

Pitfichie Downhill

Biodiversity Plan

Introduction

Gravitate North East will manage an area of forest adjacent to the bike trails and car park for biodiversity. The trails are within an area of commercial forest and open moorland. Most of the area is clear felled and due for replanting with non-native mixed conifers.

Gravitate North East is negotiating a lease of the trail tread and car park, with auxiliary rights to manage a corridor of 20m each side of the trail, 40m in total. A total 15.5ha of forest lies within these corridors. This is a small area, within the Pitfichie and Corrennie Forest Land Management Plan, managed by Forestry and Land Scotland (a combined area of 2500ha), but it does offer the opportunity to link different environments, break-up the commercial planting and offer projects for biodiversity gain.

Forestry and Land Scotland Land Management Plan

Given the trail corridors are a small part of the wider forest Pitfichie and Corrennie Forest, Gravitate North East's Biodiversity Plan will work within the framework of the existing plan Land Management Plan (LMP) operated by Forestry and Land Scotland (FLS).

FLS must meet the regulatory goal "to produce a high quality timber. The timber could come from either broadleaves or conifers. This will be done, taking into account: areas of high recreation, the trails and the forest landscape management" and support the secondary goal "to maintain the high environmental value of the site maintaining tree species and habitat diversity" (LMP 2016).

The LMP 2016 recognised two sites designated as Plantation on Ancient Woodland Sites (PAWS) and five smaller sites designated as Semi-Natural Woodland (SNW) in the area of Pitfichie Hill. As well as areas of dead wood of high ecological potential, and Low Impact Silviculture System (LISS), (designated Shelterwood in the LMP), existing areas for recreational use (Bike Trails and access roads) and timber production.

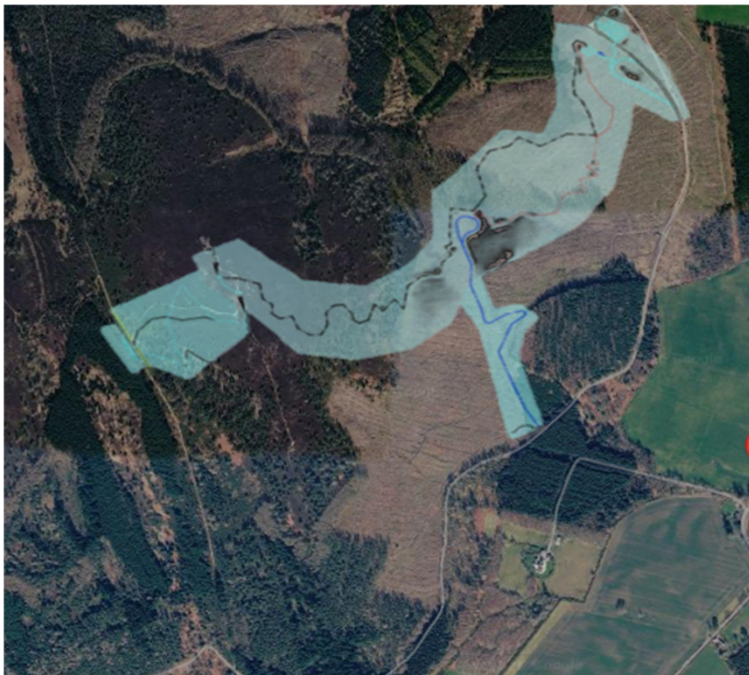
The LMP will take opportunities to link these semi-native woodlands and PAWS to other similar woodlands in the surrounding landscape. Some of these woodlands will be preserved, particularly the woodland on Pitfichie hill that connects with the PAWS sites, so as to improve habitat connectivity.

Storm Arwen felled many of the trees on the northeastern side of Pitfichie Hill, the area of the proposed trails, in 2021 and the area was subsequently clear-felled,

including most of the designated areas above. A new LMP, including the current clear-felled areas will be published in 2027.

Construction

Construction of the trails will only be for a short duration of their total life but is an opportunity to protect and enhance biodiversity. Blue shaded area in Map 1 is the construction corridor within which Gravitare North East will build the trails. This is a wide corridor so that the exact location of the trails can avoid any particularly environmentally sensitive locations, such as perennial nest sites and ground water seeps.



The construction work will follow a Construction Method Statement that mitigates the environmental impact of construction work.

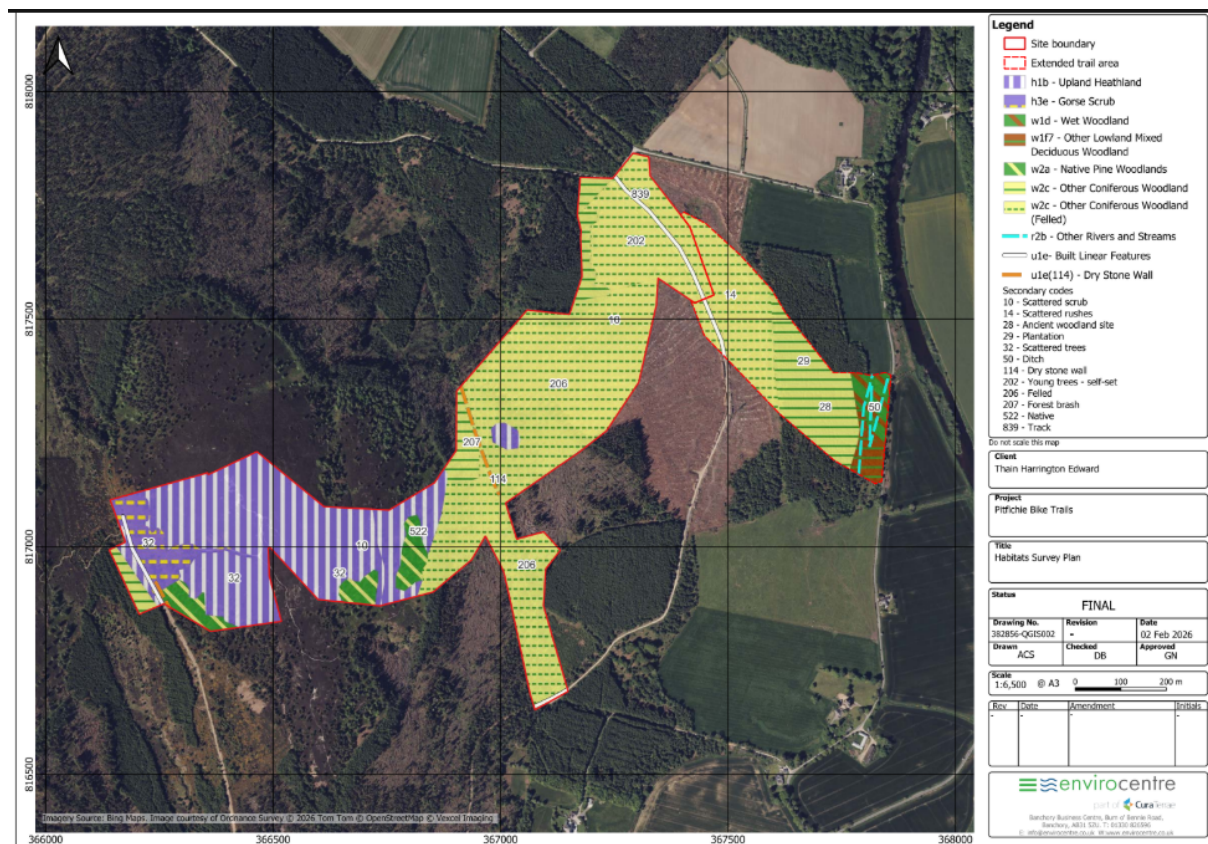
Biodiversity Status and Goals

Site Assessment 2026

A Preliminary Ecological Appraisal identified 8 Primary Habitats, shown on Map 2, including **Wet Woodland**, **Other lowland mixed deciduous woodland**, **Native pine woodlands**, **Other Coniferous Woodland** (Scattered Scrub, Scattered rushes, Ancient woodland site, Plantation, Young trees – self-set, Felled, Forest brash), **Upland Heathland** (Scattered scrub, Scattered trees), **Gorse scrub**, **Built Linear features** (Dry stone wall and Track) and **Rivers and Stream** (Ditch).

Although most of the trails will pass through Other Coniferous Woodland habitat which is rated of site importance, it does link directly with Upland Heath Land, rated of national importance and Native Pine Forest and Dry Stone walls rated of regional

importance. The trails areas link indirectly, through stands of conifers, to habitats of low land mixed deciduous woodland to the east and Upland Birch (Native Woodland Survey).

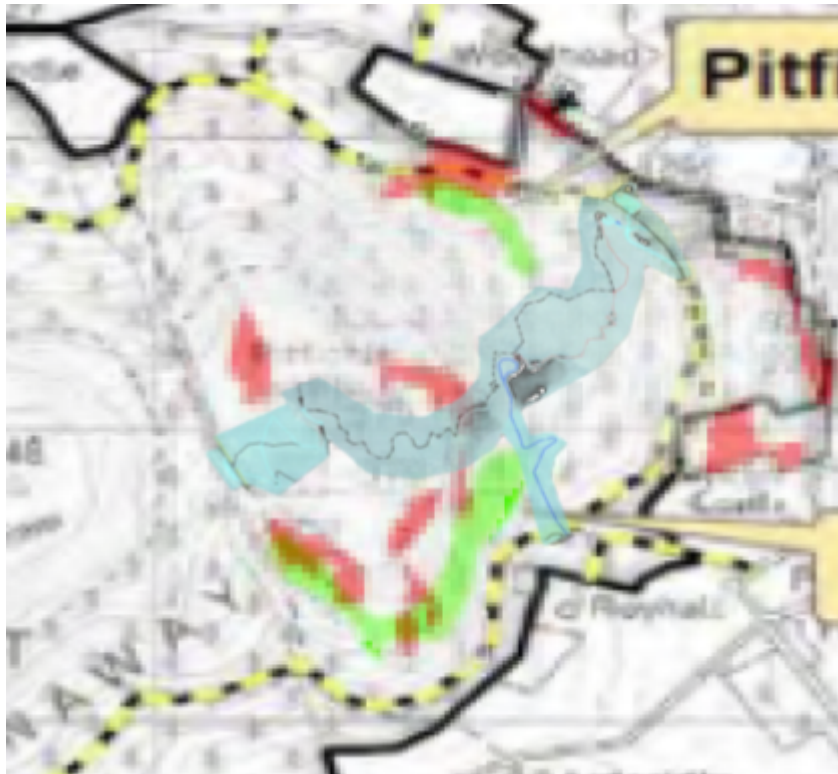


The preliminary ecological assessment (PEA) undertook a desk study into birds, mammals, amphibians and reptiles on site. Unfortunately, the NESBReC (North East Scotland Biological Records Centre) does not return records for bats, Red Squirrel, Pine Marten, Badger (only tracks), Hedgehog, Mountain Hare, nor amphibians and reptiles. However, riders have spotted Red Squirrels and Pine Marten scat was identified during the PEA. Therefore, there is a need for more reporting, and foundation of the biodiversity plan is to promote reporting of these species, and relevant bird species to the NESBReC.

The PEA identified habitats that would support a range of mammals, birds, amphibians and reptiles that if protected from commercial forestry and promoted in the appropriate areas could develop their abundance and diversity on the site.

The Biodiversity Plan will aim to produce a net biodiversity gain from this start point, based on an increase in the size, quality, condition, location and type of biodiversity within the constraints of the site and the LMP.

Map 2: Candidate Trail Locations overlain on Areas of PAWS (green) and SNW (red).

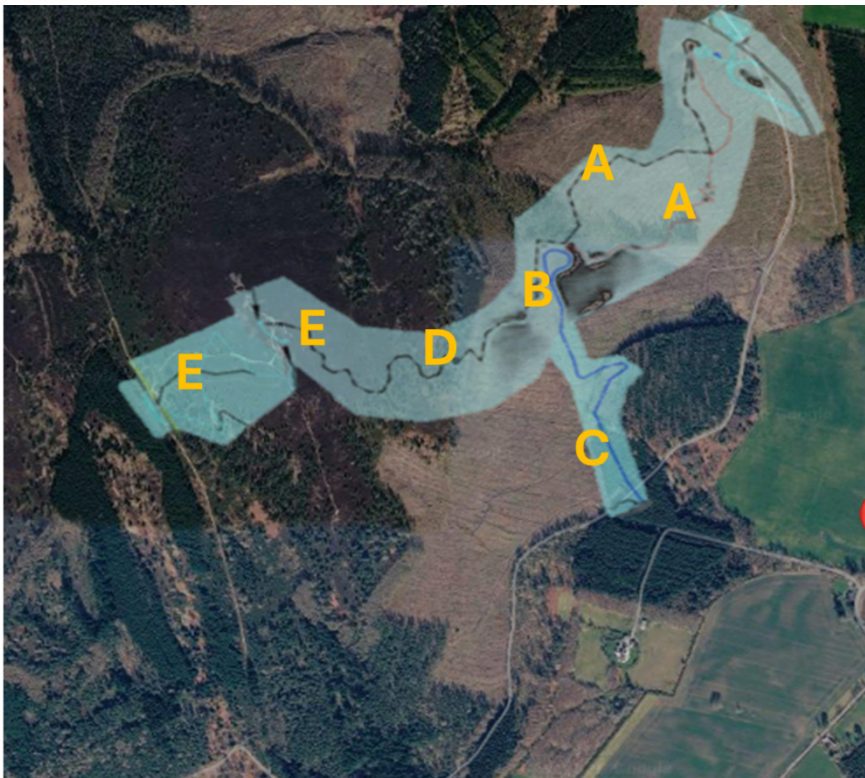


BIODIVERSITY ACTIVITY PLAN

Developing and sustaining habitats for biodiversity will take time but can be achieved through consistent monitoring and targeted activity to support habitat development.

The activity plans for improving biodiversity of the trail corridors are described for different sections of the trail. The activities are informed by the recommendations for improving biodiversity from the following bodies: RSPB, Scottish Wildlife Trust, NatureScot, Butterfly Conservation Scotland, North East Scotland Local Biodiversity Partnership and the Gravitare North East PEA 2026. Other sources will be added as the habitat monitoring continues and the forest matures.

The sections of the trail corridor and sites for activities are shown in Map 4.



Site Wide Actions

Promote sightings and recording of animal and plant species.

Promote insect numbers and diversity.

Promote appropriate variety of habitats through the life cycle of the bike trails and commercial forest. For example, stands of trees of different ages, and limiting the dominance of one species, such as bracken.

Trail Section A: Lower DH1 track and DH 2 Track

These sections of trail run predominantly northeast through commercial conifers. Their orientation offers the greatest potential for variation in areas of direct sunlight and shade reaching the forest floor. These trail corridors effectively form forest rides through the commercial forestry which benefits the biodiversity in these locations.

Actions: Manage these trails as forest rides to promote species of Bats, Butterflies and Moths. Increase the population of insects and create a diversity of structure and vegetation types and shade across and along the ride. The rides can provide habitat corridors for bats connecting low land farmland with the open moorland.

Develop and maintain areas of grassland, high shrub (potentially informal coppicing), medium height trees and retaining some longer standing deciduous trees to create a diversity of habitats as the forest matures.

Maintain open areas of soil and gravel, and wet patches, probably in the lee of raised trail features and drainage features. Where appropriate consider informal damming of drainage features to create standing water, such as historical harvester tracks.

Trail Section B: Mid-Station meeting of trails and Ride-up

This section lies on a flat section of the hill where several trails meet on potentially creating an open area in the mixed conifers to benefit biodiversity. The area is currently clear-felled, apart from a thin stand of a few trees. The area is designated for Scots Pine re-generation but is also close to the slope above which includes Upland Birch and potentially Pedunculate Oak and Alder.

The reduced gradients result in water pooling in forwarder-tracks here.

Actions:

Remove non-native species from the area and maintain an open space in the forest.

Retain trees or standing dead wood to provide perches for raptors, and potentially sites for bat boxes. Adding posts if clear felling does not provide sufficient perching sites.

Add bird and bats boxes in adjacent forest stands.

Create scrapes, during construction, on the flat areas (up to 5x3m) to promote standing water habitats for invertebrates and amphibians.

If appropriate, plant P.Oak trees to extend the P.Oak/Alder zone on bouldery-ground. Source seed from the Paradise Wood SSSI and lower slopes of Cairn William.

Trail Section C: Ride Up to Mid-Station (3.4 ha)

This section of trail is at the lower part of the hill, and follows the line of a granite stone dyke, rising to the flat area of the hill. It is bordered by a stand of Sitka Spruce/Larch to the east, and a clear felled area, designated a Scots Pine and Broadleaf, in an area of Shelterwood.

Westside Action: (adjacent to Scot Pine Shelterwood)

Remove regeneration of Sitka Spruce and Larch transferred from the eastern margin. Scarify the soils to encourage natural regeneration and weed clearance to favour Scots Pine.

Limit Gorse regrowth, following clear fell, along the granite wall to maintain a range of shelter in the gorse and exposed the stone surfaces.

East Side Action: (adjacent to Sitka Spruce): Encourage growth of native species by removal of regenerating Sitka Spruce. Selectively removing trees to create uneven aged stands of conifers and broadleaves, potentially to be preserved for

continuous cover habitat for red squirrels; this area is adjacent to mixed broadleaf forest to the south where squirrels have been sighted.

Note that this trail section links the two PAWS zones on Pitfichie Hill, via Section A on the DH1 trail (Map 2 and 4). The Future Planting Plan (2022) shows PAWS (Pitfichie 1) to be stocked with Scots Pine by natural re-generation (with a small area of planting).

Trail Section D: Upper DH1 track

This section of trail passes from commercial woodland to the open moorland, over steep ground, trending east to west. This section crosses the upper forest margin, and between areas designated as areas of Semi-native Woodland.

Actions: Evaluation and monitoring: gather information about the remnants of Semi-Native and Ancient woodland, early spring (or winter) and summer, to inform further actions.

Candidate Actions:

Removing just a small number of non-native trees (halo thinning) in a targeted way to maintain semi-native woodland species.

Removal of coarse vegetation, such as excessive growth of bracken that may swamp native species.

Targeted deer management to reduce grazing pressure.

Trail Section E: Upper DH1 track and Push-up Track

These lengths of trail cross open heathland which is dominated by heather, shallow organic soils and exposed granite bedrock.

Candidate Actions:

Evaluate current browsing load on moorland shrubs and evaluate latent species that are over grazed. Develop potential for juniper growth, and other upland shrubs, potentially with small-scale protection from browsing.

Removal of bracken, non native saplings.

Potentially cut back senile heather in small areas to create a habitat mosaic for insects.

Reinstate heather soils on worn granite areas.

References

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