



Upton Meadow Millennium Wood

Management Plan

2009-2014

MANAGEMENT PLAN - CONTENTS PAGE

ITEM	Page No.
------	----------

Introduction

Plan review and updating

Woodland Management Approach

Summary

1.0 Site details

2.0 Site description

2.1 Website synopsis

2.2 Summary description

3.0 Public access information

4.0 Long term policy

5.0 Key Features

5.1 Informal Public Access

5.2 Pond

5.3 Open Ground Habitat

5.4 Ancient Semi Natural Woodland

6.0 Work Programme

Appendix 1: Compartment descriptions

Appendix 2: Harvesting operations (20 years)

Glossary

MAPS

Access

Conservation Features

Management

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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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

- Work with others to plant more native trees to enable the creation of more native woodlands and places rich in trees
- Protect native woods, trees and their wildlife for the future
- 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) 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. These include our approach to the restoration of Planted Ancient Woodland Sites (PAWS), deer management, control of non-native invasive species, tree safety and bio-security.

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 key features of value. We intervene in our woods when there is evidence that it is necessary to maintain or improve biodiversity. Wherever possible our management aims to support natural processes.
2. We provide free public access to woods for quiet, informal recreation and woods are managed to make them accessible, welcoming and safe.
3. Our ancient trees are retained for as long as possible.
4. All of our non-native conifer plantations on ancient woodland sites are restored to a predominantly native species composition and semi-natural structure.
5. We establish new native woodland using either natural regeneration but largely through tree planting, particularly when there are opportunities for involving people.
6. Existing semi-natural open-ground and freshwater habitats on our estate are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
7. The long-term vision for our non-native conifer secondary woods is either to convert them to predominantly native woodland or to restore them to semi-natural open ground.
8. The heritage value of woods is taken into account in our management.
9. 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.

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:	Upton Meadow Millennium Wood
Location:	Wirral, Merseyside
Grid reference:	SJ266874, OS 1:50,000 Sheet No. 108
Area:	15.05 hectares (37.19 acres)
Designations:	Ancient Semi Natural Woodland, Community Forest, County Wildlife Site (includes SNCI, SINC etc), Great Landscape Value

2.0 SITE DESCRIPTION

2.1 Website synopsis

Nestling in an intensely urban area close to Birkenhead, Upton Meadow is an oasis for people and wildlife alike. It encompasses a network of ecologically important habitats. But it is also a vital recreational resource for local people, who make good use of some 1.5 km of footpaths. The public bridleway along its western boundary provides an important link for the people of Upton and Greasby to Arrowe Park and beyond.

Well loved and used, the woodland, a wide and varied mix of native broadleaves and shrubs, was created as part of the Woodland Trust's "Woodlands on Your Doorstep" initiative.

Visitors can explore the lowland tree mix of Upton Bridge Wood or enjoy the grassland on Southern Meadow. A pond in the north of the site sustains many invertebrates and amphibians - including a healthy toad population.

Arrowe Brook, which marks the west boundary, is an excellent wildlife corridor with a rich mix of plants, shrubs and trees along its bank.

2.2 Summary description

Upton Meadow lies on the north western tip of the Wirral peninsula close to the town of Birkenhead. The site was planted in 1997 and is part of the Woodland Trusts "Woodlands On Your Doorstep Project". A wide and varied mixture of native broadleaf trees and shrubs were planted which included Oak, Ash, Birch, Holly, Hawthorn and Blackthorn.

The site was leased to the Trust from Wirral Borough Council on a 99 year lease (from 1997). Although incorporated as a single management area the limitations of the Millennium Commission funding meant that the site was acquired and planted under two separate budgets.

Upton Meadow Millennium Wood (cost code 4940) 20 acres.
Upton Meadow (None Woyd, cost code 4763) 16 Acres.

The new plantations add further diversity to the following existing habitat features:
Upton Bridge Wood: This older woodland block is an example of semi natural lowland mixed woodland, this is reflected in the sites designation as a grade C Site of Biological Importance (SBI).

Southern Meadow: This grassland area is also designated as a Grade C SBI.

Pond: The pond can be found in the northern half of the site in compartment 1B. Aquatic surveys have shown the presence of a wide range of invertebrates and some amphibians including a healthy population of common toad. The water quality of the pond is reasonably good.

Arrowe Brook: Arrowe Brook forms the western boundary to the site. The brook is considered an excellent wildlife corridor due to the high diversity of plants, shrubs and trees along its bank. It also provides an important green link to Arrowe Park and to the open countryside beyond.

Upton Meadow is located within an intensely urban area. However it contains a network of ecologically important habitats, which the Woodland Trust will strive to conserve and enhance. The area of new planting will continue to serve to strengthen the sites importance as an oasis for wildlife in a predominantly urban landscape. The site also provides valuable informal recreational opportunities for local people and offers a network of over 1.5Km of footpaths along with a public bridle path that runs along the entire western boundary of the site. The site is well used and much loved by the general public.

3.0 PUBLIC ACCESS INFORMATION

Upton Meadow comprises of 15ha mix of ancient and new planted urban woodland located in Upton, on the Wirral. The main entrance is off the roundabout that joins Greasby Road and Upton Bypass, there is no official parking although regular walkers on site tend to park in the turning off the roundabout that leads to the main entrance on site. The site has a network of informal grass paths which form a circular route, a bridleway runs along the western boundary off Greasby Road and onto adjacent council land, this bridleway is managed by the local authority. The main entrance has a standard kissing gate installed. The site is very flat but can get quite wet in parts, access for buggies etc. along the bridle path is restricted due to a horse box consisting of railway sleepers installed into the ground at the entrance by the Local Authority to deter motorbikes.

The nearest toilet would be located at the Sainsburys about quarter of a mile away from the main entrance on the Upton Bypass.

The nearest bus stop is on Greasby Road opposite the Twelfth Man Pub about a 2 minute walk from the bridle path entrance onto the site which is on the right hand side heading north east along the pavement. For more information visit the Traveline website <http://www.traveline.org.uk/index.htm>.

4.0 LONG TERM POLICY

The Woodland Trust intends to maintain Upton Meadow as a varied but interacting and dynamic mosaic of habitats, offering an ongoing amenity to the local population, and ensuring the continuity of woodland habitat as an integral part of the areas greater ecological landscape. Where safe to do so the development of stand structure; species mixture: herb and understorey layers; and the rise and decline of mature trees will be allowed to develop naturally. This natural rate of change will enable the widest possible variety of habitats and species to survive and evolve. However, due to the urban location and high usage of the site and neighboring ground, stand stability and public safety will be key drivers for woodland operations.

Guided by the parameters set out in the Woodland Trusts woodland management principles and access policy, management will continue to seek a balance between conservation and public enjoyment. The Trust will continue to inform the local community regarding plans and issues relating to the wood, and will endeavor to engage local involvement where practicable. The Trusts duty of care to neighbors and visitors will be addressed through ongoing tree safety and site risk assessment regimes, which will stimulate remedial works as required.

Wetland areas will be maintained and enhanced wherever possible. Opportunities to extend and create further wetland habitat will be investigated. Deadwood and stone piles will be created close to the ponds to provide habitat for amphibians.

The Woodland Trust will take advantage of any reasonable opportunities for commercial returns from woodland crops where it does not conflict or compromise the overall conservation objectives adopted for this site.

5.0 KEY FEATURES

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

5.1 Informal Public Access

Description

Informal Public Access

Significance

One of the Woodland Trust's corporate objectives is to "Increase people's awareness and enjoyment of Woodland". Encouraging people to visit Upton Meadow by providing informal access therefore achieves this aim.

Opportunities & Constraints

Upton Meadow Wood is well sited to provide access to and the enjoyment of woodland to a large community, and serves as a green link to other recreational areas such as Arrow Park. Open access and high usage carries a number of management constraints such as misuse in the form of tipping, fires, motorbike riding, horse riding off the bridle path and occasionally vandalism.

Factors Causing Change

Waterlogging/ erosion of paths

Long term Objective (50 years+)

Continue to encourage visitors to the site by keeping the path networks open and well maintained.

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

The footpath network will be managed in a way that ensures it copes with a predicted increase in visitor numbers. This will be achieved by taking measures to control unauthorised and damaging activities such as motorbike use and horse riding off the bridleway. And through the monitoring and proactive management of paths, entrances and other infrastructure through an annual estates maintenance contract.

Resurfacing worn sections of footpath.

Repair of poorly drained sections of footpath.

Unauthorised and damaging activities such as motorbike use will be controlled.

Ensuring horses do not stray from the bridleway by controlling access and ensuring adequate signage is in place.

Including site in EMC when planting contract period is over.

5.2 Pond

Description

A small pond is located at the northern end of the site near to one of the management entrances.

Significance

Ponds on the Cheshire/Merseyside border are drastically in decline due to a number of factors such as development and pollution. Ponds are known to be extremely diverse in flora and fauna for their size. Therefore their protection and where possible enhancement is of importance.

Opportunities & Constraints

Ponds and wetland provide important habitat variation and species diversity to a site, and offer the possibility for educational activities such as pond dipping. Ponds are however a potentially hazard that can be a draw on resources.

Factors Causing Change

Natural Succession to woodland/ carr

Long term Objective (50 years+)

To ensure the continued presence of pond and wetland habitat on the site.

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

The Trust intends to create one or more new wetland scrapes on the land directly west of the existing pond. This will be coupled with a revision of the mowing regime in that area to allow a transitional zone between new and old wetland habitats. The gradual succession of willow and alder carr in the area of the original pond will not be interfered with.

5.3 Open Ground Habitat

Description

Area of high diversity grassland which extends from the rear of Upton Bridge Woods to the southern boundary (compartments 2A and 2B). Species indicative of semi-improved grassland such as yellow rattle can be found.

Significance

Due to development pressure and changes in farming practice this kind of habitat has become nationally rare.

Opportunities & Constraints

This area of grassland adds habitat and species diversity to the site. Dog fouling and poor sward quality make the marketing of the grass cuttings difficult, this coupled with the cost of managing encroaching scrub could undermine the long-term sustainability of the current management approach.

Factors Causing Change

Natural Succession To Woodland, Fire

Long term Objective (50 years+)

Continue to manage the area as a rich grassland meadow.

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

The meadow will continue to be cut once a year to control scrub development and when possible the cuttings will be removed from the site to ensure the soils do not become enriched and to reduce fire risk.

Where scrub does regenerate it will be removed to ensure the area does not succeed to woodland.

5.4 Ancient Semi Natural Woodland

Description

Compartment 2A contains the largest area of mature woodland on site, Upton Bridge Wood. The wood is an example of ancient semi-natural lowland mixed deciduous woodland, and is designated as a grade C Site of Biological Importance (SBI). The woodland contains a mosaic of different habitats that includes damp ditches with bryophytes, mosses and ferns; open glades with a reasonably diverse ground flora and many mature canopy species.

Significance

This habitat is a rare habitat in the local area.

Opportunities & Constraints

The species diversity of this woodland block is highlighted by its status as an SBI. Through minimizing disruption in this woodland there is the possibility that ground and shrub layer flora and fauna will survive to spread outwards to the new plantations as they mature, whilst many trees in Upton Bridge Wood will progress into late maturity and with the increase of deadwood and veteran tree habitats deliver an even greater variety to the whole sites biodiversity potential

Factors Causing Change

Long term Objective (50 years+)

The Trust takes a holistic and long-term view to habitat survival and evolution, and where it is safe and practicable to do so intends to allow natural processes to dictate the development of this section of woodland. Over the long-term the wood will develop a range of naturally paced vegetation cycles that will include periods of regeneration and decline. In terms of the complex and dynamic cycles between the larger flora and fauna and the micro world of invertebrates, fungi and other lower plants this process will allow the progression of the widest possible species abundance and diversity.

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

Tree safety, boundary issues and the maintenance of sight lines for safety will generate opportunistic works over the 2009 to 2014 management plan period, but otherwise the wood will be subject to a minimum intervention regime

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
2012	SL - Tree Safety Works - Zone A	Tree safety works as a result of inspection on the 27.08.2011	29/02/12
2012	LC - Routine Litter Picks	Litter control across entire site. Site report	31/03/12
2012	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site	30/04/12
2012	LC - Routine Litter Picks	Litter control across entire site. Site report	30/06/12
2012	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site	31/07/12
2012	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site	31/08/12
2012	LC - Routine Litter Picks	Litter control across entire site. Site report	31/08/12
2012	NWH - Maintenance Work	Hay cut to mulch across area marked on map in yellow and cut all path areas across entire site. Leave 5m strip uncut around the edge of meadow and around any scrub.	30/09/12
2012	LC - Routine Litter Picks	Litter control across entire site. Site report	30/11/12
2013	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths across site (including bridle way edges). 2 meter width either side of paths and bridleway. Entrance maintenance at all access points. Litter control across whole site.	31/05/13
2013	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths across site (including bridle way edges). 2 meter width either side of paths and bridleway. Entrance maintenance at all access points. Litter control across whole site.	31/08/13

2013	LC - Routine Litter Picks	Litter pick across entire site - site report.	31/10/13
2014	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Entrance maintenance at all access points. Litter control across whole site.	31/05/14
2014	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Hay cut to mulch across area marked on map in yellow. Entrance maintenance at all access points Litter control across whole site.	31/08/14
2014	LC - Routine Litter Picks	Litter pick across entire site - site report.	31/10/14
2015	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Entrance maintenance at all access points. Litter control across whole site.	31/05/15
2015	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Hay cut to mulch across area marked on map in yellow. Entrance maintenance at all access points Litter control across whole site.	31/08/15
2015	LC - Routine Litter Picks	Litter pick across entire site - site report.	31/10/15
2016	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Entrance maintenance at all access points. Litter control across whole site.	31/05/16

2016	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Hay cut to mulch across area marked on map in yellow. Entrance maintenance at all access points Litter control across whole site.	31/08/16
2016	LC - Routine Litter Picks	Litter pick across entire site - site report.	31/10/16
2017	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Entrance maintenance at all access points. Litter control across whole site.	31/05/17
2017	AW - Visitor Access Maintenance	Path and ride cutting of all marked footpaths (including bridle way edges) on all footpaths marked across entire site. Hay cut to mulch across area marked on map in yellow. Entrance maintenance at all access points Litter control across whole site.	31/08/17
2017	LC - Routine Litter Picks	Litter pick across entire site - site report.	31/10/17

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1A	5.50	Broadleaf Open Ground (Not Grant Aided)			Management factors (eg grazing etc)	Informal Public Access	Great Landscape Value
<p>This sub-compartment contains a wide variety of habitats including newly planted woodland, existing woodland, grassland and wetland.</p> <p>The new woodland was planted in 1997 and contains mixed broadleaf species such as oak, ash, hazel, birch, blackthorn and hawthorn.</p> <p>Arrowe Brook forms the western boundary of the site and is a valuable wildlife corridor. Its value has been increased considerably by the establishment of linear belts of woodland. These plantations were planted by Wirral Borough Council in 1980 and include species such as field maple, grey alder, grey willow, hawthorn, guelder rose, poplar spp, oak and ash. Ground flora in the plantation area includes common comfrey, common sorrel and coltsfoot.</p> <p>The northern meadow is of less importance ecologically than the southern meadow. Typical species found include fescue grasses, velvet bent, meadow buttercup, common vetch and sneezewort. Whilst these plants are more common they are still significant in this area.</p> <p>This compartment also contains one of the two management entrances on site (3.6m wide).</p>							
1B	4.00	Oak (Pedunculate)	1900	Coppice		Informal Public Access	

This compartment is made up mainly of native broadleaves planted in 1997. However the area also contains several other habitats.

Two small copses can be found in this compartment. Copse 1 is characteristic of deciduous woodland, tree species include pedunculate oak (*Quercus robur*), turkey oak (*Quercus cerris*), sessile oak (*Quercus petraea*), sycamore (*Acer pseudoplatanus*), , English elm (*Ulmus procera*), hawthorn (*Crataegus monogyna*), hazel (*Corylus avellana*) and holly (*Ilex aquifolium*). The copse encompasses a pond and surrounding marshy area. Both grey willow and crack willow do well in this wet environment. Aquatic surveys have shown the pond to contain good numbers of invertebrates and some amphibians (including a significant colony of common toad). Tests have shown the water to be of reasonable quality.

Copse 2 is very similar to copse 1 with a similar mix of deciduous species. This copse has a diversely structured understorey and a reasonably diverse ground flora including species such as lords and ladies, lesser celandine, moschatel, goldilocks buttercup and pignut.

The ecological character of both copses strongly reflects that of Upton Bridge Wood. It is thought that the two copses may once have formed part of Upton Bridge Wood. The new planting aims to link the copses again to Upton Bridge Wood.

This compartment contains two public entrances, one of which is also used as a management access point.

2A	2.90	Broadleaf Open Ground (Not Grant Aided)			Management factors (eg grazing etc)	Informal Public Access	Ancient Semi Natural Woodland, County Wildlife Site (includes SNCI, SINC etc), Great Landscape Value
----	------	---	--	--	-------------------------------------	------------------------	--

This sub-compartment contains Upton Bridge Wood, the largest area of mature woodland on site. The wood is an example of ancient semi-natural lowland mixed deciduous woodland, and is designated as a grade C Site of Biological Importance (SBI). The woodland contains a mosaic of different habitats that includes damp ditches with bryophytes, mosses and ferns; open glades with a reasonably diverse ground flora and many mature canopy species. These include pendunculate oak, Turkey oak, sessile oak, beech, English elm, wych elm, horse chestnut, sycamore, lime and ash. The shrub layer of the woodland is diversely structured with species including hazel, wild privet, hawthorn, blackthorn, elder, honeysuckle and ivy. Many saplings can also be observed in the shrub layer, this shows natural regeneration is occurring successfully and is an encouraging sign for the future of the woodland. However care will need to be taken to control the establishment of sycamore and Turkey oak.

Ground flora in the woodland is both diverse and well established. Locally abundant species include lords and ladies, ground ivy, goldilocks buttercup lesser celandine pignut and moscahtel. The woodland contains significant levels of deadwood which offers an excellent habitat for birds and invertebrates.

The south meadow can also be found in this sub-compartment. Habitat surveys have shown the site to be an area of semi-improved grassland, and is the most important area of grassland on the site. Indicators of species richness such as yellow rattle can be found in the meadow. The discovery of this species led to the meadows designation as a grade C SBI in 1995.

An area of the bridleway runs through the site. This section of bridleway is well used by the general public.

2B	1.60	Ash			Management factors (eg grazing etc)	Informal Public Access	Community Forest, Great Landscape Value
----	------	-----	--	--	-------------------------------------	------------------------	---

This sub compartment is made up mainly of native broadleaves (as above) planted in 1997.

A small section of the south meadow can also be found in this compartment. This compartment is considered to be the minimal intervention area of the site.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2009	1A	Thin	0.06	0	0

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.