# Formonthills Plan period 2023 to 2027



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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® (FSC®) 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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- 2. Site Description
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Management Proposals Map

# 1. SITE DETAILS

## **Formonthills**

Glenrothes, Grid reference: NO259036, OS 1:50,000 Sheet No. 59 Location:

118.47 hectares (292.75 acres) Area:

Tree Preservation Order External Designations:

N/A Internal Designations:

# 2. SITE DESCRIPTION

Formonthills Woodland is a mosaic of young planting, mature woodland and open ground, located in and around the north-western boundary of Glenrothes. It is important both for the diversity of its habitats and also the range of marginal habitats created between adjacent areas. Rhind Hill is included within the site boundary, this being a high point in the local area, at 233m above sea level (a.s.l.), and the lowest point in the south west corner is approximately 140m a.s.l.

Most of the woodlands have been established on what was previously improved or semi-improved farmland. Over most of the site the soils are brown earths of reasonable fertility, often underlain by clays derived from glacial drift. Dolerite boulders (probably brought in drift from the nearby Lomond Hills) are frequent and form the building materials for the old farm dykes. The site drainage is complex and has been modified by previous farm drainage works, including clay field drains, stone conduits and burn diversions.

The area around Glenrothes is described by the MLURI climate maps as being fairly warm, moist lowland foothill. However much of the site is surprisingly exposed given its lowland classification.

The central area of woodland is dominated by young native woodlands with an area of about 55 hectares (ha). These were established between 1995 and 1997 shortly after the Trust took ownership of the site. In the northern parts of the woodland creation area there is a mosaic of groups of Scots pine and broadleaves. The trees are now mostly well established and have generally closed canopy. In mosaic with the young woodland are glades, shrubs, gorse scrub, and semi-wetland habitats.

The creation of the 50ha native woodland at Formonthills provides a very significant addition to the local landscape and biodiversity. It all the more important for integrating these benefits into the urban fringe and providing an interface with the more open landscape of the Lomond Hills. Fife generally has a very fragmented and low level of woodland cover, and much of the existing resource is either coniferous or non-native broadleaved. The new woodlands at Formonthills border little existing woodland outside of the site.

In 2001 the Ground Flora Project was begun with the aim of establishing the ground flora component of new native woodland at the same time as the tree canopy. This resulted in the seeding of 11ha with wild flower seeds and the establishment of a number of trial plots. The seeded areas have established well (in particular primrose, bluebell, red campion, St Johns wort & meadowsweet) and provide colour and nectar throughout the spring and summer. The introduction of woodland ground flora has also increased the biodiversity value and visual interest of the woodlands and provided a model for other such projects.

A belt of more mature mixed woodland provides a backdrop to the housing boundary in the south. These woods were mainly planted by the Glenrothes Development Corporation as part of the establishment of the new town and date from the 1980's. They are quite varied in species and structure and their most abundant components are ash, Scots pine, larch, birch, oak, alder, beech and sycamore.

In the east of the site, conifer woodlands were planted in the 1970's, dominated by Sitka spruce. After extensive windblow in 2012, these were felled and replanted with native broadleaves and Scots pine. Some mature Sitka spruce still remains to the west of Pitcairn Centre.

Within the young native woodland there are 4 large glades and several smaller ones. These are areas of grassland that have been mown once or twice annually since c.1997. Arisings are removed with the long term aim of reducing fertility to improve floral diversity. There is a substantial area of semi-improved acid grassland centred on Rhind Hill. This has some botanical interest and was grazed until 2016. Adjacent to Rhind Hill there are also extensive gorse thickets.

There are several wetland areas throughout the site, with varied plant communities, dominated by grasses and rushes but including water horsetail and early purple orchid. A small scrape / pond was created (water from a spring) in 2021 to increase open water habitat. There are also a number of ditches and water courses passing through the site. Many of these are the result of previous agricultural drainage and their current courses are artificial, although naturalised over many years. An informal study by SEPA in 2006 showed a high diversity of invertebrate fauna in the burn near the Pitcairn Centre, indicating good water quality. The largest water course is the Conland / Coul burn which runs along the northern boundary of the site.

Many features such as stone dykes, hedgerows and mature hedgerow trees remain from the site's agricultural past. These now form valuable niche habitats. Mature hedgerow trees account for most of the few mature broadleaves in north-west Glenrothes.

The site supports a host of bird life, including buzzards, kestrels, skylarks, meadow pipits and crows. Mammals include roe deer, rabbits and moles.

The Trust's land marches with the southern boundary of the Lomond Hills Regional Park. There is a Tree Preservation Order on 7 mature oak trees between Pitcairn Centre and Calder Court (cpt 3a).

Formonthills provides a major resource of land for informal public access in the north-west of Glenrothes with a population of approximately 50, 000. The path network is extremely well-used by local people. It is also popular with visitors from other parts of Glenrothes and beyond.

There are nearly 10km of paths forming a strategic network linking the communities adjoining the woodland as well as providing a network of routes through new and existing woodland. These routes are suited to a variety of users and on mostly level ground or shallow slopes and without steps. Some routes are surfaced, whereas others are unsurfaced and may be muddy in places. Some paths are part of the Core Path Network. There are 30 entrances and 3 car parks adjacent to the site (one on Trust land). The boundaries with housing areas total about 4.5km in length.

The site provides an educational resource to local schools and nurseries.

# 3. LONG TERM POLICY

#### Woodland

To move towards a mixed woodland of diverse age and structure. Canopy species will be mostly birch, oak, rowan, cherry, sycamore and Scots pine with a variety of other native tree and woody shrub species. There will be occasional groups and individuals of mature exotic conifers for colour and diversity, where these can be retained against wind damage. The canopy will generally be fairly open for reasons of both amenity and diversity of ground flora. There will be frequent deadwood. The woodland will form an attractive backdrop to Glenrothes and be a key element in the local landscape.

#### Connecting people with woods and trees

The site will be a welcoming and pleasant place for walkers, horse riders and mountain bikers, providing an extensive area of green space, both woodland and open space, for quiet informal recreation. There will be a wide range of users, mainly local dog walkers and families, but also by people from further afield. Schools and groups will be using the area for outdoor learning and practical activities.

The path network will be easily accessible from residential areas and form links between them, as well as onto other wider path networks. There will be a framework of surfaced paths and a more extensive network of un-surfaced paths. Access provision will be in keeping with WT access guidelines and site access coding (A). Interpretation will include a series of sculptures to help with orientation and added interest on site.

#### Other habitats

There will be a diversity of semi-natural non-woodland habitats across the site, providing both an interesting amenity landscape and a high biodiversity potential. Habitats present are likely to include gorse thicket, grassland, wetland, open water, woodland specialist ground flora, wildflower meadows, streams and old boundary features. It is accepted that natural successional changes will take place and that existing habitats may evolve over time in nature and location.

# 4. KEY FEATURES

## 4.1 Connecting People with woods & trees

#### Description

Formonthills provides a welcome accessible greenspace area on the north-western edge of Glenrothes, a new town with a population of approximately 50,000 residents. The woodland acts as an important buffer between housing and agricultural fields and hill land to the north. The 118 hectares is a mosaic of young planting, mature woodland, and open ground and is one of the most significant areas of public open space near the town. Rhind Hill is the high point at 233m with amazing views over the town and beyond to the Firth of Forth, Bass Rock and Largo Law.

There are approximately 10km of paths forming a strategic network linking the communities adjoining the woodland and providing a network of routes throughout the woodland, as well as onto external paths through Coul Den Local Nature Reserve and into the Lomond Hills Regional Park. These routes are suited to a variety of users and on mostly level ground or shallow slopes in the Southern part of the site, with steeper ground as you head towards Rhind Hill. Some paths are surfaced with hard-core (hedgehog way marked route and path between Western Avenue and Calder Court) whereas others are grass and earth paths and may be muddy in places. In addition to the managed paths there are many informal desire line paths. There are two way-marked path loops (hedgehog and squirrel) with posts carved with drawings done by local school children. Many of the paths are part of the Core Path Network, and lead onto land managed by the Fife Coast and Countryside Trust.

There is a Woodland Trust car park at the end of Benvane Road, which is surfaced with hard-core and has room for about 15 cars. There are two further car parks adjacent to the woodland - Coul Den car park at the end of Calder Road, and Pitcairn Centre car park at the end of Moidart Drive. These are also surfaced with hard-core and have room for a similar number of cars and are both owned by the Council. The Trust car park is shut at night. There is a large grassy glade next to the Benvane Road car park, which can be used for events and overflow car parking.

There are 30 entrances to the woods, all with Woodland Trust welcome threshold signs. On Benvane Road there is a large threshold sign and wooden ladder board sign, and there are brown tourist signs directing visitors from Leslie Roundabout, along Western Avenue and onto Formonthills Road, and Benvane Road. There are two information boards (at Benvane Road and Pitcairn Centre car parks). Several sculptures are situated at main path junctions to help orientate the visitor. Entrances have no access barriers, but a few entrances have posts or boulders to restrict the width of entrance where there have been issues with quad bikes on site, with no quad / motorbike signs.

The path network has been improved over the last decade and there has been a gradual increase in visitor numbers, mostly local dog walkers but also people from further afield. Mountain bikers and horses also regularly use the site. In the spring and summer the many wild flowers along paths and in several large glades are a great attraction. Some schools and nurseries use the site regularly for outdoor education.

There are several volunteers (Wood Wardens) who help to keep an eye on the wood, pick up litter and report back any

issues. Several local walkers also help to keep the area free of litter.

The high public usage and closeness to a large urban area also creates occasional management difficulties such as vandalism, fly tipping, litter, motorbikes & quads, poaching deer, out of control dogs chasing wildlife, dog poo, and garden waste tipping.

#### **Significance**

The path network is extremely well-used by local people, and is also popular with visitors from other parts of Glenrothes and beyond. Although Glenrothes is generally well-provided with woodland, Formonthills provides one of the most significant areas of public open space, giving a varied experience of open ground and woodland habitats close to people's homes. The paths provide direct routes between housing developments and link into the wider path network.

There are 20 primary schools and 3 high schools in Glenrothes, and the site provides an educational resource for outdoor learning, and practical activities. Currently Formonthills is used regularly by Carleton Nursery and Collydean Primary School, which is within walking distance.

The current level of public usage is defined as WT access category A - High (Regularly used at all times of year, more than 15-20 people per day using main entrances).

The nearest other Woodland Trust sites are Keil's Den and Largo Serpentine in Largo.

#### **Opportunities & Constraints**

Opportunities: To encourage more use of the woods: by holding some public engagement events; by providing opportunities for groups wanting to do practical work (such as tree tube removal), and by encouraging people into the woods who have not been before and may not be confident in visiting woods. There is also the opportunity for partners to use the site for health walks or green gyms.

Constraints: anti-social behaviour.

#### **Factors Causing Change**

Climate change with more intense rainfall and greater visitor numbers is making un-surfaced paths muddier.

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

The site will be a welcoming and pleasant place for walkers, horse riders and mountain bikers, providing an extensive area of green space, both woodland and open space, for quiet informal recreation. There will be a wide range of users, mainly local dog walkers and families, but also by people from further afield. Schools and groups will be using the area for outdoor learning and practical activities.

The path network will be easily accessible from residential areas and form links between them, as well as onto other wider path networks. There will be a framework of surfaced paths and a more extensive network of un-surfaced paths. Access provision will be in keeping with WT access guidelines and site access coding (A). Interpretation will include a series of sculptures to help with orientation and added interest on site.

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

The site will be well-maintained and welcoming. Achieved by:

- Ensuring that all managed paths are kept free from encroaching vegetation, and well-drained where possible (edges cut twice annually).
- Ensuring entrances are kept in good order and welcoming (annually).
- Regular collections of litter (every 2 months) and clearing dumping (when occurs);
- Regular site safety surveys of trees and access features (bridges, benches, structures) as per risk assessment;
- Upgrade surfaced path loop from car park (hedgehog way-marked path) (1585m by 2027).
- Maintenance of ditches and culverts to keep paths as dry as possible (annual).
- Install 2 more sculptures at main path junctions to help orientate visitors and add interest (by 2027).

Opportunities for public engagement will be sought when possible. Achieved by:

- To hold public events (at least 1 in this plan period).
- To encourage people into the woods who have not been before and may not be confident in visiting, by volunteer-led walks and activities, on a trial basis for 2 years (up to 4 times a year in 2023 and 2024), and continuing annually if successful.
- To continue our partnership with Fife College students (furniture making course) providing a new creative bench to go on site as part of a competition (annually).
- To host corporate volunteering groups in doing practical work (twice by 2027).

## 4.2 Secondary Woodland

#### Description

The main block of woodland to the NW comprises of young native trees established between 1995 and 1997, shortly after the Trust took ownership of the site. The site was previously farmland, consisting of improved grassland in the south and semi-improved grassland in the north. The main species, which were planted in shelters, are oak, birch, ash, alder, and groups of Scots pine in the northern parts. A fire in 2003 destroyed about 4.5ha in the east of 6a, which was replanted.

Ash dieback disease (Chalara) is affecting most of the ash trees, with many dead and others with severe dieback. Some ash next to paths and boundaries were felled in 2020 for safety reasons, with replacement planting in tubes.

The existing woodland, both broadleaved and coniferous, form strips adjacent to housing areas around Balgeddie, Collydean, Pitcairn and Coul. These woods were mainly planted by the Glenrothes Development Corporation as part of the establishment of the new town and probably date from the 1970s - 80s. They are quite varied in species and structure and their most abundant components are ash, Scots pine, birch, Sitka spruce and sycamore with frequent wild cherry, oak, rowan and alder and occasional larch, willow and beech. There were areas of Sitka spruce at the western end (cpt 3a & 4a & 4b) which were felled and replanted in 2012 after major windblow in 2011 & 2012.

Woodland along the edges of houses, paths and Scots pine blocks were thinned in 2015, to reduce the issues with trees growing close to houses, and to let more light to the ground for a greater diversity of plants.

The woodlands also contain mosaic of other habitats – glades, marsh, gorse, streams and acid grassland.

#### **Significance**

Both broadleaved and coniferous woodlands contribute to the overall diversity of the site, in terms of ecology, landscape, biodiversity and visitor experience. In several places they link into external woodland shelterbelts, creating

habitat networks. The woods provide an interface between urban fringe and the more open landscape of the Lomond Hills Regional park. Fife generally has a very fragmented and low level of woodland cover

# **Opportunities & Constraints**

Opportunities: To gradually restructure the conifers to native species to improve ground flora diversity by increasing light to the forest floor.

Constraints: Proximity to housing and general high public use makes some operations difficult. Garden tipping is an issue along boundaries where excessive garden cuttings smothers trees, looks unsightly, can introduce invasive plants, blocks drains and makes access for boundary inspections difficult.

Deer browsing make protection of young trees essential.

Tree Preservation Order on 7 oaks between Calder Court and Pitcairn Centre.

# **Factors Causing Change**

Wind blow (particularly of conifers), ash dieback disease (chalara), build up of garden dumping and invasive plants (rhododendron, Himalayan Honeysuckle, snowberry, bamboo and variegated yellow archangel).

## Long term Objective (50 years+)

To move towards a mixed woodland of diverse age and structure. The canopy will generally be fairly open for reasons of both amenity and diversity of ground flora. There will be frequent deadwood. The woodland will form an attractive backdrop to Glenrothes and be a key element in the local landscape.

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

Ensure the establishment of young planted woodland. Achieved by:

- Maintenance of tree shelters as needed as a result of wind-damage or vandalism (cpts. 2d, 5b, 8a (1600 trees planted in 2021) and 8e (1500 trees planted in 2018 & 19) annually);
- Remove shelters when no longer needed for protection (cpts 1e, 2d (north), 4b, plus occasional remaining shelters in cpts 5, 6, 7 by end 2027) using volunteers as much as possible. (Shelters of recent planting to be removed in next plan period);
- Weed newly planted trees to reduce grass competition if needed in first few years (cpt 2d, 5b, 8e (1600 trees in 2023).
- Cut any non-native conifer tree regeneration (cut spruce in cpts 3a & 4b by 2027).

Control Invasive plants. Achieved by:

- Survey the woodland and map where all invasives are present (by end of 2023).
- Continue controlling any invasive rhododendron, Himalayan Honeysuckle and bamboo found, dealing with any regrowth by cutting / pulling / spraying whenever present. (Whole site but mainly cpts 3a & 4b, annually).
- Stop invasive snowberry encroaching into new areas by control (digging up or spraying), annually. Trial controlling one area where the snowberry is dominant (cpt 2b south, between Scaraben Crescent and Cairngorm Drive, by 2025) with annual follow up treatment as required until 2027.
- Trial stopping the spread of invasive variegated yellow archangel into new areas where there are paths or natural barriers as "front line" by spraying (2024 and then annually). Denser areas of this plant will be left as control would mean killing all the ground vegetation around it.

Ash Dieback

Monitor ash for chalara (ash dieback disease) (as part of regular tree safety inspections).

- Ash trees that have more than 50% dieback next to houses, roads, and paths will be felled for safety reasons.
- In many areas the ash with dieback are situated in single species blocks. To diversity the age and species composition of the woodland, three small areas of ash with dieback near paths will be clear felled. These areas will be fenced to protect from deer browsing, establishing native trees by natural regeneration and supplementary planting to diversify (cpt 6a, not more than 1 hectare, by 2027).
- Any healthy ash trees will be retained with the hope that they might be more resilient trees to survive long term. In low risk areas, dead and dying ash trees will be retained for their ecological value.

## **Thinning**

- Continue thinning of Scots pine blocks to open up for stability and increased light for ground flora (25% intermediate selective thin cpt 6a & 7a by 2027).
- Thin around young oaks to create more open grown trees for the future, diversifying the structure and increasing light levels for ground flora (25% selective thin cpt 6a, not more than 4 hectare, by 2027).

#### 4.3 Mixed Habitat Mosaic

#### Description

Formonthills is a diverse site with a variety of different habitats integrated into the woodland landscape. In particular: (a) Glades: Within the young native woodland (cpts 5, 6, 7) there are 3 large glades and several smaller ones, totalling 3.14ha. These are areas of grassland that have been mown once or twice annually since c.1997. Arisings are removed with the long term aim of reducing fertility to improve floral diversity.

- (b) Ground flora: In 2001 the Ground Flora Project was begun with the aim of establishing the ground flora component of new native woodland at the same time as the tree canopy. This resulted in the seeding of 11ha with wild flower seeds and the establishment of a number of trial plots. The seeded areas have established well (in particular primrose, bluebell, red campion, St Johns wort & meadowsweet) and provide colour and nectar throughout the spring and summer. As part of the Fife's Buzzing project in 2016, 2 glades and the marshy area near the boardwalk were planted with wildflower plugs.
- (c) Wetland: The main area of permanent wetland is the upper part of 5c with water horsetail and early purple orchid. The lower part of 5c is seasonally wet and dominated by grasses and rushes (5c total 1.78ha). The western part of 5d (1.72ha) is a large open area of wet grassland of rushes, tufted hair grass and creeping buttercup. There are other isolated pockets of poorly drained land in cpts 6, 7 and 8 where rushes dominate. A small scrape / pond was created in 2021, fed from a spring, to increase open water habitat.
- (d) Water courses: There are 2 burns which run along the northern boundary: Coul Burn in cpt 4b and Conland Burn in cpt 8. There are also a number of ditches and water courses passing through the site. Many of these are the result of previous agricultural drainage and their current courses are artificial, although naturalised over many years. An informal study by SEPA in 2006 showed a high diversity of invertebrate fauna in the burn near the Pitcairn centre, indicating good water quality.
- (e) Semi-improved acid grassland: This area, centred on the area around Rhind Hill, occupies about half of cpt 8a in a mosaic with gorse thicket.
- (f) There are extensive gorse thickets, occupying about 25% of cpt 8a (mostly nearest Conland Burn in the north) and anecdotal evidence indicates that the gorse is spreading. There are also isolated thickets of gorse among the young woodland, particularly in cpt 6.
- (g) Hedgerows, dykes and old hedgerow trees: Many boundary features remain from the site's agricultural past. These

now form valuable niche habitats. Mature hedgerow trees account for most of the few mature broadleaves in northwest Glenrothes.

# Significance

Formonthills is important both for the diversity of its habitats and also the range of marginal habitats created between adjacent areas. Formonthills is sandwiched between a relatively intensive agricultural landscape and the urban fringe, both of which contain few of the habitats concerned.

#### **Opportunities & Constraints**

Opportunities: To increase wetland diversity by creating more open water.

To work with Fife Coast and Countryside Trust on the "Back Burn" project to naturalise and improve the Conland and Coul burn corridors.

Constraints: The drainage system is in a state of flux with springs appearing as old clay pipes get blocked. This causes problems when affect paths.

Occasional fire-setting by youths causes unplanned changes in gorse distribution.

## **Factors Causing Change**

Gorse expansion, Climate change, Fires.

# Long term Objective (50 years+)

There will be a diversity of semi-natural non-woodland habitats across the site, providing both an interesting amenity landscape and a high biodiversity potential. Habitats present are likely to include gorse thicket, grassland, wetland, open water, woodland specialist ground flora, wildflower meadows, streams and old boundary features. It is accepted that natural successional changes will take place and that existing habitats may evolve over time in nature and location.

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

Maintaining and improving diversity of non-woodland habitats. Achieved by:

- Mowing glades once annually after flowering and continue to remove arisings to reduce fertility (3.14ha annually).
- Creating 2 further small scrapes to increase open water (survey in 2023 to assess where this would be most beneficial, with work by 2027 approximately up to 10m2 each).
- Control gorse in open grassland to stop further spread of gorse and to keep a range of ages for diversity, by cutting half the accessible areas (c. 3ha) once every 4-5 years on a rotational basis, leaving older bushes on slopes inaccessible by machinery (cpt 8a, cut 1.5ha by 2027).
- Liaise with Fife Coast & Countryside Trust regarding their proposals for the Back Burn Project (Conland & Coul Burns). Work in partnership to deliver any outcomes that are in line with the Woodland Trust's management approach for the site (work and timescale dependent on FCCT).

# APPENDIX 1 : COMPARTMENT DESCRIPTIONS

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1a	3.05	Mixed broadleaves	1973	High forest		

A south-facing broadleaved woodland, thinned in 2009 and again in 2020 to fell diseased ash. The semi-mature canopy (80% cover) is dominated by sycamore, with frequent downy birch, occasional Scots pine and oak and rare ash, cherry, willow, beech and alder. The understorey (30% cover) consists of dominantly snowberry, with frequent juvenile downy birch and rare rowan, hazel and oak. There is frequent regeneration of mostly birch, with occasional oak and rare hazel and hawthorn. A small burn runs through the subcompartment from north to south, bordered by mature native broadleaves dominated by oak, with occasional beech, sycamore and cherry, and a hawthorn hedge to the west. There is a patch of juvenile sycamore to the west. Ground flora is dominated by grasses, including abundant tufted-hair grass, with frequent thistles and dock and occasional rosebay willowherb, dog rose and creeping buttercup. The south-western finger contains young planting, grasses and thistles. Occasional evidence of deer and rabbit browsing, both old and recent. Occasional brash and twigs form the only deadwood habitat.

1b	2.28	Mixed	1965	High forest	
		broadleaves			

Mainly broadleaved woodland, thinned in 2002 and again in 2020 to fell diseased ash trees. The semi-mature canopy (90% cover) is dominated by alder with abundant ash, and occasional birch, oak and Scots pine and rare sycamore, larch, cherry and beech. The understorey (25% cover) is dominated by snowberry, with occasional hawthorn, especially in a hedge running through the centre, and rare rowan, blackthorn and juvenile Scots pine. There is occasional rabbit browsing of the frequent alder and ash regeneration. Ground flora includes abundant grasses and creeping buttercup, frequent nettles and dock, and occasional daisies, ground ivy, wood avens, hogweed, broad buckler fern, soft rushes, bramble and rosebay willowherb. There is occasional dead wood.

1c	0.16	Mixed	1900	High forest	
		broadleaves			

A narrow subcompartment that runs between a field and a horse paddock with a small stream running along the western boundary. The canopy (50% cover) consists of mature and semi-mature trees, with frequent mature cherry and sycamore, occasional willow and birch and rare ash. The footpath is kept relatively open, with the mature trees on either side. The understorey is varied, including frequent juvenile cherry and elder, occasional birch, hawthorn and sycamore, and rare snowberry, Sitka spruce, gorse, blackthorn, rowan and dog rose. There is occasional bark stripping by squirrels of sycamore and cherry trees. Regeneration of cherry and elder is occasional. Ground flora is dominated by grasses, with abundant creeping buttercup, frequent ground ivy, rosebay willowherb, dock and woodruff, as well as occasional broad buckler fern, cleavers, nettles and wood avens. Occasional dead mature trees are present.

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
1d	3.09	European larch	1965	High forest		

A mainly coniferous woodland of varied species and age structure. The ash trees were thinned in 2020 due to disease. The canopy (95% cover) is dominated by larch, with frequent ash, Scots pine and beech, occasional willow, poplar and Norway spruce, and rare birch, cherry, rowan and oak. The understorey (40% cover) consists of frequent juvenile ash and beech as well as elder and hawthorn, occasional rowan, cherry and sycamore, and rare snowberry, dog rose, Norway spruce and oak. There is frequent beech and ash and occasional poplar and sycamore regeneration. Ground flora consists of abundant grasses, nettles and wood avens, frequent bramble, woodruff, dock and creeping buttercup, and occasional hogweed, thistles and broad buckler fern. The area is relatively flat. A burn runs through the centre, from north to south, bordered by a mature hawthorn hedge. There is occasional dead wood. There is isolated windblow, worst affected to south of playing field.

1e	0.41	Mixed	1900	High forest	
		broadleaves			

A thin belt of trees between housing developments and containing a well-used path. The strip is dominated by a row of widely spaced, mature trees of oak, frequent sycamore and cherry, and occasional ash and Norway maple (60% cover). Several of the mature trees are subject to frequent remedial safety work. The understorey (50% cover) is dominated by hawthorn (remnants of a hedge) with occasional juvenile oak and cherry and rare holly, rowan and beech amongst other shrubs. Ground flora is dominated by grasses, abundant creeping buttercup, frequent nettles and brambles, and occasional wood avens, dock, rosebay willowherb and broad buckler fern. There is occasional dead wood in the form of dieback in mature trees or fallen dead branches.

1f	0.7	Mixed	2002	High forest	
		broadleaves			

An area of young planting in 1.2m shelters. Species consist of abundant ash and birch, frequent oak, rowan and wild cherry, and occasional goat willow, hawthorn and hazel. The cpt was planted in 2002 and is well established. A mature hawthorn hedge runs through the centre of the compartment. Ground flora is prolific and is dominated by grasses and thistles, with abundant nettles and frequent dock and hogweed.

2a	1.38	Mixed	1974	High forest	
		broadleaves			

An area of juvenile and semi-mature mixed broadleaved and coniferous planting, thinned in 2009 and again in 2020 to fell diseased ash trees (chalara). The canopy (80% cover) is dominated by ash, with frequent birch, sycamore and Scots pine and occasional cherry and rowan. The sparse understorey is dominated by snowberry, with frequent hawthorn and occasional juvenile birch and ash and rare oak, rowan, elder, hazel and lilac. There is frequent regeneration of ash and birch, mainly from coppicing, with occasional hawthorn. Ground flora is dominated by grasses, with frequent bramble, rosebay willowherb and dock, and occasional nettles, creeping buttercup, ragwort,

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations				
	thistles and soft rushes. There is frequent deer browsing on sycamore regeneration. Frequent fallen branches make up the deadwood habitat.									
2b	0.78	Mixed broadleaves	1972	High forest						
An area of mixed semi-mature woodland (85% cover), thinned in 2009, and again in 2020 to fell diseased ash trees (chalara). Consisting of frequent alder, Scots pine and rowan, with occasional ash in the southern strip as well as larch, and rare birch and oak. There is a line of mature oak and ash trees along the western boundary. The understorey (40% cover) is dominated by snowberry, with occasional rowan, juvenile birch and ash, hawthorn and elder. There is abundant ash regeneration with occasional alder and hawthorn as well. Ground flora consists of abundant grasses, rosebay willowherb, frequent hogweed, and occasional bramble, daffodils and creeping buttercup. Occasional small branches form the deadwood habitat.										
2c	1.12	Mixed broadleaves	1974	High forest						
regeneration edge of the hawthorn. dominated	on from coppi e subcomparti There is abun by grasses ar	ice, and occasion ment. A waterco dant browsing c	nal hawthorn. ourse bisects to on ash regene frequent soft	A mature hawtho he subcompartme ration by deer, as rush, hogweed and	rn hedge grows alor ent, bordered by bra	ebarking. Ground flora is				
2d	0.83	Mixed broadleaves	2009	High forest						
1970, but for	Sycamore, Scots pine and birch with young planting of shrubs (2016). The area was Sitka spruce planted approx 1970, but felled in 2016. Ash was felled in 2020 due to ash dieback disease and replanted with mixed native shrubs. Ground flora is sparse, dominated by grasses, with abundant nettles and rosebay willowherb, frequent hogweed and occasional bramble, rose, thistle and foxglove. There is frequent dead wood in the form of brash and fallen branches.									
2e	0.42	Mixed broadleaves	1974	High forest						
with freque (50% cover	ent alder and ) is dominate	willow and rare d by juvenile ash	birch. Poorly n, with occasion	drained, often wit onal juvenile alder	h areas of standing v . There is frequent a	l nated by pole-stage ash, water. The understorey sh regeneration, as well imore. Ground flora is				

	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
	-	r-grass, with free bles. There is fre	-	_	occasional hogweed,	creeping buttercup,
2f	1.75	Mixed broadleaves	1972	High forest		
compartm cherry and with occas male and I	ent was thinn elder, and ra ional rowan, o	ed in 2009. The ure birch, oak, had bak and sycamor rosebay willowh	understorey c zel, larch and e. Ground flo	onsists of frequen hawthorn. There i ra consists of frequ	s frequent regeneratuent grasses and bra	broadleaves. The sycamore, occasional tion of mostly beech, mble, with occasional and again in 2021. The
2g	0.59	Mixed broadleaves	2002	High forest		
		-		f young planting (2 zel, and blackthorn		t mainly of shrubs with
3a	7.37	Mixed broadleaves	2012	High forest		Tree Preservation Order
	-	dleaves in 2010.	The broadlea	ives consist of fred	uent birch, willow, s	ext to houses was felle cycamore, beech, ash,
cherry, rov of beech, e and occasi deadwood	elder and syca onal lady fern habitat.	more. Ground flo and rosebay wil	ora consists o lowherb. The	f broad buckler fer re are occasional b	rn, with abundant ne oranches and some b	ettles, frequent brambl
cherry, row of beech, e and occasi deadwood	elder and syca onal lady fern	more. Ground flo	ora consists o	f broad buckler fe	rn, with abundant ne	ciduous trees, consistion cttles, frequent bramble orash forming a minima
cherry, row of beech, e and occasi deadwood 4b  A relatively planted in years earliwith occas regenerati buckler fer	alder and syca onal lady fern habitat.  3.14  y narrow woo tubes in 2012 er. Pole stage ional juvenile on of ash, syc in and occasio	Mixed broadleaves  dland between t after major wine sycamore extene ash and sycamo amore and birch and butterbur, so	he Coul burn dblow of Sitkads along the breand rare had often formund florations.	f broad buckler fere are occasional buckler fere are occasional buckler fere are occasional buckler fere as spruce. Three smourn in the northway withorn, snowbern a consists of abundance of a bundance for the ference of the ference ference for the ference ferenc	null  ousing in the south. all areas were cleare est. The understorey ry and birch. There is lant grasses and net	ettles, frequent bramb brash forming a minima Broadleaves were ed and replanted a few or is dominated by elde

This is an area of mixed, mainly broadleaved mature woodland. It is mainly mature beech and ash, with a dense younger canopy to the southeast. A row of mature beech borders a wall along the south-western boundary. Ow the canopy (80% cover) is dominated by mostly mature sycamore and beech, with rare ash, willow and alder. The understorey (25% cover) consists of abundant elder, occasional ash, beech and Sitka spruce, and rare oak and hawthorn. There is abundant ash and beech regeneration, with occasional oak and Sitka spruce regeneration. Ground flora is dominated by grasses with abundant butterbur, frequent bramble and occasional broad buckler hogweed, soft rush and lady fern. The Coul Burn runs along the north eastern boundary and enters a large culve WT land. There is no notable browsing. Occasional dead wood is present.  4d 2.98 Mixed broadleaves 2001 High forest  A young broadleaved woodland (planted 2001). Species consist of abundant sessile oak and ash, with frequent rowan and birch, and occasional holly and hawthorn. It is generally well-established although not yet closed can there is a mown glade, but within the woodland the ground flora is dominated by grasses, with abundant hogw bramble, willowherb, raspberry and thistles, and occasional soft rushes. A strip of pole stage woodland to the so 90% cover) is predominantly ash and sycamore with frequent Sitka spruce and Scots pine and occasional birch. understorey (15% cover) in the southern section consists of mostly juvenile sycamore, with frequent snowberry occasional elder, birch and Sitka spruce. There is rare dead wood. This area suffered from ash dieback disease a was thinned in 2020.  5a 3.75 Mixed 1995 High forest  Phigh forest  An area of young broadleaved woodland and shrubs (planted 1995) composed of pole stage ash, aspen and alde the west and juvenile mixed woody shrubs to the east (blackthorn, grey willow, elder, dog rose and hawthorn). There is cocasional elder, birch and Sitka spruce. There is rare dead wood. This area suffered from ash die	Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
younger canopy to the southeast. A row of mature beech borders a wall along the south-western boundary. Ow the canopy (80% cover) is dominated by mostly mature sycamore and beech, with rare ash, willow and alder. The understorey (25% cover) consists of abundant elder, occasional ash, beech and Sitka spruce, and rare oak and hawthorn. There is abundant ash and beech regeneration, with occasional oak and Sitka spruce regeneration. Ground flora is dominated by grasses with abundant butterbur, frequent bramble and occasional broad buckler hogweed, soft rush and lady fern. The Coul Burn runs along the north eastern boundary and enters a large culve WT land. There is no notable browsing. Occasional dead wood is present.  4d 2.98 Mixed broadleaves  A young broadleaved woodland (planted 2001). Species consist of abundant sessile oak and ash, with frequent rowan and birch, and occasional holly and hawthorn. It is generally well-established although not yet closed can There is a mown glade, but within the woodland the ground flora is dominated by grasses, with abundant hogw bramble, willowherb, raspberry and thistles, and occasional soft rushes. A strip of pole stage woodland to the so 90% cover) is predominantly ash and sycamore with frequent Sitka spruce and Scots pine and occasional birch. understorey (15% cover) in the southern section consists of mostly juvenile sycamore, with frequent snowberry occasional elder, birch and Sitka spruce. There is rare dead wood. This area suffered from ash dieback disease a was thinned in 2020.  5a 3.75 Mixed broadleaves High forest broadleaves was thinned in 2020.  5a 3.75 Mixed broadleaves to the east (blackthorn, grey willow, elder, dog rose and hawthorn), access track and burn bordered by a mature hawthorn hedge bisect the subcompartment. There is little ground under the well-established trees to the west, but in the east it is dominated by grasses with abundant soft rushe frequent thistle and dock, and occasional greater plantain. There is occasional recent deer browsing of ash							
A young broadleaved woodland (planted 2001). Species consist of abundant sessile oak and ash, with frequent rowan and birch, and occasional holly and hawthorn. It is generally well-established although not yet closed can There is a mown glade, but within the woodland the ground flora is dominated by grasses, with abundant hogw bramble, willowherb, raspberry and thistles, and occasional soft rushes. A strip of pole stage woodland to the so 90% cover) is predominantly ash and sycamore with frequent Sitka spruce and Scots pine and occasional birch. Understorey (15% cover) in the southern section consists of mostly juvenile sycamore, with frequent snowberry occasional elder, birch and Sitka spruce. There is rare dead wood. This area suffered from ash dieback disease a was thinned in 2020.  5a 3.75 Mixed 1995 High forest broadleaves woodland and shrubs (planted 1995) composed of pole stage ash, aspen and alde the west and juvenile mixed woody shrubs to the east (blackthorn, grey willow, elder, dog rose and hawthorn). access track and burn bordered by a mature hawthorn hedge bisect the subcompartment. There is little ground curder the well-established trees to the west, but in the east it is dominated by grasses with abundant soft rushe frequent thistle and dock, and occasional greater plantain. There is occasional recent deer browsing of ash regeneration. Dead wood is rare in this area. This area suffered from ash dieback disease with ash thinned along paths in 2020.	younger ca the canopy understore hawthorn. Ground flo hogweed, s	nopy to the so (80% cover) i y (25% cover) There is abun ra is dominate soft rush and	outheast. A row is dominated by consists of abuidant ash and be down grasses will ady fern. The Co	of mature be mostly matur ndant elder, c ech regenera th abundant b oul Burn runs	ech borders a wall re sycamore and be occasional ash, been tion, with occasion outterbur, frequentalong the north ea	l along the south-we eech, with rare ash, ech and Sitka spruce, nal oak and Sitka spr t bramble and occas astern boundary and	stern boundary. Overall, willow and alder. The and rare oak and uce regeneration. ional broad buckler fern
rowan and birch, and occasional holly and hawthorn. It is generally well-established although not yet closed can There is a mown glade, but within the woodland the ground flora is dominated by grasses, with abundant hogw bramble, willowherb, raspberry and thistles, and occasional soft rushes. A strip of pole stage woodland to the so 90% cover) is predominantly ash and sycamore with frequent Sitka spruce and Scots pine and occasional birch. Understorey (15% cover) in the southern section consists of mostly juvenile sycamore, with frequent snowberry occasional elder, birch and Sitka spruce. There is rare dead wood. This area suffered from ash dieback disease a was thinned in 2020.  So 3.75 Mixed broadleaves  An area of young broadleaved woodland and shrubs (planted 1995) composed of pole stage ash, aspen and alder the west and juvenile mixed woody shrubs to the east (blackthorn, grey willow, elder, dog rose and hawthorn). access track and burn bordered by a mature hawthorn hedge bisect the subcompartment. There is little ground under the well-established trees to the west, but in the east it is dominated by grasses with abundant soft rushes frequent thistle and dock, and occasional greater plantain. There is occasional recent deer browsing of ash regeneration. Dead wood is rare in this area. This area suffered from ash dieback disease with ash thinned along paths in 2020.	4d	2.98		2001	High forest		
An area of young broadleaved woodland and shrubs (planted 1995) composed of pole stage ash, aspen and alder the west and juvenile mixed woody shrubs to the east (blackthorn, grey willow, elder, dog rose and hawthorn). access track and burn bordered by a mature hawthorn hedge bisect the subcompartment. There is little ground under the well-established trees to the west, but in the east it is dominated by grasses with abundant soft rushed frequent thistle and dock, and occasional greater plantain. There is occasional recent deer browsing of ash regeneration. Dead wood is rare in this area. This area suffered from ash dieback disease with ash thinned along paths in 2020.	90% cover) understore occasional	is predomina y (15% cover) elder, birch a	intly ash and syc in the southern	amore with for section cons	requent Sitka spru ists of mostly juve	ce and Scots pine an nile sycamore, with	d occasional birch. The frequent snowberry and
the west and juvenile mixed woody shrubs to the east (blackthorn, grey willow, elder, dog rose and hawthorn). access track and burn bordered by a mature hawthorn hedge bisect the subcompartment. There is little ground under the well-established trees to the west, but in the east it is dominated by grasses with abundant soft rushe frequent thistle and dock, and occasional greater plantain. There is occasional recent deer browsing of ash regeneration. Dead wood is rare in this area. This area suffered from ash dieback disease with ash thinned along paths in 2020.	5a	3.75		1995	High forest		
·	the west an access trac under the v frequent the regeneration	nd juvenile mik and burn bowell-establishistle and doclors. Dead woo	xed woody shru ordered by a mat ed trees to the v k, and occasiona	bs to the east cure hawthorn vest, but in th I greater plan	the control of the co	willow, elder, dog r subcompartment. T ated by grasses with sional recent deer b	ose and hawthorn). An here is little ground flor abundant soft rushes, rowsing of ash
5b 13.13 Mixed 1995 High forest Click or tap here		T					

Young broadleaved woodland and designed open ground planted 1995. The planted species consist of abundant sessile oak, ash and silver birch, with frequent wild cherry, bird cherry, elder, hawthorn and occasional gorse and broom. Establishment has been successful in most areas and some parts have achieved canopy closure and had shelters removed. There are also some patches which are less well established and will require maintenance for longer. There are a number of mature trees and old hedgerows on the field boundaries. Ground flora is dominated

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations				
by grasses and rosebay willowherb, frequent dock, nettles, soft rushes and tufted hair-grass, and occasional thistles, bramble and hogweed. In the east there are substantial mown glades, managed as spring flower meadows.										
5c	1.78	NULL		Non-wood habitat	null					
grasses, wi westerly se purple orch system. Th planting wi wildflower	This is an area of open permanently wet ground and wetland, where ground flora is dominated by rushes and grasses, with frequent thistle and tufted hair-grass, and occasional dock, rosebay willowherb and bramble. The westerly section has frequent water horsetail and the area is known to support a substantial population of early purple orchids. An access track and burn divide the compartment interrupting what would once have one wetland system. There is no notable tree regeneration. In 2005/6 the Fife Ranger Service engaged local schoolchildren in planting wildflowers (inc. marsh marigold) and creating wet scrapes and newt hibernation mounds. In 2016, wetland wildflower plug plants were planted under the Fife's Buzzing Project, including marsh marigold, ragged robin and yellow flag iris. In 2021, a scrape / pond was created for open water habitat, fed by spring.									
5d	1.72	NULL		Non-wood habitat						
moderately been carrie creeping bu	y wet at mosted out. Ground attercup, dock	times of year. The dflora is domina k, horsetail and h	ne eastern pa ited by rushes nogweed. The	rt is somewhat les s, with abundant g ere is frequent gra	s wet, as access rela rasses and occasion zing on the rushes, p	. The western part is ted drainage works have al tufted hair-grass, presumably by rabbits. ed in 2020 along paths				
ба	22.8	Mixed broadleaves	1996	High forest						
birch with f Scots pine i quills, with close due to corner, whi recovered. grasses and Dead wood	requent rowal in the central many of the co o a combinati ich was subse There are sev d rosebay wille I is rare. Brow	an, hawthorn, bl northern area. So the subsequentle on of browsing a quently replanted veral annually me towherb, with free vising is frequent	ackthorn, bird spacing varies y upgraded to and exposure ed, mainly wit own glades. V equent nettles and there is	d cherry and occas from 2m to 3m and 0 1.2m shelters. In . A fire in 2003 des th ash, in 1.2m tub Vithin the woodlands, thistles and soft	ional juniper. There and the original plantions areas the cand stroyed about 4ha in les, although a few ond areas ground flor rushes, occasional had the presence of roe	ing was done in Tubex opy has been slow to the south-eastern of the original trees have				

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations			
Mixed young woodland mosaic of broadleaves and Scots pine (planted 1996/7) and occupying the highest parts of the new woodland. The groups of Scots pine are well established and are providing shelter for the ongoing establishment of broadleaves, consisting of mainly sessile oak and downy birch with frequent rowan & hawthorn and occasional holly and juniper. Spacing varies from 2m to 3m and the original planting was done in Tubex quills, with many of the oak and birch subsequently upgraded to 1.2m shelters in 2002 and a further 4500 in 2006 due to continued roe browsing. There are also patches of gorse spreading within the planting. Exposure is also an issue for establishment and canopy has not yet closed in the broadleaved areas. There are two annually mown glades. Ground flora within the woodland is dominated by grasses and rosebay willowherb, with frequent thistle and hogweed, and occasional dock. Scots pine blocks were thinned in 2016.									
8a	13.71	NULL		Non-wood habitat	Sensitive habitats/species on or adjacent to site				
nearer Con incidents o grasses, wi gorse, but i path to the	An area of semi-improved acid grassland, gorse thicket, and wet marshy ground. This area includes Rhind Hill and the steep slopes down to the Conland Burn. There are areas that are colonised by gorse, being more extensive nearer Conland Burn along the north of the site, and covers approximately 5 hectares. There are occasional incidents of gorse fires. There is no notable tree regeneration except close to the burn. Ground flora is dominated by grasses, with occasional soft rushes, particularly in the south west. Rabbits were also present, with warrens in the gorse, but none have been seen in recent years. There are desire line footpaths in this compartment, and a mown path to the summit of Rhind Hill. The area was let for grazing until 2016, when fences separating the grassland from the rest of the woodland were removed.								
8b	4.38	Mixed broadleaves	1995	High forest					
and conifer others and Scots pine, The other of juniper, ho including o	This subcompartment consists of four separate areas of planting (in 1995) composed of mixed native broadleaves and conifers in stock-fenced exclosures (removed in 2017). The long thin exclosure in the west is older than the others and dominated by gorse scrub, juvenile birch and ash, with frequent rowan and Sitka spruce, and occasional Scots pine, hawthorn and elder. Some of the ash on the path side were felled in 2020 due to ash dieback disease. The other exclosures consists of abundant Scots pine and birch, frequent rowan and hawthorn, and occasional juniper, holly and gorse. The compartments have generally closed canopy. Ground flora is dominated by grasses including occasional tufted hair-grass, with frequent soft rushes, and occasional nettles, brambles and thistle. Deer browsing is rare, but rabbit browsing occasional. There is no notable natural regeneration.								
8c	0.08	Sitka spruce	1965	High forest					
					•	sses and rare soft rush			

Cpt No.	Area (ha)	Main Species	Year	Management Regime	Major Management Constraints	Designations
and nettles. Dead wood is frequent due to logs from the recent thinning operation, as well as windblow. Brash from fallen trees was chipped in 2017 after a couple of incidents of bonfires next to mature trees.						
8d	0.75	NULL		Non-wood habitat		
Two areas of permanently wet open ground. The ground flora is dominated by soft rush, with abundant grasses and mosses.						
8e	5	Mixed broadleaves	2019	Wood establishment		

Area of grassland planted in 2018 and 2019 with native trees and shrubs in 4 small blocks (approx. 1500 trees planted (by public, Dundee High School and Fife Coast & Countryside Trust volunteers). An extension to the areas west of the trig point was planted in 2021, to compensate for ash felling in other compartments.

# APPENDIX 2: 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.

## **Registered Office:**

# The Woodland Trust, Kempton Way, Grantham, Lincolnshire NG31 6LL.

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# APPENDIX 3: MAPS

# Formonthills Compartment Map



