Glendevon Woodlands (Plan period – 2025 to 2030)



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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 Scotlish 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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Appendix 1: Compartment Descriptions

GLOSSARY

1. Site Details

Glendevon, by Dollar, Perthshire, Muckhart, Glendevon, by Dollar, Perthshire Grid reference: NN946032 OS 1:50,000 Sheet No. 58 Grid reference: NN992021 OS 1:50,000 Sheet No. 58 Grid reference: NN971030 OS 1:50,000 Sheet No. 58

Area:

Glen Sherup: 603.51 hectares (1491.31 acres)

Glen Quey: 382.96 hectares (946.31 acres)

Glen Quey Moss: 57.45 hectares (141.96 acres)

Geordie's Wood:243.50 hectares (601.70 acres)

External Designations:

Great Landscape Value

Internal Designations:

Tree For All Site, Welcoming Sites Programme Tree For All Site, Welcoming Sites Programme Welcoming Sites Programme

2. Site Description

This Management Plan covers four sites (Glen Sherup, Glen Quey, Glen Quey Moss and Geordie's Wood). Collectively they are known as the Glendevon Woodlands.

General Description

The Glendevon Woodlands are four sites extending to 1,287 hectares in the Ochil Hills. They are primarily comprised of recently established upland native woodland creation, and Glen Quey Moss which is a small area of previously-grazed fields and raised bog. The sites are a diverse range of habitats, consisting of: large areas of new native woodland, a mosaic of sporadic open ground and riparian zones along with large tracts of open hill ground. The three original sites were acquired by the Woodland Trust Scotland (WTS) between 2001-2004 and were former sheep farms: Glensherup and Glen Quey. This was followed by the acquisition of large parts of Balliliesk sheep farm (these areas became Geordie's Wood). Glen Quey Moss is the most recent addition to the Glendevon Woodlands, acquired in 2024.

Location

The Glendevon Woodlands take their name from the only major glen which cuts north to south through the central Ochil Hills. The Ochil Hills are a long range of steeply sided, round topped hills, stretching 40 kilometres from Stirling to the Firth of Tay. There are many peaks over 600m offering splendid views across central Scotland and to the north. The nearest towns are Dollar (3 kilometres to the south-west) and Auchterarder (8 kilometres to the north). The nearest larger towns or cities are Perth to the north-east and Stirling to the south-west. Glendevon Woodlands lies on the west side of the River Devon, on land rising towards the high central plateau of the Ochil Hills. The A823 road between Dunfermline and Crieff runs through the glen and provides a road link between the various access points to the property. Most of the woodland is situated within the local authority district of Perth & Kinross. Part of Geordie's Wood (south of the Auchlinsky Burn) is located within Clackmannanshire.

Site History

The three woodland creation projects that make up the original three sites of the Glendevon Woodlands arose through the BP-funded Scottish Forest Alliance (SFA) project. The prime objective of the SFA was the regeneration and expansion of large tracts of native woodlands in Scotland. Partners included: BP, Forestry Commission Scotland, Woodland Trust Scotland and the Royal Society for the Protection of Birds. Prior to acquisition the main activity on the land was sheep farming. Several centuries of intense sheep grazing had denuded the soils and plant life and resulted in a loss of habitat and wildlife diversity. Tree planting commenced in 2001 and was completed in 2008. Approximately 850 hectares were planted with native tree species.

Glen Quey Moss, a 57 hectare extension to Glen Quey was acquired by Woodland Trust Scotland in 2024, thanks to generous funding from donors. Previously grazed with sheep, its unusual geology also meant it was also under threat of being used as a quarry. Native woodland planting is planned on this area beginning in 2026.

Landscape

The landscape is typical of the central Ochil Hills, with an abrupt southern scarp rising from the plains of Central Scotland, behind this steep abutment lie a series of rounded rolling grassy hills and narrow hidden glens. The most wideranging views of the property are from neighbouring hill tops. The hills have structurally more in common with the

rolling Scottish Border hills than the steeper Grampians to the north. Much of the surrounding Ochil Hills continue to be used as open sheep grazing, with extensive areas of commercial conifer plantations and windfarms.

The local landscape will change significantly as the native woodland continues to develop and there will be a more continuous but varied forest landscape. A fringe of semi-montane scrub, heather and blaeberry is gradually developing on the slopes at higher altitude. Further up this gradually gives way to more open ground. The hilltops are exposed and often experience harsh and prolonged winter weather conditions.

Hydrology

The sites form part of the upland catchments of the River Devon, which flows into the River Forth between Alloa and Stirling. Minor springs and burns rising on the property feed the main burns: Frandy Burn, Glensherup Burn and Glenquey Burn, all flow into the River Devon, which feeds into Castlehill Reservoir and beyond. Apart from an area of land in Clackmannanshire (part of Geordie's Wood) most of the Glendevon Woodlands are situated within the public water supply catchment for Fife (a network of five reservoirs). Water abstracted for public consumption passes through the Water Treatment Works above the southern end of Castlehill Reservoir. Glenquey Reservoir is a brown trout fishery, with rights held by the Devon Angling Association. Glensherup and Lower Frandy are stocked trout fisheries, with a trout hatchery on the Frandy Burn.

Geology and Soils

The Ochil Hills are part of a Devonian lava extrusion whose appearance is largely due to the Ochil Fault which results in the southern face of the hills forming an escarpment. The plateau is undulating with no prominent peak. Hence, the underlying geology is of volcanic origin, neutral to acid, consisting of basaltic lava with tuffs. Soils vary considerably, with peats, peaty podsol or peaty gleys on the upper slopes and slope "shoulders". Brown earth soils occur on the mid to lower slopes. Soils are predominantly acid. Prior to restoring to native woodland, the original three sites underwent a full soil survey as part of a baseline carbon assessment.

Glen Quey Moss is a good example of a terraced glacial deposit, where an ice-dammed loch would have been situated during the Devensian Ice Sheet. When the ice sheet retreated, high energy glacial meltwater flows would have left a terraced deposit, with rapid meltwater flows helping to shape the glen downstream.

Flora and Fauna

Over much of the ground the vegetation is relatively uniform being dominated by grasses such as Nardus and Molinia, typical of ground with a long history of grazing and possibly burning. There are some areas of degraded wet heathland on upper slopes, with recovering dry heath, mainly on the mid slopes above the River Devon. On some of the brown forest soils of the mid to lower drier slopes, bracken is returning following control at the time of tree planting. In these and associated areas, some of the herb rich acid grassland retains some semi-natural characteristics. Vegetation of most interest is often associated with burns, springs and wet flushes, either due to a history of lower grazing pressure and/or the base rich nature of some of the flushes on the upper slopes.

In 2007 the majority of the lower, improved fields behind Muckhart (approximately 24ha), were deep ploughed to invert the improved soil and then direct seeded with a mix of native wild flowers, before being planted through with trees. This process converted what had been improved grassland into species rich wildflower habitat, as part of a nationwide project, Forest of Flowers. Species sown include cornflower, meadow buttercup, yellow rattle, red campion, Ox-eye daisy, birdsfoot trefoil and grasses including slender creeping red fescue.

Roe deer and sheep are widespread in the area. Hence, the sites were individually deer fenced to ease grazing pressure and allow the young woodland to establish. Red deer are occasionally spotted.

Foxes are common, and brown hares are seen occasionally (mountain hares are very rare). Vole and mice populations fluctuate. Stoats and weasels are occasionally seen. Otters are regularly spotted around the fringes of the reservoirs and burns and pine martins have recently been recorded in the area. Red squirrels use the small areas of mature woodland on the sites and have been seen feeding in the woodland creation areas.

Following planting the vole population increased which has attracted increasing numbers of resident raptors, in particular; short-eared owl, long eared owl, tawny owl and kestrel. Ospreys return annually and are regularly seen fishing the reservoirs and red kites are seen occasionally. Woodland birds have increased significantly. A large increase in bird numbers occurs across the sites during the summer months. Moorland birds and waders such as snipe, curlew, lapwing and oystercatcher are common and whinchats are regular summer visitors. Black grouse are frequently seen and heard. Several small lek sites have become established on the higher levels as the semi-montane/woodland fringe habitat continues to improve. Dipper, ducks, wagtails and kingfisher are often seen feeding on the burns, rivers and reservoirs. The rare Blaeberry bumble bee has been found at Glen Sherup.

Archaeology and Cultural History

It is likely that the Ochil Hills once had considerably more woodland coverage than today - there are historical references to a forest between the 12th and 16th centuries. It is probable that this was a forest in the 'traditional' sense of the word – as a royal hunting forest, which often consisted of a range of habitats, from large tracts of open ground through to dense areas of woodland cover. A detailed archaeological survey of the area was carried out in 1988 by the Royal Commission on the Ancient and Historical Monuments of Scotland (RCAHMS) and WTS commissioned surveys shows several dykes, banks, buildings and former field systems on the lower slopes, which indicate that in the past there was significantly more farming activity than today.

For the last 250 years (up until acquisition by the Woodland Trust Scotland) the area was solely used for sheep grazing. The main glens of Glendevon and Glenquey both have a long history as important through routes, for moving livestock and trade goods. The sections of drove roads in Glen Quey and Geordie's Wood were once part of these old established routes. There is a restored bee-bole in the dyke just south of Glenquey farm house. Bee-boles are recesses built within a dyke, used to shelter beehives, the age is unknown.

Existing Woodland

The new native woodland creation within Glendevon Woodlands is now generally established. Within these areas are occasional, previously existing, single trees and small clumps of mainly native broadleaved trees with some sycamore, some of which have provided seed for localised regeneration. In addition, there are several mature shelterbelts in strips and blocks - mainly coniferous in nature. The majority of these are around the Scottish Water Treatment Works and above the village of Muckhart (both in Geordie's Wood). Several shelterbelts are shown on maps from 1860. Hence, those belts are recorded on the NatureScot Ancient Woodland Inventory as Long Established of Plantation Origin (LEPO 2b). Within the south-west corner of Geordie's Wood there is also approximately 2 hectares of sycamore coppice. Within Glen Quey, alongside Glenquey Burn there is a small area of what appears to be semi-natural woodland and within Glen Sherup is a square block of Sitka spruce.

Other Features of the Site

The site is being regularly assessed for its contribution in carbon sequestration and was one of the pilot schemes in

Scotland for carbon offsetting. These assessments are part of Scottish Forest Alliance (SFA) research and development projects across the suite of SFA sites. This research provides further understanding in regard to carbon sequestration and biodiversity changes in new native woodlands.

Community Involvement

The site is rural and parts of it are remote. However, there are links and interest groups in Muckhart and Glendevon, in addition to Friends of the Ochils.

The Muckhart Nature Park is one of the busiest parts of the Glendevon Woodlands (an area of 3ha of land close to the village that features several community-led projects). The Nature Park was designed by the local community and is now maintained by the Woodland Trust, in partnership with the community. This area includes: surfaced paths, a pond with dipping platform, an orchard, sculptures and picnic area.

3. Long Term Policy

The Woodland Trust will continue to manage the young native woodlands at Glendevon to ensure they establish into diverse and resilient woodlands. Secondary woodlands will be restructured and restored to native woodlands, with most non-native species removed. The sites will form a mosaic of habitats on a landscape scale, composed of native woodland, open habitats and montane scrub. The predominant woodland types will be National Vegetation Classification (NVC) W11 and W17 (birch and oak-dominated woodlands) at lower elevations, merging into W19 and W20 (juniper and willow scrub) at higher elevations.

Management of the woodlands will continue to be through deer management, with fencing only used where stock encroachment could cause damage to the woodland. Removal of seeding non-native conifers will continue until they are not a problem.

The site will continue to provide informal access, in accordance with the Scottish Outdoor Access Code, for local users as well as visitors accessing the wider Ochils. The grass-cut path network will continue to be maintained to provide access to the woodland and hill paths.

Regular inspections will be undertaken for tree safety and other access features, with remedial work carried out as needed. Paths will continue to link into the surrounding path network linking the hilltops in the Ochils.

The community in Muckhart will continue to be actively involved in the Muckhart Nature Park and volunteering opportunities on the sites will continue to engage with corporate groups and local volunteers. Wider public consultation will be undertaken whenever the Management Plan is reviewed.

4. Key Features

4.1 f1 New Native Woodland

Description

Collectively the sites are known as Glendevon Woodlands. Glen Sherup, Glen Quey and Geordie's Wood were purchased and planted during 2001 to 2008 as part of a Scottish Forest Alliance (SFA) collaborative project. Glen Quey Moss was purchased in 2024, part of which is planned for woodland creation. All four sites were previously open grazed upland sheep farms.

The objective for the Woodland Trust at Glendevon was to establish native woodland and open ground habitats on a landscape scale, whilst improving public access. The first site to be established was Glen Quey; planted in 2001-2 and covering 382ha. Glen Sherup was planted 2003-4, covering 605ha and Geordie's Wood was planted in 2005-7, covering 245.41ha. Approximately 70% of the total area was planted, the rest deliberately retained as open ground habitat. The trees have established well at lower altitudes, but a mix of exposure and browsing pressure from deer and encroaching sheep has meant a lot of trees at higher altitudes have struggled to establish or have died.

Overall the distribution of surviving trees means that the woodland has developed a very natural-looking structure and upper tree line.

The three original sites have perimeter deer fences, which are now porous due to their age. Deer are now being managed on the sites through culling, with targets set based on population data and habitat surveys assessing browsing damage. A thermal imagery drone survey in 2024, identified average densities across the three sites as 16 roe deer per km/sq. Current cull targets are being set to reduce deer populations on the site to a sustainable level, where natural regeneration will be possible.

There are no ancient or veteran trees on the sites.

Significance

Within the Ochil Hills only a few fragmented examples of existing native woodland remain e.g. Dollar Glen. The Glendevon Woodlands project delivered an extensive area of new native woodland within a large landscape on a scale previously unseen in this area. The extensive area of new woodland has created new habitats for woodland birds, black grouse, red squirrels and pine martens.

The Forth Climate Forest project is looking to link more areas of woodland creation in the Ochils, creating habitat networks and corridors. The Glendevon Woodlands have the potential to link with other large conservation projects in the western part of the Ochils.

Opportunities & Constraints

Opportunities

- 20 hectares of woodland creation at the newly acquired site, Glen Quey Moss
- Gradual removal of sections of the old perimeter deer fence around Glen Sherup, Glen Quey and Geordie's Wood over the duration of the plan (and beyond) will remove barriers in the landscape for wildlife and visitors
- Opportunities for planting montane scrub at higher elevations at Glen Quey and Glen Sherup where trees have struggled to establish
- With boundary deer fencing now porous, there is the opportunity to manage deer on a landscape-scale, with opportunities to engage with neighbours to do this
- Many of the young trees are now producing seed, providing a huge seed source for natural regeneration once browsing levels are reduced

Constraints

- Relatively poor vehicle access to the more remote parts of the sites can make certain operations challenging

Factors Causing Change

- Deer continue to impact the young woodland, especially at higher altitudes where it is still establishing
- Deteriorating fencing will mean livestock encroachments are more common
- Sitka spruce seeding from neighbouring plantations
- Ash die back has killed most of the young ash in Geordie's Wood and Glen Quey

Long term Objective (50 years+)

Establish a resilient mosaic of diverse native broadleaved upland and montane woodland interspersed with open ground. The sites will provide a range of habitats for a wide variety of flora and fauna and whilst also providing good access for visitors.

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

- Gain approval from Scottish Forestry for a Long Term Forest Plan and Deer Management Plan for the four Glendevon sites (2025)

- Apply for Forestry Grant Schemes available through the Sustainable Management of Forests in 2026 to facilitate the sustainable management of the young woodland, including monitoring and facilitating deer management and livestock exclusion for the next five years
- Continue to monitor areas where livestock incursion may be an issue in the future, repairing/replacing with stock fence as/when necessary with neighbours throughout the plan period:
 - Glen Sherup: 1400m at eastern boundary with Glen Sherup Farm; 750m at Cairnmorris Hill south-western boundary with Gleneagles Estate
 - Glen Quey: 1700m at southern boundary with Maiden's Well; 650m around the fields above Glen Quey Farm
 - Geordie's Wood: 650m around the fields to the west of Nether Auchlinsky House; 200m to the south of the Glendevon Water Works track; 200m to the north of the Muckhart Nature Park; 600m around the fields to the south of the Muckhart Nature Park; 900m at the western boundary with Westerhall Farm
- Consult neighbours to make a plan to remove redundant deer fencing at Glen Quey: 5600m of redundant deer fencing along the northern and eastern boundary of Glen Quey with Forestry & Land Scotland and Burnfoot settlement; 300m of fencing at southern end of Glen Quey Reservoir, bounding with Scottish Woodlands
- Remove redundant internal deer fencing: 1900m along southern edge of private road to Glen Quey Reservoir, along Geordie's Wood boundary and 400m around the Glen Quey Burn when Glen Quey Moss fencing is installed (2026); 1600m redundant deer fencing around Glendevon Water Works when felling works and replanting are taking place (2026)
- Continue to remove and recycle plastic vole guards from Geordie's Wood across the plan period and beyond. Continue removal with contractors each year for at least 40 people days each year. Removal work has started at the northern end of Geordie's Wood, continue to work south through the site. Facilitate ad-hoc volunteer work-parties to remove vole guards for local groups or corporate groups (throughout plan period)
- Plant a trial area of montane scrub creation in compartment 2a (Glen Quey) where previous woodland creation has not established (2027). NVC will be W19 or W20, with species planted: common juniper and montane willows. An initial trial area of 4 hectares will be planted at low densities at Glen Quey in suitable locations along the Garchel Burn, using Trico for protection from deer grazing in 2027. The success of the trial will be assessed in 2028, with further planting planned at Glen Quey and Glen Sherup if successful (2029)
- Apply for a Forestry Grant Scheme for approximately 20 hectares of native woodland creation on the lower slopes of Glen Quey Moss (compartment 9) which is not blanket bog (2025). If successful, install fencing and plant trees with community involvement across two planting seasons (2026-8)
- Continue to manage deer through deer management with contractors throughout the plan period to ensure deer densities are reducing in line with the Deer Management Plan submitted to Scottish Forestry and to enable natural regeneration to establish. Implement deer density drone surveys every second year (2026, 2028 and 2030) and annual herbivore impact assessments (beginning 2026) to monitor progress of deer management and amend cull targets accordingly
- Fell all established Sitka spruce regen along key areas for regeneration: 1000m along the boundary of compartment 2b (where Glen Quey bounds Forestry & Land Scotland) in 2025 and 1700m along the boundary of compartment 3a (where

Geordie's Wood bounds Scottish Woodlands' Auchlinsky Hill) in 2026. Use contractors to fell large trees, or volunteers where this is possible with handsaws

- Produce a fire plan for the sites to be shared with Scottish Fire and Rescue (by spring 2026). Ensure this is reviewed every year throughout the plan period

4.2 f2 Connecting People with woods & trees

Description

The Glendevon Woodlands are an attractive location, with a variety of landscapes to offer visitors, including extensive areas of young woodland and open hill tops.

Access is primarily promoted by foot from the village of Pool of Muckhart and from the Forestry & Land Scotland car park off the A823. There are a handful of informal car parking areas in laybys along the A823 to access Glen Sherup and Glen Quey.

Apart from a small section of surfaced loop path leading from Muckhart Parish Church into the Muckhart Nature Park at Geordie's Wood and a surfaced track at Glen Quey, the paths are all unsurfaced and maintained annually by strimming and cutting back encroaching vegetation. The paths are steep, muddy and boggy in places, in particular where they access the hill tops. There are a handful of benches, most of which are situated in Geordie's Wood.

The Reservoirs Trail is a 14.5km long one-way route through three of the Woodland Trust sites and Forestry & Land Scotland's forest. It is a core path and signposted at several points along the route. Much of the route can be muddy, with one burn crossing which can be impossible when the burn is in spate.

The site contains several orientation boards (installed in the early 2010s) which are due to be refreshed during this plan period.

The nearest communities to Glendevon Woodlands are the villages of: Glendevon, Burnfoot and Pool of Muckhart. Auchterarder (population 6000, 10km away) and Dollar (population 2800, 6km away) are the nearest towns. It is thought that most of the people who use Glendevon Woodlands are local people, in particular users of Geordie's Wood which is accessible by foot from Muckhart. The longer hill walks available at Glendevon Woodlands are often used by visitors from further afield, but generally within the Central Belt or Perth & Kinross.

Most visitors are walkers, but the site is also used by runners, mountain bikers and horse riders. There are links through to paths across the Ochils, to Auchterarder and Dollar.

Other countryside sites nearby are Forestry & Land Scotland's Glendevon forest and Dollar Glen managed by National Trust for Scotland. Loch Leven National Nature Reserve is 15km to the east. The nearest Woodland Trust site is Wood Hill Wood in the Ochils, access from Alva or Tillicoultry.

The sites are used for a variety of community or charity events, including: charity walks by Dollar Academy students, hill

running events, British Trust for Ornithology research and community-run arts events. The Conservation Volunteers run occasional events and the Woodland Trust uses the site for corporate volunteering. Forth Rivers Trust installed a series of leaky dams at Geordie's Wood in 2024 and continue to be involved locally with invasive species removal projects along the Forth catchment.

Muckhart Nature Park was developed in consultation and with help from the local community. The Woodland Trust now manages the up keep of this area, but continues to work closely with representatives from the local community to ensure it continues to be enjoyed for their benefit. The area includes: a surfaced loop path, orchard, pond, outdoor amphitheatre, wooden sculptures and picnic area.

There are several primary schools nearby: Muckhart, Fossoway, Strathdevon and Blackford. The nearest high schools are: the Community School of Auchterarder, Alva Academy, Kinross High School and Dollar Academy.

Significance

Glendevon Woodlands provides informal public access to a significant part of young native woodland in the Ochil Hills.

The path network links into various neighbouring estates and the wider Ochils, which are a mix of commercial forestry, open hill ground and windfarms. The sites offer great views to Highland Perthshire in the north and over the Firth of Forth to the south.

Opportunities & Constraints

Opportunities:

- Involve local communities, schools, volunteering groups and corporate groups in tree planting at Glen Quey Moss and removing redundant plastic vole guards across Geordie's Wood, Glen Quey and Glen Sherup
- Develop links with local groups and charities such as: The Conservation Volunteers, Forth Rivers Trust and the Eastern Lowlands Red Squirrel Group
- Continue to work with Forth Rivers Trust and other partners on eradication of Japanese Knotweed along the River Devon
- Recruit volunteer wardens for the sites
- Improve access networks across the sites, exploring opportunities for circular walks or an alternative route for the Reservoirs Trail which makes use of the newly acquired Glen Quey Moss site

Constraints:

- A lot of the site is very remote and hilly, with minimal visitor infrastructure for hosting groups
- Car parking is limited and there are limited public transport options

Factors Causing Change

- Wetter summers mean sections of paths are deteriorating and will require ongoing maintenance and drainage works

Long term Objective (50 years+)

Glendevon Woodlands will continue to provide a welcoming and inspirational experience of native woodland in an upland setting, with well-maintained trails through a variety of landscapes and habitats. Entrances and signage will have a welcoming appearance and there will be well-maintained paths providing routes through a variety of landscapes, including the easy access loop at the Muckhart Nature Park.

Occasional events will be held on the site, organised by the Woodland Trust, local community and partner organisations.

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

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

- Maintaining 36km of paths and 22 entrances, drainage, 10 benches and interpretation signage (annually)
- Carrying out regular site safety inspections (as per site risk assessment)
- Continue to work with the Muckhart Nature Park community group, The Conservation Volunteers, Forth Rivers Trust, Forestry & Land Scotland and begin to work in partnership with the Eastern Lowlands Red Squirrel Group and other relevant organisations (throughout plan period)
- Work with the Muckhart Nature Park community group to manage the Muckhart Nature Park for the benefit of the local community. This will include maintaining the paths, doing regular safety checks on site infrastructure and maintaining the orchard trees
- Update visitor interpretation, installing seven new signs at key access points across the sites. Refresh welcome signage and waymarker posts across the sites where necessary (by the end of the plan period)
- Liaise with neighbours about the feasibility of installing a footbridge on the Reservoirs Trail to improve safety (2026-27)
- Audit the full Reservoirs Trail, identifying issues for path maintenance, improved drainage or re-routing (2026)
- Recruit volunteer wardens, in particular for Glen Quey Moss (throughout plan period)
- Create new grass-cut paths from Geordie's Wood, through Glen Quey Moss to Burnfoot and Glen Quey. Maintain existing path through Glen Quey Moss from Burnfoot (annually)
- Install owl nest boxes with live-stream nest cameras at key locations across the sites (2026)

4.3 f3 Secondary Woodland

Description

There are several blocks of secondary woodland across the sites (compartments 1c, 5a, 6a and 7a) mainly planted as shelter belts or blocks of coniferous woodland. Most of these areas were planted around 1960 and most are unthinned, and now increasingly susceptible to windblow.

1c and 5a are dominated by Sitka spruce, 6a is more mixed in species but has suffered severe windblow during 2020's Storm Arwen and 7a is even-aged sycamore coppice regeneration from the 1980s.

Ground flora is almost absent under the dense stands of spruce and sycamore. In the more open, mixed species woodland ground flora is frequent and dominated by; coarse grasses, rosebay willow herb, bracken and mixed herbs.

Significance

Before the native woodland creation, when surrounded by open hill, the woodlands have played an important role in providing areas of shelter. The conifer woodlands continue to screen the Water Treatment Works from the main road and other parts of the Glendevon Woodlands.

These woodland areas have also offered an alternative habitat for a variety of flora and fauna and added diversity to the landscape.

Opportunities & Constraints

Opportunities:

- Felling and replanting areas of non-native conifer woodland with native woodland will enhance biodiversity and create a more resilient native woodland habitat
- Reduce seeding from invasive non-native Sitka spruce
- Removing windblow in compartment 6a will allow for rhododendron within these areas to be eradicated

Constraints:

- Protected species such as red squirrels use many of these areas of woodland. Felling will need to be planned to reduce impacts on them and re-planting consider their preferred habitats
- High deer pressures may mean the area will need to be replanted within a fenced area or in deer-height tree guards

Factors Causing Change

Storms will continue to cause damage to unstable conifer blocks.

Long term Objective (50 years+)

Secondary woodland will have been restructured, to include retaining existing native and naturalised species and nonnative unstable conifer blocks will be replanted with mixed native broadleaves and Scots pine. These areas will be more diverse, resilient and able to withstand storms.

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

- Felling (approx. 6 ha) within compartment 5a around the Glendevon water treatment works, to remove all non-native conifers. Scots pine will be retained where possible (2026)
- Replanting compartment 5a with native broadleaves and Scots pine, with a focus on squirrel-friendly species to reinstate good habitat. Protection will be dependent on deer pressure, either within a deer-fenced exclosure, in deer-height tree guards or using Trico deer deterrent (2027)
- Investigate feasibility of clear-felling remote 1 hectare Sitka spruce plantation compartment 1c in Glen Sherup under the same contract as compartment 5a. If feasible, this will reduce seeding of Sitka spruce (2026). If felling is feasible, compensatory native replanting within deer fenced compartment 5a or, if this is not fenced, within clear-felled area in deer-height tree guards (2027)
- Felling (approx. 6 ha) within compartment 6a (Geordie's Wood) to remove windblown conifers and all non-native conifers (2026)
- Replanting compartment 6a with native broadleaves and Scots pine. Replanting will be dependent on deer pressure, either within a deer-fenced exclosure, in deer-height tree guards or using Trico deer deterrent (2027)
- Removal of rhododendron in compartments 5a and 6a (Geordie's Wood) and compartment 9 (Glen Quey Moss). Rhododendron in compartment 5a is limited to a handful of well-established bushes, in compartment 6a they are more frequent but smaller in size. There is one large bush near the A823 road boundary in Glen Quey Moss. Cutting and stump treating larger bushes, and spot-spraying or removing smaller plants by hand (2027). Continue follow-up treatment every second year, where necessary until eradicated (2029)

4.4 f3 Semi Natural Open Ground Habitat

Description

Semi-natural open ground is an important component on all three sites at Glendevon Woodlands. On the hilltops and across higher levels, large expanses have been deliberately left unplanted to create a mosaic of habitats. The majority of the open habitats are acidic or unimproved grassland with small areas of heath, dominated by *Calluna vulgaris* and blaeberry. There are extensive areas of bracken, in particular on the lower slopes of Glen Quey and Glen Quey Moss.

Meum athamanticum (Spignel)is unusually frequent in the Glendevon woodlands. Spignel is a nationally scarce species, with its distribution in the UK restricted to relatively few sites in Central and Southern Scotland, Northern England and North Wales.

The newly acquired site Glen Quey Moss comprises of approximately 17 hectares of raised bog. An NVC survey (Alistair Godfrey, 2012) identified the raised bog area as a mosaic of NVC types, dominated by M18a with areas of M2b, M25, M17 and M19. Numerous sphagnum mosses are found on Glen Quey Moss, including: *Sphagnum fallax, S. cuspitdatum, S. papillosum, S. magellanicum and S. capillifolium*. Other species identified were: bog cranberry, bogbean, hare's tail cottongrass, common cottongrass and heath-spotted orchids. Raised bogs are a rare and threatened habitat in Scotland, and Glen Quey Moss is a good example which has been relatively undisturbed by humans.

Significance

Retaining open habitats allows for a wide variety of wildlife to benefit from the site. They provide areas for black grouse to lek and for ground-nesting birds such as meadow pipits and skylarks.

The open habitats give the woodland a semi-natural appearance at large scale and when viewed from a distance.

The blanket bog of Glen Quey Moss is a rare habitat within in the wider area, providing a valuable habitat for ground nesting birds and invertebrates.

Opportunities & Constraints

Opportunities:

- Open habitats at higher elevations could be made more biodiverse with low-density planting of montane species such as juniper and montane willows
- Restoration of the raised bog

Factors Causing Change

Increased wildfire risk due to climate change.

Long term Objective (50 years+)

The Glendevon Woodlands will be a mosaic of habitats, dominated by a diverse native woodland but areas of seminatural open ground will form an important part of the site as a whole. As deer pressure reduces across the site, small pockets of natural regeneration may take hold in these open habitats and small amounts of montane species planted at higher altitudes will add to the overall diversity of the woodland.

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

- Semi-natural open habitats will be monitored for natural regeneration as part of a Woodland Condition Assessment before the next management plan review (2029)
- Discuss options for restoration work on the raised bog with Peatland Action (by the end of the plan period)

- No other interventions are planned in this plan period.

4.4 f5 Carbon

Description

The new native woodland is in Woodland Carbon Code commitment management regime. The precise area under commitment is shown on the UK Land Carbon Registry, and the Carbon data layer in GIS.

Significance

The Woodland Carbon Code (WCC) is the quality assurance standard for woodland creation projects in the UK, and generates high integrity, independently verified carbon units, backed by the Government. High quality carbon projects drive the Woodland Trust to achieve its 'create' goal via creating woodlands that benefit nature, climate and people into the future.

Opportunities & Constraints

Constraints:

- Commitment to ensuring the Woodland Carbon Code area meets is carbon unit delivery projections

Factors Causing Change

- Slow growth of trees at higher altitudes

Long term Objective (50 years+)

To ensure, at minimum, the woodland delivers the quantity of carbon units as specified for the project in the UK Land Carbon Registry. This will be monitored every subsequent 10 years, via independent verifications undertaken by the carbon team.

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

- General inspection of all carbon compartments (see Carbon Layer in Arc GIS online), ensuring any significant changes to the composition, stocking, or area, are reported to the carbon team

Appendix 1: Compartment Descriptions

| Cpt No. | Area (ha) | Main Species | Year | Management Regime | Major Management Constraints | Designations |
|------------|--------------|--------------------------------|------|-----------------------|--|--------------|
| 1a | 344.93 | Mixed native broadleaves | 2003 | Wood establishment | Gullies/Deep Valleys/Uneven/Rocky ground, Very steep slope/cliff/quarry/mine shafts/sink holes etc | |

Sub-compartment 1a is situated within Glen Sherup and was phase 1 of the planting on site, starting in spring 2003.

222 hectares of compartment 1a was planted, with native broadleaves and a small amount of Scots pine. The remaining 123 hectares was not planted (mostly at higher elevations, along burns and paths) and when planning the planting, was intentionally designed as open ground.

Many of the birch (both silver and downy) suffered from birch dieback due to two fungi: Marssonina betulae and Anisogramma virgultorum. As a result, a large amount of replanting was necessary over an extended period, this has contributed to irregular growth rates and somewhat patchy development in places. The slower growing trees tend to be concentrated on the higher levels, in waterlogged areas and exposed faces. The lower woodland is now established, although the slow growth-rate and low height of some of the trees at higher elevations means they are still vulnerable to browsing damage.

Woodland types are W11, W17, W18, W19, W4 and W7 and matched to site conditions. The principal tree species is birch (silver and downy), which amounts to 53% of all trees planted. Other species present are oak (sessile and pedunculate) 9%, alder 9%, ash 4%, willow species 5%, rowan 5%, Scots pine 6%, juniper 3%, the balance is made up of mixed shrubs: hazel, hawthorn, blackthorn, elder, guelder rose and dog rose and minor tree species e.g. aspen, gean, crab apple, bird cherry, elm, and holly.

Trees were planted at densities ranging from 800 stems/ha to 2500 stems/ha. The woodland fringe along the high levels, riparian zones and around the woodland perimeter have a lower stocking density to provide a more open, irregular and feathered woodland fringe structure.

The perimeter of Glen Sherup is entirely deer or stock fenced, however much of this fence is porous and in need of removal or replacement where livestock incursions are still possible.

| 1b | 258.4 | Mixed | 2004 | Wood | Gullies/Deep | |
|----|-------|-------------|------|---------------|-------------------------|--|
| | | native | | establishment | Valleys/Uneven/Rocky | |
| | | broadleaves | | | ground, Very steep | |
| | | | | | slope/cliff/quarry/mine | |
| | | | | | shafts/sink holes etc | |
| | | | | | | |

Sub-compartment 1b was Phase 2 of the planting of Glen Sherup and started in spring 2004. The total planting area was 200 hectares and the remaining 58 hectares was unplanted and designed as open ground habitat.

| Cpt | Area | Main | Year | Management | Major Management | Designations |
|-----|------|---------|------|------------|------------------|--------------|
| No. | (ha) | Species | | Regime | Constraints | |

Tree growth was similarly challenging to the issues experienced in compartment 1a.

Woodland types are W11, W17, W18, W19, W4 and W7 and matched to site conditions. The principal tree species is birch (silver and downy), which amounts to 50% of all trees planted. Other species present are oak (sessile and pedunculate) 16%, alder 4%, ash 5%, hazel 4%, willow species 2%, rowan 4%, aspen 2%, gean 2% juniper 3%, and mixed shrubs; hawthorn, blackthorn, elder, guelder rose, dog rose and juniper- which have grown very well. Other minor tree species represented are: Scots pine, crab apple, bird cherry, elm, and holly.

Trees were planted at densities ranging from 800 stems/ha to 2000 stems/ha. Years of overgrazing by sheep had degraded the heathland vegetation. However, the reduction in grazing has meant that heather is starting to return around Ben Shee and the north-eastern slopes.

This is a good area for black grouse and several small leks have been recorded. Bracken has re-established itself in places, especially among the drier knolls on the lower slopes.

| 1c | 1 | Sitka spruce | 1960 | High forest | |
|----|---|--------------|------|-------------|--|
| | | | | | |
| | | | | | |

Small isolated block of un-thinned Sitka spruce planted circa 1960 with occasional deadwood. The block sits in a relatively sheltered position and there is minimal windblow. Ground flora is almost completely absent beneath the Sitka spruce.

| 2a | 286.84 | Mixed | 2001 | Wood | Gullies/Deep |
|----|--------|-------------|------|---------------|-------------------------|
| | | native | | establishment | Valleys/Uneven/Rocky |
| | | broadleaves | | | ground, Very steep |
| | | | | | slope/cliff/quarry/mine |
| | | | | | shafts/sink holes etc |
| | | | | | |

Sub-compartment 2a is located in Glen Quey, which was planted in one phase. 2a was planted in autumn 2001. The total area of Glen Quey is 383 hectares. The area planted was approximately 306 hectares, with the remaining 77 hectares designed as open ground habitat.

The lower woodland is now established, although the slow growth-rate and low height of some of the trees at higher elevations means they are still vulnerable to browsing damage.

The perimeter of the entire Glen Quey site is deer and rabbit fenced, however much of this fence is porous and in need of removal or replacement where livestock incursions are still possible.

The primary woodland NVC type across 2a and 2b is birch/oak (W11 and W17), with some ash/alder woodland (W7) on the more fertile flushed areas along the lower burns. The principle species across sub-compartment 2a are birch (silver and downy) 57%. Other species include; oak (sessile and pedunculate) 17%, alder 3%, ash 4% (which has

| Cpt | Area | Main | Year | Management | Major Management | Designations |
|-----|------|---------|------|------------|------------------|--------------|
| No. | (ha) | Species | | Regime | Constraints | |

mostly died due to ash dieback), rowan 5%, bird cherry 2%, gean 2%, hazel 4%, hawthorn 3%. The remaining 3% is a mixture of; willow, aspen, elm, blackthorn, holly, juniper and dog rose.

Planting densities average 1400 stems/hectare, and ranges from 1,100 stems/ha or less on the upper slopes at the south and western end of the site to 2,500 stems/hectare on the lower ground.

Vegetation is predominated by coarse grass species associated with a long history of heavy grazing on acid uplands. These are mainly Nardus and Molinia with what was degraded heath on the higher levels and upper peatland areas. The better drained mineral soils along parts of the high levels have a more heathy content whilst the drier soils on the knolls and south facing middle slopes are dominated by: bracken, finer grasses and herbs. Several areas of soft rush dominate around the numerous wet flushes and burns on the more peaty wet soils.

Small pockets of heathland species existed at the time of planting. These were primarily; heather (Calluna vulgaris) and blaeberry (Vaccinium myrtilis) which were mainly restricted to patches on the high levels and upper eastern slopes along Innerdownie.

In places the deer fence does not follow the actual property boundary due to topography e.g. over the main summit ridge and where the fence enters the reservoir near its southern end.

Management access is via the old Drove Road that runs alongside Glenquey Reservoir. There is a permissive right of access through the wood for the owner of the commercial conifer woodland at the far end of Glen Quey. All other access points are unsurfaced and only suitable for ATVs.

| 2b | 96.11 | Mixed | 2001 | Wood | Gullies/Deep |
|----|-------|-------------|------|---------------|-------------------------|
| | | native | | establishment | Valleys/Uneven/Rocky |
| | | broadleaves | | | ground, Very steep |
| | | | | | slope/cliff/quarry/mine |
| | | | | | shafts/sink holes etc |
| | | | | | |

Sub-compartment 2b is located in Glen Quey and was planted in 2001. 2b was planted in one phase starting in April 2001.

Woodland types are W11, W17, and W7 and tree planting was matched to site conditions. The principal species in sub-compartment 2b are birch (silver and downy) 50%. Other species include; oak (sessile and pedunculate) 16%, alder 6%, ash 9%, rowan 5%, bird cherry 2%, gean 2%, hazel 4%, hawthorn 4%. The remaining 2% is made up of: willow, aspen, elm and several mixed shrubs (e.g. blackthorn, holly, juniper and dog rose).

There is a scattering of natural regeneration, mainly rowan and birch, over the less fertile and heathy areas in the north-eastern part of 2b. The seed comes from the remnant, scattered, population of semi-mature birch and rowan on the mid-slopes. Regeneration is at a similar stage of development as the planted trees.

| Cpt | Area | Main | Year | Management | Major Management | Designations |
|-----|------|---------|------|------------|------------------|--------------|
| No. | (ha) | Species | | Regime | Constraints | |

Vegetation is mainly coarse grasses, principal species being those associated with a long history of heavy grazing such as Molinia and Nardus. Several areas of soft rush dominate around wet flushes and on the more peaty wet soils on the lower slopes. In drier areas bracken clumps dominate e.g. on the south facing middle slopes. Heather and blaeberry have increased on all the drier slopes, especially on the northern promontory overlooking Glendevon and across the higher levels going towards Innerdownie.

There is an old disused curling pond near the north east boundary, which has been restored by the local community as a wildlife pond.

In places the deer fence does not follow the actual property boundary e.g. behind Burnfoot. Management access is via the old Drove Road that runs alongside Glenquey Reservoir. All other access points are unsurfaced and only suitable for ATVs. A neighbour also has a right of vehicular access along the old Drove Road.

| 3a | 97.64 | Mixed | 2005 | Wood | Gullies/Deep | |
|----|-------|-------------|------|---------------|----------------------|--|
| | | native | | establishment | Valleys/Uneven/Rocky | |
| | | broadleaves | | | ground | |
| | | | | | | |

The majority of planting (59 hectares) was planted within a deer fence enclosing the majority of the site and was planted in spring 2005 as part of the first phase of planting at Geordie's Wood. Several small areas, (1.4 hectares) were planted outwith the fence in spring 2006 in 1.2m tree shelters. The remaining 37 hectares were designed as open ground habitat.

Woodland types are NVC W7, W11 and W17. The primary species are: birch (silver and downy) comprising 43% of all trees, and oak (sessile and pedunculate) comprising 23% of all trees. Additional species are: ash 8%, rowan 3%, alder 3%, hazel 5%, willow species 3%, aspen 2%. The remaining is a mixture of: gean, Scots pine, crab apple, bird cherry, elm, holly along with mixed shrubs (hawthorn, blackthorn, juniper, elder, guelder rose, and dog rose). Planting densities average approximately 1600 trees per hectare across the sub-compartment and the trees are now well established across the site.

There is a row of mature broadleaves, mainly ash, along the "Holloway", which is part of the old Drove Road, and other mature trees along the drystane dyke along the lower section of Rab's Burn. The mature trees are a mixture of; ash, elm, beech and oak.

The vegetation is primarily acid grassland, with some wet heath/tussock Molinia at the northern end. There is a large wet flush on the level ground around Rab's Burn. Here the vegetation is dominated by soft rush.

The entire perimeter of Geordie's Wood was deer and rabbit fenced, however much of this fence is porous and in need of removal or replacement where livestock incursions are still possible.

Reducing grazing pressure from sheep has meant that many plants have flourished. One infrequently observed

| Cpt | Area | Main | Year | Management | Major Management | Designations |
|-----|------|---------|------|------------|------------------|--------------|
| No. | (ha) | Species | | Regime | Constraints | |

species is Spignel (also known as Baldmoney) Meum athamanticum, which was once cultivated in parts of Scotland, the roots were eaten as a root vegetable and the delicate foliage used in a variety of home remedies. It is also known to taint cow's milk. There is a large area of Spignel in sub-compartment 3a, situated on a hillock overlooking Castlehill Reservoir, near Baldmony Knowe.

The area has a long history of agricultural use, and there are a large number of linear earthbank/dyke structures. These were built as livestock enclosures in the past. Near the northern end of the Holloway the remains of a former small farmstead can be seen, which was known as Upper Auchlinsky.

In 2012 a distinctive picnic bench was installed at each site. The one situated in sub-compartment 3a overlooks Castlehill Reservoir and has engraved images on the legs, taken from drawings inspired by nature and drawn by school children from Strathdevon Primary School, Dollar.

| 3b | 104.01 | Mixed | 2007 | Wood | Gullies/Deep | Great Landscape |
|----|--------|-------------|------|---------------|-------------------------|-----------------|
| | | native | | establishment | Valleys/Uneven/Rocky | Value |
| | | broadleaves | | | ground, Very steep | |
| | | | | | slope/cliff/quarry/mine | |
| | | | | | shafts/sink holes etc | |
| | | | | | | |

This area was Phase 2 of the planting scheme for Geordie's Wood. The main planting was undertaken in spring 2007, totalling 52 hectares (the remaining 52 hectares was designed as open ground, mainly around Seamab Hill).

The entire perimeter of Geordie's Wood was deer and rabbit fenced, however much of this fence is porous and in need of removal or replacement where livestock incursions are still possible. Approximately 3km of boundary fencing near Muckhart was replaced as new stock fencing in 2024.

The trees are now well established. Woodland types are W7, W11 and W17, matched to site conditions. Principal species across the sub-compartment are birch (silver and downy) comprising 43% of all trees, and oak (sessile and pedunculate) comprising 23% of all trees. Other species are: ash 8%, rowan 3%, alder 3%, hazel 5%, willow species 3%, aspen 2%, the balance is made up of: gean, Scots pine, crab apple, bird cherry, elm, holly and assorted mixed shrubs (hawthorn, blackthorn, juniper, elder, guelder rose, and dog rose).

The site has required several phases of replanting due to losses causing low stocking density in several places and to counter the effects of ash dieback. Stocking density now averages approximately 1600 trees per hectare across the sub-compartment.

Vegetation consists of improved grassland on the lower slopes between the Glendevon water works and sub-compartment 6a and unimproved grassland over the rest of the area and on and around the slopes of Seamab Hill. There are sporadic clumps of bracken on the drier southern slopes of Seamab Hill. In addition, there are areas of rush-pasture and wet flushes on some of the mid to lower slopes on the north-eastern side of Seamab Hill. Most of the unimproved areas of vegetation are acid grassland.

| Cpt | Area | Main | Year | Management | Major Management | Designations |
|-----|------|---------|------|------------|------------------|--------------|
| No. | (ha) | Species | | Regime | Constraints | |

Prior to tree planting, approximately 12.6 hectares of Forest of Flowers was established on the lower ground to the east, between the Glendevon water works and sub-compartment 6a. This was pre-prepared by inverted deep ploughing and some conventional ploughing and then sown to establish an area of mixed species native wildflowers as part of the Geordie's Wood Forest of Flowers project. This species rich wild flower area was then planted through with trees and for the first few years was very successful and attracted a great variety of insects and birds into the area throughout the summer. Gradually most of the diverse range of wildflowers was eased out by the profusion in growth of rosebay willow herb, grasses and thistle on the neutral/slightly alkaline base rich soil.

Within sub-compartment 3b, between the lower improved grassland and the upper unimproved land is an old windblow/clearfell area on an east facing slope. The shelterbelt traversed the bank from the WTW to the shelterbelt of sub-compartment 6a. The timber was cleared prior to Phase 2 of planting.

Where larger gaps have appeared due to ash dieback, sessile oak, rowan, cherry and aspen were planted and in smaller gaps more shade tolerant species e.g. hazel, holly, hawthorn, blackthorn, etc were inter-planted. All trees were planted in either 1.2m tree guards or 0.75mm shrub shelters.

The area has a long history of agricultural use and there are several earth bank former enclosures across the area from different periods. The northern boundary of the sub-compartment is the Auchlinsky Burn, which also forms the boundary between the Local Authority areas of Perth & Kinross and Clackmannanshire. Legal access for management and timber uplift is via the Glendevon water works access road and the looped track around the water works. Legal access does not extend up past the water works for timber uplift.

| 3c | 16.66 | Mixed | 2008 | Wood | Great Landscape |
|----|-------|-------------|------|---------------|-----------------|
| | | native | | establishment | Value |
| | | broadleaves | | | |
| | | | | | |

Sub-compartment 3c faces southeast across the low-lying fields of Geordie's Wood between the mixed conifer shelterbelt of 6a and Balliliesk Home Farm. The soil is predominately brown earth and prior to planting it was mostly managed as improved grassland.

This was phase 3 of the planting programme for Geordie's Wood, with the majority planted in spring 2008. Prior to tree planting, 11 hectares was pre-prepared by inverted deep ploughing and some conventional ploughing and then sown to establish an area of mixed species native wildflowers as part of the Forest of Flowers project for Geordie's Wood. This species rich wild flower area was then planted through with trees and for the first few years was very successful and attracted a great variety of insects and birds into the area throughout the summer. Gradually most of the diverse range of wildflowers was eased out by the profusion in growth of rosebay willow herb, grasses and thistle on the neutral/slightly alkaline base rich soil.

| Cpt | Area | Main | Year | Management | Major Management | Designations |
|-----|------|---------|------|------------|------------------|--------------|
| No. | (ha) | Species | | Regime | Constraints | |

The entire perimeter of Geordie's Wood was deer and rabbit fenced, however much of this fence is porous and in need of removal or replacement where livestock incursions are still possible. Approximately 3km of boundary fencing near Muckhart was replaced as new stock fencing in 2024.

Ten hectares was planted with trees, the remaining 1 hectare designed as open ground. Woodland NVC types are: W7, W11 and W17. Principal species across the sub-compartment is: birch (silver and downy) 43% and oak (sessile and pedunculate) 23%. In a matrix of other species e.g. ash 8%, rowan 3%, alder 3%, hazel 5%, willow species 3%, aspen 2% and the balance of 10% was made up of: gean, Scots pine, crab apple, bird cherry, elm, holly and assorted shrubs (hawthorn, blackthorn, juniper, elder, guelder rose, and dog rose). Trees were planted at densities averaging 1600 trees per hectare across the sub-compartment. Initially, the trees grew well then slowed due to prolific weed growth by grasses and dense beds of rosebay willow herb and thistle – which required annual cutting. The trees are now established and growing well.

Legal access for management purposes is through Balliliesk Steading and across the lower field to the covered reservoir. Or via sub-compartment 3b from the Glendevon water works access road.

| 4a | 3.8 | Mixed | 2008 | Wood | Great Landscape |
|----|-----|-------------|------|---------------|-----------------|
| | | native | | establishment | Value |
| | | broadleaves | | | |
| | | | | | |

This area was previously an enclosed field of intensively grazed, improved pasture. In 2006 the area was established as a nature park. It now has an all abilities looped path and features: a small pond, sculptures, community orchard, outdoor seating and an outdoor meeting area, for the benefit of the local community and schools to use and is known as Muckhart Nature Park. The Woodland Trust now manages the up keep of this area, but continues to work closely with representatives from the local community to ensure it continues to be enjoyed for their benefit

Tree planting of 1.5 hectares, predominantly with native species, was carried out between 2008 and 2010. In addition, several specimen trees were also planted within the site. In 2007 a small area of 0.4 hectares was prepared, by inverted deep ploughing and conventional ploughing and then sown to establish an area of mixed species native wildflowers as part of the Forest of Flowers project for Geordie's Wood. This wildflower area has converted back to grassland.

A line of mature large beech trees occurs along the western edge of the sub-compartment. In the past water from springs at the top of the field was piped into several old livestock troughs and an under-field drain. Livestock, from Balliliesk Steading have through access to fields to the east and west along the track which runs alongside the dyke at the top of the sub-compartment. This area is important as a gateway to the remainder of the Glendevon woodlands and the wider Ochil Hills. Legal access for management is through sub-compartment 3c to Balliliesk Steading.

| Cpt No. | Area (ha) | Main Species | Year | Management Regime | Major Management Constraints | Designations |
|------------|--------------|-----------------|------|----------------------|---------------------------------|--------------|
| 5a | 8 | Mixed conifers | 1960 | High forest | | |

Several mature shelter belt screens, of mainly un-thinned spruce, surrounding the Glendevon water works and several private houses. Predominately under thinned Sitka spruce with some Norway spruce, larch, Scots pine with occasional mixed broadleaves. The blocks to the north and east were selectively thinned in a two phased operation in January and August 2009. In the winter of 2011, a severe gale caused significant windblow among the trees in the northern belt and opened up a 0.7 hectare pocket of windblow within the stand. This was cleared and made safe during winter 2011/12 and the site prepared for planting. It was restocked in spring 2013 with mixed native broadleaves. A small amount of ground, directly behind the houses, was retained as open ground. Windblow continues to be a constant threat, mainly due to a lack of thinning in the past.

Small quantities of Rhododendron ponticum regrowth have been found in the strip north of the road leading towards the Glendevon water works.

Levels of deadwood are occasional within the standing timber and abundant where pockets of windblow have occurred. Ground flora is almost entirely absent beneath the Sitka spruce and is occasional beneath the Scots pine and larch. Ground flora is dominated by acid-loving grassland species.

A legal agreement with Scottish Water allows for use of the Glendevon water works access road for timber uplift to alongside the field below the water works site and for management access. Management access is also permitted along the new haul road, installed approximately 2010, which skirts around the southern end of the waterworks. This haul road removes the requirement to travel past the residential cottages with management vehicles. In 2011, 0.8 hectares of rough grassland below the water works was planted with mixed native broadleaves in 1.2m tree shelters.

| 6a | 8.96 | Mixed | 1960 | High forest | Great Landscape |
|----|------|-------------|------|-------------|-----------------|
| | | broadleaves | | | Value |
| | | | | | |
| | | | | | |

Mixed species shelterbelts planted in circa 1960 comprising mainly of mature Sitka spruce, larch and a few Scots pine with occasional semi-mature: sycamore, beech, oak and ash. The larch and spruce areas have suffered severe windblow during Storm Arwen in 2020 and future stability of the stand is a concern. Small pockets of Rhododendron ponticum regeneration occasionally appear despite previous treatment programmes.

Deadwood is abundant in places, mainly as a result of the sporadic windblow. Ground flora is generally absent beneath the spruce, frequent beneath the other trees and abundant in the pockets of windblow.

| Cpt No. | Area (ha) | Main Species | Year | Management Regime | Major Management Constraints | Designations |
|------------|--------------|-----------------|------|----------------------|--|--------------|
| 7a | 4.31 | Sycamore | 1980 | High forest | Very steep slope/cliff/quarry/mine shafts/sink holes etc | |

An area of even aged pole stage sycamore woodland at the south-western tip of the site. Ground flora is sparse and dead wood rare.

| 8 | 17.36 | Open | Raised bog | Raised bog | |
|---|-------|---------|------------|------------|--|
| | | habitat | | | |
| | | | | | |

An area of raised bog which is in relatively undisturbed condition. An NVC survey (Alistair Godfrey, 2012) identified the raised bog area as a mosaic of NVC types, dominated by M18a with areas of M2b, M25, M17 and M19. Numerous sphagnum mosses are found on Glen Quey Moss, including: *Sphagnum fallax, S. cuspitdatum, S. papillosum, S. magellanicum and S. capillifolium*. Other species identified were: bog cranberry, bogbean, hare's tail cottongrass, common cottongrass and heath-spotted orchids.

The bog is bounded on the west by the track which leads to the Linn Hill phone mast and on the north by the Glen Quey Burn. It was originally an ice-dammed loch, which explains its formation.

An archaeology survey in 2023 identified a large circular mound in the middle of Glen Quey Moss as a possible Bronze Age burial cairn.

| 9 40.09 Open Woodland | reation Archaeology/steep |
|-------------------------------|---------------------------|
| ground | slopes/bracken |

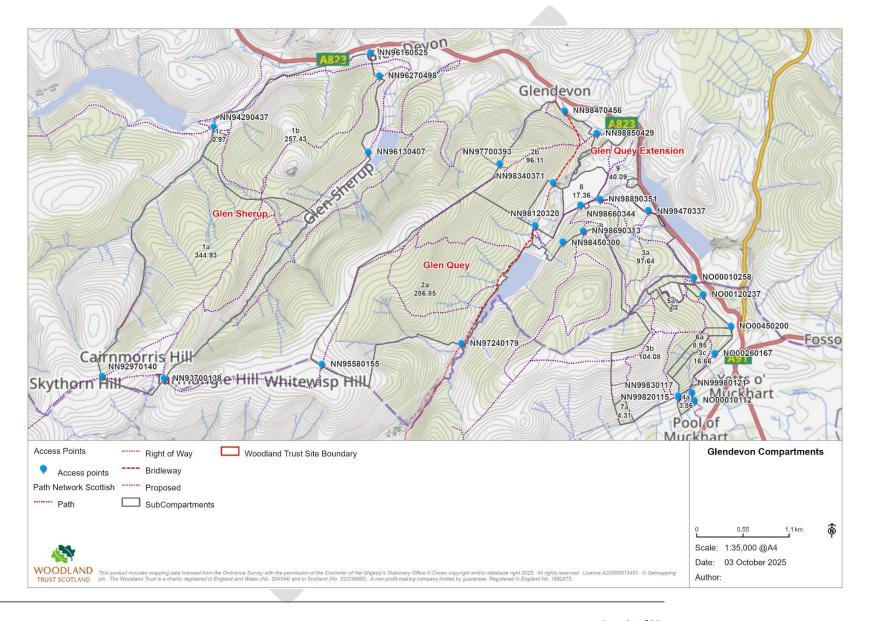
This area of Glen Quey Moss was previously grazed by livestock and is generally acid or unimproved grassland. An NVC survey in 2023 identified the majority of the site as U5 grassland, with significant areas of U20, dominated by bracken. There are areas of M23 rush pasture along the burns, with areas of M25 dominated by purple moor-grass.

Compartment 9 slopes steeply downhill from the flat expansive of the raised bog in compartment 8 to the west. The steep cleuchs were eroded during the last Ice Age, when the ice-dammed loch above burst and carved the steep gullies below which today hold the Howcleuch Burn. Moraine hills can still be seen from this geological feature.

There are extensive areas of Spignel in this compartment, explaining the name Baldmony Knowe of one of the rises.

An archaeology survey in 2023 identified numerous field boundaries throughout the compartment, and a potential fragment of a Roman Road near the Burnfoot entrance.





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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