Raasay

Land Management Plan Brief

Vision

Raasay forest provides an opportunity to manage and enhance a designed landscape of great historical and cultural importance. The forest structure will be diversified to produce a more varied age structure and also divided in to smaller, windfirm coupes that will allow small volumes of timber and firewood to be harvested for use on the island. The future forest will enhance the visitor experience, specifically around archaeological and historical sites.

1. Project Background

Raasay

Landscape setting

Raasay is made up of 2 forest blocks: Inverarish in the south near the village and Brochel in the north. Inverarish is made up of steep sided glens that run up to Can nan Eun, it is highly visible from the ferry and within the village. The majority of Inverarish is a designed landscape that dates back to the 18th century. Brochel is a steep, terraced slope with an Easterly aspect; it is visible from the sea and also the popular tourist destination of Applecross.

Geology, soil, climate, slope stability

Inverarish

Complex geology with granite intrusions on the higher ground in the south produce an acidic soil that is mostly unflushed blanket bog, previously planted with Sitka spruce and lodgepole pine. Oskaig plantation is overlying gabbro producing a fertile basic brown earth soil. The remainder of the forest is underlaid with a mixture of micaceous and calcareous sandstones which has created typical brown earth in the inverarish glen with peaty surface water gleys to the north of this. The torridonian shales on Raasay contain the oldest fossilized plant remains yet found. A unique type of loam in the centre of the island indicates that Raasay may not have been glaciated and therefore shows a rare flora community.

The climate varies from warm and wet with minimal exposure below 100m altitude to cool, wet and moderately exposed above this. There are no slope stability issues in this block.

Brochel

This block is a mixture of sandstone, mudstone and siltstone with 3 basalt dykes running through it. This has created the terracing of the site due to the relative resistance to erosion and weathering. The soils are upland brown earth along the coastline. Above 100m the soil is unflushed blanket bog in the south and peaty surface water gley in the north. This whole site is currently felled and there is some regeneration of native broadleaves, mostly in the incised gullies that run down the site. The photo below shows how much tree regeneration can be achieved if grazing pressure is reduced.

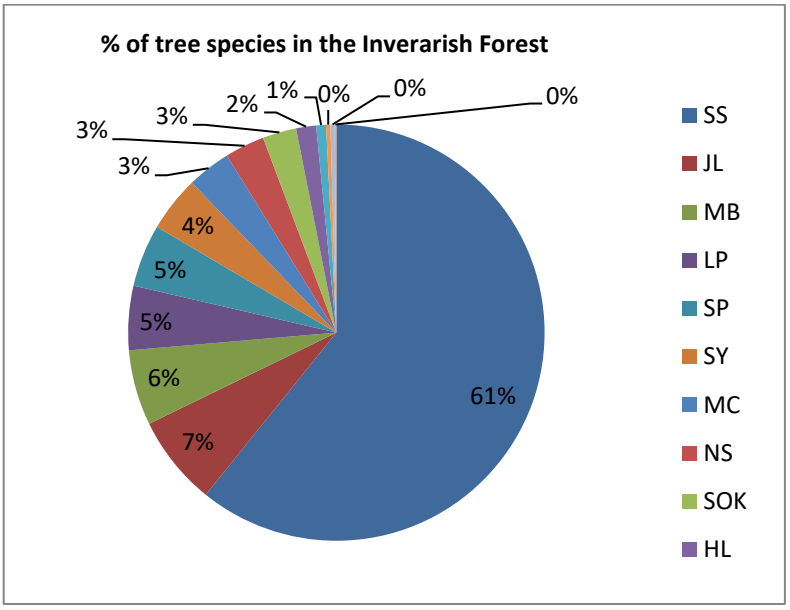
Small exclosures in Brochel with tree regeneration inside.

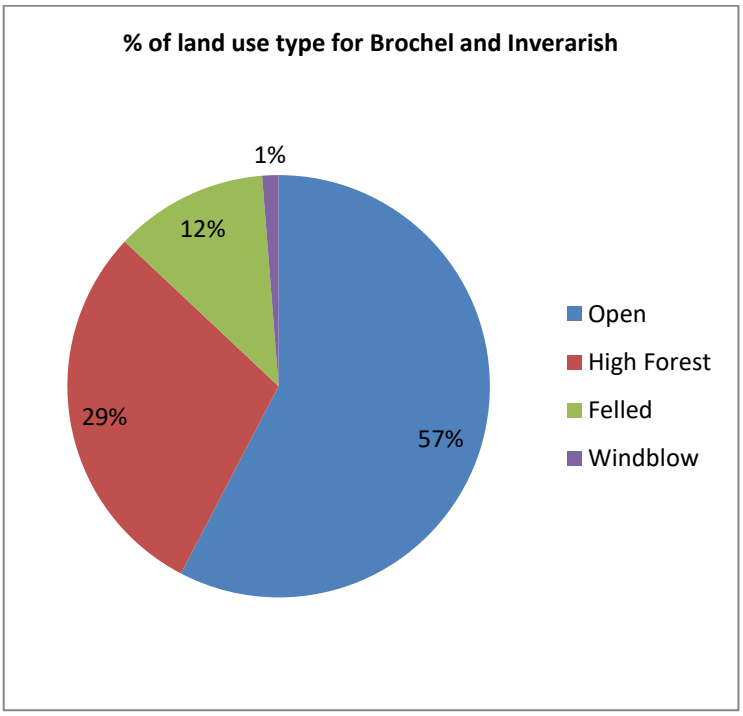
The climate varies from warm, moist and sheltered at the coast to cool, wet and moderately exposed above 100m altitude. There are no slope stability issues in this block.

Forest composition

Inverarish has a mixture of conifers and broadleaves on the west of the block with policy woodlands dating back to the 18th Century and more traditional productive conifer plantations in the east of the block at higher altitudes and poorer soils and climate. Since 2016 there has been considerable felling of larch due to infections of *Phytophthora ramorum*, this has left 33ha to be restocked. Restocking since 2013 has been with mixtures of native broadleaves and some productive conifers. Sitka spruce is the most prevalent species occupying 61% of the forest. The pie chart below shows the proportion of tree species in the Inverarish block.

Brochel was felled in 2001 and is mostly open with some patches of natural regeneration of native broadleaf. The land use of both Brochel and Inverarish combined is shown in the chart below.





2. Project Objectives /Outcomes

Design Inverarish forest for future small scale management to produce a sustainable resource of timber and firewood.

Long term management of deer and rabbit populations at levels to allow future woodland establishment.

Maintain and enhance the designed landscape associated with Raasay House and reduce the impact on the landscape in the future.

Remove larch from the forest to prevent further *Phytophthora ramorum* infections in larch.

Control Rhododendron to reduce the inoculum levels of *Phytophthora ramorum*.

Maintain current path network and provide additional informal paths where operations allow.

Maintain archaeological sites within the forest to allow visitors to understand the significance of the sites and improve the visitor experience of the sites.

Develop a Land Management Plan delivered in accordance with United Kingdom Forestry Standard (UKFS) and the UK Woodland Assurance Standard.

Develop a Land Management Plan which delivers against the relevant objectives of the Inverness, Ross and Skye District Strategic Plan and Scotland's National Forest Estate and Strategic Directions

2.1 Strategic objectives

- **Healthy**: Adapting the National Forest Estate to climate change and build resilience to extreme weather events by diversifying structure and species and creating more windfirm stands.
- **Productive**: Continue to produce a sustainable supply of timber and firewood to contribute to Scotland's economy and recognise the potential of the Estate to assist transition to a low carbon economy.
- **Treasured**: Investigate opportunities for partnership working with communities, government bodies and NGOs.
- **Access**: Help visitors to experience and enjoy the outdoor environment, encourage use of the estate for health benefits and outdoor learning.
- **Cared for**: Manage key habitats for white tailed eagle and the Raasay water vole.

3. Project Scope

3.1 Key features that will influence the development of management proposals

- Harvesting timber on Raasay to ship off the island is an expensive operation. The future harvesting will focus on producing timber for processing on the island and for firewood for the local community and the Raasay house wood chip boiler.
- The forest is known to provide habitat for Golden Eagle, Sea Eagle and herons. The forest will continue to be managed in a way to maintain and enhance these habitats. Raasay is also important as it supports a unique sub-species of the bank vole, darker and twice the weight of the mainland species called the Raasay vole.
- The current larch on the island is at risk of infection by *Phytophthora ramorum*. In order to remove this risk the larch will be felled in the first 5 years of the LMP. To reduce future infection in Rhododendron this will also be controlled by cutting and treating the stems, burning and spraying regrowth.
- There are many important archaeological sites within the forest that need to be maintained,

enhanced and in some cases protected. This includes the designed landscape which is related to the early policy woodlands associated with Raasay House.

- Inverarish is well used and enjoyed by the local community and visitors for recreation. The core path network will be maintained and opportunities for more informal paths will be taken if practical during operations.

- The Inverarish block is especially visible from the ferry and many viewpoints around and the village. The forest will be designed to have minimal impact on the landscape of the island in balance with the other objectives.

3.2 Known issues & opportunities to be investigated

The soil and climate of Raasay provide opportunities to replant with alternative tree species of conifers and broadleaves, this would be in keeping with the designed landscape associated with Raasay House.

Raasay is a popular tourist destination and as such the forest needs to be designed to minimise impact to landscape and recreation.

The risk of *Phytophthora ramorum* on the island means that larch needs to be felled and rhododendron needs to be controlled to manageable levels.

All operations on Raasay are expensive due to the additional cost of getting people and machinery on to the island. Harvesting and extracting timber from the island is an at cost operation, as such it is planned that future felling and restock of the forest would provide timber in small parcels that could be sawn for timber on the island, used for firewood supplies on the island and supply wood chips for a boiler due to be installed in Raasay House.

Because of the community and tourist benefits that the forest provides, the community of Raasay have shown interest in purchasing the forest from FES. The Land Management Plan will design the forest to be suitable for community management in the future.

Tree protection during establishment is an issue with rabbits and deer in Inverarish and sheep in Brochel. This may be improved with better control in the future and installing the correct grids to keep deer out and maintaining the perimeter deer fence. This will be increasingly important as more palatable species are used in the restocking.

In the areas clearfelled for Phytophthora ramorum infections there are some areas that have regenerated naturally with western hemlock and Sitka spruce. This will be managed to produce a future firewood resource. Forest management will take advantage of natural regeneration to restock clearfelled sites where possible and a seed source exists.

Where clearfell sites are highly visible they will be replanted in the following season to establish tree cover as quickly as possible.

4. **Inclusion** (Key documents to be produced)

- Management map
- Future habitat & species map
- Designed landscape map
- CSM6 maps
- Water map
- Deer management plan

- SSSI management plan
- Open habitat management prescriptions
- Landform analysis & plan visualisations
- Summary of activities
- EIA determination

5. Exclusion

- Detailed site specific management plans (work plan)

6. Project Organisation

LMP TEAM- responsible for undertaking the revision	
Ben Griffin	Planning Forester
Isabelle Destor	Environment Forester
Chris Nixon	Operations Forester
Mike Beveridge	Operations Forester
Russell Cooper	Wildlife Ranger Manager
Renate Jephcott	Landscape Architect
Ross MacMillan	Wildlife Ranger
Sally Phillips	Civil Engineer
Bruce Taylor	Recreation Forester
GOVERNANCE- Responsible for overall management of the project	
Project Sponsor	Doug Mitchell (Planning Manager)
Strategic direction	IRS FD Management Team
Forestry Commission Scotland	Agata Baranska (Development and Operations Advisor)
Silvicultural Advisor	Tor Stokes

7. Time frame

Community Scoping Meeting	May 2018
Internal and Community Meeting	June 2018
External Stakeholder and Community Consultation	June 2018-July 2018
Draft plan completion	August 2018
Detailed consultation internal and external.	August 2018
Review of commentary & amendments	August 2018
Internal review	August 2018
Submission of final plan	September 2018

8. Risks

- Plan takes longer to put together than September 2018.
- Stakeholders & community consultation is more complex and time consuming than anticipated.

Mitigation: If the above project milestones are not being met then this will be reported to the project sponsor. If the final deadline will not be met then an extension will be applied for from Forestry Commission Scotland however this will impact other Land Management Plans in the Forest District.

9. Stakeholders

Statutory Stakeholders:

Scottish Natural Heritage
Scottish Environmental Protection Agency
Highland Council Tree Officer
Skye District Salmon Fishery Board

Other Interest:

RSPB
Raasay Development Trust
Raasay Community Council
Grazing Committee
Raasay House Community Company
Raasay Heritage Trust
Scottish Water
Mountaineering Council for Scotland
Scottish and Southern Electricity
Historic Scotland
Skye Fisheries Trust

Neighbouring Landowners:

SGRPID
Raasay Development Trust