

# **East Wray Cleave**

# Management Plan 2017-2022

# 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 Summary Description
  - 2.2 Extended Description
- 3.0 Public access information
  - 3.1 Getting there
  - 3.2 Access / Walks
- 4.0 Long term policy
- 5.0 Key Features
  - 5.1 Ancient Woodland Site
  - 5.2 Informal Public Access
- 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <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:	East Wray Cleave
Location:	Lustleigh
Grid reference:	SX784828, OS 1:50,000 Sheet No. 191
Area:	23.50 hectares (58.07 acres)
Designations:	Ancient Woodland Site, National Park, Planted Ancient Woodland Site

# 2.0 SITE DESCRIPTION

## 2.1 Summary Description

East Wray Cleave is noticeable for its clusters of conifers in a predominantly broadleaf area. This shady wood is home to some elusive wildlife, from dormice and wood ants to many species of bird nesting in the larch trees.

## 2.2 Extended Description

East Wray Cleave lies within the Wray Valley, on the Eastern side of the Dartmoor National Park. It is 1.5km north of the village of Lustleigh close to the busy Bovey Tracey- Moretonhampstead road (A382). The wood forms a conspicuous conifer canopy in a landscape dominated by broadleaved woodland, positioned above a small pastoral field system in the valley bottom, where the Wray Brook runs south east towards Bovey Tracy. The setting, geology and nature of the site and the wider Wray Valley, are typical of the Dartmoor National Character Area (NCA150/NE519).

The north western end of the woodland behind the East Wray Hotel is known to be of Ancient origin but was coniferised when the native woodland was felled in the early 1960s under the then government incentives to develop the UKs timber resource. Throughout this Planted Ancient Woodland Site (PAWS) remnants of the former native woodland can be seen, particularly along drainage lines and boundaries.

The rest of the woodland would have consisted of a series of small fields divided by wooded hedge banks and this too was planted with conifers in the 1960s, with old boundary trees still present in places.

Despite the heavy shading of the conifer canopy occasional Sessile Oak standards occur. The remnant floral features indicate the native woodland was characteristic of upland oak coppice Oak-Bramble-Bracken-Ivy (W10c) with more open areas representative of Oak-Downy Birch-Wood sorrel (W11a). Numerous notable species are present in the wood including Dormice and Wood Ant.

Charcoal hearths and old coppice stools are evident throughout the PAWS area. On the upper slopes near Elsford Rock there is evidence of prehistoric field patterns, believed to be connected to the more extensive field networks on neighbouring land.

Coupes of conifer restocking were created after severe storm damage in the 1990s, but these have been damaged and delayed in growth by extensive deer browsing.

Since acquisition in 2000 the Trust spent a period of time surveying and gathering information to assist in making long-term management decisions, along with improving management access around this very steep site.

# 3.0 PUBLIC ACCESS INFORMATION

## 3.1 Getting there

There is no public parking available close to East Wray Cleave. The closest place to park can be found in Lustleigh village (approximately 1 mile away) although this can get very busy in the holiday season and itself has limited parking. There is parking provision at the Trenchford Reservoir. Access to East Wray Cleave from both of these places can be gained by walking public footpaths although short distances are over country roads that can be busy and have no pavements.

Access to the site is being improved with the development of the East Wray Valley Cycle Trail. It is possible to gain cycle access from Wray Barton SX769846 (2km) and at Casely Court SX786822 (1km) along the busy A382 to access the wood via the footpath to the rear of the East Wray Hotel. Bikes can be chained to the entrance gate of the wood.

The short private access road off the A382 runs behind the hotel to the lower side of the wood. The site has pedestrian only access via a kissing gate over a public footpath. This leads up through the site and exits at the top of the site via a step over stile to join the local footpath network leading to Lower Elsford Farm and access to the Trenchford and Tottiford Reservoirs. The permissive paths within the wood itself follow the management tracks across this steep site. Gradients vary greatly, from level to very steep and the surface throughout is uneven, and rocky.

There is no access for motorbikes, mountain bikes or horse riding within the wood.

Nearest public toilet - Bovey Tracey is the nearest town (approximately 3.5 miles) with facilities for visitors. Toilets can be found in the Station Road Car Park including disabled toilet (RADAR keys required). Further information on Public Toilets can be found on the Teignbridge District Council website - www.teignbridge.gov.uk under "Environment" and then "Teignbridge Services".

Nearest bus stop - The nearest bus stop is in Union Square, Fore Street, Bovey Tracey, approximately 3.5 miles from East Wray Cleave. There is a service from Bovey Tracey to Moretonhampstead although this runs infrequently with no official stops between the two towns along the A382.

3.2 Access / Walks

# 4.0 LONG TERM POLICY

In 50 years' time, the Ancient Semi-natural Woodland of East Wray will be a habitat of predominantly native broadleaved species, featuring a structural diversity that will maintain a continuous cover canopy whilst promoting a rich ground flora and assemblages of lower plants such as lichens and bryophytes. Conifer regeneration will be controlled but large, significant species may be retained as these mature trees provide valuable wildlife habitat and will continue to do so as they age and decay. There will be regular management interventions to maintain diversity including the light and air conditions for rare lower plant communities, characteristic of Dartmoor woods, to thrive through the control of shade bearing species such as holly and coppicing along ride/ track edges.

Past invasions of non-native species such as Laurel, Rhododendron and Himalayan Honeysuckle have been eradicated from the wood but any remnants or re-invasions will be removed as they occur.

Informal public access will be maintained, allowing visitors to explore the rugged nature of this wood both through the public footpath and the permissive paths along connecting tracks.

# 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

The site was previously a mixture of upland Oak woodland and wood pasture, with field systems still evident in places. The former areas of Oak woodland, designated as ancient, were planted with mixed conifer crops in the early 1960's with small blocks of Beech on the western edge. Douglas Fir is the main crop species within the ancient woodland, with Japanese Larch, Sitka Spruce and Norway Spruce around the periphery.

Remnants of ancient woodland flora exist in places, along track edges and boundary features, including Yellow Arch-angel, Wood Melic, Dog's Mercury, Blue Bells, Woundworts and Figworts. Where there is sufficient light along the rides for diversity and basking, butterflies such as Silver-washed Fritillary, Pearl-bordered Fritillary and Ringlet make use of the surviving woodland flora . Dormice have been recorded on the site although there is no regular monitoring at present. A feature of interest is a geological formation which gives rise to the richer soils found in the Wray Valley. The Wooleigh Grits are conglomeratic rocks of clays and boulders eroded from Dartmoor Granite. This leads to exposures of loose granite across the site, which has in the past been quarried. The quarries have long been inactive but a combination of exposed granite boulders and waste from quarrying now litters the site, creating a loose Clitter that's easily disturbed on the steep slopes.

The combination of Clitter, steep slopes and the potential safety risks posed to both property and highways below the site, has led to the decision of thinning in small groups (approx. 0.2ha) as a safer means of restoration rather than the approach of continual thinning. This limits the areas being worked at any one time, reducing draglines and avoiding the need to re-work areas.

## Significance

PAWS recovery and restoration is a prime objective of the Trust. The site helps to achieve national, regional and local biodiversity and habitat action plan targets, including fulfilling multiple objectives in the Dartmoor Habitat Action Plan for Woodland.

The wood has many scattered remnant trees, supporting a rich array of lower plants, including lichens and bryophytes, some species of which fall into the Biodiversity Action Plan for Devon. East Wray Cleave adjoins several other woods in the Wray Valley, providing habitat connectivity over a landscape scale, connecting through Lustleigh Cleave and into the Bovey Valley Woods. Several woods in the surrounding area and adjoining landscape have been designated as SSSI's, NNR's and fall within the South Devon Woods SAC.

## **Opportunities & Constraints**

Constraints:

- The only timber access from the site is via a neighbouring property and access is poor on site.
- The landscape impact of harvesting/ restoration operations.
- Instability of exposed trees after thinning/ felling operations.

- Potential damage of historic and earth features/boundaries, and danger from dislodged rocks to workers, property and highways.

Opportunities:

- To begin the process of natural regeneration within the wood and create conditions suitable for surviving woodland flora to spread.

## **Factors Causing Change**

- Deer and Squirrel damage - signs of both are abundant and likely to limit natural tree regeneration and ground flora.

- Phytopthora ramorum - Infections present in the remaining Larch would lead to the clear felling and restocking of large areas.

- Conifer regeneration - limited on the site but still present.

- Invasive species - Rhododendron and Laurel have largely been removed from the site but continued control is needed.

## Long term Objective (50 years+)

Mixed, predominately native broadleaved woodland of varied age and species structure and with representative ground flora and lichens throughout. Mature trees growing on into senescence with subsequent restocking to occur by natural regeneration. On-going management will be required to maintain light levels and structural diversity and to remove undesirable species.

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

- Gradual restoration to broadleaved composition through selective felling of small conifer groups (<0.2ha) promoting natural broadleaved regeneration (1b, 1c, 1d, 1e, 2b, 2e, 3a, 4a)

- Appropriate deer management to reduce browsing levels and enable sustainable natural regeneration processes

- Maintenance of restock areas (2a, 2d, 2f, 3a) to restore broadleaved component

- Presence of invasive plants will continue to diminish through a combination of spraying and stem injection. At present 1a, 1c & 1e contain isolated groups of Rhododendron, Laurel and Himalayan Honeysuckle.

- Increase levels of fallen and standing deadwood across the site where safe to do so as part of thinning and tree safety works (1b, 1c, 1d, 1e, 2b, 2e, 3a, 4a)

- To begin the process of ride edge coppicing along tracks where sufficient broadleaf regeneration has occurred. This will be focussed on tracks between 2a & 2c and all tracks surrounding 3a. This will benefit ground flora by increasing light and created a more diverse structure to the woodland.

## 5.2 Informal Public Access

## Description

The wood is open for quiet informal recreation on foot primarily via a public footpath that leads steeply uphill through the site from East Wray Barton towards Lower Elsford. There is no parking, and the path is not that well used. Whilst there is a good ride network, areas away from the public footpath appear to be little frequented apart from use by a few local residents. New path links to Casely Wood (adjacent to the east) have been created allowing wider access to other public rights of way.

## Significance

Whilst informal public access is a fundamental Woodland Trust it is also a fundamentally important aspect to the Dartmoor National Park management plan. Managed paths are the public right of way (footpath) and those linking to Casely Wood (DNPA owned) and nearby Wray Valley Cycle Trail.

## **Opportunities & Constraints**

Constraint:

- The wood has no formal access for the public except on foot via a public footpath and there is no parking available nearby.

**Opportunities:** 

- Maintenance of the entire ride network will allow visitors easier access within the whole wood

## Factors Causing Change

- Potential instability of trees during restoration as increasingly open stands become more susceptible to wind throw

- Felling/ tree safety works on surviving remnant trees that are close to paths/ rides

- Footpath closures are likely during restoration/ felling operations, including the public footpath

## Long term Objective (50 years+)

A site that is pleasant, easy and safe to visit with features and facilities providing an informal experience for local visitors, and the general public with well networked and defined, but low key, informal routes, (including permissive footpaths linking to adjacent woodlands)

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

- Ensure access provision is in keeping with access and entrance guidelines and network is appropriate to level of usage . This will include an upgrade of all signage currently on site.

- Manage existing accesses, furniture and facilities appropriate to level of use

- Manage tree safety

- Coppicing along track/ path edges to increase access provision as well as enhance the woodland biodiversity. This will be focussed on tracks between 2a & 2c and all tracks surrounding 3a.

6.0 W	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	1.49	Oak (sessile)	1890	High forest	No/poor vehicular access to the site		Ancient Woodland Site, National Park			
Mixed Bracke sycame Hazel, archan banks	Vixed native broadleaves of varied structure but principally high forest (P1890): Oak-Bramble- Bracken-Ivy (W10c) woodland with some beech and sycamore (1950) in the sub canopy. Significant sycamore, sweet chestnut and beech open grown standards exist here (all 3.5 m plus d.b.h P1750). Hazel, holly and sycamore form the shrub layer. Ground flora is varied including bluebell and archangel west of the bank and ferns and Holcus mollis dominating east of it. Several old walls and banks occur.									
1b	0.72	Sitka spruce	1961	High forest	Mostly wet ground/exposed site, No/poor vehicular access to the site		National Park, Planted Ancient Woodland Site			
Sitka s includii hazel c signific	Sitka spruce (P61) and Douglas fir (P61) high forest with a patchy field layer of ivy and ferns including Dryopteris affinis. Occasional remnant broadleaves remain including oak standards and hazel coppice but all are rare. Ground flora is sparse but lichen growth is concentrated around significant boulders.									
1c	3.30	Douglas fir	1961	High forest	No/poor vehicular access to the site		National Park, Planted Ancient Woodland Site			
Dougla Occasi Ground	as fir (P ional re d flora i	61) high fo mnant bro s sparse a	orest w adleav and cor	ith a patchy field ves remain includi ncentrated on ride	layer of ivy and feri ing oak standards a side glades.	ns including Dryc and hazel coppic	opteris affinis. e but are rare.			
1d	2.88	Douglas fir	1961	High forest	No/poor vehicular access to the site		National Park, Planted Ancient Woodland Site			
Dougla includii hazel c	Douglas fir (P61) and Norway spruce (P61) high forest with a patchy field layer of ivy and ferns including Dryopteris affinis. Occasional remnant broadleaves remain including oak standards and hazel coppice but are rare. Ground flora is sparse and concentrated on ride side glades.									
1e	1.50	Douglas fir	1961	High forest	No/poor vehicular access to the site		National Park, Planted Ancient Woodland Site			

Douglas fir (P61+62) high forest with a patchy field layer of ivy and ferns including Dryopteris affinis. Occasional remnant broadleaves remain including Oak standards and hazel coppice but are rare. Ground flora is sparse, but rich and varied and concentrated on ridesides and glades. A quarried area in the west of the sub compartment was created by the previous owners to serve as a stacking and loading bay. This is surrounded by young gorse and laurel growth with large areas of sunny bare soil banks. Occasional and significantly large beech standards also occur here.

		-	-			
1f	0.60	Oak	1890	High forest	No/poor	National Park,
		(sessile)			vehicular access	Planted Ancient
					to the site	Woodland Site

Mixed Native Broadleaved Stand (p1890), Oak canopy with beech and sweet chestnut, sycamore is abundant in the sub canopy, ivy, bluebell and archangel.

2a 1.07 Mixed 2003 broadlea ves	High forest	No/poor vehicular access to the site		National Park, Planted Ancient Woodland Site
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Area clear felled in 2003 and partially restocked with native broadleaves which are yet to establish. Natural regeneration of birch, hazel, willow, ash present with occasional oak. Also conifer regeneration present. Significant Wood Ant nests occur on the edge of the area. The power line corridor crossing the sub compartment is regularly cleared by Western Power Distribution.

2b	0.24	Scots pine	1921	High forest	Archaeological features, No/poor vehicular access	National Park, Planted Ancient Woodland Site
					to the site	

A small linear block of mature Scots pine (P21), with a bramble and bracken field layer.

2c	0.82	Mixed	1993	High forest	No/poor	National Park,
		broadlea			vehicular access	Planted Ancient
		ves			to the site	Woodland Site

An area of conifer restock (P93) following a clear fell after the storm damage in 1990: Principally Douglas fir restocking (some larch) but some broadleaved planting at edges of coupe (ash/oak and cherry). The conifer has suffered from lack of maintenance and deer damage. The field layer is dominated by tall bracken and bramble, with many ruderals including foxglove and willowherbs. Regeneration including sycamore, ash, birch, oak occurs throughout. Groundflora is effectively absent.

2d	1.29	Mixed	2016	High forest	Diseases,	National Park, Planted Ancient
		Ves			vehicular access to the site	Woodland Site

Pure Sitka Spruce (P61) High forest without shrubs or ground flora. Significant Wood Ant nests occur on the edge of the area. Increasing amount of wind throw as crop reaches terminal height, at northern edge the unidentified banks in Dr Nick Berry Report 2002 are being increasingly damaged as root plates pull up the bank.

Subcompartment felled winter 2015/16 due to excessive windblow. Restocked spring 2016 with MB.

2e	0.82	Mixed broadlea	1993	High forest	Diseases, No/poor	National Park, Planted Ancient
		ves			vehicular access to the site	Woodland Site

An area of conifer restock (P93) following a clear fell after the storm damage in 1990: Principally poorly advanced Douglas fir restocking (some larch) with some broadleaved planting at edges of coupe (ash/oak and cherry). Deer damage and lack of maintenance have delayed the crop. The field layer is dominated by tall bracken and bramble, with many ruderals including foxglove and willow herbs. Regeneration including sycamore, ash birch, and oak occurs throughout. Ground flora is effectively absent.

2f	1.44	Sitka	1961	High forest	No/poor	National Park,
		spruce			vehicular access	Planted Ancient
					to the site	Woodland Site

Area clear felled in 2003 and partially restocked with native broadleaves which are yet to establish. Natural regeneration of birch, hazel, willow, ash present with occasional oak. Also conifer regeneration present. Significant Wood Ant nests occur on the edge of the area.

Areas of windblow within the former crop has aided regeneration.

3a	2.64	Douglas	1993	High forest	Diseases.	National Park.
		fir			No/poor	Planted Ancient
					vehicular access	Woodland Site
					to the site	

An area of conifer restock (P93) following a clear fell after the storm damage in 1990: Principally Douglas fir (some larch) restocking but some broadleaved planting at edges of coupe (ash/oak and cherry). The field layer is dominated by tall bracken and bramble, with many ruderals including foxglove and willowherbs. Regeneration including sycamore, ash birch, and oak occurs throughout. Groundflora is effectively absent.

	1	1	1	Ì		1	
4a	2.69	Japanes	1961	High forest	Archaeological		National Park,
		e larch			features,		Planted Ancient
					Diseases,		Woodland Site
					No/poor		
					vehicular access		
					to the site		

## Douglas fir (P61)+Japanese

larch (P61)+Norway spruce (P61). Wild cherry clone. Bracken dominates over ground ivy, bluebell, wood sage and archangel. North of the large wall that dissects the sub compartment the flora changes dogs mercury dominating over ferns.

						-		
4b	1.18	Japanes e larch	1961	High forest	Diseases, No/poor vehicular access to the site		National Park, Planted Ancient Woodland Site	
Janane	ese lar	ch (P61) a	nd hee	ch (P61) over a fi	eld laver of dense	hracken with rare	- bramble A	
significant clonal group of wild cherry occurs on the NE edge. Ground flora is virtually absent								
4c	0.60	Sycamor	1960	High forest	No/poor		National Park.	
		e			vehicular access to the site		Planted Ancient Woodland Site	
Sycam	Sycamore (P60) and ash (P60) high forest dogs' mercury dominates the ground flora with frequent							
hart's t	bart's tongue forn							
5a	0.04	NULL		null			National Park	
Area licenced to the Neighbour								

# Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2018	1c	Thin	1.00	85	85
2018	1e	Thin	0.60	83	50
2018	3a	Thin	0.40	128	51
2018	4a	Thin	0.25	180	45
2018	4b	Thin	0.15	80	12
2019	1b	Thin	0.70	57	40
2019	1d	Thin	0.80	81	65
2019	2b	Thin	0.20	60	12
2019	4a	Thin	2.60	31	80
2020	1a	Thin	1.40	7	10
2020	1c	Thin	1.00	85	85
2020	1e	Thin	0.60	83	50
2020	1f	Thin	0.60	17	10
2020	2c	Thin	0.80	21	17
2021	1b	Thin	0.70	57	40
2021	1d	Thin	0.80	81	65
2021	2e	Thin	0.80	38	30
2021	4b	Thin	0.60	33	20
2022	1c	Thin	1.00	85	85
2022	1e	Thin	0.60	83	50
2022	3a	Thin	1.00	70	70
2023	1d	Thin	1.00	65	65
2023	2a	Thin	1.00	20	20
2023	2f	Thin	1.40	14	20
2023	4b	Thin	1.00	35	35
2023	4c	Thin	0.60	20	12
2024	1b	Thin	0.70	43	30
2024	1c	Thin	0.60	83	50
2024	1e	Thin	0.60	83	50
2024	4a	Thin	1.00	80	80
2025	1d	Thin	1.00	50	50

2025	2e	Thin	0.80	38	30
2026	1c	Thin	0.60	83	50
2026	1e	Thin	0.60	67	40
2026	3a	Thin	0.80	63	50
2026	4a	Thin	0.80	50	40
2027	1b	Thin	0.70	43	30
2027	1d	Thin	1.00	40	40
2027	4b	Thin	0.60	42	25
2028	1c	Thin	0.60	67	40
2028	1e	Thin	0.60	67	40
2028	2d	Thin	1.26	8	10
2028	2e	Thin	0.80	38	30
2029	1d	Thin	0.60	50	30
2029	4a	Thin	0.80	38	30

# 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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