

<p>Land Management Plan Brief Lochaber Forest District LMP Unit: Leanachan Forest Date: March 2017</p>	 <p>Forestry Commission Scotland Coimisean na Coilltearachd Alba</p>
<p>Planning Team: Lead Christina Tracey Henry Dobson (environment) Kirsty Mann (recreation) John Jackson (deer mgt) AN Other (harvesting) Jeff Hancox (roads) Jim MacIntosh (woodland creation) Naill Justice (restocking) Sam Wilson/Sarah Hood (GIS support)</p>	

Description

Location and History

The Leanachan Land Management Plan (LMP) area lies in the broad forested strath of the Great Glen to the north east of Fort William. It covers the northern lower slopes of Aonach Mor, Carn Mor Dearg and Beinn Nebheis mountain massif. The 3,130ha national forest estate here is continuous with the forest of Killiechonate estate to the north and the re-establishing natural woodland of the former British Aluminium estate to the south and west. Its north western boundary is the Fort William to Spean Bridge railway line.

The main forest acquisition of 3,058ha was in 1933 from the Law Debenture Corporation. Chapman Wood (164ha) to the south, in Coire Cul na Creige Duibhe, was acquired in 2007. A small area by Leanachan farm was sold in 2003.

Current land use and key features

Leanachan forest is a major recreation facility close to Fort William with access to the Nevis Range gondola, cycling and walking trails. There is an approved Masterplan for the development of further tourism facilities including accommodation within the forest.

The forest is predominantly conifer plantation woodland. A fringe of native woodland has developed above the conifer tree line and represents a link to a tree cover predating the Forestry **Commission's work**. Restructuring of the forest has begun with felling of the first rotation crop as it reaches maturity in line with the 2006 forest design plan. In addition to establishing the second rotation of productive conifers, the restocking has created wider riparian areas and increased the amount of native broadleaf and open space. In the core of the forest lies the lowland blanket bog of Lon Leanachain SSSI which has been partially restored.

Although only the upper unplanted areas of Leanachan forest are included in the National Scenic Area, the forest forms the lower frame for the Aonach Mor Massif when viewed from across the Great Glen and **from the Commandos' memorial. It is also visible from various**

points between Fort William and Corpach. The design of the upper margin, in particular, needs to be sensitive to the landscape. There is scope for developing a more natural transition from forest to open hill.

A closer perspective is seen from the A82 and the railway. The forest also forms a major part of the view from the Sgurr Fionnsg-aig view point visited by many of the gondola visitors.

Site and Climatic conditions

Climatically the forest is in one of the more favourable locations of Lochaber for tree growth. A warm, moist and moderately exposed climate exists along the A82 corridor and the straths of the river Lundy and the Allt an Loin. The River Lundy corridor and the eastern part of the forest are the most sheltered. The conditions become cooler and wetter with altitude but only become sub-alpine at the upper margins of the forest.

The principal aspect of the forest is north facing with local topography giving small scale internal variations. The forest lies entirely within the catchment of the River Lochy with the western half draining directly into the Lochy while the eastern section lies in the catchment of the river Spean itself a tributary of the Lochy. The hydrology has been heavily modified by the original British Aluminium hydro scheme which diverted all the hill burns into hydro electricity generation at the smelter.

A varied geology of Pre-Cambrian rocks underlies most of the forest covered by glacial drift deposits and peat. The granites of the Ben Nevis complex underlie the southern part of the forest. The forest has full soil survey data to 1:10k.

Part of the forest falls within the Parallel Roads of Lochaber SSSI and contains some of the glacial features of this Earth Science site. A more detailed features map is available.

The soils of around 75% of the forest are classed as poor nutritionally and 20% of the area classed as very wet and a further 30% as wet.

This is a revision of a plan approved in 2006. The crop data was update for 10% of the forest area with an attribute survey in 2014.

Social Factors:

The forest lies within the Inverlochy and Torlundy Community Council and the Spean Bridge, Roy Bridge and Achnacarry Community Council areas. Leanachan Farm is a privately owned property within the forest and has a private water supply. There are also private houses adjacent to the forest at Torlundy.

Recreation facilities and use

Leanachan Forest is well established as a destination for outdoor recreation. Much of the recreation opportunity is focused around the gondola base station of Nevis Range, mountain bike and ski centre, which attracts some 130k visitors per year. The forest, particularly to the west is a popular recreation area with mountain bike trails and walks radiating from Nevis Range. A High Wire course adds to the visitor activities at the base station.

The North Face car park at Torlundy is popular as the start point for expeditions to Ben Nevis' North Face and for walking away from the main mountain bike area. Like the Torlundy access, a small car park at the end of the public road to Leanachan farm is used by people looking for a quieter walk or ride in the forest. Rights of way, core path, the old Puggy Line and the East Highland Way all traverse the forest providing opportunity for longer walks and rides.

The importance of Leanachan Forest for recreation has led to the development of a Masterplan for **the "resort" develop of a range of accommodation from basic wooden pods to chalets and a hotel.** The area is now zoned in the Local Plan for tourist related development

Internal forest landscape

The value of commercial and informal recreation is a key objective and driver in the development of Leanachan forest. It will guide the management of the existing forest and the future appearance of the forest both for visitors within the woods and those viewing it from above. E.g. Alpine view framed by spruce and other conifers from the café and the gondola.

Landscaping work along the main access road to Nevis Range in the last couple of years has enhanced the welcome to the forest. A similar project is underway to improve the immediate landscape of the MacKenzie Road, the old road to the ski centre. As part of this LMP, a programme of forest management will be developed building on the landscaping work to date with the aim of improving the visitor experience of the wider visitor zone.

Within the forest bounds, but now out with public ownership, is the Lochaber Rural Centre with auction mart and a number of business units as well as space for further expansion. The roadside landscape here is still being developed to soften the impact of the building and associated infrastructure.

There is potential conflict between forest operations and increasing recreational activity and ways to help mitigate this through forest design will be a key objective of the LMP development as well as opportunity to enhance the visitor experience.

Cultural heritage

There is one designated heritage site, Leanachan Motte. The remains are limited but the site is important as a rare example of this type of defensive structure in the area and the wet conditions may yield some well-preserved artefacts.

The remains of corn kilns and buildings are recorded in the heritage layer along with the settlement of Tomnafet. **The route of Wade's military road runs along the northern edge of the forest** and the forest has links to the Jacobite battle for Fort William.

There are various historical and current artifacts associated with the Aluminium smelter including the old Puggy Line, the adits and hydro pipe line and the wartime decoy site.

Environmental Factors:

Woodland habitat

The largest area of plantation on ancient woodland site (PAWS) is on the upper eastern edge of the forest and still called Coille Leanachain on the map although this has little remnant woodland cover. There are other smaller PAWS area associated with the burns.

There is some rhododendron and other invasive species within Leanachan which are being monitored but currently of low priority for control within the Forest District context.

The water courses of Leanachan forest are all heavily modified as a result of the original British Aluminium hydro scheme which abstracted all the water from the burns coming off the high ground above the forest. All the burns with the exception of the river Lundy (poor) and the Allt a Mhuilinn (bad) are classified as good ecological potential by SEPA. The plan will seek to improve the quality of the water and of the riparian network below the adits. The Lundy and the Allt a Mhuilinn both fail due to the impact of water abstraction. There may also be some scope for natural flood management through the forest design work.

Open habitat and peatland

The open habitats of Leanachan forest are associated with the upper margins of the forest and part of the much larger Beinn Nebheis SSSI (9,539ha) and SAC (9,316ha). Here there are also remnants of native woodland, predominantly birch, at the upper margin of the plantation woodland. There is potential for further developing this area as treeline woodland.

The crags below Sgurr Finniosg-aig may hold remnant montane willow and other associated flora due to the presence of limestone in the geology.

Lon Leanachain SSSI is a major feature of the forest area and the LMP will incorporate the revision of the SSSI management plan to protect and enhance the designated area along with the necessary consents from SNH for operations that may impact on the condition of the mire. There are other areas of deep peat that will require further assessment on their potential for restoration or tree growth. These areas also have the potential to contribute to the storage of carbon.

Species

Deer populations are currently assessed as medium for the forest as a whole but there is a browsing impact on the native natural regeneration and a heavier impact on the bog SSSI. The upper deer fence is no longer tight and the plan will need to consider the future of a strategic fence for re-establishment of the PAWS areas and the upper treeline wood development

Leanachan forest is designed as a red squirrel strong hold although the populations are low. There is a need to consider species that will provide a sustainable food source as well as mature trees for habitat and to maintain linkage between suitable habitats to improve the suitability of the forest for red squirrel.

Although there are no black leks within the forest, it lies between two black grouse strong hold areas at Roy Bridge/Spean Bridge and Glen Nevis/Cow Hill. There is potential for improving the habitat for black grouse on the upper margin of the forest.

A barn owl nest scheme has recently been established to provide nest sites in an otherwise suitable habitat.

Chequered skipper and pearl bordered fritillary are present on the northern edge of the forest.

Areas where biodiversity is a high priority will be identified through the LMP process and become part of a permanent framework for the forest design.

Economic Factors:

Timber production

Leanachan Forest is a key softwood timber producing area in the forest district – due to terrain suitable for wheeled harvesting systems, good road access and proximity to markets. The current production forecast is for c22km³/year over the next 10 years of which 84% is Sitka spruce. Production then declines as the mature crops are felled. The plan needs to consider the potential to extend rotations to achieve a more steady flow of timber and also to review increasing the volume available from thinnings.

The site conditions are favourable for growing a variety of productive conifers, as well as, Sitka spruce of sawlog grade. Thinning should be the default for the majority of stands as they reach the age of first thinning. The aim is for full restocking of the felled area with targeted open space.

High quality silviculture which creates attractive woodlands with a lower rate of harvesting disturbance will be important in the main visitor zone. Where possible the current stands should be thinned and managed in this area under a lower impact silvicultural system. The development of visitor management zones should also be considered as part of the LMP development. There is an urgency about this work as the window of opportunity for the current stands is closing. The economics of working the steep slopes will be considered in the preparation of the plan.

Although relatively sheltered the forest is still prone to windblow, particularly from storm events due to the wetter soils. The largest area of windblow is in Chapman Wood and will require the early clearance of the hill top. The coupe boundaries will be designed to try to increase wind resilience in the future.

The potential for broadleaf timber production will be considered in Leanachan in relation to the existing broadleaf areas mainly of birch of firewood grade. Where broadleaf woodland is proposed in the future, timber production will also be considered as an objective.

Careful consideration of the costs of establishment of alternative conifers and broadleaves needs to be included to ensure the most cost effective delivery of the plan objectives is achieved.

Forest roads and haulage

The main forest access for timber haulage currently runs close to the Nevis Range car park and lower gondola station facilities. Neither the Torlundy public road access nor the public road into Leanachan are suitable for HGVs (despite what the Satnav tells continental lorry drivers). The forest is generally well roaded although the road into Chapman Wood requiring significant upgrading to make it suitable for haulage. A couple of areas of the forest still needing roading for future timber haulage. There may be scope during the plan development to provide other benefits from the road alignments as well as taking measures to minimise the impact on the recreation facilities including noise disturbance.

A strategic timber haul route extends from Killiechonate forest through Leanachan to A82.

Other economic activities

Leanachan Forest makes a significant contribution to the local economy through supporting the recreation facilities around Nevis Range. Leanachan forest is an important venue for significant national and international events including hosting one of the World Championship Events in June bringing hundreds of people to the area for the weekend. The plan needs to take this into account in planning operations as well as improving the appearance of the forest as the backdrop.

Leith manages the lime, sand and quartzite quarry in the forest, leased from FCS. This quarry is due to be expanded to the east in the coming year. Quarry traffic uses the forest access at Nevis Range

River Lochy is the most productive fishing river in Lochaber with Spring and Autumn runs of salmon. River Lundy is one of its main spawning tributaries with the removal of some dams and weir in 2010 increasing the access to suitable beds.

In addition to the hydro infrastructure for the Aluminium Smelter, the construction of a hydro scheme by Nevis Range is currently underway with part of the penstock, the powerhouse and export cable within the Leanachan forest boundary.

The need for electricity transmission routes impacts on the forest with the Western Isles/Aluminium smelter pylon lines running through the forest. The need to increase the resilience of this line is likely to require an increase in the width of the wayleave. Mitigation for this will need to be built into the plan.

The West Highland railway line runs along the northern edge of the forest.

Objectives:

Leanachan forest has been managed for multiple benefits over the years with a strong contribution to the local economy. This policy will continue in the future with its importance as a significant outdoor recreation provider and commercial softwood timber producing area as the principal drivers. The challenge of the LMP is to increase the integration and cohesion of the different objective of management which have the potential both to complement and to conflict with each other.

Primary objectives

- Retain a strong core of commercial conifers suitable for the site to support the local forest and timber industry. Forest management should focus on the production of softwood sawlogs and creating attractive forests for recreation activities through species choice and the thinning of suitable crops. Ensure that resilience to climate change, in particular increasing storm events and pest and disease attack is tested through the planning process. Aim to create a more even flow of timber from the existing crop over the next 20-30 years.
- Recreation is a key aspect of this forest with a significant and growing contribution to the local economy. The design of the forest, particularly to the west needs to focus

management on the development of high quality forests that enhance the visitor experience.

- Restore and expand the native birch woodland of Coille Leanachain to form a natural treeline woodland. Identify opportunities to manage some of the broadleaf woodland for wood production. Use native woodland expansion to enhance the riparian zones for fishery protection.
- Define buffer boundary of the Lon Leanachain SSSI. Review the deep peat areas of the forest to optimise the potential of both the soil and the trees to lock carbon following the FCS guidance on peatland management.

Supporting objectives

- Recognising the wider landscape context of the forest design the future coupes to fit with the landscape as seen from key viewpoints, in particular the upper margin.
- Work with relevant stakeholders to increase the resilience of their infrastructure within the forest.
- Consult and work with local communities and stakeholders including neighbouring landowners.
- Undertake a cost benefit analysis of the proposals as well as ensuring that the plans are affordable in the current economic climate.

Stakeholders & consultation:

There are a number of key groups and organizations that will be able to contribute to the project through support and advocacy: -

Forestry Commission Scotland
Inverlochy and Torlundy Community Council
Roy Bridge and Achnacarry Community Council
Local Deer Management Group
Historic Environment Scotland
River Lochy Fishing Association
Scottish Water

Highland Council
Scottish Natural Heritage

SEPA
CONFOR
Scottish & Southern Electricity
Network rail

Neighbours and Stakeholders including

Nevis Landscape Partnership
Lochaber Fisheries Trust

Nevis Range
SIMEC and Liberty House (owners of aluminium smelter and associated land)
Killichonate estate
Leanachan farm
Lochaber Rural Complex
Dornie Quarry

Forestry Commission Contact

Christina Tracey
District Forester planning
Lochaber Forest District
Torlundy
Fort William
PH33 6SW
Tel 07767 251 380
E mail : christina.tracey@forestry.gsi.gov.uk

APPENDICIES

Appendix 1 Achieving national priorities locally

The management of the Forestry Commission Scotland's national forest estate is guided by the FES National Strategic Directions (2013-16). These directions form the basis of the Lochaber FD Strategic Plan (2014-17): -

1. **Healthy**, achieving good environmental and silvicultural condition in a changing climate
2. **Productive**, providing sustainable economic benefits from the land
3. **Treasured**, as a multi-purpose resource that sustains livelihoods, improves quality of life, and offers involvement and enjoyment
4. **Accessible**, local woodlands and national treasures that are well promoted, welcoming and open for all
5. **Cared for**, working with nature and respecting landscapes, natural and cultural heritage
6. **Good value**, exemplary, effective and efficient delivery of public benefits.

The individual forest areas of Lochaber differ in the contribution they make to achieving the different national directions. The tables in Appendix 1 highlight the contribution that Leanachan forest can make to deliver these national priorities in more detail.

Appendix 2 Leanachan Forest Zones

The Leanachan forest has been split into three areas for the purpose of preparing the plan. Each area or zone has different characteristics and different priorities for management. (These are working titles at present.)

- Timber zone – productive core of the forest
- Interactive zone - high public use and interaction with tourism and industrial businesses
- Transition zone – boundary between the conifer forest and the open hill

Specific objectives along with the features and challenges of each zone are given in more detail in the separate document.