



Pressmennan Wood

Management Plan 2013-2018

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 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) 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:	Pressmennan Wood
Location:	Stenton, nr Dunbar
Grid reference:	NT630729, OS 1:50,000 Sheet No. 67
Area:	85.87 hectares (212.19 acres)
Designations:	Ancient Semi Natural Woodland, Ancient Woodland Site, Area of Landscape Value, Long Established Woodland of Plantation Origin, Planted Ancient Woodland Site

2.0 SITE DESCRIPTION

2.1 Summary Description

This beautiful mature woodland sits on a vantage point overlooking Pressmennan Lake and the surrounding countryside. It's home to an abundance of wildlife such as deer, owls, otters and bats, as well as some strange, 'mythical' creatures, the Glingbobs and Tootflits - kids will love searching for their hidden homes in the gnarled trees.

2.2 Extended Description

Pressmennan wood is approximately 1.5km to the south of the village of Stenton in East Lothian. Located to the north of Deuchrie Dod hill in the Lammermuir Hills and to the south-east of Pressmennan Lake. Altitude is 125m above sea level in the north-east below the lake rising to 275m above sea level on the slopes of Deuchrie Dod at Gallows Law. Woodland aspect is general north-westerly.

The geology of the area is mainly Silurian Llandovery greywacke, siltstones and mudstones, with a small area of Upper Devonian/ Lower Carboniferous red sandstone at the western end. This gives rise to brown forest soils with some gleying in the sandstone areas. Soils tend to be deeper on the flatter areas and thinner on the steeper slopes. The MLURI climate map identifies the area as fairly

warm, rather dry lowland, being moderately exposed with moderate winters.

Pressmennan wood is situated in a prominent position in the surrounding landscape. The surrounding landscape is characterised by narrow, scattered old cleugh woodlands to the east and heading down towards the coast. Shelterbelts with occasional larger woodlands are scattered throughout a predominately agricultural landscape interspaced with villages and farm steadings. Pressmennan wood is one of the larger ancient woodland areas within East Lothian. The land to the south of the wood is a combination of grazed moorland and open hill interspersed with the occasional block of small scale commercial woodland. To the north, across the lake, ancient woodland extends in a narrow strip around the lake for approximately 11ha this is outwith Woodland Trust Scotland (WTS) ownership.

Much of Pressmennan Wood is recorded on Scottish Natural Heritage's (SNH) Ancient Woodland Inventory as Ancient Semi-Natural Woodland (ASNW). However Pressmennan wood has been greatly altered by man throughout its history leading to its current classification of Planted Ancient Woodland Site (PAWS). Pressmennan Wood is recorded on the Roy Map c1750 and has several unscheduled linear features such as: woodbanks and drystone dykes. The woodland lies within an Area of Great Landscape Value (AGLV) and the higher parts of the woodland around Gallows Law fall within the Lammermuir Hills Specially Identified Areas of Hill Land.

The wood comprises of 86.19ha of mixed conifer and broadleaved species, with conifers being the dominant species. Generally the overall condition of the woodland is healthy. Most of the commercially planted crops date from the late 1950's. Conifer composition is predominately European larch with Norway spruce, Douglas fir, and Scots pine to a lesser extent.

The broadleaved component falls into approximately 4 categories;

- 1) Secure ASNW along with mature broadleaved trees scattered throughout the wood. Predominantly these tend to be sessile oak, ash along with some beech and birch and are classified as NVC type W11 and W7.
 - 2) Broadleaves planted during the 1950's, usually in a mixture with the conifers. These are generally: beech, sycamore, sessile oak and ash.
 - 3) Areas of more recent natural regeneration or planting dating from the mid-1970's to the present. There are a few areas of broadleaved natural regeneration scattered throughout the wood. Predominately composed of ash, rowan and birch and willow species with the occasionally oak.
 - 4) Restocking where pockets of wind blow or small scale clearfelling has occurred, from the mid-1990 to the present day.
- Species comprise entirely of mixed native broadleaved specifically suited to the relevant NVC site classification e.g. oak, ash, gean and birch with mixed native shrubs.

In addition natural regeneration of conifer species is occurring especially where pockets of wind blow have previously occurred and the timber has been extracted and where in other areas where mineral soils have been exposed e.g. alongside forest roads. Natural regeneration is composed mainly of European larch with the occasional Douglas fir, Sitka and Norway spruce.

Ground flora varies in response to over storey and altitude. Much of the ground flora area is dominated by a thick, dense mat of woodrush. In the few areas where woodrush is less dominant then bracken, fern species, bramble, ramson, bluebell, wood sorrel, primroses, bugle, dogs' mercury and foxgloves are evident. On the highest slopes soft grasses interspersed with whins occupy the

ground flora. Vegetation underneath the denser conifer and beech stands is often sparse. Occasional patches of nettles occur throughout the site.

Mature *Rhododendron ponticum* (*R. ponticum*) is present and spreading on the lower slopes of the woodland. Bramble and raspberries are found throughout the wood.

Throughout the site standing and fallen deadwood levels vary. Higher amounts are often found within the areas of mature broadleaved trees. Sporadic windblow throughout the site is helping to increase to the amount of available deadwood habitat.

In the eastern section of compartment 3 there are several areas of open ground which have been in part colonised by whins. In the north-east of the wood, Bennet's Burn runs west through compartment 1 providing a localised riparian habitat. The "lake", one of only 3 in Scotland and originally flooded in 1812 defines the northern boundary of Pressmennan wood. The lake along with Bennet's burn provides a suitable habitat for otters. Otters have been recorded in both of these areas. An electricity wayleave runs through the eastern end of compartment 4 and provides a permanent open ground habitat.

Although no formal surveys have to date been carried out it is clear from visitor feedback that Pressmennan wood is an important area for wildlife. Some of the more notable species include: roe deer, hare, rabbit, vole, badger, bats and otter along with a diverse range of bird and insect species such as; tawny owl, buzzard, woodpecker, treecreeper, etc. Fungal species are well represented throughout the site. Especially in areas where mature trees are present or where standing or fallen deadwood and decaying stumps occur.

HISTORY

It is thought that oak from Pressmennan wood was used in the building of the warship The Great Michael at Newhaven in the 15th century although there are no records to confirm this, historical records confirm that oak timber was a very scarce commodity in Scotland at that time, so it is feasible. Records do exist of timber being felled in Pressmennan wood since the 1700's. There are also records from 1812, which show the estate importing seed from all over the world. Thus, questioning whether the provenance of the remaining mature trees in the woodland is derived from locally sourced seed. Mature oak woodland still existed in 1955 when the Forestry Commission bought Pressmennan from Biel & Dirleton estates. During this time most of the wood was clearfelled and replanted with a mixture of commercial species predominately conifers e.g. European larch, Norway spruce, Douglas fir, and Scots pine. The only significant piece of the mature oak wood to survive was a strip along the bank of the lake. In addition, several individual and small cluster groups of the pre-clearance broadleaved trees and coppice stools survived these are scattered throughout the wood.

The Woodland Trust Scotland (WTS) acquired the wood from the Forestry Commission in 1988. Since acquiring the woodland the WTS has carried out several selective thinning operations to remove a proportion of conifers which in turn opens up the forest canopy allowing more light to access the forest floor. In addition, several medium scale clear fells and restocking operations which concentrated on areas affected by windblow have also been undertaken. Restocking of these areas was carried out in 1999 and 2003 with: oak, ash, birch, hazel and rowan. Natural regeneration of birch and willow species also became established on these sites.

ACCESS

There is excellent provision for public access, with approximately 6.5km of internal paths of different grades. In particular, there is a family focused circular walk known as the Glingbobs and Tooflits trail. The wood ties in with the wider network of footpaths both as part of medium length return loop from the village of Stenton or as part of longer distance routes from the east and west and is a Core Path (233). The car park at the west entrance to the wood has parking facilities for approximately 8 cars and includes a picnic table and benches. Visitors to the wood can enjoy panoramic views across East Lothian, the Firth of Forth and across to Fife from the paths highest point on the slopes of Gallows Law.

There is vehicular access to the wood via an unclassified road from Stenton, which turns onto a rougher but easily negotiable track for the last 300-400m to the car park.

Management access from the car park is good and obtained via the 2 main forest roads.

3.0 PUBLIC ACCESS INFORMATION

3.1 Getting there

By bus

Bus services are limited. Pressmennan Wood is around a 1.5km (under one mile) walk from the bus stop in Stenton, along unclassified road and rough track.

For up-to-date information on public transport, visit traveline.org.uk, or telephone 0871 200 22 33.

By train

There is a railway station at Dunbar.

For up-to-date information on public transport, visit traveline.org.uk, or telephone 0871 200 22 33.

By car

Leave the A1 at the Thistly Cross roundabout outside Dunbar and follow the B6370 for about 4.8km (three miles) to Stenton. Turn left at the end of the village (in front of a primary school) and after 1.5km (just under a mile) you will see a brown sign for Pressmennan Wood on the left. There is a car park for eight cars at the end of the track.

3.2 Access / Walks

The main entrance is via a kissing gate, suitable for wheelchairs and buggies, on the west side of the wood. Here, there is a car park with space for eight cars, an information board providing details of the sculpture trail and other routes, a picnic table and benches.

A second accessible kissing gate leads onto a surfaced path up Gallows Law to a viewpoint, where there is a picnic bench. There is a further entrance at the east of the wood, following Bennet's Burn through a field gate.

The site has an extensive network of paths, totalling 6.5km (four miles), of which 3.7km (2.3 miles) are forest roads. The rest are grass and earth, which can become muddy. Paths can also be narrow and steep in some areas of the wood.

A surfaced path of just over 2km (1.3 miles) links the west and east entrances. From the car park, you can follow the accessible, circular sculpture trail to spot the homes of 'mythical' creatures, the Glingbobs and Tootflits.

4.0 LONG TERM POLICY

The long term intention is that Pressmennan wood will gradually revert over time to a more semi natural woodland and be managed as high forest with a diverse range of species and age. Primarily dominated by native species and with diverse, well developed typical shrub and field layers, all representative of the survival and extension of ancient woodland components from the pre restoration period. It is anticipated that the site will always contain an element of non-native tree species such as European larch, Douglas fir, sycamore and beech.

Restoration to ancient woodland will be a gradual, targeted and phased process. Creating conditions in which surviving ancient woodland components can recover and make them more resilient to management processes such as clearfelling or natural processes such as windblow.

Initially the ancient woodland components that have been identified will be secured; these include woodland specialist ground flora, precursor and mature trees, deadwood and archaeological features. This will involve opening up areas adjacent to known hotspots, shaded rides, tracks and paths and releasing mature trees currently being shaded out by surrounding conifers. The threat of over shading will be gradually removed by halo thinning to secure and enhance the ground flora and encourage native broadleaf regeneration, progressively converting the existing non-native woodland areas towards a more native broadleaved woodland type of NVC type W11/W17 and in parts W7. Scattered mature broadleaves and scattered precursor hotspots will be halo thinned to gradually secure them and improve vigour. More open areas will be encouraged to regenerate naturally with native species. Areas of *R. ponticum* will be controlled and managed until eradicated.

Once the remnant features are secure operations will concentrate on shifting the canopy gradually towards a predominantly native species composition. Ancient woodland features will continue to be opened up, releasing advanced native regeneration through a process of targeted gradual thinning throughout. A proportion of non-native conifers will be retained for an extended period to continue to provide essential woodland habitat structure.

The effect of deer browsing and fraying damage on natural regeneration is to be monitored. If deer are deemed to be a continuing factor in preventing regeneration then protection of regeneration in fenced enclosures and increasing deer control by culling will be applied.

Present site access facilities will be maintained and enhanced to suit local demand, which is classed as Grade A - high usage. Responding proactively to changes in demand and with consideration to the development of East Lothian's Core Path Network. The main track through the wood from east to west from the car park is a proposed route. Although it is likely this will increase use of paths and paths linking onto this network, no large scale upgrading or improvement of woodland paths is planned during the period of this plan unless necessary. To date, access has been almost exclusively by walkers and the present path network is able to accommodate the level of activity with soft paths usually able to recover after wet periods. The success of the Glingbobs and Tooflits Trail is also increasing public access on the site.

The WTS will continue to promote the woodland so that local users and visitors can gain an understanding of the woodlands importance in the landscape, the need for restoration and how this enhances the diverse habitat and encourages biodiversity. Promotion of the wood and the restoration work to a wider audience will be on-going.

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 Planted Ancient Woodland Site

Description

Pressmennan wood is recorded as being wooded continuously since the early 15th century. Until the 1950's it was mainly native oak woodland. During the 1950's the Forestry Commission acquired the site and clearfelled the majority of the woodland. It was restocked with a predominantly conifer mix which included European larch, Norway spruce, Douglas fir and Scots pine along with small pockets of western red cedar and western hemlock. Some beech, sycamore, ash and sessile oak were also included as part of the restocking programme. Throughout the woodland occasional small groups and individuals mature trees remain from the original woodland structure which existed prior to the 1950's clearfelling. Providing a tangible link between the current woodland structure and the preceding woodland composition.

During the 1990's and early 2000's, four areas of predominantly coniferous woodland were clearfelled and restocked with mixed native broadleaves comprising: sessile oak, ash, birch, hazel and rowan. These conventional restocking techniques have been successful and ensured that the process of gradual conversion of Pressmennan Wood to predominately mixed native broadleaved woodland is underway.

Some small scale enrichment planting with mixed native broadleaves was carried out in 2008 in compartment 1c where previous pockets of windblow have been cleared.

Successful natural regeneration of some native broadleaves and none native conifer species has occurred in areas adjacent to "hotspots" and also in areas where mechanical ground disturbance has previously occurred e.g. along forest roads and where timber extraction routes which has allowed the mineral soil beneath to become exposed. However, away from these areas evidence of advanced regeneration is significant by its absence. This is especially noticeable within the European larch and mixed conifer crops.

Five Genguards were installed throughout the site in 2009 to provide a deer proof environment for assessing the development of natural regeneration on the site. In 2012 they were all inspected. No evidence of successful regeneration by any tree species was recorded. All Genguards were dominated in the main by greater woodrush (this was especially so under the European larch) or a combination of ruderals such as: bramble, bracken, honeysuckle, great woodrush and a few herbs and soft grasses.

Ground flora varies throughout the woodland in relation to the varying levels of shade and light and soil conditions. Throughout much of the woodland dense swaths of greater woodrush is dominant, interspersed with bluebells, etc. The amount of standing and fallen deadwood varies throughout the woodland is a combination of old stumps, brash, snapped off limbs, standing dead and windblown trees. Increased amounts of deadwood are often found in and around areas where remnant features of the ancient woodland survive and where PAWS restoration work is underway.

Evidence of an old drove road can be found towards the south west corner of the wood along with several linear features such as: drystone dykes and woodbanks.

Significance

Ancient Woodland Sites (AWS) are valuable primarily because of the potential remnant ancient woodland species and habitat that they may contain. This value increases when the AWS woodland directly connects to an adjacent area of AWS or ASNW. Thereby, providing the opportunity to increase the core area of semi-natural habitat, increase biodiversity and interlink forest habitat networks. The Woodland Trust Scotland is committed to restoring all non-native conifer PAWS type woodland, in its ownership, to Restored AWS (RAWS) and to ensuring the continuing survival and where possible enhancement of the ancient woodland components.

Opportunities & Constraints

Opportunities

To continue to move the ASNW features from being threatened, to secure through a programme of targeted and gradually phased operations designed to conserve and enhance the remnant ancient woodland features and extend existing ASNW hotspots.

Where remnant features are secure, operations can be targeted at long term improvements to the woodland habitat. This will be achieved by a gradual transformation of the woodland to one which is composed predominantly of native species.

Constraints

At Pressmennan, windblow, due to age and stability of standing crop, is a constant threat to any gradual restoration to ancient woodland. Opening up too much of the canopy at any one time in the larch and mixed conifer area is likely to result in extensive windblow occurring.

Deer browsing remains a threat to successful regeneration of trees and ground flora.

A combination of, large areas of heavy gley soils and dense swathes of greater woodrush is proving to be a barrier to successful tree seeding and establishment by inhibiting seed germination.

R. ponticum regrowth/spread represents a threat to natural regeneration of both native ground flora and tree species.

Factors Causing Change

Wind damage, deer browsing and fraying damage, natural regeneration of non-native conifers e.g. larch and spruce, Invasive R.ponticum. Greater woodrush, which will continue to expand as light levels increase. Tree diseases.

Long term Objective (50 years+)

To increase, enhance and perpetuate the ancient woodland composition by gradually restoring the woodland characteristics to uneven aged high forest composed predominantly of native species typical associated with upland oak woodland and by restricting potential threats. The existence of non-native tree species will be accepted as an occasional feature of the canopy. Support a healthy and secure ground flora throughout which is associated with the NVC upland oak woodland type.

Retain standing and fallen deadwood where safe to do so.

Safeguard species diversity by controlling the spread of regenerating beech and sycamore seedlings where necessary and continue with a programme of eradication of R. ponticum.

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

The maturing European larch and mixed conifer stands are currently a key component of Pressmennan Wood and form a prominent feature on the landscape. However, due to a range of factors, many of the conifers are now at a stage where crop stability is threatened and vulnerable.

Sporadic pockets of windblow are increasing throughout the conifer stands. Hence, any further large scale thinning operation is likely to significantly increase the risk of windblow occurring. For that reason, intermittent and carefully targeted and phased selective crown thinning's are to be carried out over the next few years which will focus on remnant ancient woodland features such as: individual native trees, veteran trees, areas of advanced regeneration and existing native species hotspots.

AWS restoration work in line with the 2012 PAWS assessment. The strategy will be implemented in priority zones. Approximately 4.0 hectares of targeted AWS restoration work will commence in 2013 in compartments 2 and 3. This will be followed by approximately another 4.0 hectares of targeted PAWS restoration work in 2016, again occurring within compartments 2 and 3. AWS restoration work will comprise of; light selective crown thinning of the mixed conifer crop; with up to 20% of the standing crop to be removed within the target areas in order to manage light levels, favour and release existing native tree species and encourage advanced native broadleaved regeneration in and around "hotspots". In addition halo thinning will be carried out around existing native tree species as required throughout the wood. Stands of none native species (predominately sycamore and beech) will be selectively crown thinned as required. Where possible, much of the timber will be extracted pole length using conventional skidder extraction methods to lightly scarify the soil in order to break through the dense mat of greater woodrush, improve soil aeration and drainage and to produce a suitable seedbed for natural regeneration to occur.

Lop and top to be retained on site as fallen deadwood.

The establishment of coniferous woodland over much of the site resulted in large areas becoming totally devoid of any suitable seed bearing native tree species, especially within the conifer stands. Consequently, due to the lack of a native seed source, and time constraints due to the heightened risk of windblow, these areas will require some initial assistance during the restoration process. This will be in the form of enrichment planting with native species, where suitably sized gaps in the tree canopy occur, with larger sized seed producing species such as oak and hazel planted in 1.2m tree shelters and staked.

Monitor site annually for signs of natural regeneration, deer damage, development of ancient woodland plant communities and competing vegetation and adjust management strategy accordingly.

Monitoring of the Genguards indicates that greater woodrush is likely to be a significant factor in restricting successful natural regeneration on the site. Scarification within the Genguards is to be carried out to expose the mineral soil. Followed by annual monitoring.

If deer browsing damage reaches unacceptable levels the erection of temporary deer fencing and increased deer control will be considered.

Revise PAWS assessment every 5 years to ensure the retention of ancient woodland specialist species, precursor trees and deadwood, and other remnant AW features remain intact during the restoration process.

5.2 Informal Public Access

Description

Pressmennan wood is well used and is situated to the south of the village of Stenton. Internally there is an extensive path network with a range of routes of varying grades covering approximately 6.5km. Approximately 3.7km of these paths are forest roads established to provide access for forest operations. The other 1.8km of paths are generally soft paths, which provide good views over Pressmennan Lake as well as a viewpoint looking north over East Lothian the Firth of Forth and across to Fife. The paths are generally in a good state of repair but during prolonged periods of rain they can deteriorate in places and become muddy. There are 3 entrances to the wood, generally from the east and west. The main entrance is at the western end of the site where there is also a car park for 8 cars. The main track through the wood is a designated Core Path 233 with a link onto Core Path 451 which links through to Stenton to the north.

The site continues to be popular with visitors and is at the moment able to cope with current footfall. At present parking facilities are adequate however if the success of Glingbobs and Tootflits continues this may lead to increased parking pressure. Hence, additional parking places may be required.

The 2013 level of public use is defined as WTS Access Category (High Use)

Significance

Pressmennan wood is well known throughout East Lothian and is within easy reach of Edinburgh, as well as smaller towns, such as North Berwick, Dunbar and Haddington. The wood forms an integral part of the local access network as well as linking into longer distance routes which cross the Lammermuir Hills.

Opportunities & Constraints

Opportunities

To further develop access facilities within the site responding reactively to user demand and proactively on PAWS restoration interpretation.

Engage with mountain bike and horse riders to inform them about ancient woodland and agreeing defined routes of use.

Constraints

Ground very steep in places with soils becoming waterlogged following periods of heavy rain. Deteriorating access track.

Factors Causing Change

Due to wear and tear. The access track leading to the woodland from the unclassified road is deteriorating and will require upgrading in the near future.

Increased use as site becomes better known through initiatives such as Visit Woods and erection of Brown Tourist signs.

Long term Objective (50 years+)

To maintain and enhance public access facilities for the purposes of informal recreation. The site will continue to offer the opportunity for quiet informal recreation, encourage family use and support educational initiatives.

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

Access provision will remain in keeping with WTS Access Guidelines and site access coding and reviewed every 5 years as part of the Management Plan.

Or amended accordingly if a significant change in local circumstances occurs.

Upgrading of the stone access track leading up to the wood is likely within the next 5 years. As the track is privately owned the potential will be explored to assess the best options available.

6.0 WORK PROGRAMME

Year	Type of Work	Description	Due By
2013	WMM - Invasive Plant Control	Rhododendron ponticum control - Carry out a combined approach: Respray any regenerating R.ponticum plants over treated areas using Roundup Biactive 450 glyphosate and carry out stump injection using neat Roundup Biactive 450 as required along with hand pulling where feasible. Pesticide record sheet required with invoice.	20/09/13
2013	AW - Visitor Access Maintenance	2nd cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/trimming all footpaths and tracks (including approach track to car park). Also trim around yellow stone and wooden sculptures along lakeside.	21/09/13
2013	WC - Tree Weeding / Fertilising	Bracken Whipping around tubes across cpt 2b to promote tree growth.	01/10/13
2013	WMI - PAWS Restoration	PAWS restoration targeted selective thinning to gradually expand native broadleaved hotspot areas, carry out halo thinning to favour established native tree species and encourage regeneration. Includes some minor track/ride repairs.	30/11/13
2013	PE - Interpretation & Signage	Replace decayed/damaged Wavey Wood Post sculpture on Glingbobs & Tootflits Trail.	30/11/13
2014	AW - Visitor Access Maintenance	1st cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/trimming all footpaths, benches and tracks (including approach track to car park) Also trim around yellow stone and wooden sculptures along lakeside route of 'Tootflit Trail'. Cut back overhanging branches throughout.	28/06/14
2014	WC - Tree Weeding / Fertilising	Bracken Whipping around tubes across cpt 2b to promote tree growth.	31/07/14

2014	AW - Visitor Access Infrastructure	Installing 2x perch seats. Perch seats to be supplied by WTS and delivered to contractors address. Location details will be provided once seats have arrived.	29/08/14
2014	AW - Visitor Access Maintenance	Repair bank and install steps leading to Glingbobs&Tootflits house.	31/08/14
2014	AW - Visitor Access Maintenance	2nd cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths and tracks (including approach track to car park). Also strim around yellow stone and wooden sculptures along lakeside.	21/09/14
2014	AW - Visitor Access Maintenance	2nd cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths and tracks (including approach track to car park). Also strim around yellow stone and wooden sculptures along lakeside.	21/09/14
2014	WMI - General Site Restoration Work	Repairs to southern boundary fenceline to protect Ancient Woodland features and support establishment of natural regeneration areas.	31/10/14
2014	WMM - Invasive Plant Control	Rhododendron ponticum control; Phase 1/ Early September 2014-Survey site and provide a map and Schedule of Works. As per fixed priced quote of (£928+vat). Phase 2/ From September 2014 through to December 2014. Carry out targeted control as per Schedule of Works. Priced as per quote of £380 +vat/day (based upon 2 men/day and includes Roundup) Chemical to be used must be -Roundup Biactive 450 (glyphosate). PRS will be required with invoice.	30/11/14

2014	WMI - PAWS Restoration	Viridor funding; PAWS restoration. Enrichment planting in 1.2m tree shelters with native species e.g. 40-60cm UK grown oak in open canopy areas and hazel in more shaded zones to improve species, habitat and age diversity and increase native species composition.	26/12/14
2015	PE - Interpretation & Signage	Replace damaged Frog on a Log sculpture on Glingbobs & Tootflits Trail.	31/05/15
2015	AW - Visitor Access Maintenance	Paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths, benches and tracks (including approach track to car park) Also strim around yellow stone and wooden sculptures along lakeside route of 'Tootflit Trail'. Cut back overhanging branches throughout.	28/06/15
2015	AW - Visitor Access Maintenance	2nd cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths and tracks (including approach track to car park). Also strim around yellow stone and wooden sculptures along lakeside.	21/09/15
2015	AW - Management Access Maintenance	Access track and car park improvement; grading, infilling of potholes, surface dressing, profile camber and bed in new track surface.	31/10/15
2015	WMM - Invasive Plant Control	Rhododendron ponticum control - Carry out a combined approach: Treat all R.ponticum plants over areas shown on plan using Roundup Biactive 450 glyphosate and Mixture B additive, if required. Carry out stump injection using neat Roundup Biactive 450 as required along with hand pulling and lifting where feasible. Pesticide record sheet required with invoice.	31/10/15
2015	WMM - General Site Management	Cut back encroaching gorse scrub at top ride turning area and picnic area.	31/10/15

2015	AW - Management Access Maintenance	Additional costs for track improvements-due to severe deterioration in road surface and increased wear and tear.	30/11/15
2015	SL - Tree Safety Emergency Work	Emergency Tree Works: Along path by lake. Refer to schedule of work and plan A/ Fell the windblown overhanging birch, cross cut into manageable sections and clear up lop & top- leave in wood as deadwood habitat, ensure path is clear and there are no hung up branches. B/ Cut back windblown hazel branches enough to make safe and open up path, clear branchwood - leave in wood as deadwood habitat.	04/12/15
2016	WMM - Invasive Plant Control	Rhododendron ponticum control - Carry out a combined approach: Respray any regenerating R.ponticum plants over treated areas using Roundup Biactive 450 glyphosate and carry out stump injection using neat Roundup Biactive 450 as required along with hand pulling where feasible. Pesticide record sheet required with invoice.	30/06/16
2016	WC - Tree Weeding / Fertilising	Bracken Whipping around tubes across cpt 2b to promote tree growth.	31/08/16
2016	WC - Site Maintenance	Collect up and remove any discarded tree shelters and stakes found along the track from D to Q, as shown on the EMC map. Two piles are known; D-Drain and one of the Q-Quarry areas-but search other quarry as well. Copy of Waste Transfer note is required before invoice can be paid.	31/08/16
2016	PE - Interpretation & Signage	Repairs and improvements to Glingbobs and Tootflits information sign and sculptures.	31/08/16

2016	AW - Visitor Access Maintenance	2nd cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths and tracks (including approach track to car park). Also strim around yellow stone and wooden sculptures along lakeside.	31/08/16
2016	AW - Visitor Access Maintenance	1st cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths, benches and tracks (including approach track to car park) Also strim around yellow stone and wooden sculptures along lakeside route of 'Tootflit Trail'. Cut back overhanging branches throughout.	31/08/16
2016	WMI - PAWS Restoration	PAWS restoration targeted light selective thinning to gradually expand native broadleaved hotspot areas, carry out halo thinning to favour established native tree species and encourage regeneration. Includes some minor track/ride repairs.	30/11/16
2016	PE - Interpretation & Signage	Supply: 1 off ladderboard and 4 WT Welcome signs in oak for Pressmennan Wood. Spec' & cost is as supplied via previous emails.	30/11/16
2017	WMI - PAWS Restoration	Enrichment planting; Cheviot Trees to supply: trees (sessile oak and alder), tree shelters and stakes-as per Delivery Note: 249843.	13/03/17
2017	PE - Interpretation & Signage	Supply 1500 off Pressmennan Wood leaflet update-10207. Rethink Ref; 205512	30/06/17

2017	AW - Visitor Access Maintenance	Paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/trimming all footpaths, benches and tracks (including approach track to car park) Also trim around yellow stone and wooden sculptures along lakeside route of 'Tootflit Trail'. Cut back overhanging branches throughout.	30/06/17
2017	PE - Interpretation & Signage	Carry out upgrade works to entrance; repair pot holes in road & drainage repairs to drains & culverts at car park.	31/08/17
2017	AW - Visitor Access Maintenance	2nd cut of paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/trimming all footpaths and tracks (including approach track to car park). Also trim around yellow stone and wooden sculptures along lakeside.	30/09/17
2017	WMI - PAWS Restoration	PAWS restoration targeted light selective thinning to gradually expand natural regen' hotspot areas and open up rides (scalloping) followed by groundwork to encourage regeneration and repairs to rides. Carry out halo thinning to favour established native veteran trees. Carry out minor track/ride repairs - postponed to 2018	31/10/17
2017	WMM - Invasive Plant Control	Rhododendron ponticum control - Carry out a combined approach: Respray any regenerating R.ponticum plants over treated areas using Roundup Biactive 450 glyphosate and carry out stump injection using neat Roundup Biactive 450 as required along with hand pulling where feasible. Pesticide record sheet required with invoice.	31/10/17
2017	SL - Tree Safety Emergency Work	Clear up snapped off oak bough across path by lake; open up path and disperse branchwood in woodland to provide deadwood habitat.	30/11/17

2017	SL - Tree Safety Emergency Work	Carry out tree works as per the plan and instructions; fell trees, make safe, open up path and log up any timber into one metre sections and leave stacked in neat piles and disperse branchwood in woodland to provide deadwood habitat. Treat the decorated oak bough (tree No5) carefully and respectfully and leave as much of the decorated branchwood as possible intact and positioned at the side of the path so that it can continue to be made use of.	22/12/17
2018	AW - Visitor Access Maintenance	Paths (2.6 soft path/ 4km vehicle track) and entrances (x2) general maintenance, including strimming entrances, around car park & mowing/strimming all footpaths, benches and tracks (including approach track to car park) Also trim around yellow stone and wooden sculptures along lakeside route of 'Tootflit Trail'. Cut back overhanging branches throughout.	29/06/18

APPENDIX 1: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
1a	1.73	Birch (downy/silver)	1975	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Planted Ancient Woodland Site
<p>Stand of semi-mature mixed broadleaves, including downy birch, sessile oak, ash, sycamore, gean and rowan with occasional Norway spruce, Sitka spruce, western red cedar and larch and some areas of open ground. Some mature oak trees, particularly to the north. Understorey consists of juvenile birch and oak with occasional sycamore, holly and ash. Occasional natural regeneration occurring. Rhododendron is beginning to establish along northern edge of sub cpt. Ground flora is predominantly grasses with frequent bramble, great woodrush and patches of bracken in open areas. Occasional dog's mercury, foxglove, bugle, broad buckler fern, bluebells and wood-sorrel can also be found. Hypnum cupressiforme and Mnium hornum mosses are frequently found. There are occasional large stumps of mature trees colonised by fungi. A small tree nursery is situated near the southern track.</p>							
1b	5.80	Oak (sessile)	1890	PAWS restoration	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>A long, narrow compartment stretching the entire length of the lakes south east shore. Predominantly native in character (NVC type W11) with mature sessile oak comprising most of the canopy cover with some ash, birch and beech scattered throughout. The understorey includes holly, elder (also fern-leaved), hazel, juvenile birch, rowan and patches of rhododendron, particularly along the informal lakeside path where it forms natural tunnels in places. There is occasional regeneration of birch and holly. Ground flora consists mostly of great woodrush and bracken, with frequent male and lady ferns, bramble, wood-sorrel and various fungi with scattered bluebells throughout. Mosses are frequent, including Mnium hornum, Eurhynchium praelongum and Atrichum undulatum. There are abundant deadwood habitats in the form of standing and fallen mature trees.</p>							
1c	2.32	Mixed native broadleaves	2008	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value

<p>This is a relatively open area of enrichment planting with a canopy of widely spaced semi- mature mixed broadleaves, comprised mostly of ash, with scattered birch, beech and sessile oak. An understory of juvenile holly, birch and larch as well as gorse, broom, elder and establishing rhododendron. There is frequent birch regeneration, particularly in the west. Ground flora is patchy in composition, with abundant bramble, great woodrush and bracken, as well as grasses such as tufted hair grass. Occasional male, lady and broad buckler ferns can be found.</p>							
1d	3.08	Sycamore	1955	High forest		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>The canopy consists predominantly of sycamore, with mature Norway spruce and semi-mature Scots pine, Douglas fir, with oak, birch and larch. The understory is comprised of scattered rhododendron, with occasional elder and honeysuckle. There is also occasional holly regeneration. The ground flora consists of mainly great woodrush, as well as frequent bramble, soft rush, nettles and grasses. Wood-sorrel and foxgloves are rare. Hypnum cupressiforme and Eurhynchium praelongum mosses are frequent. Deadwood comprises of brash and scattered windblow.</p>							
1e	2.85	Mixed native broadleaves	2001	Wood establishment		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>A relatively flat area of 2001 restocking by Bennet's burn at the east end of the lake. This compartment has a very sparse canopy (20% cover) of mainly semi-mature ash as well as and alder and birch. The area near the burn is populated by young alder and soft rushes. There is a sparse understory of mostly juvenile alder as well as birch, elder, broom and gorse. There is occasional Norway spruce regeneration. The ground flora is dominated by grasses, including much tufted hair grass, as well as great woodrush, brambles, soft rushes and patches of bracken. Mosses include Hypnum cupressiforme as well as occasional H. mammalatum and Rhytidiadelphus squarrosus. Occasional deer browsing affects some of the newly planted trees.</p>							
1f	0.88	Beech	1998	PAWS restoration	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>One of the few compartments in this wood with a southern aspect, this area of relatively dry woodland has a canopy of mostly semi-mature beech as well as some ash and Norway spruce. There is a patch of mainly ash in the west, with a varied age structure. Due to shade the cpt. has a sparse understory of juvenile beech, and some gorse, elder and blackthorn. The ground flora varies between the track, where bramble, soft rushes, occasional bluebells, raspberry and foxgloves are intermingled with occasional alder and ash regeneration, and the woodland interior where vegetation is sparse and consists mainly of grasses, male fern and herb Robert. There is frequent brash, especially on higher slopes.</p>							

1g	0.74	Scots pine	1956	PAWS restoration	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>On the top of a steep south-facing slope with rocky outcrops, this compartment has a canopy of mainly semi-mature to mature Scots pine, as well as oak, ash and larch. The understorey consists of juvenile oak, as well as hazel, blackthorn, hawthorn, honeysuckle, gorse and rose. There is occasional ash, holly and alder regeneration. Ground flora is comprised of mainly grasses, as well as wood sage and occasional soft rushes, bracken, foxgloves and dog's mercury. Mosses consist of Hypnum mammalatum, Hypnum cupressiforme and Mnium hornum. Occasional brash provides some dead wood habitat. A drystone dyke delineates the northern boundary, between the wood and arable and grazed fields. Part of the dyke crosses the north eastern corner of the compartment.</p>							
2a	4.44	Mixed native broadleaves	1975	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>A mixed stand in terms of age and species composition, the semi mature canopy is made up of birch, as well as oak, sycamore, European larch, Scots pine, Douglas fir, red cedar, ash and cherry. The understorey is predominantly juvenile birch with oak, occasional hazel, elder, Norway spruce, willow, holly, rose and honeysuckle. Regeneration is rare. Ground flora is predominantly composed of large clumps of greater woodrush, frequent grasses, and occasional bramble, broad buckler fern, male fern, wood-sorrel, dog's mercury and patches of bracken. Thuidium tamariscinum, Mnium hornum and Hypnum mammalatum are some of the mosses present. There is occasional dead wood in the form of twigs and windblow. Several small pockets of windblow have occurred in recent times. The trees have been made safe and left in situ. Numerous windblown individual trees are scattered throughout. An open area to the east is carpeted with bracken and a sparse cover of oak and birch. There is an area of thicker scrubby birch mid-compartment.</p>							
2b	20.98	Mixed conifers	1955	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value

A large, north-facing compartment of mature European larch, Douglas fir and Scots pine, with semi-mature oak, sycamore and beech and occasional precursor mature oak and rowan coppice. The sparse understorey consists predominantly of juvenile and semi-mature oak, as well as some honeysuckle, rowan, broom, gorse, birch, beech and rhododendron (latter to the north). There is scattered regeneration of holly. *Rhododendron ponticum* is gradually establishing, in particular, along the northern edge of the compartment. The ground flora consists mainly of large scattered clumps of greater woodrush, as well as bracken, wood sorrel, bramble, male, lady and broad buckler ferns, soft rush and grasses at the compartment edges. There are a variety of mosses, including *Plagiothecium undulatum* and *Polytrichum formosum*. There is frequent dead wood in the form of windblow, old stumps and brash, with a pocket of windblow expanding at the western end of the sub cpt.

Numerous individual trees and small pockets of windblow have occurred throughout the compartment.

3a	0.59	Beech	1955	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
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This compartment is a narrow semi mature strip running along the south western boundary of the wood. Dominated by beech with birch and oak throughout. A row of mature beech runs east to west mid-cpt; presumably delineating a former field boundary. The understorey is sparse and consists of mostly juvenile beech. There is also rare birch regeneration. Ground flora is sparse under the beech canopy (overall 60% cover), but where it survives includes great woodrush, soft rush, grasses, occasional bugle, bracken and dog's mercury, and rare wood-sorrel and *Viola* spp. There are a variety of mosses such as *Polytrichum formosum*, *Plagiothecium undulatum* and *Atrichum undulatum*. There is frequent small diameter dead wood in the form of windfall and brash with occasional stumps.

3b	2.44	Mixed native broadleaves	2001	Wood establishment		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
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Felled and replanted with native mixed broadleaves in 2001, this compartment is scattered with a few leggy semi-mature trees of oak, beech with some birch, Scots pine and alder. There is a spreading understorey of broom with holly, birch and larch regeneration. A previous windblown area to the southeast has also been replanted, though this lies in a wet area dominated by soft rushes. The dense, tussocky ground flora consists of mostly soft rushes and grasses, as well as brambles, great woodrush, foxgloves and some bracken and broad buckler ferns. *Hypnum mammalatum* and *H. cupressiforme* mosses are found on the abundant brash, windfall and tree stumps. A small ravine/burn runs north west through from the southern tip of the sub cpt.

3c	0.33	Western red cedar	1955	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>A small compartment of dense mature and semi-mature beech and red cedar with occasional Norway spruce. There is a minimal understorey of elder and rose, and rare holly regeneration. There is abundant dead wood in the form of windblown trees stumps and branches. Some of it covered in <i>Hypnum mammalatum</i>. Ground flora consists of wood-sorrel and soft rushes, as well as the occasional bugle, great woodrush and nettles.</p>							
3d	2.75	Douglas fir	1955	PAWS restoration	Archaeological features	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>This is a relatively steep, linear, north-facing compartment of Douglas fir, with occasional semi-mature beech, downy birch, oak, Norway spruce, Scots pine and larch. There is an especially dense strip of conifers (30m wide) along the southern boundary bordering a drystone dyke. Also to the south is a small area that is distinctly different, comprised of scrubby birch with a carpet of great woodrush. There is a sparse understorey of hazel, juvenile beech and oak, and some regeneration of holly. Small pockets of windblown trees provide an occasional deadwood habitat. The incidence of windblow is gradually increasing. Ground flora varies throughout and consists of grasses, soft rush, large areas of greater woodrush, and occasional wood-sorrel, foxgloves and broad buckler fern. Mosses include <i>Hypnum mammalatum</i>, <i>Hypnum cupressiforme</i> and <i>Polytrichum commune</i>. The remnants of an old drove road or similar with associated earth banking with precursor trees is also evident.</p>							
3e	20.09	European larch	1955	PAWS restoration	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value

A large, steep, north-facing compartment of mixed conifers with broadleaves, with a flat area on the top of the hill to the south. Relatively uniform in composition throughout. Based upon current crop spacing, form and growth it is apparent that the European larch/MC areas have received regular thinning over the years. Hence, the crop is well spaced and of good quality. The conifer area is prominent in the landscape. The canopy consists of predominately mature European larch, with mixed conifers of: Scots pine, Sitka spruce and Douglas fir along with scattered semi-mature birch, and a few veteran precursor oaks. The understorey is comprised of juvenile oak and birch, with occasional rhododendron, rowan, rose and honeysuckle. There is a variety of regeneration, including larch, birch and holly. The ground flora is predominately composed of extensive areas of greater woodrush and grasses, as well as occasional soft rushes, wood-sorrel, broad buckler fern and patches of bracken and is particularly dense along the network of extraction rides. There are occasional fungi and mosses, such as *Plagiothecium undulatum*, *Rhytidiadelphus squarrosus*, *Polytrichum commune*, *Thuidium tamariscinum* and *Polytrichum formosum*. Abundant dead wood in the form of old stumps, brash and windblow litters the forest floor. Semi-mature oak trees can be found throughout the compartment, particularly to the south near the track. There is a small quarry along the track, mid-compartment.

Numerous individual and several small pockets of windblow have occurred throughout the compartment. The incidence of windblow is gradually increasing. Pockets of natural regeneration of predominately European larch have occurred in the past in some of the larger gaps.

3f	0.20	Oak (sessile)	1955	High forest	Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
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At the very south west of the wood lies this tiny sub compartment of predominantly secure mature oak. The southern corner contains several suppressed Douglas fir. Dead wood is rare though towards the north is a large old stump hotspot. The ground flora is comprised of abundant great woodrush and grasses with bluebells. There are occasional fungi and mosses. To the south, outwith the site is a small area of open grazed oak woodland.

3g	2.27	Mixed native broadleaves	2001	Wood establishment		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
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In 2001 this compartment was replanted with native broadleaves. Although some leggy broadleaved trees remain throughout, the southeast has denser tree cover, especially along the cpt. boundary. The canopy consists of semi-mature birch and beech, with occasional rowan, sycamore, oak and willow. Occasional gorse forms part of the understorey, along with occasional larch regeneration. The ground flora is dense in places and consists of abundant grasses, great woodrush, bramble and tufted hair grass, as well as soft rush, foxglove, wood-sorrel and broad buckler fern, with scattered bluebells. There are occasional fungi. Abundant brash forms a good deadwood habitat. A quarry and one of the two main access tracks borders the compartment to the north. There are minor deer paths throughout.

3h	7.32	Beech	1955	PAWS restoration		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>Extending in a narrow band along the south east boundary of the wood this is a relatively flat area with a northerly aspect, the canopy consists of mature larch and semi-mature beech and sycamore, with occasional Scots pine and occasional Norway spruce, Corsican pine and Douglas fir. Juvenile beech and gorse make up most of the understorey, along with young larch, rowan, holly, Douglas fir and occasional western red cedar. There is varied regeneration of larch, birch, holly and some Scots pine. The ground flora is dominated by great woodrush, along with abundant patches of bracken and frequent brambles and grasses, with occasional patches of bluebells. Mosses include frequent Hypnum cupressiforme, Dicranum majus and rarely also Leucobryum glaucum. There are numerous areas of open ground which are colonised by greater woodrush, bracken and gorse. A disused track to the south is overgrown with great woodrush and contains 3 small areas of enrichment planting (oak) in 1.2m tubes. A small burn runs north from the southwest of the cpt. where a brick cistern is located, originally part of hydraulic water pump to one of the surrounding buildings.</p>							
4a	6.88	Ash	1955	High forest	Services & wayleaves, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>The canopy has a diverse species and age structure and consists of mostly ash, with semi mature oak, sycamore and beech with larch and occasional Norway spruce, Western red cedar and Douglas fir. Understorey includes beech with ash and Norway spruce with western red cedar and oak towards the east with honeysuckle throughout. The ground flora consists of predominantly great woodrush as well as grasses and soft rushes, with occasional dog's mercury, wood-sorrel, male and broad buckler ferns. Bracken is establishing adjacent to the electricity wayleave which runs south - north towards the east of the sub cpt. Mosses include Hypnum cupressiforme, Isoetecium myosuroides, H. mammalatum, Eurhynchium praelongum and Mnium hornum. There are occasional deer paths. The eastern boundary features a crumbling drystone dyke on a raised earth bank.</p>							
4b	0.18	Mixed native broadleaves	2008	Wood establishment		Informal Public Access, Planted Ancient Woodland Site	Ancient Woodland Site, Area of Landscape Value
<p>A small compartment at the eastern boundary of the wood. Previously under coniferous woodland this area was hit by wind blow and consequently cleared in 1999. There is occasional broadleaved regeneration mainly birch with some larch. Ground flora comprises of abundant great woodrush, frequent grasses, and occasional soft rush, bramble, bracken, foxglove and broad buckler fern.</p>							

Appendix 2: Harvesting operations (20 years)

Forecast Year	Cpt	Operation Type	Work Area (ha)	Estimated vol/ha	Estimated total vol.
2018	2a	Thin	1.00	60	60
2018	2b	Thin	1.00	50	50
2018	2b	Thin	1.00	50	50
2018	3b	Thin	1.00	50	50
2018	3d	Thin	1.00	60	60
2018	3e	Thin	1.00	50	50
2018	3e	Thin	1.00	50	50
2020	2a	Thin	1.00	60	60
2020	2b	Thin	1.00	50	50
2020	3b	Thin	1.00	60	60
2020	3e	Thin	1.00	50	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.