

# Adams Wood

# 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <u>www.woodlandtrust.org.uk</u> 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 <u>www.woodlandtrust.org.uk</u>. 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.
- The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
- 5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
- 6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
- 7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
- 8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
- 9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 10 Any activities we undertake will conform to sustainable forest management principles, be appropriate for the site and will be balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

## SUMMARY

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

## **1.0 SITE DETAILS**

Site name:	Adams Wood
Location:	Frieth
Grid reference:	SU781905, OS 1:50,000 Sheet No. 175
Area:	12.00 hectares (29.65 acres)
Designations:	Ancient Woodland Site, Area of Outstanding Natural Beauty, Planted Ancient Woodland Site

## 2.0 SITE DESCRIPTION

#### 2.1 Summary Description

A public bridleway and footpath through this site link Frieth with Skirmett. Roe, fallow and muntjac deer are resident, along with badgers. Evidence of ancient earthworks have been surveyed by John Morris of the Chilterns Woodland Project.

#### 2.2 Extended Description

Adams Wood is a 12 hectare (29.5 acre) ancient semi-natural woodland site and is situated near Frieth, Buckinghamshire within the parish of Hambleden in the Wycombe district, and the heart of the Chiltern Hills Area of Outstanding Natural Beauty. The woodland was acquired by the Woodland Trust in 1997. It is positioned on a south-easterly aspect on the edge of a dry valley, with excellent views over the Chilterns and a particularly attractive view to the nearby village of Skirmett. It adjoins other ancient and semi natural woodland on the northern and western boundaries, as well as improved grassland to the north-west and east. Approx. 9 Ha (22 acres) is classified as ancient, with 3 Ha (7.5 acres) added since 1845. The site has been identified as a Woodland Improvement area and the surrounding land as Woodland Priority Habitat Network (extracted from Natural England's Priority Habitats Inventory v2.1).

The woodland is a mixed high forest canopy planted ancient woodland site (PAWS), dominated by pole stage beech with oak, ash, cherry and silver birch appearing frequently, and some occasional field maple, sycamore, hornbeam and yew. The majority of the woodland was felled and replanted between 1959 and 1975 with beech, Japanese larch, Corsican pine and ash. However there are trees on the boundaries and scattered large yew, ash and whitebeam internally which are older and pre-date the planting. The conifer element has been thinned several times, the most recent operation focussing on larch in 2015 in compartment 2. The understory is sparse and spread out, and includes elder, hazel, holly and field maple. Climbers present include ivy, traveller's joy and black bryony. The ground flora consists mostly of dogs mercury with bramble, bluebell and bracken, though 17 ancient woodland indicator plants have been recorded including hairy wood rush, remote sedge, wood sorrel, wood melick, woodruff, wood millet, wood sedge and yellow archangel.

There are many archaeological features present within the site including a sunken lane which forms part of the public bridleway as well as sawpits, wood-banks and charcoal hearths. There are a series of terraces and lynchets evident which are likely to be the remnants of an early medieval field system. These features were surveyed and mapped by John Morris of the Chilterns Woodland Project in 2002, and he concluded that the area is likely to have been wooded for perhaps 600 years.

The soils at Adams Wood are free draining loams (brown rendzina soils) overlying chalk of the Cretaceous era. The terrain is mostly flat with a maximum height above sea level of 135 metres (440 feet).

A public bridleway runs through the middle of the site, linking Frieth and Skirmett and providing good access to the woodland. It also forms part of the Chiltern Way (a long distance footpath through the Chiltern Hills). There is circular walking route possible around the wood using the bridleway and a connecting permissive path.

### 3.0 PUBLIC ACCESS INFORMATION

#### 3.1 Getting there

Getting there: An infrequent bus service runs from High Wycombe to Frieth (about 1 mile) or Skirmett (about 1/2 mile) which are the nearest two villages. From either village, the woodland is accessible via minor roads and public rights of way. There is no parking close to the woodland and parking would need to be in Frieth.

One public bridleway and one public footpath enter the wood whilst another public footpath runs along the northern boundary. Permissive paths also run through the wood and these along with the rights of way, help to form a circular walking route within the woodland. The wood is on the edge of the Hambleden Valley and as such many of the paths have a gradient. All the paths are unsurfaced and can be muddy at any time of the year. There is some path furniture to negotiate on the public footpath entrances.

Public conveniences: The nearest public conveniences are at Marlow approximately six miles away. They are maintained by Wycombe District Council and located at Central Marlow, Gossmore and Pound Lane (www.wycombe.gov.uk or phone 01494 421 415).

For further information about public transport, contact Traveline - www.traveline.org.uk or phone 0871 200 22 33 .

All distances are approximate.

3.2 Access / Walks

## 4.0 LONG TERM POLICY

The long term intentions for Adams Wood will seek to realise two of the Woodland Trust's three key aims:

- to protect native woods, trees and their wildlife
- to restore damaged ancient woodland

The woodland is designated as PAWS (Planted Ancient Woodland Site). Ancient woodland is one of our most valuable and threatened terrestrial wildlife habitats, and in England is defined as woodland sites with evidence of continuous wooded cover since 1600 AD. At Adams Wood, both conifers and broadleaves have been planted between 1958 & 1975 following extensive felling.

A restoration programme has taken place since acquisition at Adams wood with a number of operations focussed on thinning non-native conifer species, to revert the stands to a more seminatural composition. The conifer element now comprises a minor element (no more than 15%) and the threat from dense shade has been reduced to negligible levels in these work areas, and has therefore secured ancient woodland remnants in all bar a few isolated areas.

Existing native broadleaves will also require extra room to grow and develop however, and subsequent operations will focus on providing a diverse and resilient range of native and locally appropriate tree species. Practically this means that the broadleaf plantation component, where identified after assessment as a threat to diverse and durable broadleaf regeneration and/or forming dense shade suppressing ground flora, will be gradually thinned. In subsequent selective continuous-cover (there will be no loss of woodland cover) operations to thin stands to robust levels, management will consider practice which may provide an economic return. A minor component of specimen conifer trees will be retained long-term to provide increased biodiversity and woodland resilience.

As the woodland matures, management of the woodland will diversify the overall age and stand species structure. Some broadleaved trees will be identified and left to reach old age and decline naturally. Provision of deadwood, both standing and fallen will be maintained and to provide important niche habitats within the wood, particularly for invertebrates and fungi, except if they pose a significant tree safety risk. Silvicultural operations will focus on improving the habitat required to favour the continued presence of the rare flora present on site, increasing diversity of species and age structure to enhance biodiversity, and developing a diverse and mixed woodland that is resilient to pests and diseases.

Path management at Adams Wood will help to create lighter conditions within the wood which will enhance the edge vegetation structure, as well as helping to dry out the path surfaces for visitors which tend to remain damp for much of the year.

Observations will be carried out to record any factors causing change that may be detrimental to the vitality and structure of the woodland. For example there should be no damaging invasive species present on the site, and the likely colonisation by ash dieback (Hymenoscyphus fraxineus) and other pests and diseases monitored and managed where necessary. Though the canopy layer has significant quantities of ash in parts, there is good natural regeneration of a mix of other native broadleaf species making the requirement for replacement planting unlikely.

The wood will always remain open for public access and the public's enjoyment of the woodland will be enhanced by improving and maintaining an accessible and safe network of paths and rides. Entrances, boundary fences, and benches will be maintained as necessary and the access provision will be monitored and provided.

## 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 Woodland Site

#### Description

This is a planted ancient woodland site with most of the planting having taken place in 1959.

Principally Japanese larch with some Corsican pine was planted on 5.5 ha but this now comprises a minor element (no more than 15%) following a number of thinning operations (most recently in 2015) and the threat from shade has been reduced to negligible levels in this zone.

Broadleaves have been planted throughout the woodland, (beech, ash, oak, cherry) but are now mixed with younger naturally regenerated trees (mostly ash and beech) plus a scattering of older pre-plantation trees in the western side of the wood (scattered yew, ash and whitebeam) which are older and pre-date the planting.

The understory is sparse and spaced out, and includes elder, hazel, holly and field maple. Climbers present include ivy, traveller's joy and black bryony.

The site still contains a rich ancient woodland flora, including bluebell, dog's mercury and wood spurge. The site NVC Classification approximates to 'beech - dogs mercury woodland' W12. 17 ancient woodland indicator plants have been recorded including hairy wood rush, remote sedge, wood sorrel, wood melick, woodruff, wood millet, wood sedge and yellow archangel.

Archaeological features are present including sawpits and also wood-banks around much of the boundary, which contain some of the oldest trees growing in the wood including whitebeam, yew and field maple as well as beech. A minor element of non-native laurel is still present in the SE corner of the wood, alongside some planted box.

Roe and Muntjac deer populations in the past have led to cause excessive grazing of flora and natural regeneration but deer numbers have been managed and reduced to lower levels, allowing good levels of natural regeneration where light allows.

#### Significance

Restoring PAWS woodlands is the only way of increasing the UK's area of ancient semi-natural woodland, which cannot be recreated. Buckinghamshire is a county where 45% of ASNW has been lost since the Second World War with only 4000 ha remaining. ASNW is irreplaceable, and the amount in Britain has been drastically reduced over the last century. 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 that cannot be found in new woodland creation sites, and a key aim of the Woodland Trust is to prevent any further loss of ancient woodland.

Adams Wood contains a high quantity and diverse range of flora, many of which are ancient woodland indicator species and nationally scarce.

#### **Opportunities & Constraints**

Constraints:

- The main access and paths can be wet for much of the year, and are steep in parts, so any management work has to be carefully timed with drier site conditions

- Woodland archaeology is present and damage must be avoided during any forestry operations
- The lane leading to the woodland is narrow and un-surfaced, making extraction difficult
- Deer are present on site and browsing of natural regeneration is evident

Opportunities:

- To restore all PAWS areas within the site using best practice

- To use the site to demonstrate the Trust's approach to woodland management and to influence neighbouring landowners and other key stakeholders

#### Factors Causing Change

- Death of ash due to colonisation of ash dieback (Hymenoscyphus fraxineus)
- Presence of invasive non-native species (laurel)
- Mammal damage (deer, rabbits, squirrels)

- Increasing shade largely from plantation beech which is threatening regeneration and ground flora

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

In the long term the PAWS areas within Adams Wood should all be predominantly broadleaved in composition, with all other major ancient woodland components in a secure and improving condition, including old growth trees, ground flora, archaeological features, pre-plantation trees, and a diverse deadwood component.

The likely colonisation by ash dieback (Hymenoscyphus fraxineus) will affect the species composition of the wood over time, and the resulting mixed stands (oak, beech, cherry, sycamore, birch being the most common species) of high forest will be being managed on a continuous cover silvicultural system to produce uneven-aged, self-regenerating stands of high conservation and amenity value.

The wood will also be free of non-native invasive species such as Portugese laurel, which will have been eradicated. Sycamore is naturally regenerating in the woodland and this process will be allowed to continue; over time sycamore will become a larger component of the tree mixture throughout the wood.

Deer damage to the broadleaf trees will be monitored and action taken if the damage becomes unacceptable.

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

Within this plan period the remaining PAWS will be fully restored, and the focus of management directed toward bolstering vigour and diversity, namely;

- Eradicate the non-native invasive species (Portuguese laurel) during this plan period (approx. 0.2Ha / 0.5 acres), ensuring regular monitoring of regrowth and undertaking follow up herbicide treatment where required - 2017-2022

- Deer impact surveys will be carried out every 2 years to assess any increase in levels of deer damage

- Selective approx. 25% thin of pole stage plantation broadleaves (predominantly beech & ash) to encourage a more diverse variety such as cherry and oak (and shrub layer structure from e.g. hazel / hawthorn) through natural regeneration of compartment 1a - approx. 4.3Ha - 2018-2020

- Approx. 670m of selective path-edge thinning along bridleway and public footpath running north/south, to improve structural diversity and help dry out public access route. Thinning including scalloped areas to provide niche micro-climate habitat and minimise damage from wind tunnelling - 2018-2020

- Selective thinning and extraction of larch in Cpt. 2a to break up remaining groups and complete restoration programme (approx. 25-30 trees) - 2019-2020

#### 5.2 Connecting People with woods & trees

#### Description

Adams Wood is relatively isolated in the heart of the Chilterns AONB, with the closest vehicular parking in Frieth around 1.6km / 1 mile away.

The wood has a small catchment of visitors. Adams Wood lies in the middle of the Chiltern villages of Frieth, Fingest and Skirmett, all small villages between 1km - 1.6km and 0.5 - 1 mile away. High Wycombe is 8km / 5 miles and Henley on Thames 9.5km / 6 miles. There are a small number of more isolated dwellings closer to the wood as well.

There are 2 public rights of way running through the wood. One of these is a bridleway / footpath which runs north-south through the centre, and as the bridleway directs east the shorter section of footpath continues, exiting the site to the north. Both of these paths are part of the Chiltern Way long distance footpath, a circular walking route of around 200 km / 125 miles, taking in some of the finest scenery in the country. It is way-marked throughout and is a wandering, varied and mostly rural way stretching around the Chilterns Area of Outstanding Natural Beauty. The route passes through all four counties of the Chilterns (Bucks, Oxfordshire, Hertfordshire and Bedfordshire) and takes in most parts of the Chilterns.

There are 3 official entrances to the wood in total and one other permissive path which links to the public paths and contributes to a circular walk around the wood. All routes total 1.1km / 0.7 miles and are un-surfaces and steep in parts, and they remain wet for much of the year.

Due to the low level of visitors The Woodland Trust has given the site a category C for access, (low usage site where we do maintain paths), where less than 5 people per day use a single entrance.

Adams Wood has many features evident within the site that could be of interest/attract people to the site, such as;

 Excellent views over the Chilterns and a particularly attractive view to the nearby village of Skirmett
Ancient Woodland flora (a fantastic bluebell wood) including 17 ancient woodland indicator plants such as hairy wood rush, remote sedge, wood sorrel, wood melick, woodruff, wood millet, wood sedge and yellow archangel

- Active PAWS restoration programme

- Many archaeological / historic features including a sunken lane which forms part of the public bridleway as well as sawpits, wood-banks and charcoal hearths. There are a series of terraces and lynchets evident which are likely to be the remnants of an early medieval field system. Surveying and mapping in 2002 concluded that the area is likely to have been wooded for perhaps 600 years

Nearby Woodland Trust sites include Munces Wood and Kimbers Copse some 6km / 3.7 miles to the east near Marlow Bottom, Pullingshill Wood and Marlow Common 5.5km / 3.5 miles to the south east, Penn Wood north east 13km / 8 miles and Bisham Woods 9km / 5.5 miles south-east in Buckinghamshire. The Berks, Bucks and Oxon Wildlife Trust has a number of sites surrounding Adams Wood and the National Trust's Watlington Hill and Wood is some 7km / 4.3 miles to the west.

The site is isolated however, far from local schools and with no parking facilities, and there is currently no local active community / volunteer group due to the limited population surrounding the wood.

Significance

Adams Wood provides a quiet area for walking and recreation for people living near to the woodland.

There are also some visitors from further afield walking the Chiltern Way.

There are many archaeological features present within the site including a sunken lane which forms part of the public bridleway as well as sawpits, wood-banks and charcoal hearths.

#### Opportunities & Constraints

Constraints:

- The woodland path can become very muddy during wet weather, particularly as it has a combined use as a bridleway

- Vehicular parking is not available

Opportunities:

- There is the opportunity for wider publicity of the wood via marketing information about the Chiltern Way

- To provide formal and quiet access opportunities to an ancient woodland with associated (and some rare) flora

Factors Causing Change

Changes in vegetation along rides.

Long term Objective (50 years+)

Public access will be provided at the wood in perpetuity.

To have easier access for visitors with a drier ride / path surface along clearly defined routes.

The paths will be kept safe for quiet, recreational pedestrian access to the woodland.

The site should be accessible and safe but not over-managed with excessive infrastructure and signage.

There should be an appropriate level of resources available for the site to guide and inform all visitors.

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

During this plan period access within Adams wood will be maintained and improved for visitors enjoying the peace and tranquillity the woodland provides, namely;

- Routine safety inspections of the trees in higher risk zones, such alongside footpaths and tracks, will be carried out formally every two years.

- Entrances - maintenance and inspection: Cleaning of all signage and fixing of any immediate problems with entrance furniture - annually.

- Path cutting and maintenance: Removal of overhanging branches especially along bridle path up to height of 4.5 metres - annually.

- 2 x new 'breadboard ' signs installed at main entrances - 2018

- Cleft-chestnut fencing to be installed between main entrance and timber stacking area to replace old post and wire - 2018

6.0 WORK PROGRAMME						
Year Type of Work		Description	Due By			

## APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	4.28	Beech	1965	High forest	Archaeological features, Landscape factors, Sensitive habitats/species on or adjacent to site, Site structure, location, natural features & vegetation		Ancient Woodland Site, Area of Outstanding Natural Beauty, Planted Ancient Woodland Site

A stand of mixed broadleaves planted in mid 1960's and mainly ash and beech. There are a scattering of larger pre-plantation ash trees, some maidens and some coppice, (last cut most likely when the re-planting was carried out). The hazel present in the stand is probably pre-plantation as well. Further planting of beech is thought to have been undertaken around 1975. The age class of trees is quite diverse overall. There is a good deal of natural regeneration, accounting for at least 20% of the stand, and a significant amount of young beech developing. Other species present include yew, hornbeam and wild cherry, (especially in the northern quarter of the compartment), as well as holly, hawthorn and field maple. The ground flora is made up of dog's mercury, bluebell and honeysuckle. Squirrel damage is evident on some of the beech stems.

A plantation of Japanese larch and beech estimated to have been established around 1960. The quantity of planted larch in the stand was variable; in the northern half it accounted for 30-40% of the stand and is the tallest tree in the canopy, whereas in the southern half it was 10-20%. There has been routine thinning of the larch and it now comprises no more than 15% overall. Natural regeneration of ash and beech has occurred and is now quite developed, accounting for over 20% of trees. In the northern half there is a noticeable lack of young trees below 20 years and therefore a lack of understory; this differs from other parts of the wood and is explained by the low light levels due to the larch. Deer browsing on broadleaf cut stumps is evident. There is an historic wood-bank on the eastern boundary which has older pre-plantation trees growing on it. Whitebeam, field maple, beech and yew are all present on the wood-bank. Other broadleaves in the stand are wild cherry, sycamore and holly. Ground flora consists of patchy dog's mercury, lords and ladies and honeysuckle. A clump of Portugese laurel and box is present in the southeast corner, probably established for game cover.

3a	2.57	Beech	1050	High forest	Archaeological	Ancient	Area of
	2.57		1555		features,	Woodland Site,	
					Landscape		Natural Beauty
					factors, Sensitive		
						woods & trees	
					on or adjacent to	woous a liees	
					site, Site		
					structure,		
					location, natural		
					features &		
					vegetation		

This is the western most block of Adams Wood and is predominantly an area of broadleaf high forest. Beech is the predominant species and is thought to have been established at two intervals, in 1950 and 1970. There is also ash coppice scattered throughout the stand which was last cut around 1960. A minor component (no more than 10%) of conifers is present, namely Corsican pine and Japanese larch and some of the pines are now forming impressive specimen trees. The larch and pine closer to the western boundary have suffered wind-snap and wind-blow. Other broadleaf species include birch, hawthorn and yew. Sycamore is now well established and regenerating. There are older beech trees situated along the south westerly edge of the wood, in several lines and presumably planted in this way. Ground flora is comprised of abundant dog's mercury, lords and ladies and honeysuckle. But nettle and ivy (on trees) are evident towards the western edge of the wood, which could indicate fertilisation of the ground in the recent past. There is a wood-bank on the western boundary with mainly field maple and hazel growing on it.

## Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2019	1a	Thin	2.00	90	180
2019	2a	Thin	1.40	21	30
2020	1a	Thin	1.40	36	50

## 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.

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