



Dolebury Warren

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 Natural Secondary Woodland	
5.2 Informal Public Access	
5.3 Historic Features	
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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:

- 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 www.woodlandtrust.org.uk. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council® (FSC®) under licence FSC-C009406 and through independent audit.

In addition to the guidelines below we have specific guidance and policies on issues of woodland management which we review and update from time to time.

We recognise that all woods are different and that the management of our sites should also reflect their local landscape and where appropriate support local projects and initiatives. Guidelines like these provide a necessary overarching framework to guide the management of our sites but such management also requires decisions based on local circumstances and our Site Manager's intimate knowledge of each site.

The following guidelines help to direct our woodland management:

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene when there is evidence that it is necessary to maintain or improve biodiversity and to further the development of more resilient woods and landscapes.
2. We establish new native woodland using both natural regeneration and tree planting, but largely the latter, particularly when there are opportunities for involving people.
3. We provide free public access to woods for quiet, informal recreation and our woods are managed to make them accessible, welcoming and safe.
4. The long term vision for our non-native plantations on ancient woodland sites is to restore them to predominantly native species composition and semi-natural structure, a vision that equally applies to our secondary woods.
5. Existing semi-natural open-ground and freshwater habitats are restored and maintained wherever their management can be sustained and new open ground habitats created where appropriate.
6. The heritage and cultural value of sites is taken into account in our management and, in particular, our ancient trees are retained for as long as possible.
7. Woods can offer the potential to generate income both from the sustainable harvesting of wood products and the delivery of other services. We will therefore consider the potential to generate income from our estate to help support our aims.
8. We work with neighbours, local people, organisations and other stakeholders in developing the management of our woods. We recognise the benefits of local community woodland ownership and management. Where appropriate we allow our woods to be used to support local woodland, conservation, education and access initiatives.
9. We use and offer the estate where appropriate, for the purpose of demonstration, evidence gathering and research associated with the conservation, recreational and sustainable management of woodlands. In particular we will develop and maintain a network of long-term monitoring sites across the estate.
- 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:	Dolebury Warren
Location:	Churchill
Grid reference:	ST459591, OS 1:50,000 Sheet No. 172
Area:	22.66 hectares (55.99 acres)
Designations:	Area of Outstanding Natural Beauty, Nature Conservation Area

2.0 SITE DESCRIPTION

2.1 Summary Description

Dolebury Warren is a mixed broadleaved and coniferous plantation woodland. It lies on the north scarp of the Mendip Hills within the Mendip Hills AONB. It is part of continuous woodland stretching for many miles along the slope, with ash, oak, small-leaved lime, hazel, and areas of conifer and beech plantation.

The wood was formerly part of the estate at Mendip Lodge, and some historical features remain including a raised platform surrounded by a stone wall known as The Lookout, with many dry-stone walls found throughout the wood and surrounding area. Parts of the site have extensive views across North Somerset and beyond. The wood is well used by walkers and visitors to the Mendip Hills, and to the Dolebury Warren Iron Age hillfort to the south.

2.2 Extended Description

Dolebury Warren is a mixed broadleaved, coniferous plantation woodland with semi natural characteristics. It lies on the north scarp of the Mendip Hills within the Mendip Hills AONB and The Mendip Hills National Character Area 141. It is part of continuous woodland stretching for many miles along the slope and is typical of woodland of this area. It is situated approx. 1 mile to the east of Churchill, 14 miles from Bristol and 10 miles from Weston-Super-Mare.

Adjacent to the east is Mendip Lodge Wood which is ASNW in origin. To the west is a secondary conifer plantation, and to the south of the wood is the well-known unimproved grassland and hill fort of Dolebury Warren, owned by the National Trust and managed by Avon Wildlife Trust, which is a designated SSSI. To the north there are fields, mostly used as paddocks, running to the A368 and the village of Upper Langford.

The site is classified as secondary woodland dominated with naturally regenerated ash, but with small areas of oak, small-leaved lime and hazel, with areas of planted conifer and beech. The western end of the site has been wooded for longer than the eastern section and this is reflected in the well-developed communities of flora characteristic of ancient woodland. There are several ancient small-leaved lime coppice stools on or near the current boundary, and one particularly magnificent beech tree on the main ride. Map evidence shows some of the south east of the woods being open in the past.

Currently the wood is relatively even aged with the majority of trees dating from the 1950's and 60's when the wood was planted with a mixture of conifers. These conifers dominate much of the canopy but have been thinned and many canopy gaps exist with copious natural regeneration present underneath. There are blocks of self-seeded broadleaf, mostly Ash also dating to this time.

The wood was formerly part of the estate at Mendip Lodge, now demolished, at the eastern end of the wood. Some historical features remain from this period within the wood, including a raised platform surrounded by a stone wall known as The Lookout. This has extensive views across North Somerset and beyond. A report on the history of the lookout was produced in 2006. A number of dry stone walls that date to the Enclosure Acts of the C19 cross the site from the south.

The wood is a valuable recreational resource, and is well used by walkers and visitors to the Mendips and the hillfort. The site contains an internal network of paths which link to a wider network, all of which are well used.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

General location:

Dolebury Warren Wood lies parallel to the A368 at Upper Langford on the northern slopes of the Mendip Hills.

Parking and access to the site:

There is no parking available at the site. Access to the western end is pedestrian only, via a public footpath or Warren Lane which is a private driveway. Access from the eastern end is up a public bridleway, Stoney Lane, a rough boulder strewn ancient track. Parking is available 1km away on the B3134 or can be reached via a footpath near adjacent woodland. The nearest public toilets are also located at this spot (for more information on other public toilet see the North Somerset Council website)

General overview of paths & entrances:

There are three entrances from Stoney Lane on the eastern boundary (two step over stiles and one squeeze gap), one on the public footpath from Dolebury Warren Hill Fort on the southern boundary (step over stile) and one on the public footpath at the NW corner off Warren Lane (squeeze gap). There is a public footpath running from the NW corner, through the wood to eventually reach the top of the hill. Rides within the wood link these paths and provide access to much of the wood. All the paths are steep and uneven in patches with some areas remaining wet through much of the year.

Public Transport:

There is a bus stop at Langford approx 1.5 km from the wood which is serviced regularly by buses to and from Bristol. See www.traveline.org.uk. (checked August 2013).

3.2 Access / Walks

4.0 LONG TERM POLICY

Secondary Woodland - Manage the woodland by developing and maintaining a mixed age and species structure, to promote a healthy, species-rich and resilient woodland. The wood will be managed similarly to a planted ancient woodland site (PAWS) because of the abundance of woodland flora associated with ancient woodland and areas of planted conifer. The gradual removal of conifers will change the canopy to one of a predominantly native broadleaf high-forest with a mixed age and species structure, and in turn improve the biodiversity of the woodland. Some conifer trees will be retained in reference to the plantation history of the site and to improve the resilience of the wood. The woodland will be managed through a continuous cover forestry approach, initially through the thinning and removal of coniferous trees in the short term, shifting to the maintenance of structural diversity in the broadleaves stands in the medium to longer term.

Public Access - The importance of the wood as a local recreational resource will be maintained and improved. The site will be valued by local users and visitors, both as a through route and a recreational and interesting resource in its own right. Visitor levels in the Mendip area are relatively high, with good numbers of users visiting the site. An improved path network will continue to work towards the Trust's objectives of inspiring everyone to value woods and trees, and appropriate access infrastructure will be installed and maintained to support visitors.

Historic Features - The remnant historic features will be secured and enhanced to promote public awareness and enjoyment. Provision of access will continue with access points maintained and a network of paths that allow visitors to appreciate the interesting features of the site. The Lookout will be maintained as a feature for its historic value, and the amazing views will be kept by periodically clearing the vegetation.

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 Natural Secondary Woodland

Description

Dolebury Warren is a mixed broadleaved, coniferous plantation woodland with semi natural characteristics on a north facing slope on the Mendip hills. It is part of a wider wooded slope of mixed natural secondary and conifer woodland. Compartment 1 is dominated in areas by abundant 30 year old ash regeneration, with occasional hazel, beech, birch, and hawthorn with remnant small leaved lime and oak on boundaries, there are also occasional remnant planted Scots pine. An area of conifer was clear felled in 2013 resulting in heavy bramble. Compartment 2 is predominantly conifer plantations of Norway spruce and larch with regenerating young broadleaf ash dominant woodland where previous conifer thinnings have taken place, there are also occasional Douglas fir and Western red cedar (P1960). Thinned in 2007 and 2013 in the eastern and central sections, with regenerating broadleaf's now present and heavy bracken and bramble cover where over-thinned. There are also occasional remnant plantings from the previous estate ownership including small-leaved lime, horse chestnut and beech in Compartment 2. In compartment 3 there are mixed broadleaved with dominant ash regeneration and some hazel understorey, and conifer planting of larch and douglas fir sloping down to the north boundary, with yew groves scattered along the ride edge on the top slopes.

Maps dating to 1880 show the western half of the wood under tree cover (compartment 1) at that time and much of the woodland ground flora in this area is characteristic of ancient woodland including toothwort, violet, dog's mercury, wood spurge, ramson's, bluebells and wild strawberry. A moss and bryophyte rich ground flora community are also particularly noticeable throughout the site. Ancient Woodland Vascular plants survey available in reference information. The south eastern half of the site (compartment 2) is more recently wooded and due to the dense conifer canopy is noticeably less rich in ground flora. Due to the steep slopes and thin soil it is thought likely that scrubby grazing was present, so some species would have lingered such as the ransoms and ferns abundant along the northern boundary of the eastern half.

Scattered mature trees - remnants of estate plantings including small leaved lime, beech and horse chestnut provide additional interest, including a magnificent beech tree in the centre of the site on the main ride. Ancient small leaved lime coppice stools, an area of yew, and remnant veteran oaks indicate areas of longer wooded history.

A large hard standing area suitable for stacking timber is present in the north west corner by the main management access, it has laurel bordering the entrance and adjacent houses.

Significance

The wood is an important part of a wider network of woodland cover on the Mendips and particularly across the northern face. The site also connects to the SSSI to the south. Ash woodlands have been identified as an important habitat in Mendip Hills AONB Management Plan. Dolebury Warren although not ancient contains a good representation of the species typical of these woodlands. The woodland scarp has been identified in the Mendip Hills AONB Landscape Assessment as an important landscape feature to be retained.

Opportunities & Constraints

Opportunities:

Due to spread of ash dieback in region - In current plan period there is a window of opportunity to halo thin ash around struggling shaded and over-topped other broadleaf trees e.g. oak, cherry, beech, birch etc on steep slopes to allow trees to establish before ash become infected with chalara.

Constraints:

The management access is narrow and with steep slopes restricting timber extraction and harvesting on steeper sections of woodland.

The wood is highly visible when viewed from the north along the hillside and therefore any major changes in the canopy would be easily visible and thus potentially in conflict with the Mendip Hill AONB Landscape Assessment.

Factors Causing Change

Bramble and bracken suppressing natural regeneration of tree species in conifer restoration areas..
Deer browsing and squirrel damage preventing some broadleaf trees from reaching maturity.
Pests and diseases - Ash die-back (Chalara), potential infection of Phytophthora Ramorum in Larch.

Long term Objective (50 years+)

A healthy high forest structure of mostly mixed native broadleaf species of varying age, with some tree species reaching maturity and natural regeneration of broadleaf species maintained through low intensity management using a continuous cover forestry approach. A healthy ground flora characteristic of ancient woodland will be evident throughout the wood. Conifer plantation will have been restored to native broadleaf woodland through gradual thinning and selective felling to promote a broadleaved canopy with a diverse structure favouring ancient features and semi-natural flora and vegetation; composition will be largely composed of native and honourary native broadleaved species. Some conifer trees will be retained in reference to the plantation history of the site and to improve long term resilience.

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

The short term objective is to improve the diversity, age structure and species composition of the woodland and increase natural regeneration of broadleaf trees, and to reduce the proportion of conifers by gradually opening up the existing stands through selective thinning initiating natural regeneration processes. A diverse range of broadleaves species will be favoured with the aim of creating and maintaining a more diverse structure and predominantly native species composition. This will slowly increase the percentage cover of the broadleaf element toward the current target of 80%.

This will be done by -

Gradually thin the densest conifer stands to improve the health and value of the current conifers and to favour broadleaves to create the conditions in which the woodland communities can recover and thrive in line with WT restoration guidance and policy -thin Norway spruce, Larch and Scots pine by 25% as part of the gradual restoration process, as supported by the PAWS and WCA assessment in compartment 1, 2 and 3 in winter 2017/18, and 2018/19.

Gradual halo thinning of dense areas of ash regeneration to promote a varied and diverse age structure and species composition of other naturally regenerating broadleaved trees being dominated and shaded by dominant 30 year old ash regen as highlighted in the woodland condition assessment (WCA). This will allow trees to establish and build up root systems on the steep slopes and make them less susceptible to wind blow and effects of chalarra. Halo-thin ash in compartment 1 by coppicing 20% of ash in 2016/17, 2017/18, 2018/19, 2019/20, and 2020/21 by volunteer group, with brash left stacked in small habitat piles as dead wood.

Carry out a deer impact assessment in 2018 and develop a subsequent deer management strategy to ensure deer browsing isn't negatively impacting on broadleaved regeneration.

Improve vehicle access for management of woodland - clear muddy sections of path using mini digger down to hard surface and re-aggregate path with stone to improve vehicle access.

5.2 Informal Public Access

Description

The area contains three main tracks all running east/west, they link together to provide many route options within the wood and link to a wider network of paths across the adjoining land. Although the tracks within the wood are generally level and in good condition, some climbs up uneven tracks are required to reach the site, meaning the site is mostly used by the better-abled. The wood has a public footpath and several kilometres of permissive paths through it which link with a well-used footpath network around the Mendips. The site contains three main tracks all running east/west that link together to provide many route options within the wood. The main tracks within the wood are generally gently sloping and in good condition, but some of the paths in the wood have steep or wet sections. Several smaller paths have been created by volunteers. These are unsurfaced and allow access to the steeper parts of the site that were difficult to experience before. There is one designated public footpath running from the North west entrance exiting to the top or south east. Fine views can be enjoyed northwards across North Somerset from the Lookout and these have been opened up by the sensitive coppicing of the area underneath the Lookout.

Several smaller linking paths have been created by volunteers. These are unsurfaced and allow access to the steeper parts of the site that were difficult to experience before, however they can only be used by the fitter walkers and contain many steps.

There is one designated public footpath. All the paths are well used by locals and visitors to the area.

Fine views can be enjoyed northwards across North Somerset from the Lookout and these have been opened up by the sensitive coppicing of the area underneath the Lookout.

Significance

Provision of public access and increasing people's enjoyment of woodland is a key aim of the Woodland Trust, and it is furthered by ownership and management of Dolebury Warren.

Opportunities & Constraints

Opportunities

The paths link to a wider network of footpaths and open access areas including Dolebury hill fort, Black Down and Burrington, and The Butcombe Trail providing recreational enjoyment across the mendips for many users, and opportunities to engage with users of the wood through interpretation, signage and events.

Volunteer engagement through an active volunteer group that meet once a month to carry out small scale management tasks as directed by Site Manager.

The car park currently used for management access could be opened to visitors if the access lane was in WT ownership.

Constraints:

There is no public car parking facility near the site.

Poor accessibility of some paths.

Factors Causing Change

Misuse by cyclists/motorcyclists. Unauthorised use by horse riders

Long term Objective (50 years+)

The wood will be well-used and valued by the surrounding community. It will be known for the variety of walks, abundance of spring flowers and links with the wider footpath network. Access will be maintained to a high level of quality and safety, and will be welcoming and easily accessible with more challenging 'wilder' paths available.

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

The short term objective is to maintain the site as easily accessible, attractive, well maintained and safe woodland. The path network and entrances should remain in good condition and appropriate for level and type of use and in accordance with access category B. This will be done by:

Main paths are to be cut and maintained as necessary twice each year in June and September, and cleared of obstructions such as fallen branches as needed, with trimming of encroaching vegetation in June, and main paths cut back 1m either side of path in September .

Entrance furniture will be maintained as required to keep them welcoming and in good condition during path cuts and allow access to walkers only.

Smaller paths will have access maintained and improved by the volunteer group clearing branches and fallen trees, and installing steps and revetment on steep slopes in difficult to access parts.

5.3 Historic Features

Description

The site contains numerous historical features and physical historical references to previous land uses. The site was part of the grounds of Mendip Lodge, built in 1787 by the Reverend Thomas Sedgewick Whalley who commenced planting in the wood and landscaped the grounds and its features (the Lodge is now gone). The most obvious of these is The Lookout, a stone circle prominent with good views across North Somerset, which is most likely a folly created during the Romantic Garden design phase, but may possibly pre-date back further to be linked with the Iron Age hill fort to the South of the wood. The stone work around the Lookout was restored by skilled volunteers over a three year period to 2012.

A similar, larger but less well preserved earthwork, surrounded by veteran oaks and covered in regenerated trees lies to the south west, still within the wood. Its origin is unknown but is related to the Mendip Lodge period.

Many of the dry stone walls throughout the site date to the Enclosure Acts of the C19, and relate to a time when the land was open and grazed, some are possibly even older and are the remains of grazing enclosures related to the Iron age period and the hillfort to the south. These walls were also re-built by the Mendip dry-stone walling association to 2013.

Other features within the woodland are the old quarry workings along the northern boundary.

Report on the man-made features in the wood and surrounding area of Mendip Lodge available in reference information.

Significance

The Trust protects the archaeological sites in its ownership. This area is rich in physical history both recent and ancient, and these features are a direct way of linking the local community to its history.

Opportunities & Constraints

Opportunities:

Interpretation boards highlighting the interesting features found within the wood.

Constraints:

Presence of these features does constrain harvesting operations to an extent but careful planning can avoid a conflict and historic features map available on GISMO.

Factors Causing Change

Natural deterioration and falling veteran trees causing damage.

Long term Objective (50 years+)

The remnant historic features will be secured and enhanced to promote public awareness and enjoyment, and for people to establish a link to the history and previous uses of the site. Provision of access will be maintained and a network of paths that allow visitors to appreciate the interesting features of the site.

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

The Lookout will be maintained as a feature for its historic value, and the amazing views will be kept by periodically clearing the vegetation. Check the walls remain stable and safe and rebuild where possible using the volunteer group.

Design and install 2 x new welcome and 1x historic features interpretation boards at main entrances and Lookout.

The Lookout will be kept open and the views maintained by coppicing on a 5 year cycle - coppice 0.5 Ha of area below look out in winter 2018/19.

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	7.76	Ash	1960	High forest	No/poor vehicular access within the site, Sensitive habitats/species on or adjacent to site	Informal Public Access, Natural Secondary Woodland	Area of Outstanding Natural Beauty
<p>Secondary woodland although with canopy cover for well over 100 years it has ancient semi-natural woodland ground flora. Predominantly naturally regenerated ash P1960 with occasional conifers and some large coppiced veteran small-leaf limes on the western and northern boundaries, and ancient beech trees on the main ride.</p> <p>A small slither of the south boundary approx 1.5 Ha is technically with the Dolebury Warren SSSI (NE Unit 5 - Wood Pasture and Northern Fields). This is likely a historical mapping mistake as the area is secondary woodland and conifer plantation.</p> <p>The south west boundary near the southern entrance and along the ride has beech and Scots pine plantation P1960's.</p> <p>There are pockets where conifer was clear felled, first in 1990/5 and two more recent glades where Spruce was removed in 2013, this is now high bramble.</p> <p>The understorey is of hazel, hawthorn, yew, elder and bramble, with varied ground flora and has areas rich in bluebell, herb paris, green hellebore and toothwort - all associated with ancient woodland. There are also numerous ferns and mosses as this side of the valley is wettest and north facing.</p> <p>A small area in the north west entrance is associated with old farm buildings and part of this area is surfaced as a loading bay. A small area was planted with hazel in 1997 on site of former pigsties. There is also a large active badger sett in the north west corner.</p> <p>The soil is generally free draining as it overlies limestone. The slope is steep to the south gradually flattening towards the north.</p> <p>The actual southern boundary is not marked on the ground and difficult to locate as it runs into identical neighbouring Wildlife Trust managed woodland.</p>							
2a	6.23	Norway spruce	1950	High forest	Archaeological features, No/poor vehicular access within the site, Sensitive habitats/species on or adjacent to site	Informal Public Access, Natural Secondary Woodland	Area of Outstanding Natural Beauty

Mixed conifer woodland with significant self-seeded broadleaf. Larch, Norway Spruce, and some Scots Pine and Douglas Fir (all approximately P60). Some areas are now filled with broadleaf regeneration of mainly ash with some sycamore and oak. Thinned regularly in 1995, 2007 and 2013 and now wide spaced conifer with abundant native regeneration dominated with bracken and bramble with natural regeneration starting to come through.
 There are some mature Beech, Yew and Oak lining the main ride.
 There is a slope throughout this compartment to the north, but it is well served for access with tracks running along the contours above and below along its entire length.
 The Lookout is in this compartment, and is a circular stone platform looking out with a view over North Somerset with an open glade with 2 mature lime pollards and a horse chestnut. A stone wall has been restored (2007) marking an old field boundary within this area and another in a state of disrepair also exists.

3a	7.77	Ash	1950	High forest	No/poor vehicular access within the site, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Natural Secondary Woodland	Area of Outstanding Natural Beauty
----	------	-----	------	-------------	--	--	------------------------------------

Mixed conifer and broadleaf woodland. Predominantly naturally regenerated ash with some sycamore and oak mixed with areas of Larch (Japanese and European) and Scots Pine (P50-60) that get denser to the east of the compartment. It was not thinned in 2013 and is due for work as the densest shading conifers remaining on the site.
 There is an area dominated by large mature yews and occasional oak towards the east of the compartment, and along the main central ride. Part of the compartment was thinned 1995 to favour native broadleaves and final crop conifers.
 The understorey is very limited with hazel and younger ash and sycamore regeneration.
 There are areas of bare rock, large boulders and very steep slopes. Parts of this compartment show an abundance of ancient woodland associated flora particularly to the northern boundary, and is also damp north facing with mosses, lichens and ferns.

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2020	1a	Thin	7.00	1	5
2020	1a	Thin	7.00	1	5
2020	1a	Thin	0.50	50	25
2020	2a	Thin	2.00	50	100
2020	3a	Thin	2.00	25	50
2021	1a	Thin	7.00	1	5

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.