat from invasive non-native species such as Himalayan balsam.

Habitat diversity will be present in the form of managed open ground, particularly unimproved grassland in Subcpt 1b, and bracken-dominated glades in Sucpt 1d. Open habitats should form 10-20% of the site.

The archaeological features should be in good condition with the pillboxes mostly visible to visitors and not threatened by tree encroachment or undercutting by the river.

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

To maintain the current structure of the woodland including areas of open habitat and to reduce threats to floral biodiversity from invasive non-native species. This will be achieved by:-

- Control Himalayan balsam (<1ha) by annual strimming where accessible, before seeding (mid July).
- Ensure control of remnant Japanese knotweed (approx 2 sq.m) Subcpt 1b: annual monitoring followed by stem injection with Glyphosate as necessary.
- Maintain approx 2ha of open habitat by annual bracken and scrub control.

# 5.2 Connecting People with woods & trees

#### **Description**

The site can be accessed via a public footpath to the north which runs from Sandhill Lane and a licensed footpath to the south from Palesgate Lane. A single route allows access throughout the length of the site with short alternative routes through Subcpts Ib and Ic. The path through the central part of the wood is frequently narrow and occasionally steep. There are footbridges across tributary streams and wet areas and steps on steep sections. The route allows visitors to see most of the 10 pillboxes as well as the more subtle archaeological features such as woodbanks and holloways.

Although relatively inaccessible and remote, the site receives regular daily visitors - Woodland Trust access category B: 5-15 people a day. Visitors come from neighbouring towns and villages such as Crowborough (population: 20,607) and Rotherfield (population: 3,208). It is promoted as part of East Sussex County Council's Paths to Prosperity: Route 28 Rotherfield Walk. ESCC Rights of Way Department maintains some of the infrastructure such as footbridges and steps. There is a licenced permissive bridleway across the north of the site via a concrete bridge over the river. The route is the responsibility of Rotherfield Woodlands Riding Club and helps riders avoid narrow lanes.

Hornshurst Wood to the east of the site is also open to the public and has a small car park off Eridge Lane, near Rotherfield. It is linked to Old Lodge Warren by the public footpath. There are other Woodland Trust sites nearby in Tunbridge Wells including Hargate Forest (4.5 miles) as well as RSPB Broadwater Warren (5 miles) and Sussex Wildlife Trust's Eridge Rocks (3 miles).

# **S**ignificance

Access to this site provides an opportunity to experience a variety of habitats, both wooded and open, in a quiet location yet close to the town of Crowborough and the village of Rotherfield. It is part of a complex of woodlands with public access including Hornshurst Wood to the east.

# **Opportunities & Constraints**

#### Opportunities:-

To continue to provide low-key access to a diverse, semi-natural woodland.

#### Constraints:-

Illegal use of the site by off-road motorcyclists and horse riders requires barriers to be installed at key points.

Distance from public roads and lack of parking will always limit visitor numbers.

#### **Factors Causing Change**

Erosion of river bank diverting path.

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

The site will continue to provide a low key but high quality visitor experience for able-bodied walkers. There will be maintained paths with infrastructure such as footbridges where necessary. The site will have low-key signage denoting WT ownership.

Features such as the WW2 pillboxes will be visible to visitors and should not present a safety hazard. Other site hazards such as the redundant water treatment works will be maintained in a safe condition by the

provision of suitable fencing. The route of the path through the site may be diverted due to river bank erosion.

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

Maintain low-key public access appropriate to the site and numbers of visitors. This will be achieved by the following:-

- Annual maintenance of approx 2.3km of paths throughout the site.
- Annual inspection of 2 entrances and infrastructure (footbridges/culverts/steps/fencing) and follow-up maintenance as appropriate.
- Undertake annual Zone A tree safety survey along boundary with railway line, alternating summer crown condition and autumn fungal surveys
- Undertake Zone B summer tree safety survey every 3 years: 2020/23/26.

# 6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
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Currently unavailable due to GDPR requirements.

# APPENDIX I: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)		Year	Management Regime	Major Management Constraints	Key Features Present	Designations
la	0.64	Common alder	1940	Min- intervention	Archaeological features, No/poor vehicular access to the site, No/poor vehicular access within the site	Connecting	Area of Outstanding Natural Beauty

This sub-compartment comprises the northernmost section of the site with the main public and management access via the public footpath from Sandhill Lane. The footpath crosses the river via a footbridge. Rotherfield Woodland Riding Club has a license to use a permissive bridleway from Hornshurst Wood via a concrete bridge and on to the lane.

Tree species are predominantly alder and birch with some oak, goat willow, hazel and hawthorn. Although not listed as ancient woodland, ground flora is dominated by bluebell with occasional wood anemone, wood sorrel and wild garlic.

lb	1.66	Open ground	Non-wood habitat	Archaeological features, No/poor	Ancient Semi Natural	Area of Outstanding
			Habitat	vehicular access to the		Natural Beauty
				site, No/poor	Connecting	,
				vehicular access within	People with	
				the site	woods &	
					trees	

Unimproved grassland with frequent bracken. Bluebells spreading from surrounding woodland. Crossed by WW2 anti-tank ditch lined with alder, birch, oak and yew. River bank dominated by alders. Small patch of Japanese knotweed by river bank (controlled 2018).

lc	6.47	Oak	1850	Min-	Archaeological	Ancient Semi	Ancient Semi
		(pedunculate)		intervention	features,	Natural	Natural
					Housing/infrastructure,	Woodland,	Woodland, Area
					structures & water	Connecting	of Outstanding
					features on or	People with	Natural Beauty
					adjacent to site,	woods &	
					No/poor vehicular	trees	
					access within the site,		
					Very steep		
					slope/cliff/quarry/mine		
					shafts/sink holes etc		

Linear woodland (NVC W10) bounded by railway to the west and river to the east. Southern section is

designated ASNW. Northern section is very long established secondary woodland. Mature oak and occasional beech over hazel, birch, hawthorn, holly, rowan, goat willow and crab apple. Alder dominates along the river. Occasional large yew. Structurally diverse. Species-rich ground flora includes bluebell, wood anemone, dogs mercury, wild garlic, wild daffodil, wood sorrel, tutsan and wood spurge. The site of North Springs Pumping Station is located in the centre of this subcpt. Fenced-off settling tanks still remain. Site very narrow in places with very steep slopes and river incised. Contains 4 WW2 pillboxes. Woodbanks to N and S and other earthworks.

ld	4.95	Birch	1970	Min-	Archaeological	Ancient Semi	Area of
		(downy/silver)		intervention	features, Gullies/Deep	Natural	Outstanding
					Valleys/Uneven/Rocky	Woodland,	Natural Beauty
					ground, Services &	Connecting	
					wayleaves	People with	
						woods &	
						trees	

Secondary birch-dominated woodland with significant open areas dominated by bracken. Ancient gill woodland along river. Other tree species includes oak, aspen, alder, hawthorn, hazel and goat willow. Woodland ground flora is present across the area and is species-rich close to the river including bluebell, wood anemone, violet spp, golden saxifrage, wild daffodil, wild garlic and Ribes spp. This area was part of a much larger area of damp heathland which was formerly designated a SSSI. It was denotified in 1986. 3 WW2 pillboxes and earthworks.

le	1.53	Mixed native	1900	Min-	Archaeological	Ancient Semi	Area of
		broadleaves		intervention	features,	Natural	Outstanding
					Housing/infrastructure,	Woodland,	Natural Beauty
					structures & water	Connecting	
					features on or	People with	
					adjacent to site,	woods &	
					No/poor vehicular	trees	
					access to the site		

Long established secondary semi-natural woodland bounded by the railway to the west and the river to the east. Acquired by WT in 2002. Main tree species include alder, oak, birch, yew, hazel, hawthorn, blackthorn and holly. Ground flora is predominantly woodland specialist plants such as bluebell, wood anemone, wood sorrel, wild garlic, golden saxifrage, violet spp, red campion and wild strawberry. There is I WW2 pillbox.

# **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.