

# **Beeslack Wood**

# Management Plan 2020-2025

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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 Consequently this printed version may quickly become out of date, particularly in relation to the planned work programme and on-going monitoring observations.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 <u>www.woodlandtrust.org.uk</u>. Our woods are managed to the UK Woodland Assurance Standard (UKWAS) and are certified with the Forest Stewardship Council<sup>®</sup> (FSC<sup>®</sup>) 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.

# I.0 SITE DETAILS

Site name:	Beeslack Wood
Location:	Penicuik
Grid reference:	NT245614, OS 1:50,000 Sheet No. 66
Area:	13.31 hectares (32.89 acres)
Designations:	Ancient Semi Natural Woodland, Tree Preservation Order

# 2.0 SITE DESCRIPTION

# 2.1 Summary Description

# LOCATION

Beeslack Wood is situated within the town of Penicuik, Mid Lothian, off the A701 trunk road. The horseshoe-shaped site surrounds the grounds of Beeslack Community High School and Aaron House, a residential care home. Much of the woodland lies on the valley sides of the River North Esk, which forms the eastern boundary of the site, and of its tributary, the Loan Burn, which runs through the southern arm of the wood. There is a good diversity of ancient woodland flora under a canopy of mainly native broadleaf species and interesting fauna that can often be heard or seen on site including dippers on the Loan burn, woodpeckers and deer. The woodland leads from Penicuik onto the Penicuik-Dalkeith cycle path and as such is well used by local people for walking and cycling as well. The site is also well used by pupils travelling to school from the neighbouring residential area of Ladywood Estate.

# 2.2 Extended Description

# LOCATION

Beeslack Wood is situated within the town of Penicuik, Mid Lothian, off the A701 trunk road. The horseshoe-shaped site surrounds the grounds of Beeslack Community High School and Aaron House, a residential care home. Much of the woodland lies on the valley sides of the River North Esk, which forms the eastern boundary of the site, and of its tributary, the Loan Burn, which runs through the southern arm of the wood.

#### PHYSICAL GEOGRAPHY

Most of the site lies on valley slopes of northerly, southerly or easterly aspect, with flatter ground only to the north. The north east boundary with the River North Esk is inaccessibly steep, with slopes exceeding 40 degrees.

The geology of the area commonly comprises fluvioglacial sands and gravels, although underlying sedimentary rock is visible as terraced formations along the bed of Loan Burn, which enters the River North Esk at the east of the site. The parent material gives rise predominantly to fertile brown forest soils, which are generally free draining, with damper areas on lower slopes and wet flushes along the burnside and next to the river. Soil depth tends to be shallower on the slopes and some of the steeper north-facing slopes long the Loan Burn are prone to slumping when saturated.

The MLURI climate map of Scotland classifies the area as fairly warm, moist lowland subject to moderate exposure and moderate winters.

#### WOODLAND DESCRIPTION

Beeslack is a former estate woodland consisting predominantly of mature broadleaved trees with occasional conifers scattered throughout. The majority of the site is recorded as Ancient Semi-Natural Woodland (ASNW) which suggests that most of the current tree cover was planted in the mid to late 19th century. It is dominated by oak, beech, ash and sycamore and secondary species include Scots and Corsican pine, yew, wych elm, Norway spruce, willow, alder and downy birch. A number of notably large 'veteran' trees within the wood may pre-date this planting. Ash and sycamore are regenerating across much of the site and successfully colonising the numerous gaps left by dead and fallen elms, particularly next to the burn. Oak regeneration is rare, although there are some younger trees from restocking carried out in the mid 1980's.

The dominance of beech in some areas contributes to sparse ground flora in those areas and much of the woodland is of plantation origin. However, around 60% of the tree cover consists of native species, compatible with the natural woodland types. Under storey structure is developing as gaps in the canopy break up the existing high forest structure. The under storey consists mainly of regenerating ash, sycamore, beech and wych elm, with elm understory emerging from older stems infected by Dutch elm disease. Regeneration is generally frequent and quite vigorous with the exception of the northern strip of woodland. Rhododendron ponticum has taken hold in the north eastern side of the property, mainly in the area bordering Aaron House and Japanese Knotweed is present in a few areas within close proximity to the Loan Burn.

Towards the centre of the site, north of the Loan Burn, there is an area of open ground just under 0.4 of a hectare. Previously used for and referred to as 'the pony field', this space is utilized during events on site as well as providing a different habitat encouraging more biodiversity in the woodland.

The ground flora varies and indicates several NVC woodland classes while there are several wet flushes south of Loan burn covered with dense stands of butter burr. Part of the site appears to be generally characteristic of moist herb-rich ash/elm/sycamore woodland types (NVC W9) with large swathes of wild garlic, dog's mercury and opposite leaved golden saxifrage. The drier areas, particularly to the south of the burn are more typical of grassy oak/birch woodland (NVC Type W10e) with a rich mosaic of grasses, buckler ferns, wood sorrel, wood anemone, pignut, violets, moschatel, sanicle, and other more common woodland flora.

Due to the close proximity of the Ladywood estate and other housing there are a great deal of garden escapes and other flora that has been introduced into the woodland. This is having a detrimental effect on the native flora that has been replaced in some areas and continues to lose ground to these invaders. In particular pick-a-back (Tolmiea menziesii), and variegated yellow archangel (Lamiastrum galeobdolon ssp argentatum) appear to have the most potential to replace native flora, but leopard's-bane (Dornicum pardalianches), snowberry (Symphoricarpos) and few-flowered leek (Allium paradoxum) are also highly invasive and well established in some areas. Other Garden plants are regularly introduced by planting or being thrown over the fence.

#### WILDLIFE

Grey squirrels are abundant throughout the wood and roe deer occasionally present. Pipistrelle bats are present along Loan Burn, but roost sites are not known. Otters are present in the River North Esk and probably use the Loan burn also. Grey wagtails, dippers and heron also feed along the burn. Great spotted woodpeckers and other hole nesting birds use the over-mature and standing deadwood present in the woodland.

#### SITE HISTORY

Beeslack Wood (The southern section is locally known as Ladywood), was gifted to The Woodland Trust in July 1995 by Lothian Regional Council. Little detailed information is currently available about the history of the site, although before the council took ownership, it was part of a larger farming estate. Whilst some of the site appears to have had continuous woodland cover for a long period of time, it is likely that more accessible slopes have had a history of periodic clearance for grazing. Much of the wood formed part of the grounds of Beeslack (Aaron) house and most of the present tree cover dates from plantings in the mid to late 19th century, associated with the house. Some small scale replanting was undertaken in the mid 80's and pedestrian access to the wood was improved by the construction of a new footbridge across the burn in 1997. In 1999/00 improvements included drainage and surfacing works of poor sections of path and step construction up valley sides from the footbridge. The main school run path linking the school and Ladywood estate was upgraded to a stone surface in 2008. The wood suffered from damage to a number of older trees in the wood in storms of 1998/99, again in 2001 and a few losses in 2012.

## ACCESS

Situated within Penicuik and bordered to the south by a housing estate and north by the secondary school, the wood is easily accessible and well used by a large number of people locally. It has direct links to the Penicuik to Auchendinny footpath which runs along the disused railway to the east of the wood. The western boundary also has access from the A701.

Internally, the wood is well served by a network of 3.5km mainly un-surfaced footpaths with steps located at several key points. The Loan is crossed by a bridge at the western end of the site and connects to the Railway Walk at the eastern end of the site which is also a key cycle path for the Penicuik area. Whilst there are no notable viewpoints within the wood, the site provides excellent opportunities for quiet recreation, especially in the more secluded northern section.

The wood currently suffers from significant littering and some vandalism to structures including fences, bridges and signs, especially at the western end along the path route between Ladywood Estate and Beeslack High School. Casual dumping along the Ladywood housing estate edge and accumulation of dumped material along the Loan Burn is also a problem. Management access by vehicle is limited to the track running along the Loan Burn, accessed from the railway walkway, which is owned by Midlothian Council. However, this track is prone to erosion when the burn floods. The northern end of the wood can generally only be accessed by following the woodland path behind Aaron House. Access to some areas of the site, particularly to the south, are limited due to steep sloping ground with areas of subsidence. There is also a disused quarry to the south west which has been fenced off for public safety.

# 3.0 PUBLIC ACCESS INFORMATION

## 3.1 Getting there

The wood can be easily reached by the regular bus services on the Edinburgh Penicuik route, stopping at the entrance to Beeslack High School. From there follow the Edinburgh Road footway 200m toward Penicuik to reach the entrance to the wood, where a flight of steps takes you down to the Loan Burn. The nearest rail link is via Edinburgh, then by bus. Further information about public transport is available from Traveline Scotland - www.travelinescotland.com

# 3.2 Access / Walks

The main part of the wood along the Loan Burn is situated between Beeslack High School and the Ladywood housing estate. Within this the wood is well served by a network of 3.5 km mainly un-surfaced footpaths, some of which can be muddy in winter. There are 16 entrances to the site, 6 of which are located along the boundary with the Ladywood Estate, some with steps and several with steep sections. The Loan Burn is crossed by a footbridge at the west end of the wood and this leads via a flight of steps to the A702 Edinburgh Road, a popular route with school pupils. A path runs east along the bank of the Loan burn to the southeast corner of the wood where there is a link into the Penicuik-Auchendinny walkway along a disused railway line. The northern section tends to be quieter and the path rises high up above the River North Esk giving some good views to the east.

The nearest public toilets (with disabled access) are at Bank Street, Penicuik (1.5 km, 1 mile).

# 4.0 LONG TERM POLICY

The management of Beeslack Wood will further The Woodland Trust's corporate objectives of increasing public enjoyment of woodlands, protecting ancient woodlands and improving woodland biodiversity.

The site will remain a predominantly broadleaved woodland with minimal management intervention. Much of the site appears that it would naturally be dominated by ash/elm type woodland with some Oak/birch on more acidic areas. The dominance of oak in the canopy is expected to decline and the current spread of Ash die back (Hymenoscyphus fraxineus) to our ash trees means the future of the woodland species mix is more uncertain. This fungus may have a significant impact on the ash tree population within the wood and given the likely loss of ash over the medium to long term, likely to be replaced by beech and sycamore. Coppiced elms are regenerating but will continue to suffer from Dutch elm disease. The few remaining conifers including some fine specimens of Douglas Fir, probably planted when Beeslack House was built, will be retained. Light levels will be maintained through continuous tree cover to support a healthy and secure ground flora throughout, indicative of the NVC site types within the woodland. Simultaneously, there will conscious effort to prevent over shading, allowing natural regeneration of native species to reestablish.

The Trust's corporate objective of conservation through protecting the ancient woods will be achieved by control and removal of invasive non-native flora where it is realistic and practical to do so. For this site the focus will be on eradicating Japanese knotweed and Rhododendron reviewing the effectiveness of control measures and the recovery of native flora. Furthermore, the spread of garden escapee species such as Snowberry, pick-a-back and few-flowered leek will also be monitored to determine effective methods to contain these species where possible.

To encourage public enjoyment of the woods, links with the local schools and wider community will be established to promote protection and ownership of the area focusing on key issues for the site through events. Litter and fly-tipping will be removed as far as resources allow, to maintain the natural appearance of the wood. Access management supports the Trust's objective of increasing people's enjoyment of woodlands and the current network of paths will also be maintained to provide access for quiet recreation and education opportunities. Improvements will be made to surfacing, drainage and steps where necessary to maintain the existing path network.

# 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 Connecting People with woods & trees

## Description

Beeslack Wood is an ancient woodland on the outskirts of Penicuik Midlothian that has a populations of approximately 14,000 people. The horseshoe-shaped site surrounds the grounds of Beeslack Community High School and Aaron House residential care home. With the close proximity to schools and other local services, Beeslack is classed as a Grade A- high usage site with at least 15-20 people using one entrance per day. The woodland leads from Penicuik onto the Penicuik - Dalkeith cycle path, National Cycle Network route 196 between Haddington and Pencuik, and as such is well used by local people for walking and cycling as it is part of the core path network. It is a key route to the local primary and secondary schools, particularly for those living in the neighboring Ladywood Estate to the south of the wood, and a popular destination for dog walkers, runners and those taking a gentle stroll.

Welcoming signage is present at all 16 entrances. Once you have descended into this site, it is a rare haven of tranquillity from the nearby town. There is a good diversity of ancient woodland flora under a canopy of mainly native broadleaves with an interesting fauna that can often be seen or heard including dippers along the loan burn woodpecker's nuthatches and deer. Once in season, the bluebells are stunning as they sweep down the steep wooded banks.

The wood has a long history of public use with a network of 3.54 km of informal and surfaced paths linking into the wider path network around Penicuik. The unsurfaced paths are heavily used by multiple types of stakeholder and visitor alike. The main track leads down from the pond to the south west of Aaron House. Following the track to the east there is a tarmac section of path leading from Aaron House leading downhill for approximately 235m to the kissing gate entrance leading to the cycle path. This area was upgraded by Midlothian Council as part of a 'safe route to school'. To the west of the cycle path lies compartment 3a which has an unsurfaced and narrow path leading downhill onto a flat plain which then snakes around the knoll towards the River North Esk. As this path loops round it leads back to the cycle path and to a large wide flight of steps uphill towards Ladywood Estate that are managed by the Council. The remaining five entrances from the estate back into the wood from this southern boundary have small steps with surfaced paths including occasional areas of edging, leading downhill to the Loan Burn bridge. The paths to the north of the river are surfaced with areas of drainage and a flight up steps up to the A701 all currently requiring upgrades. The path undulates as it follows the form of the river, meeting the tarmac track. There is also a path leading from the river uphill through the open space, formerly the pony field. This is unsurfaced track leading back up to the Aaron House pond. To the east of east of Aaron house there is a track that meets the tarmac path. This is an unsurfaced steep path that travels along the slope with areas of edging and steps currently requiring upgrades. This leads to the top of the hill where the track widens on the flatter ground and curls around the north east of the school playing fields forming the northern sections of the site.

The most heavily used area is the route to the south west corner of the site where families walk down the

Beeslack Wood

steps in the woodland from the Ladywood Estate, along the bridge crossing the Loan burn and ascending the flight of steps to the north of this corner linking up the Edinburgh Road A701. This is busy area throughout the day as pupils travel along this route during school break times. This is a great opportunity for children to be able to experience the woodlands every day. The local schools also optimize the proximity with the woodlands as historically it has been used by the local nursery and currently the adjacent high school has a dedicated outdoor youth worker who uses the woods daily during term time.

There are some car parking spaces (approx. 10) on the tarmacked access trackside past the High school heading east to the Care Home. No formal WT carpark area is provided. Multiple entrances all around the site provide good access on all boundaries. The Beeslack Community High School have also been happy for us to use their car park for weekend events.

In partnership with the local community, voluntary litter picking events happen here annually, providing good social inclusion and mixing of the community. There are no on site facilities, but the nearby supermarket allows skip access for litter collected and toilet facilities.

Photographers enjoy capturing the images of kingfishers and other river wildlife in the quieter sections of woodland. Mountain bikers and runners also use the site due to its steep sided form and many steps. Local University students have completed film projects here in the summer months with licensed permissions.

There is currently one Volunteer Woodland Warden that covers the site, conducting litter picks and providing regular reports of any issues in the area as well as wildlife sightings.

The WT have held events at the wood over the last few years including tree climbing and a magical woodland walk which was part of an engagement programme with local primary schools and in the past, the Woodland Trust have supported 'The Green Team' in delivering John Muir Award practical day for SI pupils.

# Significance

Situated within Penicuik, Beeslack is a popular local wood accessible to a large demographic of people and easily reached without transport.

Currently the wood is well used by dog walkers, nature enthusiasts and school children using it as their main thoroughfare to school. Visitor numbers to parts of the wood will therefore be over 100 per day on the well-travelled routes ensuring Beeslack is in WT Access Category A. The wood provides a much-needed natural space for relaxation and recreation in an urban area. The school holidays and evenings show many children from the neighbouring estate playing in the woodland. The youth worker at the local high school actively takes groups and individual pupils in to the woods daily. There is a weekly forest school of varying ages from a local nursery making this a valuable education resource to the local community. Beeslack Community High School is neighbouring to the woods and no roads need to be crossed to access the woodland.

In terms of cultural heritage, Penicuik has a rich history with Scotland's First Cotton Mill being established here at the end of the 17th century on the river Esk. boundary of this site. Local folk lore tells us in recent times a shell like logo carved in a lump of stone was found here for the old mill and later contested by Shell Oil Corporation as a copyrighted image. Needless to say their case fell flat due to historic timelines and a sideward orientation of the shell.

#### **Opportunities & Constraints**

Due to the site's ASNW status and general formation, there are limited opportunities for additional paths in the wood and the steep gradients severely limit the provision of disabled access facilities. However, there are opportunities to try and encourage greater use of the woodland as a resource for tenants at Aaron House care home adjacent to the woodland.

Both surfaced and un-surfaced path sections subjected to heavy use and are deteriorating, especially during wet weather. Opportunities to include path upgrades such as renewing the steps as part of corporate volunteering sessions. There exists an opportunity for volunteers to do some extensive step upgrade works here, with hand tools to reduce impact on the ancient soil structures present. Structural elements could be completed through volunteering sessions but path material works would need to be completed by contractors due to awkward access to these areas of the site. Possibility to collaborate with Sustrans and Penicuik Community Council for future footpath works as they are currently collaborating on other path projects leading towards the Beeslack site.

There is concern that erosion of the main access track by the burn may threaten management access to parts of the wood. Opportunity to stablise this bank using sustainable measures.

The short stepped section of path traversing the valley between Beeslack High School and Penicuik/Tesco's is heavily used by school traffic and regularly blighted by litter. This presents an opportunity to work with Beeslack High School pupils to tackle the litter and fly-tipping issues in the woodland.

The boundary to the south of the site is heavily fly tipped from the nearby housing estates access roads. Education opportunity for the residents on the southern boundary. Many have planted invasive species on the boundary edge. Collaborative project opportunity with residents and school children for native woodland planting scheme on boundary edge, which could reduce ability of fly tipping down step banking therefore, reducing management cost for removals.

There is significant anti-social behaviour and subsequent needle and glass debris on the western approach to the woods and the community council are working to reduce this with an upgrade to their path and lighting project. Illegal use of motorbikes in compartment 3a that has occurred previously. Opportunities for providing interpretative facilities in the wood are constrained by vandalism and will need to be carefully located if used.

The habitat in compartment 1b could be improved by initially reducing the grass cutting here and allowing it to go wild again. Beetle banks and wildlife habitat towers could be installed and monitored to aid out door learning.

#### **Factors Causing Change**

Fly Tipping and litter are detrimental to the natural beauty of this woodland and can be hazardous to visitors and wildlife.

Redevelopment of the High School site within the next 5 years may impose additional or different pressures on the wood.

Erosion by the Loan burn poses a threat to some sections of the path including management access.

Introduction of non-native invasive plant species from fly-tipping undermines regeneration of native flora and trees, altering the aesthetics and biodiversity of the woods in the long-term.

A path improvement project for the strip between the southern border of the Woodland Trust boundary and the Eastfield Farm Road is currently being worked on by Sustrans and Penicuik Community Council. This could increase footfall into the woodland due to improved access from this side of the site.

## Long term Objective (50 years+)

To provide safe and welcoming access for people to enjoy this woodland on a network of well-maintained paths; and by removing litter and fly-tipping and discouraging further abuse of the woodland.

To work with school and community groups to help them value the woodland and help keep the woodland clean, safe and welcoming for all.

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

Access provision will be in keeping with WT access category A (high usage) and during this plan period the following will be carried out at Beeslack Wood.

The site will be kept in a safe and welcoming condition by:

- (i) Path and infrastructure maintenance
  - a) Annual strimming, cutting back overhanging vegetation, burn clearances and minor drainage work
  - b) steps repairs across site (2021/2022).

(ii)Path upgrades across the site before the end of the management plan:

a) Path audit to identify areas of highest priority and to inform strategy for type of path upgrades suitable for each compartment when required (2020)

b) Schedule path works for 2022-2023 including:

- 1) Path upgrade including drainage on main school-run path in 1a/2a (approximately 160m)
- 2) Riverside path upgrade in Ia (approximately 600m)
- 3) Revetment repairs along path in 1c (approximately 70m)
- 4) path to north of Loan Burn to tie in with open meadow upgrades in 1b (approximately 20m)

(iii) Ensure adequate entrance/exit signage and upgrade/replace estate furniture (e.g. fences, gates) where needed at all currently used entrance points (2021, then repairs ongoing as needed).

(iv) Contractor litter picks (3 times a year).

(v) Carry out regular safety inspections (as per site risk assessment).

(vi) Repair eroding section of river bank as necessary to maintain access track (2021/2022):

a) Assess speed and type of erosion to determine appropriate protection measures that will be sustainable and in-keeping for the site (2020)

b) Consult with SEPA regarding the works required through site visit and application completion (2021)

c) Upon approval of application, tender work to contractors for completion (2021-2022)

Develop community & volunteer engagement:

(vii) Work with the Community Council, neighbours and Beeslack Community High School to organise community litter picks and invasive control (annually).

(viii) Liaise with community organisations to address the causes of littering/tipping/garden waste.

(ix) Continue to liaise with regular educational groups (annually)

(x) Developing small-scale corporate volunteering where there are appropriate management tasks (ongoing).

(xi) Establish a relationship Midlothain Council to enable collaboration and partnership working to ensure success with many of these objectives (2020 and ongoing).

# 5.2 Ancient Semi Natural Woodland

#### Description

Approximately 8.8 hectares of Beeslack wood is recorded as Ancient Semi-Natural Woodland (ASNW), found in all compartments (to varying extents) apart from 1e and 3a which do not have this designation. The woodland has a varied age structure and includes riparian habitat along the North Esk and two of it's tributaries. Canopy cover is dominated by mature oak, beech, ash and sycamore with abundant ash regenerating in any gaps. Age structure is dominated by these mature and over mature trees, however as these decline and create openings in the canopy the amount of natural regeneration is generally good and is filling the openings in the canopy. However, where present, Beech, Sycamore and Yew have become locally dominant and cast dense shade limiting the development of the understorey throughout the site. Predominant regenerating species are Sycamore, Ash, Wych Elm and Beech with Oak regrowth struggling to establish in any of the compartments. Elder is also a common shrub species found across the site particular in compartment 1f. There are three veteran trees identified on site- 2 in compartment 1a north of the Loan Burn and 1 in the northern section of compartment 1c.

Dead wood habitat is present as a few small standing trees and large fallen trunks. There are limited options for leaving standing deadwood due to the proximity of housing, roads and busy footpaths. All felled material is left on site to decay.

There is a diverse and interesting ground flora with many ancient woodland indicator species present and widely distributed. However, invasive non-native species are also wide spread and compromising the biodiversity in many of the compartments across the site.

In compartment Ia ground flora is dominated by a mosaic of wood anemone, bluebells, wild garlic, dog's mercury and wood sorrel, Moschatel, violets, water avens, buckler ferns, woundwort, and occasional presence of Rhododendron ponticum, Pick-a-back, Common Periwinkle and Japanese Knotweed.

Compartment I c predominantly has Rhododendron ponticum on the high ground with small patches of Snowberry and Common Periwinkle but dominated by bluebells as it slopes down to the river.

Ground flora in compartment I d is dominated by wood sorrel and pignut with patches of bluebell, moschatel and dog's mercury in the eastern corner. An isolated pocket of Rhododendron Ponticum is also present in this compartment. Species diversity is limited in compartment I e as frequent brambles cause dense shading across the floor but Snowberry has also been identified here.

A mixed flora composition is present in If including buckler ferns, lesser celandine, wood sorrel, opposite leaved golden saxifrage, pignut, tufted hair-grass, bugle, moschatel and wood avens. However, Pick-a-back (Tolmiea menziesii) is spreading and becoming more dominant here and Japanese Knotweed is also present, replacing the native species that should be more common in this woodland.

Pick-a-back, Variegated yellow archangel (Lamiastrum galeobdolon ssp argentatum), Snowberry and few flowered leek are also found in compartment 2a. Nevertheless, overall this compartment remains a mosaic of grasses, buckler ferns, wood anemone, wood sorrel, wood rush and indicates NVC W10e type woodland. Butter burr is the dominant species of compartment 2b whereas 2c/d/e are densely shaded within minimal ground flora of note.

Compartment 3a has a rich ground flora with wild garlic, wood rush, tufted hair-grass, wood anemone, wood sorrel, pignut, buckler ferns, lesser celandine, greater stitchwort and a small area of bracken on top of the hill. However, this is undermined by the presence of non-native invasive species including Japanese knotweed, few flowered leek, pink purslane and pick-a-back are present currently in small patches but will spread if not controlled.

Open ground on the site is represented by compartment 1b which is the only area, at 0.36ha. Known previously as the 'pony field' species here consist of meadow grasses, sweet vernal, tufted hair-grass, sorrel, overall dominated by buttercup species. Yellow Rattle was added in 2012 to aid opening of sward for other flora. The constraints of the shape of the wood within the surrounding housing and its ancient woodland character preclude the creation of more open ground

#### Significance

The majority of the wood is recorded as ASNW (Ancient Semi-Natural Woodland) on the Ancient Woodland Inventory. The site has value and importance as a diverse broadleaved woodland and also links into other surrounding semi-natural habitats of the river valley and disused-railway walkway that provide good semi-natural habitat links to other woodlands in the area. There is a good range of ancient woodland indicator flora and they are widespread and numerous throughout the woodland.

Beeslack contains ancient woodland features that are worthy of protection and restoration and this supports the Trust's corporate objectives of protecting ancient woodland and improving woodland biodiversity.

#### **Opportunities & Constraints**

Poor regen under areas of beech but light reaching the ground where safety felling has been conducted.

Minimal areas of open space on site but compartment Ib will be retained in this was for biodiversity.

Invasive species found on site, particularly garden escapee varieties, are difficult to remove without the aid of herbicides or extensive ground disturbance.

Due to riparian habitat any invasive species control needs to be conducted at a regional level to avoid continuous re-infestation from seed sources upstream- collaboration with the council and other local stakeholders is required.

Potential for canopy to naturally open up due to ash die back- space could be ultilised by invasive species or enrichment planting with native species should be considered.

#### **Factors Causing Change**

Invasive non-native species are causing the most damage to our native ground flora. This includes; Japanese knotweed (Fallopia japonica), Pick-a-back (Tolmiea menziesii), Few-flowered leek (Allium paradoxum), Snowberry (Symphoricarpos), Variegated yellow archangel (Lamiastrum galeobdolon ssp argentatum), Common Periwinkle (Vinca minor) and Rhododendron ponticum. There is a risk of more garden escapee species appearing in the wood due to waste being dumped from neighbouring gardens on the southern boundary.

Ash die back is expected to have a big impact on the ash tree population and the loss of ash trees may also have an impact on associated ground flora.

A few roe deer can still be seen using the site occasionally but they are thought to be rare visitors due to the number of dog walkers using the site and the increasingly built up nature of the area. The impact of deer has not been monitored as control within the site is not practical.

# 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 of ash/elm (W8/9) and oak/birch (W10/11) woodlands.

The existence of non-native tree species will be accepted as an occasional feature of the canopy. To support a healthy and secure ground flora throughout which is indicative of the NVC site types within the woodland by maintaining light levels through continuous tree cover yet preventing over shading. Where appropriate, areas where mature beech, sycamore and other non-native species fail or are removed for safety issues enrichment planting will be introduced. Beech regeneration will be actively removed in these areas the dominance of this species contributes to the over shading of ground flora and the regeneration of

native species. Safeguard species diversity by controlling the spread of invasive non-native ground flora.

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

(i) Enrichment planting with native species (NVC W10) in areas where large beech have been removed for safety reasons (ongoing)

- a) remove beech regeneration in compartment Ia where canopy has opened (2021)
- b) plant northern boundary of compartment Ia (Nov 2021- march 2022)
- c) replace any failed trees and remove beech regeneration in planted area as required (2023-2025)

(ii) Map and survey ground flora including density of invasive species on site- from this information a strategy will be created to prioritise removal based on threat and realistic, practical action possible. (2021)

- a) pick-a-back known to be in compartments 1a, 1f, 2a and 3a
- b) Variegated yellow arch angel known to be in compartments 2a, 2c
- c) few flowered leek previously recorded in compartments 2a and 3a  $\,$
- d) Snowberry known to be in compartment 1a, 1c,1e and 2a
- e) Common Periwinkle to be in compartment Ia and Ic

(iii) Work towards eradicating Japanese Knotweed (JK) and Rhododendron Ponticum (RP) during this plan period (ongoing):

a) Already known to be present in compartments 1a (both), 1c (RP), 1d (RP), 1f (JP)and 3a (JP), map spread and density of these invasive species across the site (2020/2021)

b) Treat with herbicide (stem injection for Japanese Knotweed in July-September and cut and paint/drill and fill for Rhododendron as appropriate in the winter) (2021)

c) Annually survey for regrowth and treat where applicable (2022-2025)

(iv) post letter/information sheet to inform neighbouring properties about the damage done to native woodlands by garden flora escapees dumped at the woodland edge (2020)

(v) Current are of open ground (1b) to be retained and allowed become more naturalized by encouraging additional biodiversity through alternative habitat features in this compartment

a) grass cuts to be reduced to once a year to allow flora to grow (August 2020 and ongoing reassessing the time of cuts annually depending on species present and desired in the area)

b) survey of the flora to determine if wildflower mix including yellow rattle is required (2021)

c) strip turfs, till soil and sow seeds with volunteer group if required following point b (2022-2023)  $\,$ 

d) install beetle banks (2023/2024)

e) monitor biodiversity following works to note any new species to the area (2023-2025)

# APPENDIX I: COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Key Features Present	Designations
la	5.34	Beech	1850	High forest	No/poor vehicular access to the site, No/poor vehicular access within the site, People issues (+tve & - tve), Services & wayleaves, Very steep slope/cliff/quarry/mine shafts/sink holes etc	Ancient Semi Natural Woodland, Connecting People with woods & trees	Ancient Semi Natural Woodland, Tree Preservation Order

Mature, predominantly broadleaved high forest dominated in some areas by beech plantation of c.1850. Beech situated largely on top of the slopes and including two veteran trees noted by the Ancient Tree Hunt. There are areas of Mature Yew, particularly boarding Aaron House, and Scot's pine and non-native conifers, including great sequoia, are also scattered throughout. Numerous small areas of open ground are regenerating successfully with various native species including rowan, alder, elder, holly and oak. Natural and coppice regeneration of varying ages is frequent, the dominating species being ash, elm and sycamore. Two areas planted c.2002; an area of pole stage ash in the east of the sub-compartment and mixed broadleaves on the bank below the school. Ground flora is dominated by a mosaic of wood anemone, bluebells, wild garlic, dog's mercury and wood sorrel in spring. Moschatel, violets, water avens, buckler ferns, woundwort, and other occasional species add great floristic diversity to this and many other compartments. Previously cut, rhododendron continues to grow in the area around Aaron House. Pick-a-back, snowberry, Common Periwinkle and Japanese knotweed can also be found in this compartment. An area of bare ground along the boundary with the school offers an opportunity for new planting. An overhead power-line crosses this subcompartment to the south of Aaron House.

lb	0.36	Open	Non-wood	Ancient Semi	Ancient Semi
		ground	habitat	Natural	Natural
				Woodland,	Woodland, Tree
				Connecting	Preservation
				People with	Order
				woods & trees	

Glade of semi-natural grassland that was once a pony field. Meadow grasses, sweet vernal, tufted hair-grass, sorrel, and buttercup dominant. Angelica, marsh thistle, violets, blinks and other species present indicating nutrient rich and moist grassland. Yellow Rattle added in 2012 to aid opening of sward for other flora. Grassland is now left unmanaged to see how it develops without further intervention.

lc	l.58	Sycamore	1950	High forest	No/poor vehicular	Ancient Semi	Tree
					access within the site,	Natural	Preservation
					Services & wayleaves,	Woodland,	Order

An area of steep ground with an easterly aspect sloping down to the River North Esk. The northern section is designated Ancient Semi-Natural Woodland and contains a large proportion of mature beech with mixed broadleaves. Old growth yews and beech, including a veteran tree of note, border the footpath at the top of the slope. An underground pipeline passes through the middle of the slope and coincides with a strip of younger mixed broadleaves and open ground. Broadleaf natural regeneration (mainly sycamore, ash is abundant throughout the sub-compartment. Slope down to river is dominated by bluebells with small patches of dog's mercury and buckler ferns. Small areas of snowberry and Common Periwinkle can be found here and rhododendron has significantly taken hold on the steeper slopes.

ld	0.76	Beech	1850	High forest	Housing/infrastructure, structures & water	Ancient Semi Natural Woodland	Tree Preservation
					reatures on or	vvoodiand,	Order
					adjacent to site,	Connecting	
					No/poor vehicular	People with	
					access to the site	woods & trees	

This narrow strip contains a high proportion of mature sycamore and Scots pine, together with other mixed broadleaves including oak, Norway maple and beech. Laural is also common as a key part of the understory for this compartment and there is also an isolated pocket of Rhododendron Ponticum near the entrance from the playing field. The uniform age structure may be the result of a history of prolonged stock grazing. Natural regeneration is hindered in many areas by the existing canopy shade and rabbits. Ground flora is dominated by wood sorrel and pignut with patches of bluebell, moschatel and dog's mercury in the eastern corner.

le	0.30	Ash	1990	High forest	Mostly wet	Ancient Semi	Tree
					ground/exposed site,	Natural	Preservation
					No/poor vehicular	Woodland,	Order
					access to the site,	Connecting	
					No/poor vehicular	People with	
					access within the site,	woods & trees	
					Services & wayleaves		

Semi-mature mixed broadleaves of natural origin, predominantly ash and sycamore, as well as the presence of rowan, beech, elm and holly. The tributary of the North Esk runs through center of this subcompartment. Significant portions of the area are densely shaded with occasional or frequent bramble, laural and snowberry. Approximately 30 Ash trees removed in winter 2019-2020 near the A701 boundary reducing the overcrowding in this compartment. There are no footpaths within the sub-compartment. Trees on the banking below Beeslack Cottages are important for stabilising the slope.

lf	0.31	Sycamore	1970	High forest	Mostly wet	Ancient Semi	Tree
					ground/exposed site,	Natural	Preservation
					No/poor vehicular	Woodland,	Order
					access within the site	Connecting	

					People with woods & trees		
Area of flat damp woodland adjacent to River North Esk and cycle path along disused railway. Dominted by							

old sycamore coppice, willow and birch with occassional alder and beech. Elder is present in the shrub layer and ground flora is dominated by buckler ferns, lesser celandine, wood sorrel, opposite leaved golden saxifrage, pignut, tufted hair-grass, bugle, moschatel, wood avens and pick-a-back (Tolmiea menziesii). Pick-aback is spreading and becoming more dominant, replacing the native species that should be more common in this woodland.There are no footpaths running through this sub-compartment.

I.								
	2a	2.55	other oak	1850	High forest	No/poor vehicular	Ancient Semi	Ancient Semi
l			spp			access within the site,	Natural	Natural
l						Services & wayleaves,	Woodland,	Woodland, Tree
l						Very steep	Connecting	Preservation
l						slope/cliff/quarry/mine	People with	Order
l						shafts/sink holes etc	woods & trees	

Mature high forest dominated by oak planted c.1850 with naturally regenerated ash, sycamore and elm regrowth. Beech, field maple and scots pine are also found in this sub compartment extends along the steep southern bank above the burn and is generally well stocked with numerous areas of open ground regenerating successfully. The understorey consists of abundant mixed broadleaved regeneration, some planted, that is varied in age. Natural oak regeneration is absent. Ground flora is dominated by a mosaic of grasses, buckler ferns, wood anemone, wood sorrel, wood rush and indicates NVC W10e type woodland. Issue with fly tipping, litter and garden waste being thrown over into this compartment from the ladywood estate. Variegated yellow archangel (Lamiastrum galeobdolon ssp argentatum) is well established in the south west corner of this compartment next to the entrance to Ladywood estate. Few-flowered-leek, snowberry and pick-a-back are also present here.

2b	0.31	Ash	1960	High forest	No/poor vehicular	Ancient Semi	Ancient Semi
					access within the site,	Natural	Natural
					Very steep	Woodland,	Woodland, Tree
					slope/cliff/quarry/mine	Connecting	Preservation
					shafts/sink holes etc	People with	Order
						woods & trees	

This compartment denotes an area where previously land has slumped into the burn and the soil appears generally wet and unstable. Now dominated with abundant butter burr. The tree canopy is dominated by ash and oak mainly towards the top of the slope and there is a substantial area of ground with ash regeneration. There are no footpaths running through this sub-compartment.

2c	0.27	Sycamore	1970	High forest	No/poor vehicular access within the site	Ancient Semi Natural Woodland, Connecting	Ancient Semi Natural Woodland, Tree Preservation
						People with	Order
						woods & trees	

Dense, thicket stage mixed broadleaves with a high proportion of sycamore and beech. The understorey is

Beeslack Wood

also composed of abundant broadleaved regeneration. Limited ground flora under heavy shade, yet a siginifcant patch of Variegated yellow archangel (Lamiastrum galeobdolon ssp argentatum) has been identified by the Ladywood Estate boundary in this sub-compartment.

2d	0.31	Ash	2008	High forest	No/poor vehicular	Ancient Semi	Ancient Semi
					access within the site,	Natural	Natural
					Services & wayleaves	Woodland,	Woodland, Tree
						Connecting	Preservation
						People with	Order
						woods & trees	

Composed of occasional mature trees with recent ash, sycamore and wych elm regeneration. There are no footpaths running through this sub-compartment.

ncient Semi	Ancient Semi
atural I	Natural
/oodland, 🛛 🕅	Woodland, Tree
onnecting	Preservation
eople with	Order
oods & trees	
	cient Semi tural oodland, onnecting ople with oods & trees

Site of an old quarry and now dominated by mature sycamore with some recent regeneration of ash and elm. A safety fence along the top edges is maintained for health and safety purposes. There are no footpaths running through this sub-compartment.

3a	0.93	other oak	1850	High forest	People issues (+tve & -	Ancient Semi	Tree
		spp			tve), Services &	Natural	Preservation
					wayleaves, Site	Woodland,	Order
					structure, location,	Connecting	
					natural features &	People with	
					vegetation	woods & trees	

A small hummock lies at the centre this compartment which is separated from adjacent compartments I and 2 by a well-used cycle path along a disused railway line. Oak planted c.1850 dominates throughout with occasional ash, elm, Scots pine, sycamore and beech. Ground flora is a diverse mosaic of wild garlic, wood rush, tufted hair-grass, wood anemone, wood sorrel, pignut, buckler ferns, lesser celandine, greater stitchwort and a small area of bracken on top of the hill. Non-native invasive species including Japanese knotweed, few flowered leek, pink purslane and pick-a-back are present in small patches but will spread if not controlled.



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Scale: 1:4030

# GLOSSARY

#### Ancient Woodland

Ancient woods are defined as those where there has been continuous woodland cover since at least 1600 AD. In Scotland ancient woods are defined strictly as sites shown as semi-natural woodland on the 'Roy' maps (a military survey carried out in 1750 AD, which is the best source of historical map evidence) and as woodland all subsequent maps. However, they have been combined with long-established woods of semi-natural origin (originating from between 1750 and 1860) into a single category of Ancient Semi-Natural Woodland to take account of uncertainties in their identification. Ancient woods include Ancient Semi-Natural Woodland and plantations on Ancient Woodland Sites (see below). May support many species that are only found in ancient woodland.

#### **Ancient Semi - Natural Woodland**

Stands in ancient woods defined as those consisting predominantly of native trees and shrubs that have not obviously been planted, which have arisen from natural regeneration or coppice regrowth.

#### **Ancient Woodland Site**

Stands in ancient woods that have been converted to plantations, of coniferous, broadleaved or mixed species, usually for timber production, including plantations of native species planted so closely together that any semi-natural elements of the understorey have been suppressed.

## **Beating Up**

Replacing any newly planted trees that have died in the first few years after planting.

#### Broadleaf

A tree having broad leaves (such as oak) rather than needles found on conifers (such as Scots pine).

## Canopy

The uppermost layer of vegetation in a woodland, or the upper foliage and branches of an individual tree.

#### Clearfell

Felling of all trees within a defined area.

#### Compartment

Permanent management division of a woodland, usually defined on site by permanent features such as roads. See Sub-compartments.

#### Conifer

A tree having needles, rather than broadleaves, and typically bearing cones.

#### **Continuous Cover forestry**

A term used for managing woods to ensure that there are groups or individual trees of different ages scattered over the whole wood and that some mature tree cover is always maintained. Management is by repeated thinning and no large areas are ever completely felled all at once.

#### Coppice

Trees which are cut back to ground levels at regular intervals (3-25 years).

# Exotic (non-native) Species

Species originating from other countries (or other parts of the UK) that have been introduced by humans, deliberately or accidentally.

## **Field Layer**

Layer of small, non-woody herbaceous plants such as bluebells.

# Group Fell

The felling of a small group of trees, often to promote natural regeneration or allow planting.

## Long Term Retention

Discrete groups of trees (or in some cases single trees) that are retained significantly past their economic felling age. Operations may still be carried out within them and thinning is often necessary to maintain stability.

## Minimum Intervention

Areas where no operations (such as thinning) will take place other than to protect public safety or possibly to control invasive exotic species.

## **Mixed Woodland**

Woodland made up of broadleaved and coniferous trees.

## National vegetation classification (NVC)

A classification scheme that allows an area of vegetation to be assigned to the standardised type that best matches the combination of plant species that it contains. All woodlands in the UK can be described as being one of 18 main woodland types (W1 - W18), which principally reflect soil and climatic conditions. For example, Upland Oakwoods are type W11, and normally occur on well drained infertile soils in the cooler and wetter north and west of Britain. Each main type can be subdivided into numerous subtypes. Most real woods contain more than one type or sub-type and inevitably some woods are intermediate in character and can't be properly described by any sub type.

## Native Species

Species that arrived in Britain without human assistance.

## Natural Regeneration

Naturally grown trees from seeds falling from mature trees. Also regeneration from coppicing and suckering.

## Origin & Provenance

The provenance of a tree or seed is the place where seed was collected to grow the tree or plant. The origin is the geographical location within the natural range of a species from where seeds/tree originally derives. Thus an acorn collected from a Turkey oak in Edinburgh would have an Edinburgh provenance and a southern European origin.

## **Re-Stocking**

Re-planting an area of woodland, after it has been felled.

## Shrub Layer

Formed by woody plants 1-10m tall.

# Silviculture

The growing and care of trees in woodlands.

# Stand

Trees of one type or species, grouped together within a woodland.

# Sub-Compartment

Temporary management division of a compartment, which may change between management plan periods.

# Thinning

The felling of a proportion of individual trees within a given area. The remaining trees grow to fill in the space created.

# **Tubex or Grow or Tuley Tubes**

Tubes placed over newly planted trees or natural regeneration that promote growth and provide protection from animals such as rabbits and deer.

# Weeding

The control of vegetation immediately around newly planted trees or natural regeneration to promote tree growth until they become established. Either by hand cutting or with carefully selected weed killers such as glyphosate.

# Windblow/Windthrow

Trees or groups of trees blown over (usually uprooted) by strong winds and gales.

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