# Railway Wood (Plan period – 2023 to 2028)



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## Introduction to the Woodland Trust Estate

The Woodland Trust owns and cares for well over 1,250 sites covering almost 30,000 hectares (ha) across the UK. This includes more than 4,000ha of ancient semi-natural woodland and almost 4,000ha of non-native plantations on ancient woodland sites and we have created over 5,000ha of new native woodland. We also manage other valuable habitats such as flower-rich grasslands, heaths, ponds/lakes and moorland.

Our Vision is:

"A UK rich in native woods and trees for people and wildlife."

To realise all the environmental, social and economic benefits woods and trees bring to society, we:

• **Create Woodland** – championing the need to hugely increase the UK's native woodland and trees.

• **Protect Woodland** – fighting to defend native woodland, especially irreplaceable ancient woodland and veteran trees; there should be no loss of ancient woodland

• **Restore Woodland** – ensuring the sensitive restoration of all damaged ancient woodland and the re-creation of native wooded landscapes.

## Management of the Woodland Trust Estate

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<sup>®</sup> (FSC<sup>®</sup>) under licence FSC-C009406 and through independent audit.

The following principles provide an overarching framework to guide the management of all our sites but we recognise that all woods are different and that their management also needs to reflect their local landscape, history and where appropriate support local projects and initiatives.

1. Our woods are managed to maintain their intrinsic key features of value and to reflect those of the surrounding landscape. We intervene in our woods when there is evidence that it is necessary to maintain or improve biodiversity, safety and to further the development of more resilient woods and landscapes.

2. We establish new native woodland for all the positive reasons set out in our Conservation Principles, preferably using natural regeneration but often by planting trees, 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. Where possible, we pro-actively engage with people to help them appreciate the value of woods and trees.

4. The long term vision for all our ancient woodland sites is to restore them to predominantly native species composition and seminatural 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 natural and cultural heritage value of sites is taken into account in our management and in particular, our ancient trees are retained for as long as possible.

7. Land and woods can generate income both from the sustainable harvesting of wood products and the delivery of other services. We therefore consider the appropriateness of opportunities 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 encourage our woods to be used for 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. We maintain a network of sites for long-term monitoring and trials leading to reductions in plastics and pesticides.

10. Any activities we undertake are in line with our wider Conservation Principles, conform to sustainable forest management practices, are appropriate for the site and balanced with our primary objectives of enhancing the biodiversity and recreational value of our woods and the wider landscapes.

## The Public Management Plan

This public management plan describes the site and sets out the long term aims for our management and lists the Key Features which drive our management actions. The Key Features are specific to this site – their significance is outlined together with our long, 50 years and beyond, and our short, the next 5 years, term objectives for the management and enhancement of these features. The short term objectives are complemented by an outline Work Programme for the period of this management plan aimed at delivering our management aims.

Detailed compartment descriptions are listed in the appendices which include any major management constraints and designations. Any legally confidential or sensitive species information about this site is not included in this version of the plan.

There is a formal review of this plan every 5 years and we continually monitor our sites to assess the success of our management, therefore this printed version may quickly become out of date, particularly in relation to the planned work programme.

Please either consult The Woodland Trust website

#### www.woodlandtrust.org.uk

or contact the Woodland Trust

operations@woodlandtrust.org.uk

to confirm details of the current management programme.

A short glossary of technical terms can be found at the end of the plan.

## **Location and Access**

Location maps and directions for how to find and access our woods, including this site, can be found by using the following link to the Woodland Trust web-site which contains information on accessible woodlands across the UK

https://www.woodlandtrust.org.uk/visiting-woods/find-woods/

In Scotland access to our sites is in accordance with the Land Reform Act (of Scotland) 2003 and the Scottish Outdoor Access Code.

In England, Wales and NI, with the exception of designated Public Rights of Ways, all routes across our sites are permissive in nature and where we have specific access provision for horse riders and/or cyclists this will be noted in the management plan.

## The Management Plan

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1	. SITE DETAILS									
		Railway Wo	od							
	Location:	Livingston	Grid	reference:	NT053703	OS	1:50,000	Sheet	No.	65
	Area:	6.49 hectare	es (16.0	4 acres)						
	External Designations:	N/A								
	Internal Designations:	N/A								

#### 2. SITE DESCRIPTION

Railway Wood is a single block of woodland situated to the northeast of Livingston and lies between the M8 to the north and the Edinburgh-Bathgate railway line to the south, just east of junction 3 on the M8. The wood lies at an altitude of 115m-125m above sea level and has a slightly northern aspect.

The geology of the area is sedimentary sandstones/ limestone's/ shale of the Carbonioferous-Dinatian period. The soils are derived from a glacial till of carboniferous sedimentary sandstones and shale and are generally Rowanhill association brown forest soils with gleying, some gleys are non-calcareous or humic. Rowanhill association soils are characterised by slowly permeable clayey horizons at varying depths between 40 and 80cm. The MLURI climate map identifies the area as fairly warm moist lowland and foothill, being moderately exposed with moderate winters.

Railway wood is a narrow, elongated strip of woodland that broadens towards its western end. The mainly conifer woodland was planted in the early 1970s by Livingston Development Corporation. As is a feature of Corporation planting the wood is made up of mainly single species blocks, with very few areas of mixed species. The main species are Sitka spruce and Scots pine which together makes up over 70% of the wood. Additionally, there are discreet blocks of sycamore, sessile oak, European larch, Norway spruce and beech. The stands in the east of the wood are generally slightly (approx. 5yrs) older than those to the west.

The Beugh Burn emerges in the west of the site and flows for approximately 200m in a steep-sided ditch before exiting along the northern boundary. The Beugh burn has been opened up but until 2006 had trees planted close to its banks over much of its length. The increased light levels should help improve diversity along this length.

Representing a small reserve of more natural vegetation within the built environment, the woodland and associated habitats are not of high quality, but are important for local biodiversity within the urban area. Even larger mammals such as deer are can be found here and a range of smaller mammals, insects and birds can be expected to benefit from the woodland cover. Buzzards that are now common along our motorways have also been seen in the woodland.

Railway Wood is an important part of the infrastructure of Livingston, providing separation and screening between industrial areas and major transport routes. It forms a prominent feature when accessing Livingston from the east along the M8 motorway. Unfortunately litter is an ongoing problem and although cleared regularly does, while visible, detract from the amenity of the woods as well as creating a hazard to wildlife.

The wood provides good public access for local residents, with just over 1km of un-surfaced footpaths throughout the site, from two entrances, across a railway footbridge from Todd Square to the south and from the main entrance at the eastern end of the wood off Pumpherston Road (B8046) between the M8 and railway bridges. Although there are no formal circuits, the brash open nature of the stands allows free access to most areas. The wood also links onto longer distance routes to the south between Pumpherston and Livingston Greenway network.

There is no Woodland Trust car park at the site, but parking areas can be found to the south in the neighbouring industrial estate and east of the wood in the nearby residential area and Uphall train station.

Management access is obtained from Pumpherston road, where a small stacking area was previously constructed at the woodland edge.

A "Welcome to Livingston" sign, visible form the M8 and owned by West Lothian Council is situated in the middle of the wood and the council has maintenance access to this.

### 3. LONG TERM POLICY

The wood will be managed as a sustainable natural resource to safeguard its public amenity and biodiversity value and in line with the Woodland Trust's corporate objectives of improving and enhancing biodiversity, encouraging public access and enhancing people's enjoyment of woodlands.

The long-term vision of the woodland is to convert the conifer woodland into native broadleaf through various harvesting (felling) operations and restocking (replanting). The woodland will consist of mixed broadleaves of a mainly native character and Scots pine will be retained where appropriate. Where planting is adjacent to transport corridors a mixture of shrubs and low stature species will be established creating a more natural woodland edge and relieving some of the 'pressure' associated with the juxtaposition between woodland and transport corridors. A proportion of conifers and their natural regeneration will be accepted although the intention will be to increase the proportion of native species in the overall mixture.

Ongoing development in Livingston and its surrounds is likely to impact on levels of use on all paths overtime. Access facilities on the site will be maintained to suit demand.

## 4. KEY FEATURES

#### 4.1 f1 Connecting people to woods and trees

#### Description

Railway Wood lies on the northern periphery of Livingston. The woodland is a significant feature in the local landscape, lying between the M8 and Edinburgh to Bathgate railway, screening industrial areas at the entrance to Livingston.

The public use is defined as WT Access Category B (Moderate usage). There is approximately 1.1km of un-surfaced path through the wood running between the main entrance from Pumpherston road (B8046) to the east of the site and the entrance across the railway bridge from Todd Square. Although this informal path is a straight through route on the site it does link directly onto the Greenway network within Livingston. This gives access to long distance routes as well as creating part of a loop path from Uphall station when combined with the tarmac path running along the south of the railway line. Currently (2023) the informal path within the site is not maintained and public access through the site is not encouraged due to anti-social behaviour, windblow and intention of significant operations being planned for the

site. Nevertheless, the area is occasionally used by locals as a scenic short cut from the train station and neighbouring industrial estate and housing to the southeast.

Graffiti and vandalism has occurred to the 'Welcome to Livingston' sign located at the east of the site. Litter and flytipping are common issues across the site. To the west there is evidence of den building and fires on regular occasions.

There is no onsite public car park, though parking is available on nearby streets.

#### Significance

Its main function is primarily to screen parts of Uphall from the M8. Railway Wood also provides a route from Houston industrial estate to the road opposite Uphall Train Station through the woodland other than using pavements.

#### **Opportunities & Constraints**

**Opportunities** -

Multiple areas of the path are suffering from poor drainage and other areas have become narrow over time. There is an opportunity improve access by using chippings from thinning and felling operations to resurface paths.

Tree planting opportunities with local community and volunteers and partners following felling operations. Considering the close proximity to the train station there is an opportunity optimise on the use public transport for such events encouraging attendance without driving to site.

Proximity to other Woodland Trust sites close by allows for potential to group works (such as path upgrades) together to be more efficient and cost effective.

Constraints -

Anti-sociable behaviour such as fires damages the natural environment as well as presenting a safety hazard to visitors and restricts installation of estate furniture and other features. Additionally, fly tipping and litter are also regular occurrences on site and are detrimental to the natural beauty of this woodland and can be hazardous to visitors and wildlife.

Linear nature of site constrains potential for large circular routes within the site.

No formal car parking can cause problems with neighbours due to visitors parking on the local. This can be difficult for public events on the site.

Maintenance access of the west is limited as the only vehicle entrance is from the B road located at the eastern end of the site.

Placement between motorway and railway means the site can be loud and therefore this limits opportunity for peaceful

#### recreation.

#### Factors Causing Change

Increased development - various schemes have been built recently (since 2020) and large new developments are currently being planned for north, southwest and southeast Livingston. This could increase demands on local sites in Livingston, including Railway Wood.

#### Long term Objective (50 years+)

Ensuring the site is safe and welcoming for informal recreation by local people. Paths are likely to remain unsurfaced unless use greatly increases but will be periodically kept well drained and clear of overhanging vegetation. The wood will have a mainly native broadleaved feel, with good screening of the motorway and railway by small trees and shrubs.

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

During this plan period, the short-term objective is to provide public access at Railway wood which is safe and enjoyable. Access provision for this site will be in keeping with WT access category B (Moderate usage). This will be achieved by:

1) The site will be kept in a safe and welcoming condition through site maintenance:

a) Informal path route will be left clear following felling operations with path cuts and entrance maintenance twice annually once works have been completed

b) Install updated site welcome signage (small timber welcome boards and exit plaques) once felling works are completed

c) Inspect trees as per site risk assessment (ongoing)

d) Removal of litter and flytipping from site as required (ongoing)

e) Cut back vegetation to allow visibility of traffic lights to the east and 'Welcome to Livingston' signage from the motorway (as required)

2) Provide opportunities for engagement:

a) Organise volunteer planting days as part of replanting once felling operations are completed (where possible and appropriate)

b) Recruit woodland warden to cover this site, monitoring frequency of use and levels of antisocial behaviour in response to felling works (before the end of the plan period)

c) Include site within Woodland Working Group volunteer sessions (as appropriate)

#### 4.2 f2 Secondary Woodland

#### Description

Planted as a screen, Railway wood is by design, long and narrow (>1km long but only 6.5ha). Throughout the wood, plantings are mainly single species blocks, planted between 1970 and 1975, with the main species being Sitka spruce and Scots pine which together make up over 70% of the wood planted around discreet blocks of sycamore, sessile oak, European larch, Norway spruce and beech. Other species present throughout the site include; cherry, elm, ash, willow, alder, birch, rowan, sycamore and Norway maple. The wood was last thinned in 2006 with additional small clearing felled to provide planting gaps for shrubs along the motorway boundary.

Shrub species on site include hazel, elder and hawthorn. The latter is the most common of these species but overall regeneration is very poor for shrubs and trees across the site. This is due to the high density conifer plantations and minimal presence of shrub layers already present throughout the site to act as a seed source.

The main species that is managing to regenerate is ash. This is a concern as Ash Die Back (ADB) also known as Chalara is present on site. Therefore, it is unlikely that these trees will be able to fully establish. The is minimal regeneration present at Railway Wood. This restricts the ability to properly assess the impact of browsing and damage by herbivores. Nevertheless, roe deer, rabbit and squirrels that have been witnessed on site. This needs to be considered for any restocking and general regeneration levels.

Deadwood on site is mainly present in numerous fallen/hooked up trees across the site, particularly to the east, as a result of windblow. There are also some stumps, logs and branches left on site from previous thinning works in 2006.

The ground flora within the woodland is generally poor under conifers, it is common for there to be no vegetation at all in these areas. In more open areas, typically the ground is dominated by brambles and grasses. Most species diversity occurs in the narrow strip of grassland retained along the southern boundary at the eastern end of the wood and the three other open areas throughout the wood, which generally coincide with old field boundaries, with a few remnant hawthorn bushes marking old hedgerows. The 1990 Botanical Atlas identifies the central part of the site as being relatively diverse, holding a number of common species associated with damp grassland and hedgebanks, including: Birds foot trefoil, Large bittercress, Creeping buttercup, Dock, Hogweed, Common hemp nettle, Cow parsley, Parsley piert, Greater plantain, Ragged Robin, Soft rush, Silverweed and Sneezewort. Rapidly maturing dense conifer cover has led to a reduction in suitable habitat for many of these species.

Japanese Knotweed has been recorded in one area to the west of the site- on the southern banks of the Beugh Burn. This was first treated with Stem Injection of Glyphosate in 2021 when it was a significant stand that was well established in the area. The Woodland Condition Assessment conducted in 2022 noted minimal regrowth present in the area. This illustrates that the initial treatment was highly effective and eradication from the site is possible. Monitoring and additional treatment will be conducted as required over the following 4 years or so to ensure eradication.

#### Significance

The wood is a significant feature of the local landscape. It forms the northern edge of Livingston, separating the motorway from the Houston Industrial Estate. The woodland is important for local biodiversity and has potential for

#### improvement.

#### **Opportunities & Constraints**

#### Opportunities -

Currently the site is dominated by high conifer canopy. However, considering the wider landscape context of this being a small, isolated strip surrounded beside infrastructure, the woodland composition needs to be restructured (by felling of conifers and replanting of broadleaves) for a higher percentage of shrub cover by the boundaries. This will maintain screening whilst reducing the maintenance conflicts and costs.

Restructuring could increase biodiversity through conversion of conifer to native broadleaf species and allow for higher age and species complexity on site. Thinning operations may also assist in improving light levels areas beneath woodland cover to support more diversity floral assemblages.

Restructuring works will result in a higher percentage of deadwood on site which is an essential wildlife habitat.

Due to its urban setting, there may be continual disturbance that restricts over browsing from deer and rabbits in particular areas. This has been noted at other sites in Livingston that have been restocked where losses have been low as animals are regularly moved through the site due to activity including dog walkers rather than staying and heavily browsing specific areas.

#### Constraints -

Proximity to infrastructure (motorway and railway) restricts appropriate methods for felling/harvesting result in complex operations which are time consuming to plan and expensive to execute. Furthermore, the planting of larger species such as oak will be restricted to avoid future conflict, growing to a large height inappropriate near the boundaries of the motorway and railway.

The presence of wet ground to the east and only one suitable access for vehicles results in poor access for harvesting as well as general maintenance activities.

Compartment 2b to the west of the site includes Beugh burn that cuts through the centre and the travels north under the motorway and an old drystone dyke. Contractors must navigate around these features for operations. However, this is possible as there is a culvert present to cross the burn and there is large gap between the northern boundary and the wall to allow machinery access to the north western corner of the site.

There are limited suitable spaces for the retention of standing deadwood on this site due to the narrow width of the woodland and the proximity to urban infrastructure. Threat of fires also results in a need to restrict the level of deadwood left on site. Fire damage to trees also compromises their health and growth which affects wildlife in the woodland as well as the potential for income for timber from harvesting operations.

Japanese knotweed was mapped on site in 2020. If this is not eradicated this invasive species could continue to spread at the detriment to natural regeneration, woodland specialist flora and overall biodiversity across the site. Leaving any amount of the species within proximity to the site could result in re-infestation of this invasive species in the long-term. Works should be avoided in the area that Japanese Knotweed has been identified to avoid spreading the invasive species.

Squirrel damage, rabbit and deer browsing are all threats to young regeneration and planting on site. Whilst the urban location causes disturbance for these species and helps to limit impact in some areas, the urban locale also restricts the suitability and efficiency of possible control methods. With this in mind, management of these species will not be undertaken for the foreseeable future and further investment will be required to replace browsed or damaged trees. This must be considered for any planting for the site.

#### Factors Causing Change

Wind throw is common on this site due to the exposure from open transport links located to the north and the south. Furthermore, most of the spruce and larch was planted as part of Livingston Development Corporation (LDC) during 1960s prior to the Woodland Trust's acquisition in 1996. These trees are now reaching their terminal height at which makes the woodland more vulnerable to windblow. This presents a threat to infrastructure and public safety.

Large-scale felling works would dramatically increase light levels quickly which could result in floral composition changing over time- from having minimal open spaces or light reaching the ground through dense conifer canopies, to significant open ground following clear felling. This may result in an initial dominance of coarse vegetation on a larger scale through the site. As the planted shrubs establish the coarse vegetation should be replaced with more generalist woodland plants over time.

Due to the urban location of Railway Wood, within close proximity to multiple small woodland areas in Livingston, invasive species and diseases present elsewhere in Livingston are likely to be aided by people, spreading seeds or spores in soil on their footwear.

Ash is well suited to the clay soils of West Lothian and is more suitable species for replanting. However, Chalara is present on ash throughout West Lothian, including Railway Wood. This means it cannot be included in the any replanting proposals and it is likely that the majority of ash regeneration will not become fully established due to the disease. Therefore, it is unlikely that ash will be a significant part of the woodland composition on this site for the foreseeable future.

There have been multiple Scottish Health Plant Notices (SHPN) in Livingston since 2018 for Phytophthora ramorum and it is likely to continue to spread. This could impact other areas of the site that do contain larch, particularly to the northwest of the site.

Large-scale felling works would result in an immediate increase in open space on site, temporarily. This, combined with the following restocking, would result in a significant change to the woodland composition particularly in terms of the species of trees as well as the ground flora.

#### Long term Objective (50 years+)

To convert this predominantly conifer plantation to mixed species woodland habitat more suitable for this narrow site. Species composition will be varied, being mostly native though a proportion of conifers, beech and sycamore will be accepted. Improvements to the canopy should help towards supporting a variety of ground flora communities.

Improving and enhancing biodiversity within this site will also be achieved by control and removal of invasive nonnative species, where it is realistic and practical to do so. For this site the focus will be on eradicating Japanese knotweed, reviewing the effectiveness of control measures and impact on the recovery of native flora.

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

The focus of the STOs for Railway Wood will be to improve biodiversity and resilience on the site through the following objectives:

1) Restructuring the woodland for pro-active health and safety and enhanced biodiversity on site:

a) Infrastructure improvements across the site to allow appropriate access for harvesting (felling) operations including re-establishing stacking area, access track and reinforcing two culverts along the track (2023)

b) Conduct harvesting operations across the site (2023/2024):

i) Clear felling conifers specifically larch, Sitka spruce and Scots pine within falling distance of either the M8 or the Railway line

ii) Thinning to Scots pine and sycamore located the west of the site

iii) Pruning on the southern boundary bordering to remove any possible interference with the railway line

iv) Standing dead trees to be left where it is safe and appropriate to do so- predominately in compartment 2b away from boundaries and paths

c) Replanting at least 80% of the felled area with small trees and shrubs (including species such as hazel, hawthorn, elder, holly, bird cherry, birch and rowan), subject to detailed design still to be completed (2023/2024)

d) Weeding and replacing any dead planted trees to ensure fulfilment of felling license conditions (2024/2025/2026)

2) Remove any redundant tree tubes from previous planting- reusing for replanting on site if possible/appropriate

3) Work towards the eradication of Japanese Knotweed during this plan period:

a) Annually check for regrowth in compartment 2b following initial treatment via stem injection in 2021 as treatment programmes can last from 2-5 years to ensure effective control

b) Follow up spot spray treatments for Japanese Knotweed regrowth (as required)

## APPENDIX 1 : SITE MAP

#### Bur eugh Track Marrfield Terrace 150W Nettle uszi Recre Jettlehill Kingsthome Park umpherston Road 00 Hunting Park odd 4 Squar Nettlehill Road Houstoun Industrial Estate Nettlehill Road Muir Road Plac 1:5,291 0.09 24/11/2021, 16:34:33 0.04 0.18 mi Γ Estate Subcompartments Estate Subcompartments Labels Hectares 0.05 0.1 0 0.2 km Estate Subcompartments Labels Management Units

#### Railway Wood compartment map

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## **APPENDIX 2 : COMPARTMENT DESCRIPTIONS**

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
2a	3.25	Sitka	1970	High forest	Housing/infrastructure,	
		spruce			structures & water	
					features on or adjacent	
					to site	

This sub-compartment covers the eastern half of the site. This is the narrowest part of the site with the width ranging from 20m from the east to a maximum of 50m wide before reaching the other sub-compartment. The main entrance to the site is located in 2a, just off Station Road (B8046) directly opposite Uphall Train Station. There is a vehicle barrier and traffic light at this entrance and one parking space for management use. From this entrance there is a type one track leading uphill which reaches the plateaux of the woodland. There is an earth mound located immediately north of the track. There is some open ground in this area which was previously used for stacking and as a turning area for management however, this is currently (2023) covered scrub predominantly broom, brambles, gorse and young birch. The 'Welcome to Livingston' sign is located to the west of this mound.

A predominantly coniferous stand of early mature high forest planted in 1970, made up of Sitka spruce and Scots pine with discreet patches of mixed broadleaves. From East to West, there is a small pocket of mixed broadleaves dominated by sessile oak near the sign. Following the informal track into the site, the woodland composition changes abruptly to dense Sitka spruce. This includes evidence of windblow in this section. Once through this block of Sitka, there is a stand of mature Scots pine and occasional mixed broadleaves are also present. There is then a small section (approximately 0.11ha) of oak approximately 35 years old. There are stretches of planted mixed broadleaves along the northern boundary in 2007. Species include birch, willow, ash, alder, oak. Other broadleaves present in this compartment include rowan, sycamore, beech, birch, ash, alder, hawthorn, gean and elder. Nevertheless, Sitka spruce dominates along the southern boundary whereas elder and ash are particularly prominent in the understorey. There are also 3 separate small areas of open ground (approx. 0.3ha), including by the footbridge that crosses the railway to the west of this compartment. Understorey and ground flora are virtually absent from beneath the conifer element of the compartment, except along the compartment edges

Deadwood is mainly stumps, branchwood and mulch left following thinning in 2006.

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
2b	3.25	Sitka	1975	High forest	Housing/infrastructure,	Click or tap here to
		Spruce			structures & water	enter text.
					features on or adjacent	
					to site	

Similarly, to compartment 2a, there are large coniferous stands dating from the mid-1970s, made up of Sitka spruce and Scots pine with patches of Norway spruce and European Larch. This compartment is wider than 2a as it averages approximately 90m wide. Throughout there are occasional groups of mixed broadleaves, birch, rowan, sycamore and beech.

There are dense stands of Sitka spruce present in the north of this compartment but it is the dominant species within the south of this compartment.

This compartment is dissected by 230m of the Beugh Burn that travels from close to the western boundary of the site eastwards then flowing northwards under the M8. There is a concrete culvert pipe that allows for pedestrian access across the burn. The larch is present along the north western boundary beside the M8 and includes a dense block on the eastern bank of the Beugh Burn. Further to the east of this block there are patches of young hawthorn and beech. Scyamore is present on the northern bank of the Beugh Burn and there is a block of Norway Maple between the water course and M8 Boundary. There is also approximately 50m of dyke present in this compartment to the northwest of the burn. A pocket of Scots pine is located to the west of the compartment, north of the beugh burn and immediately west of the drystone dyke. The banks of the burn vary from flat open edges to steep densely vegetated sections, including an area of Japanese knotweed. The Japanese Knotweed was initially treated in 2021 and has had minimal regrowth since which is then spot treated to avoid recolonisation. Understorey and ground flora are virtually absent from beneath the conifer element of the compartment, except along the compartment edges and along the banks of the small Beugh burn.

Towards the south of the compartment along the railway the stand becomes more open with an area approximately, 0.2ha of open ground to the south east of the compartment. The southern boundary is mostly mixed broadleaves on the low ground, adjacent to the boundary, including species such as willow, birch and hawthorn. There is a slight gradient increase from this boundary towards the centre of the compartment which is dominated by sitka spruce. There is an old remnant field hedge at the eastern end of the compartment at the boundary with compartment 2a.

Deadwood confined to stumps, branchwood and mulchings left following thinning in 2006.

Anti-social behaviour including fires and flytipping are evident in this compartment.

#### 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.

#### Windblow/Windthrow

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

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