CITATION

LOCH MAREE SITE OF SPECIAL SCIENTIFIC INTEREST Highland (Wester Ross)

Site Code: 1007

NATIONAL GRID REFERENCE: NG 970690

OS 1:50,000 SHEET NO: Landranger Series 19

1:25,000 SHEET NO: Explorer Series 433 and 434

AREA: 3171.76 hectares

NOTIFIED NATURAL FEATURES

Geological

Quaternary geology and geomorphology: Quaternary of Scotland

Biological

Woodlands: Native pinewood

Vascular plants: Vascular plant assemblage Freshwater habitats: Oligotrophic loch

Birds: Black-throated diver Gavia arctica (breeding)

Invertebrates: Beetles

Invertebrates: Dragonfly assemblage

DESCRIPTION

Loch Maree, is a large, deep, linear loch, 22 kms in length, which is located between the settlements of Kinlochewe and Poolewe in Wester Ross. It is an excellent example of a nutrient poor, freshwater loch.

Although many areas of the shoreline are rocky and steeply shelving and therefore unsuitable for aquatic vegetation, the more sheltered areas at the east and west ends support dense beds of alternate flowered milfoil *Myriophyllum alterniflorum* and stoneworts, *Nitella sp.* Around the islands, where more sandy substrates occur, water lobelia *Lobelia dortmanna*, bulbous rush *Juncus bulbosus*, quillwort and the nationally scarce awlwort *Subularia aquatica* can be found. The small lochans on Eilean Subhainn, the largest island, contain the nationally scarce six stemmed waterwort *Elatine hexandra*.

The islands support one of the best remaining fragments of native pinewood in Scotland. These woodlands are one of a group in Wester Ross that are genetically distinct from other pinewoods in Scotland and show affinities with those in Spain and southern France. They have a varied age structure and show good regeneration. There are few deciduous trees although the uncommon rock whitebeam *Sorbus rupicola* is present and upright Juniper *Juniperus communis* is locally abundant. In the wettest areas there are small scale examples of bog woodland and mire.

The woodland ground flora is more typical of the pinewoods of central and eastern Scotland with drier areas dominated by blaeberry *Vaccinium myrtillus*. The loch shore bordering the pinewood contains a number of uncommon plants such as marsh clubmoss *Lycopodiella inundata*, royal fern *Osmunda regalis* and bog hair grass *Deschampsia setacea*. The mire areas are dominated by a typical acid ground flora although a number of uncommon plants are present including the nationally scarce brown-beaked sedge *Rhynchospora fusca*.

The loch supports the territories of a number of pairs of black throated divers *Gavia arctica* which makes this site one of the largest breeding concentrations in Britain.

The native pinewood, the lochans and fens on the islands and the shingle shores of the loch support diverse insect communities that include a number of beetle species that are considered to be amongst the rarest and most threatened species of insect in Great Britain. Of particular importance is the occurrence of the nationally rare ground beetle *Bembidion virens* and a number of nationally scarce species including *Byrrhus arietinus* a pill beetle and *Paracymus scutellaris* a water beetle.

With 12 species recorded, the islands contain a nationally outstanding assemblage of dragonflies. Of particular note are the Northern Emerald *Somatochlora arctica*, Azure Hawker *Aeshna caerulea* and White Faced Darter *Leucorrhinia dubia*.

Loch Maree is important for paleo-ecological studies and paleo-environmental reconstruction. The pollen stratigraphy from the loch sediments and from basins on the islands (supported by radiocarbon dating) provides a valuable record of Flandrian vegetation history in north-west Scotland. In particular the results provide a detailed picture of the regional and local history of pine in the area, suggesting that the decline in pine abundance after about 4250 years ago was in response to climatic change.

NOTIFICATION HISTORY

First notified under the 1981 Act: 19 March 1992

Notification reviewed under the 2004 Act: 24 February 2010

REMARKS

Measured area of site corrected from 3100 ha.

Loch Maree SSSI is part of Loch Maree Complex Special Area of Conservation (SAC) designated for the European habitats and species listed below. The SSSI is also Loch Maree Special Protection Area (SPA) designated for the bird species listed below.

Habitats: Acidic scree

Alder woodland on floodplains Alpine and subalpine heaths

Blanket bog Bog woodland Caledonian forest

Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient

levels

Depressions on peat substrates

Dry heaths

Montane acid grasslands

Plants in crevices on acid rocks
Plants in crevices on base-rich rocks

Tall herb communities

Western acidic oak woodland

Wet heathland with cross-leaved heath

Species: Otter Lutra lutra

Birds: Black- throated diver *Gavia arctica*