



Forestry and
Land Scotland
Coilltearachd agus
Fearann Alba

Glengarry Land Management Plan Scoping Brief



Planning Team

Planning Forester

Planning Manager

Programme Planner

Environment Forester

Forest Management & Stewardship Forester

Harvesting Forester

Wildlife Ranger Manager

Civil Engineer

Visitor Services Officer

Area Land Agent

Background Information

Location:

The Land Management Plan (LMP), area lies in north Lochaber close to the village of Invergarry on the west side of the Great Glen. It extends over 13,462ha and includes:

- Glengarry Forest (12,168.8ha) lies just over 2km west of Invergarry along the south shore of Loch Garry.
- Craig Liath Forest (1176.73ha) lies south of Invergarry on the west shore of Loch Oich.
- Ardochy Forest (116.14ha) lies 7km NW of Invergarry to the north of Loch Garry.

Glengarry and Craig Liath Forests do march but FLS management is not contiguous due to the Craig Liath Crofting management area splitting the forested area of Craig Liath from Glengarry Forest. Ardochy Forest sits remote from the main LMP area.

Access:

Craig Liath Forest is accessed from the U1035 at Kilfinnan, the A82 at Loch Oich and the U1031 at Mandally. Ardochy Forest is accessed from the A87 and Glengarry Forest is accessed from the A87 at Whitebridge (Faichem), and from the C1144 at Greenfields and Tomdoun/Poulary.

Geology, topography and soils:

The LMP lies on the west side of the Great Glen with the SE facing slopes lying within the fault zone. Elsewhere the geology is part of the Moine Series, Loch Eil groups where bedrock is dominated by psammities.

Soils are highly variable throughout typically in the form of mosaics of ironpans, gleys, peats and podzols dominated by very poor nutrition.

Elevation ranges from 40m on the shores of Loch Lochy at Balmaglaster to 935m at the summit of the Munro - Sron a Choire Gharbh.

Generally topography is gentle – moderate north facing slopes on hummocky landform. This develops into steep sided mountains along the southern boundary of Glengarry Forest to the massif around Coire Glas including Ben Tee.

Slopes are moderate to steep south east facing along the Great Glen edge of Craig Liath Forest which leads to the peaty plateau crofting land. In the northern extent moderately steep north facing wooded slopes lead down to the community at Mandally. At Ardochy, the slopes are gentle to moderate and south facing.

Neighbouring land use:

Achnacarry Sporting Estate and FLS managed Clunes and Loch Arkaig Forests lie immediately south of the main section of the LMP; the A82, Loch Lochy and Loch Oich to the east; the communities of Invergarry and Mandally as well as Loch Garry lie to the north of the main part of the LMP with the A87, private forestry, estate and farming surrounding Ardochy Forest.

Importance of the LMP:

The main feature of this LMP is the Glengarry pinewoods which extends 13km along the northern extent of Glengarry Forest from Whitebridge to Poulary Deerpark. It comprises of multiple core remnants of the ancient Caledonian pinewood which are scattered to create a regeneration zone of almost 1200ha. This represents the extent of the future fully restored native pinewood.

This LMP will replace and renew the previous Forest Design Plan of Scottish Forestry reference: 030/519/230.

Economic Factors

Silvicultural potential:

Elevation in the forested land ranges from 40m above sea level at Balmaglaster in Craig Liath Forest to 405m at Meall nan Rudhag and Uillt Coire an Eich for productive conifers and 510m for native woodland at Fhudair and Doire na h-Achlaise on Ben Tee.

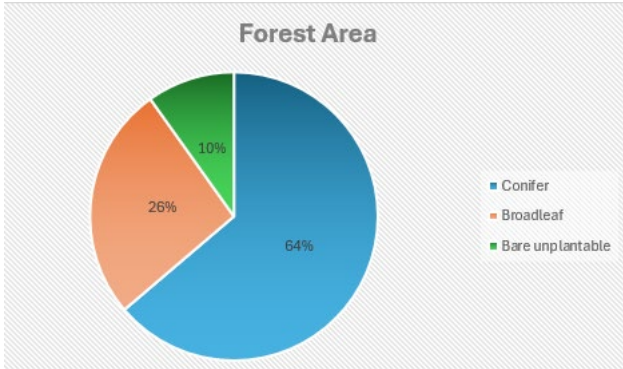
Forested sites typically sit within a gentle to moderately hummocky landscape and associated peaty basins.

The prevailing cool and moist/wet climate is conducive to good conifer tree growth although the soils and exposed topography limits the choice of tree species suitable for continued productive conifer crops.

Climate change predictions suggest that the climate will become generally warmer, with drier summers and wetter winters.

Existing crop:

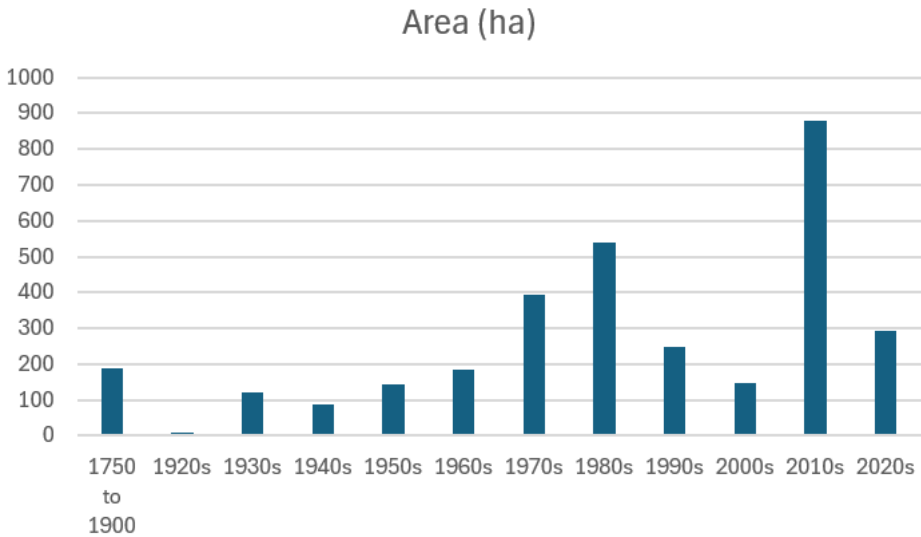
The current forest land use comprises of 2446ha (64%) of conifer high forest; 1010ha of broadleaf high forest; 378ha (10%) of bare unplanted ground and 1034ha (21%) of felled ground (awaiting restocking) see the pie-chart below. The majority of these felled areas are widespread through Glengarry Forest.



The forest land use occupies 4850ha with the main productive conifer species being sitka spruce (17% of forest land use) and lodgepole pine (16%). Open habitat occupies 8612ha which is 64% of the LMP area.

Woodland age class structure and rotation:

The bar chart below demonstrates that the main decades for tree planting was the 2010s followed by the 1980s and 1970s. This represents establishment of a mixture of first and second rotation crops.



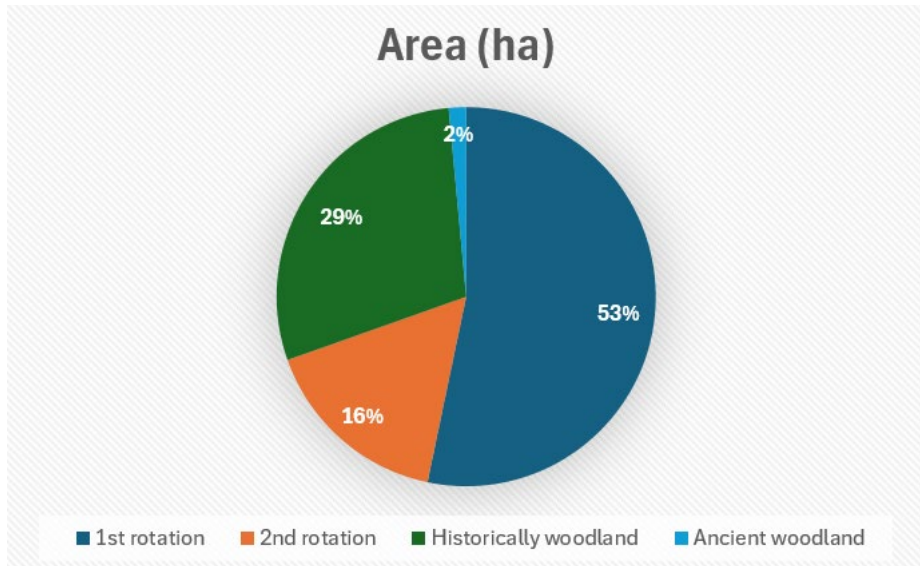
The above chart represents the breakdown of forest development as follows:

- 34.5% establishing crop (0-10 years)
- 4% thicket (11-20 years)
- 22.5% pole stage (21-40 years)
- 21% mature (41-60 years)
- 18% old forest (61+ years)

Age diversification is therefore quite evenly mixed with the exception of the younger stages. This is explained by large scale afforestation in recent years relatively low restock by planting the previous decade.

Pole stage crops are a mix of first and second rotation, with the mature and very mature crops being of first rotation planted crops or ancient woodland remnants. The productive conifer crops were managed as clearfell. Thinning has been limited to localised areas of east Glengarry Forest due to the relatively exposed nature of the forests and the distribution of peaty soils.

The chart below demonstrates that the woodland is dominated by first rotation crops.



The chart also shows that ancient semi-natural woodland occupies 2% of the forest with 29% of the forest being where plantations were planted on cleared ancient woodland sites (PAWS).

Plant health:

Dothistroma is the main threat to forest health due to the proportion of lodgepole pine in productive areas. Pine condition assessments imply Dothistroma infection is developing in some areas which can, if left to develop further, impact the health of native Scots pines.

There are areas of larch, albeit small and scattered. They are currently healthy from Phytophthora infection. The LMP area lies within an area defined by Scottish Forestry as a Priority Action Zone (PAZ). The FLS Larch Strategy defines the LMP area as lying within the PAZ more vulnerable zone. This recognises the northwards progression of the disease in the West of Scotland.

Operational access:

The forests are well served by a good forest network. Currently there is almost 79ha of forest roading of which 50% is of the highest "A" classification. The main haul route (GG1), through Glengarry Forest is used by third parties under agreements to avoid the need to travel along the C1144 public road along the north side of Loch Garry.

Renewables:

There are five operational hydro schemes in Glengarry Forest affecting the Allt Coire a Bhalachain, Allt Garaidh Gualaich, Greenfield Burn and Allt Ladaidh. The oldest scheme has been operational since 2001.

A pumped storage scheme in Coire Glas has been given- planning consent. Exploratory works are close to finishing. Once operational this scheme will have an estimated output of 15,000MW.

Environmental Factors

Statutory Designations:

There are three environmental designations all of which impact Glengarry Forest. They are as follows:

- West Inverness-shire Lochs Special Protection Area (SPA)
 - This is a designation of European importance for habitats that support black-throated divers and common scoter.
- West Inverness-shire Lochs Site of Special Scientific Interest (SSSI).
 - This is a nationally important designation for habitats that support the species in the SPA above.
- Garry Falls SSSI.
 - This is a nationally important designation for upland mixed ashwood and bryophyte assemblages deemed to be a good example of Scottish rainforest habitat.

Woodland Designations:

The ancient woodland inventory captures almost all of the following woodland designations:

- Caledonian pinewood – this consists of multiple ancient pinewood remnants covering 254ha. The associated regeneration zone extends to almost 1200ha. Restoration has commenced.
- Ancient semi-natural woodland (ASNW) captures some of the Caledonian pinewood remnants, but it also captures Scottish rainforest habitat oak woodland and birch woodland.- Some of this birch woodland lies in the crofting land at Mandally in Craig Liath Forest.
- Plantation on ancient woodland sites (PAWS) extend over most of the Caledonian pinewood regeneration zone as well as areas east and west Glengarry and most of the forested areas of Craig Liath and Ardochy forests.
- There are other minor but very important woodland and scrub remnants dotted about Glengarry Forest: bog woodland, juniper scrub and montane species such as dwarf birch and dark or tea-leaved willow scrub.
- Semi-natural birch woodland often extends high up the riparian area in watercourses and gullies.

Elsewhere, there has been large scale new native woodland establishment in Fhudair and around the relatively sheltered upper reaches of the main Allts in Glengarry Forest.

Open priority habitats:

Most of the LMP area consists of open ground dominated by priority habitats, the main ones of which are as follows:

- Upland heathland which includes snowbed communities
- Blanket bog and bog pool communities
- Montane heath and associated snowbed communities
- Tall herbs
- Inland rock outcrops and scree habitat
- Upland calcareous grassland
- Upland flush, fen and swamp
- Oligotrophic or dystrophic lochans

Threats to habitats:

Woodland habitats and some open priority habitats are impacted by non-native species including rhododendron, gaultheria shalon and non-native conifer and beech regeneration. These species change habitat conditions to impede native regeneration.

Fauna:

Fauna found in the LMP area includes: dragonfly and damselfly assemblages some of which are rare; pearl-bordered fritillary; wood ants; otter, red squirrel; water vole communities, black-throated diver, common scoter, whooper swan, goldeneye, teal, greenshank, osprey, white tailed eagle, golden eagle, raven, peregrine falcon, merlin and crossbill.

Herbivore impact:

The main herbivores that cause excessive browsing and poaching of vegetation are red and roe deer. Some non-native sika deer also inhabit the LMP area. The FLS Wildlife Ranger staff monitor and control deer and feral pigs. Glengarry and Craig Liath Forests sit within the East Knoydart Deer Management Group (DMG).

Water habitats:

The majority of the Glengarry LMP area lies within the Ness District Salmon Fisheries Board catchment. The lower reaches of the Glengarry major watercourses support important “spring” salmon fisheries.

The following SEPA waterbodies and their associated ecological potential affect the LMP area:

- Ecologically poor:

- River Garry -Loch Poulary to Loch Quoich; Allt Coire a Bhalachain; Allt Lon Glas Bheinn
- Ecologically moderate:
 - Greenfield Burn; Allt Ladaidh; Abhainn Chia-Aig; Allt a Choire Ghlais.
- Ecologically good:
 - River Garry – Loch Garry to Loch Poulary; Loch Garry; Allt na Cailliche; River Garry – Loch Oich to Loch Garry; Loch Oich; Loch Lochy.

The lowering of ecological potential to poor and moderate are as a result of hydro scheme developments.

Peatland:

Large areas of peatland can be found in Glengarry and Craig Liath Forests. They vary in condition from drained, hagged- to favourable. Restoration of hagged blanket bogs is ongoing. Some areas of forest-to-bog restoration have been identified and approved for deforestation. Other large areas of forest are being assessed for further forest-to-bog restoration to inform the revision of the LMP as part of improved management soil carbon and improved biodiversity.

Landscape designations:

Wild Land Area No.18 – Kinlochhourn-Knoydart-Morar affects the western watershed of the mountains around Coire Glas westwards over the open land and young woodland creation areas to Poulary.

The Loch Lochy and Loch Oich Special Land Area encompasses the Great Glen face of Craig Liath Forest and the Cam Bhealach, Coire Glas and Fhudair areas of Glengarry Forest.

Four landscape character areas (LCAs), affect the LMP area: Broad Forested Strath; Rocky Moorland – Lochaber; Rugged Massif – Lochaber and Interlocking Sweeping Peaks. This demonstrates the variability of landscape associated with the three forests.

Cultural designations:

There are no scheduled monuments in the LMP area, however, there are three listed buildings and structures: the Crucked Barn at Greenfields; the Falls of Garry suspension footbridge and the Invergarry Bridge suspension footbridge.

The Blar na Leine Battlefield zone affects the SW section of Craig Liath Forest. Elsewhere there are many unscheduled heritage features which are dominated by farming structures such as: farmsteads; townships; shielings, enclosures and drove roads. There are also features evidencing woodland management such as charcoal platforms, bloomeries and sawmills and lades.

Gaelic placenames also confirm the dominance of farming land use such as: Ba na Laogh (the calf's hollow); Meall nan Reitheachan (rounded hill of the head-butting rams); Bolinn Hill (hill of the cow's pools).

The Gaelic placenames also identifies the natural landscape: Bad an t-Seobhaig (The thicket of hawks); Feadan nan Saobhaidh (Streamlet of the fox dens); Allt an Oighre (burn of the

cloudberry); Allt Coire an t-Seilich (burn of the corrie of willows); Allt an Fhithich (burn of the raven; Allt Giubhais (burn of the juniper; Meall Doir an Daimh (rounded hill of the oak grove of the stag).

Social Factors

Glengarry and Craig Liath Forests lie close to the Invergarry, Mandally and Kilfinnan communities. Here the view of the forest is so localised and close that is little in the way of negative visual impact. However, the visual impact of Clunes Forest affects those who live alongside or travel along the A82 on the east side of Loch Lochy or along the A87 and C1144 on the north side of Loch Garry. The view of the boundary between Clunes Forest and Glengarry Forest is affected by the unnatural upper forest edge on Clunes face. The square conifer plantation at Balmaglaster on the highly visible slopes of Craig Liath Forest jars with the long linear features in this landscape.

Formal recreational facilities:

The east side of Glengarry Forest is popular with visitors using formal visitor facilities such as the Ciste Dubh forest car park as well as the Ciste Dubh and Allt na Cailliche trails. Tourists avail of the Loch Oich forest car park at Craig Liath Forest which is adjacent to the A82 providing short walks and picnic benches with views across Loch Oich.

Informal recreational:

Core paths LO11.09, LO11.08 and LO11.01 link Invergarry and Mandally via the River Garry riparian woodland.

Hillwalkers use the hill access routes at Kilfinnan to access Ben Tee and at Cam Bealach in which initial access is gained via Clunes Forest. A small section of the Caig hill access route enters the southern boundary of Glengarry Forest at Fedden. These last two routes follow the ScotWays old drove road and the route to Kilfinnan church.

Long distance paths:

The Invergarry Link section of the Great Glen Way (GGW) long distance footpath and cycle route uses the main forest road which passes through Craig Liath Forest from Laggan Locks to Mandally. This is core path LO11.04. The GGW is the second busiest long distance trail in Scotland. Other visitors to the forest include kayakers and anglers.

Water supplies:

The majority of the LMP land lies within the wider Ness public water supply catchment. Private water supply catchments mainly impact the Crofting land at Kilfinnan, and forested land at Forest Gate and Greenfields. Private water supplies affecting FLS managed land have been ground truthed and associated catchments identified to inform management operations.

Strategic Drivers:

To realise the vision as set out in the Scottish Forestry Strategy 2019-2029, six priorities for action have been identified for implementation:

- Ensuring forests and woodlands are sustainably managed
- Expanding the area of forests and woodlands, recognising wider land-use objectives
- Improving efficiency and productivity, and developing markets.
- Increasing the adaptability and resilience of forests and woodlands.
- Enhancing the environmental benefits provided by forests and woodlands.
- Engaging more people, communities and businesses in the creation, management and use of forests and woodlands.

To demonstrate how we will have regard to the Forestry Strategy in our work, we have identified the relevant Forestry Strategy “Priorities for Action” in our Corporate Outcomes section of the FLS Corporate Plan 2022 – 2025. The FLS National Spatial Overview, which provides direction for land management plans, has identified the Glengarry LMP as lying within Zone 5 – Northern Glens and Zone 6 – The Great Glen. These, alongside key issues and site specific challenges, have informed our draft land management plan objectives, as illustrated in:

- Appendix 1: Corporate outcomes and the site specific land management plan objectives.
- Appendix 2: National Spatial Overview.

Draft LMP Objectives

- To continue landscape scale restoration of pinewood and other native woodland habitats.
- To optimise income from existing current crops and to continue sustainable timber production.
- To safeguard priority open habitats.
- To develop a deer management strategy for the Glengarry LMP in conjunction with neighbours and the East Knoydart Deer Management Group (DMG).
- Engage with the local community in developing plans for the future development of the forest.

Stakeholders and Consultation

Scottish Forestry

NatureScot
Scottish Environment Protection Agency (SEPA)
SSE (Garry – Moriston Hydro-Electric Power Scheme) – managed from Perth.
Scottish Water
Highland Council (roads, forestry, access & archaeology depts)
Highland Council – Countryside Rangers (GGW)
Historic Environment Scotland
Ness District salmon Fisheries Board
Invergarry Community Council
(East) Knoydart DMG
Forest Research
Renewables
Scottish Canals
Craig Liath Crofting Community
Neighbouring landowners
Neighbours (Greenfields, Forest Gate, Garry Gualach)
Royal Society for the Protection of Birds (RSPB)
MOWI – Loch Garry depot
Telecommunications companies for the Glac Dubh and Craig Liath masts
Timber Transport Forum (TTF)
Lochaber Fisheries Trust