WOODLAND
TRUST SCOTLAND

# Plora Wood

# Management Plan
# 2015-2020

## MANAGEMENT PLAN - CONTENTS PAGE

# ITEM Page No.



# MAPS

# 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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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:** | Plora Wood |
| **Location:** | Innerleithen |
| **Grid reference:** | NT344365, OS 1:50,000 Sheet No. 73 |
| **Area:** | 19.71 hectares (48.70 acres) |
| **Designations:** | Ancient Semi Natural Woodland, Planted Ancient Woodland Site, Restored Ancient Woodland Site, Site of Special Scientific Interest |

## 2.0 SITE DESCRIPTION

### 2.1 Summary Description

An accessible and attractive broadleaf wood with a peaceful and intimate feel. Wild flowers abound in Spring and Summer, including the unusual upland enchanter's nightshade. Varied birdlife includes chiffchaff, redstart and green woodpecker.

### 2.2 Extended Description

LOCATION AND LANDSCAPE
Plora Wood is situated on the steep southern slopes of the Tweed valley, overlooking the A72 and runs alongside the Walkerburn – Traquair road, 2km east of Innerleithen.

The wood lies in a prominent position on a steep north-facing slope overlooking the A72 and provides contrast to the largely coniferous woodland that surrounds it. The woodland is bounded on its upper (southern) edge by a Forestry Commission Scotland (FSC) plantation. While much of this area is under conifer plantation, FCS and Borders Forest Trust (BFT) have restructured some areas and are re-establishing native woodland. It is bounded on its lower (northern) side by a minor road, and then pasture running down to the Tweed.

WOODLAND DESCRIPTION
Plora Wood is listed in the SNH Ancient Woodland Inventory as 1a - Ancient woodland of semi

natural origin (ASNW) with a large area to the south, listed as 3 - Other woodland on Roy's map. Approximately half the site is classed as Plantation on Ancient Woodland Site (PAWS) due to the enrichment planting and heavy management intervention. Plora Wood forms the core area of the slightly larger Plora Wood Site of Special Scientific Interest (SSSI), which also includes a small area of land owned by the Forestry Commission Scotland which is managed by Borders Forest Trust. It is the largest area of semi-natural oak woodland in the Tweed valley area and is one of only five oak woods over 12 hectares to be found in the Scottish Borders. It represents over 50% of the total area of ancient native woodlands in the Tweed valley area.

Plora is predominantly a sessile oak wood and has a continuous recorded history back to the 15th century. The current woodland structure shows evidence of this long history of management although now contains a number of distinct woodland types.

The western part of the woodland on the upper slopes is dominated by open woodland of mature sessile oak (planted mid-18th century) together with occasional beech. Along the roadside at the bottom of the slope the planted species become more varied, including beech, horse chestnut, lime, turkey oak, and sycamore of similar age to the oak above. In the far south-west, at the top of the site, there are some very distinctive gnarled mature oaks, surrounded by birch woodland. The central section of the woodland contains an area felled in 1968 that has regenerated to form a semi-natural semi-mature birch canopy. Overall the canopy in these areas is predominantly native (>80%). To the east of this is a block of pure conifer, planted in 1972, that was unthinned until 2002. The compartment was last thinned in 2009 around the pockets of windblow.

In the eastern half of the woodland, the lower slopes support a canopy mainly of mature sessile oak, sycamore, and beech, but with occasional larch, spruce, Douglas fir, and birch. The upper slopes mainly consist of mature beech woodland (planted 1827) towards the centre of the wood, which casts a deep shade. Situated east of this is an area (previously beech) that was felled and restocked with native broadleaves in 1991 and is now considered to be Restored Ancient Woodland (RAWS). Against the eastern boundary is a compartment planted with conifers in 1958 which, following thinning in 2002 is more open with Norway spruce, sycamore, ash, birch, and beech in mixture.

Throughout most of the wood there is a healthy woodland specialist ground flora, typified by dogs mercury and wood sorrel on lower slopes (NVC W9 upland ash) in mosaic with ferns and brambles (NVC W11 upland grassy birch/oak). This becomes more heathy in the upper south-western slopes with blaeberry and heather (NVC 17 - heathy birch/oak). A nationally rare fungus, Rimbachia arachnoidea, has been identified in the eastern part of the wood. Locally rare woodland specialist species include wood anemone, wood brome, toothwort, hairy woodrush and dog's mercury.

There is abundant regeneration of ash, beech, and sycamore. At present (2015) there is little evidence of deer browsing damage, although in the past this has been a limiting factor on the regeneration and establishment of native species.

PHYSICAL DESCRIPTION

The underlying rock is predominantly acid Silurian Greywacke which, outcropping on the steep slopes, has weathered to produce loose scree and thin soil on the upper slopes. Flood plain alluvium present on the lower slopes has contributed to the evolution of deeper soils. The soils are mostly acid, typically stony and generally free draining sandy clay loams. Wet flushes especially in the eastern section have given rise to richer, more basic conditions.

The MLURI Assessment of Climatic Conditions in Scotland classifies the area as cool wet foothill and upland subject to moderate exposure on the upper slopes and moderate winters.

OTHER HABITATS

The slopes are generally free draining, but a number of wet flushes occur, which seasonally flow as small burns. A more substantial watercourse, the Armour burn bounds the upper western boundary of the wood, and is in good condition, with dappled shade from the surrounding woodland.

There are several dry stone dykes on the eastern and southern boundaries and a dry stone retaining dyke along the entire length of the road boundary to the north. These have value as refugia for woodland specialist flora.

MANAGEMENT HISTORY

The site's recorded history dates back to at least 1143 when it formed part of a Royal grant of pasturage and pannage to the Abbey of Montrose. It is listed as part of Ettrick Forest in the exchequer rolls of Scotland from 1456, 1501 and 1589 and is depicted on Blaeu's Atlas of 1654 and Roy's map of 1750, as well as those of Armstrong in 1775 and Thomson in 1832. It also appears on the earliest editions of the Ordnance Survey from 1887 onwards.

Evidence strongly indicates continuity of woodland cover for over 800 years and it is probable that management of the woodland has changed its character and structure at various times from high forest to coppiced woodland and possibly to scrub. The steep and unstable scree slopes may have discouraged conversion of the woodland to agricultural use, such as sheep grazing.

There are no known archaeological features within the wood, although there are the remains of an old settlement, about 500m to the east. It is thought that the dry stone dykes date to about 1765.

Detailed evidence of past management is scarce. However, the Traquair Estate records of 1765 include a list of trees planted including "2,360 oaks, 800 elems, 100 ashes, 200 spruce fir and 10600 Scots fir". Planting of beech, non-native in Scotland, is mentioned is 1827.

During the First World War, much of the wood was felled, apparently to supply local communities with firewood. The last oak coppice is believed to have been 60 to 80 years ago with regrowth singled to convert it to high forest.

The site was first notified as a Site of Special Scientific Interest in 1952, for its habitat value as an ancient woodland site with semi-natural characteristics, including the presence of several locally rare woodland specialist ground flora species. Since then, the Nature Conservancy Council, now Scottish Natural Heritage, has engaged in regular discussions with the owners and the Forestry Commission Scotland (FCS) in an effort to influence management of the woodland. The SSSI boundary was expanded to include some additional areas within the neighbouring FCS land in 1986. Borders Forest Trust (BFT) have a management agreement with FCS covering the land above Plora Wood and including part of the SSSI and active liaison between FCS and WTS is on-going.

Three separate sections of the wood, each approximately 3.3 hectares, were clearfelled under the Forestry Commission Dedication Scheme in 1958 (cpt 1a), 1968 (cpt 3) and 1972 (cpt 4). The first

two areas were replanted with mixtures of Norway and Sitka spruce, Douglas fir, European larch, and Scots pine. The area felled in 1972 was replanted the following year with 1,000 oak, beech and Douglas fir. Establishment was delayed due to severe browsing by deer. Nature Conservancy Council funded a proportion of the planting in 1972 as part of an effort to retain a high proportion of broadleaved species in the wood.

The Woodland Trust purchased the property from Traquair Estate in January 1986. A small area was felled in 1988 (cpt 5c), and approximately 0.25ha of beech and sycamore was clearfelled in 1990 (cpt 2c), both being replanted with mixed broadleaves in tree shelters. The path through the wood was established in 1993 in conjunction with the formation of the roadside lay-by to allow car parking.

From 2002 to present selective thinning, with occasional ring barking, was carried out through the conifer dominated stands. This work also included the control of patches of regenerating beech and the selected ring barking of occasional mature beech. In 2009, two small exclosures (Genguards) were installed to protect native regeneration from the impacts of browsing and monitor natural regeneration. One of the exclosures subsequently disappeared a few months later.

ACCESS
The path is used daily by a small number of mainly local users. The site is classified as WT Access Category C - Low Usage (5-15 people using one entrance per day). The wood is easily accessible from Innerleithen and Walkerburn, and links into forest trails in the FCS/BFT land to the south. Plora Wood lies approximately 2 miles from the Southern Upland Way, accessible via forest tracks to the south or the minor road to Traquair.

There are access points from the road at the east end and at the centre of the woodland. There is approximately 800m of managed path connecting these entrances and linking into the FCS land above from the middle section of the wood. The path takes the walker through attractive broadleaved and mixed woodlands, contouring along moderately steep ground with occasional views out across the Tweed Valley.

A circular route is possible following the creation of a joining route to the east which joins the forest track network to the south. Some sections of the path are narrow and winding, and moderately steep in places. A reasonable degree of mobility is needed to access all areas. Paths are generally unsurfaced and may be seasonally muddy, making them suited only for pedestrian access in most areas.

There are no paths in the western half of the site but the woodland is quite open in character and relatively accessible to walkers.

Over the last few years the woodland surrounding the site has become increasingly popular for mountain biking.

There is parking space for 3 or 4 cars in a lay-by at the east entrance.

## 3.0 PUBLIC ACCESS INFORMATION

## 3.1 Getting there

Plora Wood lies on a north facing slope looking across the Tweed to the towns of Innerleithen and Walkerburn. Its northern edge abuts the minor road that runs between the bridges at Innerleithen and Walkerburn on the south bank of the Tweed, and the Forestry Commission Scotland's Elibank & Traquair Forest rises above it.

From Walkerburn (by foot or car) take the minor road that leads south across the Tweed bridge, and turn right at the junction (500m) reaching the eastern entrance to the wood through a kissing gate after a further 500m. For car users there is a layby at this entrance with parking for 3-4 cars.

From Innerleithen by car, take the Traquair Road B709 south from the junction in the town, crossing the Tweed bridge and turning left along the minor road until reaching the layby (3.5km, 2 miles). On foot from Innerleithen, follow the path along the disused railway line to the south of the town (access is from Traquair Rd or Princes St or Montgomery St). Cut up to the minor road just after crossing the bridge (1km, 0.6 miles from town centre) and there turn left. Follow the road for a further 800m to reach the western entrance to the wood on your right.

Both Innerleithen and Walkerburn can be reached by public transport using the regular bus service on the Edinburgh-Peebles-Galashiels-Melrose route. There is no nearby rail link.

The 790m path through the eastern part of Plora Wood passes through mainly broadleaved woodland. The route is unsurfaced and moderately steep in places with occasional steps, although for the most part it contours along the line of the slope, giving glimpses across the Tweed valley below. In the centre of the wood a path cuts directly up through the wood linking the minor road to the forest roads and paths in the Forestry Commission woodlands above, and providing a possible route onto the Southern Upland Way. There are no formal paths in the western path of the wood.

Nearest Public toilet - Innerleithen, Hall Street (3km) open 8am-8pm summer and 9am-5pm winter. Please check Scottish Borders Council website (scotborders.gov.uk) or call 01835 824000 for facilities and opening times.
Nearest bus stop - Walkerburn (1km) Service 62 runs regularly from Edinburgh to Melrose.  Further information about public transport is available from Traveline - www.travelinescotland.com or phone 0871 200 2233. (October 2010)

## 3.2 Access / Walks

# 4.0 LONG TERM POLICY

WOODLAND RESTORATION
The long term aim is to restore this PAWS site by securing and enhancing the ancient woodland communities. Continuous cover of predominantly native species will be maintained through recruitment of native natural regeneration or enrichment planting when gaps of sufficient size open in the canopy. The threat of over shading from remaining conifer stands will be gradually removed by a variety of silvicultural techniques, such as: targeted selective thinning, etc to preserve the remnant ground flora.
In due course the tree canopy will gradually move towards predominately broadleaved, with a high proportion of native species. There will be considerable structural and age class diversity as regeneration occurs in gaps left by the loss of older trees. The canopy will be punctuated with frequent mature and semi-mature trees and there will be frequent standing and fallen deadwood.

In the short term this will be achieved by variety of management techniques, such as: halo thinning, etc-on a 5-10 year cycle to gradually increase light levels, especially where ground flora is suppressed by heavy shade, and by reducing the shading on native trees to encourage growth and seed production.

Natural regeneration of native tree species will be encouraged in any gaps that occur naturally as a result of tree disease or windblow. Regeneration by non-native tree species e.g. Sitka spruce, etc will be periodically controlled, as required. Deer browsing will be monitored. This will continue to be carried out in cooperation with FCS.

The Woodland Trust will liaise with Border Forest Trust (BFT) (who have a 25-year management agreement over the neighbouring FCS land) and with FCS to ensure joint management across mutual boundaries.

ACCESS
Existing site access facilities will be maintained to suit local demand. Existing managed paths will continue to be maintained. It is not intended to increase or develop any further access within Plora Wood. The site will continue to be managed for the benefit of informal and peaceful recreation and biodiversity. Communication with BFT and FCS 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 Ancient Woodland Site

### Description

Evidence strongly indicates continuity of woodland cover for over 800 years at Plora. The current diverse woodland structure shows evidence of this history of management, containing a number of distinct types.

The western part of the wood is dominated by open mature sessile oak woodland and considered closer to ancient semi natural woodland, while the eastern part of the woodland is dominated by more mixed woodland of mature beech, sycamore, ash and conifers and therefore classified as a Plantation on Ancient Woodland Site (PAWS). These areas contain a valuable resource of mature and semi-mature trees. There are also areas of pure mature beech, and several compartments felled over the last 50 years. These have been variously restocked with pure conifer, mixed species, or broadleaves. Felling & restocking occurred in 1988 and 1990, with two small areas replanted with native trees in shelters, these are now considered to be Restored Ancient Woodland Site (RAWS). The roadside boundary features a wider mix of mature non-native broadleaves such as beech, sycamore, Turkey oak, horse chestnut and lime.

Throughout most of the wood there is a healthy woodland specialist ground flora, typified by dogs mercury and wood sorrel on lower slopes (NVC W9  upland ash) in mosaic with ferns and brambles (NVC W11 upland grassy birch/oak). This becomes heathier in the upper south-western slopes with blaeberry & heather (NVC 17 - heathy birch/oak). Locally rare woodland specialist species (defined as notable species in the SSSI Management Statement) include wood anemone, wood brome, toothwort, hairy woodrush, dog's mercury and the fungus Rimbachia arachnoidea.

There is abundant regeneration of ash, beech and sycamore. At present (2015) there is limited evidence of deer browsing damage, although in the past this has been a limiting factor on ash regeneration.

### Significance

Plora Wood is listed in the SNH Ancient Woodland Inventory as Ancient Semi-natural Woodland, being shown on maps since 1750. Although much of the oak woodland has a semi-natural character, to the east of the site, many of the trees, particularly non-native species, are the result of planting, and classified as PAWS. It lies in a landscape otherwise dominated by open hill or commercial conifer woodland. It is the largest area of semi-natural oak woodland in the former county of Peebles and is one of only five oak woods over 30 acres in the Scottish Borders. It represents over 50% of the total area of ancient native woodlands in the district of Tweeddale.

The woodland is bounded on its upper edges by FCS land. While much of this area is under conifer plantation, FCS and BFT have restructured adjacent areas and are re-establishing native woodland.

The wood was notified as a Site of Special Scientific Interest in 1952, for its value as an ancient woodland site with semi-natural characteristics, including the presence of several locally rare woodland specialist ground flora species.

The nationally rare fungus Rimbachia arachnoidea has been recorded in the eastern part of the wood.

## Opportunities & Constraints

Opportunities:
To restore and enhance remnant ancient woodland features. To gradually remove conifers to reduce the threat of over shading. Manipulation of the broadleaves species content will be difficult due to the high proportion of sycamore and beech, but there is scope to selectively favour more native species where regeneration occurs as well as in any restocking.
To cooperate with the FCS and Borders Forest Trust regarding the management of their adjacent landholding (also contains part of the SSSI) including deer management.
Constraints:
Ash dieback
Access for timber extraction is greatly restricted throughout much of the wood by steep gradient.
Deer numbers depend strongly on the deer control policy in the adjoining FCS land.
SSSI legislation requires permission from SNH for potentially damaging operations - "Operations Requiring Consent (ORC)".

## Factors Causing Change

Ash dieback-is now widespread throughout much of the UK (2015).
Natural regeneration of non-native tree species, any significant increase in deer browsing, occasional wind damage.
Other - FCS/BFT restructuring

## Long term Objective (50 years+)

To restore and secure the ancient woodland habitat and enhance existing AW communities by removing threats. The tree canopy will be almost entirely broadleaved, with a high proportion of native species. There will be considerable structural and age class diversity as regeneration occurs in gaps left by the loss of older trees. Throughout most of the woodland there will be a secure, healthy & diverse ground flora characteristic of broadleaved native woodland (mainly NVC W9 & W11). The canopy will be punctuated with frequent mature and over-mature native trees and there will be frequent standing and fallen deadwood.

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

To gradually restore the existing areas of critical or threatened PAWS areas- in Cpts 1, 2 & 3, and reduce the competition on native tree species from non-native species across the site - by light selective and targeted thinning and respacing over the next 5 years.
This will be achieved by reducing competition from heavy shade casting conifers and controlling the regeneration of beech where it is in direct competition with native trees. Aim to ensure the planned PAWS restructuring work (felling, enrichment planting, halo thinning, etc) in PAWS zone 2 & 3 is completed during the 5 period of this plan - by 2020.
Retain mature and semi mature trees, where possible, to ensure structural, age and habitat diversity. Ensure no decrease in security of ground flora from shading by brash from operations. Maintain or increase existing level of deadwood habitat (abundant). . Move long-term canopy structure towards mainly native broadleaved composition- achieved by periodic removal of non-native regeneration on a 10-year cycle (periodically review progress over next 5 years).
For historical reasons internal and external drystone walls are to remain intact and undisturbed by other management works except for planned maintenance. For safety reasons the drystone wall along the roadside will be maintained as required. The prognosis for ash in the UK is poor (2015), ash mortality is predicted to be high. Ash is a significant component of the woodland at Plora, especially in compartments 1&2. In order to mitigate the effects of ash dieback and the resulting loss of species biodiversity, and make the woodland more resilient in the long term, the site will be annually monitored and recorded for signs and effects of ash dieback. To ensure the woodland remains resilient to change a combination of established woodland management techniques will be applied, as and when required e.g.: enrichment planting-using a mixture of suitable alternative native species, light selective thinning and respacing and halo thinning to favour native species on a 5-10 year cycle to encouraging tree seeding and natural regeneration of suitable native species. Thinned material will generally be left in situ to provide deadwood habitat.
Retain all mature native trees at current density (frequent/secure). Ensure no decrease in security of ground flora from shading by brash from operations. Maintain or increase existing level of deadwood habitat (abundant). Ensure perimeter roadside wall remains intact and undisturbed by other management works, except for planned maintenance. Where possible, continue to move long-term canopy structure towards mainly native broadleaved composition. Due to the increase of ash dieback and the resulting loss of ash it is necessary, on parts of the site, to accept the presence of sycamore and beech. The site will be routinely monitored, observed and recorded following Woodland Trust standard site management procedures.

## 5.2 Informal Public Access

### Description

There are formal access points from the road at the east end and at the centre of the woodland. There is 790m of managed path connecting these entrances and linking into the FCS/BFT land above. The path takes the walker through attractive broadleaved and mixed woodlands, contouring along moderately steep ground with occasional views out across the Tweed Valley. A circular route is not possible without using the road or going off the paths. Some sections of the path are narrow and winding, and moderately steep in places. A reasonable degree of mobility is needed to access all areas. Paths are unsurfaced and may be seasonally muddy, making them suited only for pedestrian access in most areas.
There are no paths in the western half of the site but the woodland is quite open in character and relatively accessible to walkers.
There is parking space for 3 or 4 cars in a lay-by at the east entrance.

### Significance

The path is used daily by a small number of mainly local users.  The site is classified as WT Access Category C - Low Usage (5-15 people using one entrance per day). The wood is easily accessible from Innerleithen and Walkerburn, and links into forest trails in the FCS land to the south. The FCS land is extensively used for mountain biking. While this type of use is not appropriate within Plora, there are opportunities for FCS to route pedestrians through Plora to avoid conflict with bikes. Plora Wood lies approximately 2 miles from the Southern Upland Way, accessible via forest tracks to the south or the minor road to Traquair.

### Opportunities & Constraints

Opportunities:
Continue to liaise with BFT and FCS.

Constraints:
Steep slopes.
The elongated shape of the site does not easily allow for circular routes.

### Factors Causing Change

### Long term Objective (50 years+)

The site continues to offer the opportunity for quiet informal recreation for principally local users.

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

Ensure access is managed to WT Access Category C standard. Managed paths will be kept free of obstructions and encroaching vegetation.
Ensure access features are in good condition via annual inspection and remedial work as needed.
Ensure site is kept clean by annual removal of fly tipping over dyke as needed.

## 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 | 2.12 | Sycamore | 1960 | PAWS restoration | Legal issues, Very steep slope/cliff/quarry/mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |
| PAWS - This compartment was felled and replanted in 1958 and is now dominated by a predominantly even-aged, semi-mature canopy covering 95% of the area, with the denser canopy on the upper slopes. This includes abundant ash, birch, and sycamore, frequent larch, occasional Douglas fir, beech and Norway spruce, with rare sessile oak, willow, elm, Scots pine and Norway maple. Conifers make up approximately 10 to 15% of canopy. A light ring barking of heavy shading species was undertaken in 2008 with mixed effect. The understorey (15% cover) consists of juvenile trees including frequent ash and occasional sycamore. There is frequent regeneration of ash throughout, birch near the entrance, and rare Scots pine and holly. A small open glade exists near the entrance, with much regeneration, brambles, rushes and rosebay willowherb. Ground flora (50% cover) is dominated by mosses on the stones, and grasses, with abundant dogs mercury, wood sorrel and ferns with frequent herb Robert and violet and occasional bramble, wood avens, broad buckler fern and rare foxgloves and speedwells. This corresponds to NVC type W11 in mosaic with W9. Ground flora is poorer under dense sycamore and beech on the upper slopes. The compartment is home to the nationally rare fungus Rimbachia arachnoidea which is growing on ground moss next to the track. There is an abundance of dead wood from previous thinning. PAWS assessment – Zone 2, Threatened - stand with dense canopy posing risk to remnant features. | | | | | | | |
| 2a | 4.37 | Oak (pedunculate) | 1850 | PAWS restoration | Legal issues, Very steep slope/cliff/quarry/mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |

Broadleaved PAWS - This area contains a mixture of mature broadleaves forming a canopy of approximately 90% cover, with a few small breaks created by windblow. The canopy is dominated by sessile oak with abundant ash, frequent sycamore and beech and rare birch and horse chestnut. Lower down the slope, the section adjacent to the public road is composed of beech, lime, elm, Norway maple, Turkey oak and occasional horse chestnut. The understorey (20% cover) is composed of abundant juvenile ash and sycamore, with occasional beech and rare oak, hawthorn, and blackthorn. The understorey was thinned of pole stage beech in 2005 which has increased light levels & included halo thinning around native trees. Regeneration is varied, consisting of abundant ash, with rare beech and occasional holly. There is some evidence of deer presence; particularly deer trails however evidence of browsing is minimal. Ground flora coverage is around 80%. It mainly corresponds to NVC W9 with patches of W11, consisting of dogs mercury and ferns, abundant mosses, frequent wood sorrel and herb Robert, occasional broad buckler, male and lady ferns, bramble in more open areas, wood avens, and ground elder as well as rare barren strawberry, violet, speedwell, bluebells and foxgloves. There is occasional bare ground under dense beech canopy. There is abundant dead wood in the form of windblow, large branches and the 2005 thinning residue.
PAWS assessment – Zone 1, Secure - stand with open or lightly shading canopy posing risk to remnant features.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2b | 2.33 | Beech | 1800 | PAWS restoration | Legal issues, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |

Broadleaved PAWS. The canopy (95% cover) of this sub-compartment is dominated by mature beech (planted 1827) with occasional sycamore and lime, the latter along the southern boundary, and occasional oak. A light ring barking of heavy shading mature beech (<1 in 8) was undertaken in 2008 with mixed effect. The understorey (minimal cover) consists of occasional juvenile sycamore and rare hazel. Where light levels allow, occasional natural regeneration includes beech and ash with rare oak holly and Norway spruce. Ground flora is generally very sparse (5% cover) due to the dense beech canopy and leaf litter, and is dominated by bare ground and mosses, with occasional grasses, dogs mercury, wood sorrel and rare broad buckler fern (more frequent towards centre of sub compartment where canopy is more open and has a higher proportion of oak). The NVC type is W9 with areas of W11. Given the age of the beech overstorey the degree of shading is likely to gradually decrease as mature trees start to senesce, although most are in good health at present. There is rare evidence of deer browsing on hazel coppice. There is occasional dead wood in the form of windblow and branches.
PAWS assessment – Zone 1, Secure - stand with open or lightly shading canopy posing risk to remnant features.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 2c | 0.28 | other oak spp | 1990 | PAWS restoration | Legal issues, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |
| Broadleaved PAWS. Replanted in 1991, this area is well established and consists of oak, gean, birch, ash, wych elm, and alder, as well as juvenile birch and elder that has grown naturally. There is an open upper canopy of mature lime ash and oak. There is frequent regeneration including abundant birch, frequent beech, occasional Sitka spruce (towards southern boundary) and rare ash, Norway spruce, and sycamore. Browsing is rare. Ground flora is prolific (95% cover), with abundant grasses, frequent raspberry and occasional wood sorrel and broad-buckler fern. The dead wood habitat is limited to occasional stumps of mature trees and fallen branches.<br>PAWS assessment – Zone 1, Secure - stand with open or lightly shading canopy posing risk to remnant features. | | | | | | | |
| 3a | 1.09 | Sitka spruce | 1970 | PAWS restoration | Legal issues, Management factors (eg grazing etc), Sensitive habitats/species on or adjacent to site | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |
| PAWS. Replanted in 1968, the canopy comprises predominantly Sitka spruce with abundant Japanese larch in alternating downhill rows, with rare birch, sycamore, oak, and beech. The compartment was thinned to waste in 2002, with a greater proportion of larch than spruce removed and in 2007/8 further ring barking was carried out. A pocket of windblow is establishing in the lower sections of the sub compartment. A minimal understorey consists of occasional juvenile sycamore with rare hawthorn, birch, and beech. The compartment contains a heronry. Natural regeneration is rare, with beech and sycamore already a few years of age, but few native trees. Ground flora is sparse (5-10% cover) and occurs where the dense coniferous canopy has been thinned. It is dominated by mosses, with locally abundant wood sorrel, occasional broad-buckler fern, violets, foxgloves, and brambles and rare nettles, dogs mercury, and male and lady ferns. There is abundant softwood dead wood habitat due to abundant brash and felled trees and logs.<br>PAWS assessment – Zone 3, Threatened - stand with open or lightly shading canopy posing risk to remnant features. | | | | | | | |
| 4a | 1.66 | Downy birch | 1900 | PAWS restoration | Legal issues, No/poor vehicular access within the site | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ancient Woodland. Juvenile and semi-mature birch dominates the canopy (95% cover) with abundant sycamore and coppiced oak, and a small area (<10%) of semi-mature Japanese larch and Douglas fir (thinned in 2002). There is frequent beech, occasional rowan and rare holly regeneration. The area was originally felled and replanted in 1972, but an uneven structure has developed due to grazing pressure and differential of growth rates and the compartment can now be considered restored ancient woodland site (RAWS). A healthy ground flora (90% cover) is dominated by grasses and mosses, with abundant wood sorrel and stitchwort, occasional foxgloves, male and lady ferns, herb Robert, and violets and rare bramble, speedwell and barren strawberry. The NVC class is primarily W9. Although there is no notable browsing, there are frequent deer paths and occasional dung in this compartment. Occasional limbs and branches form a dead wood habitat.<br>In August 2018 a SPHN was issued as the Japanese larch was in the cpt was thought or suspected of being infected with P. ramorum (a recent outbreak had occurred in the adjacent FCS Elibank Forest, which adjoins the upper slope of Plora Wood. This is one of the most easterly recorded outbreaks of the disease so far (2018). Following a site visit by the SM and discussion with the FCS Woodland Officer for the area action was taken to fell the larch within the treatment zone indicated on the SPHN (all larch trees within cpt 4a) and amounted to 50 trees in total either singly or in small groups up to 12 trees. The trees were felled to recycle as per Section 4 Measures to be Taken of the SPHN. Work was completed in November 2018 and FCS notified. | | | | | | | |
| 5a | 1.17 | Beech | 1850 | PAWS restoration | Legal issues, Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |
| Ancient Woodland. This sub-compartment consists of a strip of wood bordering the drystone dyke to the north and west, and consists of a canopy (95% cover) dominated by mature beech, with occasional sycamore and rare birch, oak, ash, horse chestnut and lime. The minimal understorey consists of occasional juvenile beech, birch and hawthorn and rare oak. There is frequent beech and occasional holly and ash regeneration. Very occasional debarking of juvenile trees and rare browsing on regeneration are the only evidence of deer. Ground flora is variable due to the beech canopy and dense leaf litter, and is dominated by grasses, with frequent bramble and occasional wood sorrel, broad buckler fern, violets, ground elder, wood avens, and blaeberry to the west. Light levels will probably gradually increase as mature trees senesce. Hardwood dead wood is occasional in the form of standing and fallen trees. | | | | | | | |
| 5b | 4.75 | Oak (sessile) | 1850 | PAWS restoration | Legal issues, No/poor vehicular access within the site, Very steep slope/cliff/quarry/ mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Ancient Woodland. This area is dominated by a mature oak canopy, with occasional beech and rare Douglas fir (canopy 95% cover). The understorey is sparse (5% cover) consists of frequent oak and ash, the latter to the east, and occasional beech, rowan and hawthorn. There is frequent holly, occasional oak and rare hawthorn, Sitka spruce, ash and beech regeneration. Occasional deer browsing on oak and holly regeneration is evident. There are occasional empty tubes towards the west end of compartment. Ground flora (95% cover) consists of abundant grasses, wood sorrel, broad buckler, male and lady ferns, bracken (particularly towards west), frequent barren strawberry, violets, wood avens, and dog's mercury, frequent but patchy bramble in more open areas, and occasional blaeberry. There is also rare speedwell, herb Robert and foxgloves. There is abundant hardwood dead wood from windblow and fallen limbs. | | | | | | | |
| 5c | 0.35 | Birch (downy/silver) | 1989 | PAWS restoration | Legal issues, No/poor vehicular access within the site, Very steep slope/cliff/quarry/mine shafts/sink holes etc | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |
| Restored Ancient Woodland (RAWS). This is a small area lacking a mature canopy following felling in 1988, but with established re-planting and natural regeneration and several patches of open ground. The understorey (65% cover) is dominated by juvenile birch, with occasional ash, rowan, oak, hawthorn, and rare Scots pine. There is abundant beech and frequent birch and rowan regeneration. Ground flora (95% cover) consists of predominantly grasses, with abundant patches of bracken, occasional foxgloves, broad buckler fern, bramble, greater stitchwort and blaeberry. Limited deadwood. There is rare evidence of deer. | | | | | | | |
| 6a | 1.59 | Oak (sessile) | 1850 | PAWS restoration | Legal issues, No/poor vehicular access within the site | Ancient Woodland Site, Informal Public Access | Planted Ancient Woodland Site, Site of Special Scientific Interest |
| Ancient Woodland. This compartment can be subdivided into two areas: the north, south and a thin strip to the east consist of dominant juvenile and semi-mature birch; and the middle section contains frequent mature, gnarled sessile oak, with abundant birch. Overall, both species are equally abundant and the canopy covers 85% of the area. The understorey (5% cover) is dominated by birch with rare holly. There is abundant regeneration of beech as well as frequent rowan and occasional holly and birch regeneration. Ground flora is abundant (95% cover) and is dominated by grasses with abundant blaeberry and wood sorrel, frequent heathers and occasional violets, speedwell, bedstraw, tormentil with bracken in patches (NVC W17b on the north facing slope & W11 on the western slope to the Armour Burn). The riparian environment of the Armour burn is in good condition, consisting of open woodland with dappled shade. There are occasional deer paths throughout. Fallen oak limbs and branches make up the occasional dead wood. Scattered larch was subject to SPHN felling in 2019 due to P.ramorum -thinned to recycle. | | | | | | | |

## Appendix 2: Harvesting operations (20 years)

| Forecast Year | Cpt | Operation Type | Work Area (ha) | Estimated vol/ha | Estimated total vol. |
|---|---|---|---|---|---|
| 2018 | 4a | Thin | 1.66 | 12 | 20 |
| 2020 | 2b | Thin | 2.33 | 10 | 23 |
| 2020 | 2c | Thin | 0.28 | 18 | 5 |
| 2022 | 3a | Clear Fell | 1.09 | 300 | 327 |
| 2023 | 1a | Thin | 1.49 | 5 | 7.45 |
| 2023 | 2a | Thin | 4.37 | 10 | 42 |
| 2023 | 3a | Thin | 1.04 | 75 | 78 |

# 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.