



Clunes & Loch Arkaig LMP Summary

The land management plan (LMP), covers Clunes and Loch Arkaig Forests and stretches between the West shore of Loch Lochy and the northern shore of Loch Arkaig, in Lochaber. The land rises from 30m elevation on the western shore of Loch Lochy to 917m at the summit of Meall na Teanga in Clunes Forest. The plan occupies an area of 3002ha, of which 1184ha is forested with the remaining area dominated by upland heathland, blanket bog and montane heath habitat that includes some montane scrub.

Native woodland designations occupy 57% the forested land in terms of high quality Plantation on Ancient Woodland Sites (PAWS) ancient semi-natural woodland, Caledonian pinewood remnants and a Natural Reserve (NR). The Ancient Semi-Natural Woodland (ASNW) remnants are rich and varied, reflecting the local geology and aspects. Loch Arkaig Forest and a small section of Clunes Forest lie within the Alliance for Scotland's Rainforest strategic rainforest zone; however, Clunes Forest's ASNW remnants are particularly rich with rainforest bryophyte and lichen features associated with upland mixed ashwood habitat. Small Caledonian pinewood remnants are found above the Dark Mile in Loch Arkaig Forest. These are mainly confined to outcrops but form a pivotal ecological link between the native pinewoods of the Arkaig and the Glengarry catchments. There is a further 100ha of semi-natural or planted native woodland out with these designations.

The main neighbouring landowners in the Arkaig catchment are working together under the Beò Airceig collaboration to restore native habitats at a landscape scale. This LMP area forms part of this project.

Steep ground dominates the East and southeast areas of the LMP. Much of Loch Arkaig is dominated by moderate South facing slopes, which are favoured by the Chequered skipper and Pearl-bordered fritillary butterflies, as found in the Allt Mhuic Butterfly Reserve.

These forests and land are popular for hill-walking as well as long distance walking and cycling, most notably along the Great Glen Way. Hydro schemes are operational in Loch Arkaig Forest and exploratory operations are underway in Clunes Forest and neighbouring Glengarry Forest for a large pumped-storage scheme.

Objectives

Key management objectives concentrate on the restoration of native woodland and improving its ecological connectivity between the Arkaig and Glengarry catchments. Measures to protect ASNW remnants and veteran trees, improvements to amenity and landscape, access and tree health also form part of the main objectives.

What is planned?

During this rotation, the current commercial conifer crops will be felled on reaching economic maturity and replaced with native woodland, including Scots pine. PAWS areas will be converted to native woodland via natural regeneration, where seed sources allow. Supplementary planting of desirable species of local provenance will help to improve species diversity as well as introduce species that have been lost over time. The success of this establishment will be dependent on effective management of deer and associated infrastructure; and the control of Non-Native Regeneration (NNR) and Invasive Non-Native Species (INNS) within the LMP area as well as at a landscape scale. Restoration of native habitats at scale will strengthen future resilience and improve the adaptation to, and mitigation of, the impacts of climate change.

Some localised areas of Norway spruce in Loch Arkaig Forest will be retained where it provides high humidity conditions supporting rainforest bryophytes. Opportunities for productive native woodland out with the PAWS designations will be considered where operational access permits. Native woodland establishment will also act as slope stability woodland on the steeper slopes of the Dark Mile and Clunes to conserve soil and protect infrastructure downslope through diversity of species, rooting habits and forest structure.

The felling plan is designed to produce timber; also to restore native woodland in a sustainable way that reduces seeding threats, protects ancient woodland features and watercourses and minimises impacts to vulnerable public roads and the local community.

The next 10 years

Full restoration of native woodland will take many decades to achieve. This 10 year plan will consolidate the native establishment of legacy coupes and the phase 1 fell coupes, including woodland creation of over 40ha to restore a ghost ancient woodland in Loch Arkaig. The efforts to achieve this relies on the upscaling of deer control; effective deer fencing and ATV access routes; veteran tree protection measures; the timely planting of slope stability native woodland areas; and NNR and INNS removal. These interventions will form the foundation for climate change resilient native habitat restoration over the longer term.

The aim of the 10 year felling programme is to remove economically mature timber and manage tree plant health and NNR threats through the phased removal of larch, Western hemlock, Lodgepole and Corsican pines. Thinning and LISS management provides the opportunity to manage ancient woodland and ancient woodland features sensitively, in order of priority, remove NNR from open habitats and commence the reinstatement of riparian woodland.

Future forest

Restoration of native woodland in Clunes and Loch Arkaig Forests and the expansion of Scottish rainforest

This LMP contains valuable ASNW remnants with upland oakwood, upland birchwood and native pinewood in Loch Arkaig and upland oakwood, upland birchwood, upland mixed ashwood and montane willow scrub in Clunes Forest. The native broadleaf ASNW remnants are generally confined to the main burns and loch edges where continuous spray and humidity levels support oceanic ravine ecosystems.

The expansion of native woodland within the LMP area will provide conditions where species can spread to ideal niches as climate changes. The introduction of more Scots pine in the cooler upper slopes can help to establish an ecological connection between the Arkaig and Glengarry pinewoods via the Fhudair mountain pass and the face of Clunes above Loch Lochy. Lower slopes with upland brown earth soils should eventually develop into woodland dominated by oak and hazel.

Management of deer to a sustainable level will allow the natural expansion of more palatable species such as rowan, aspen, willows, Wych elm and juniper. Over time, woodland should naturally transition into much of the open upper hill slopes to form mountain woodland and montane scrub habitat. This in turn should provide conditions that support mammals and birds in upland habitats that are prey for protected species such as golden eagle.

Resilient permanent native woodland expansion will help to bolster the resilience of the Scottish rainforest in this location. Permanent canopy cover will help to stabilise humidity levels and provide some resilience during periods of prolonged drought, which are expected as climate changes.

This future forest will be enhanced through the Beò Airceig collaboration, to restore native habitats at a landscape scale in the Arkaig catchment.