

CITATION

LOCH ECK
SITE OF SPECIAL SCIENTIFIC INTEREST
Argyll and Bute

Site code: 980

PLANNING AUTHORITY: Loch Lomond and The Trossachs National Park Authority

NATIONAL GRID REFERENCE: NS137920

OS 1:50,000 SHEET NO: Landranger Series 56
1:25,000 SHEET NO: Explorer Series 363

AREA: 553.43 hectares

NOTIFIED NATURAL FEATURES

Biological:

Freshwater and estuarine fish:	Common whitefish (<i>Coregonus lavaretus</i>)
Freshwater and estuarine fish:	Arctic charr (<i>Salvelinus alpinus</i>)
Freshwater and estuarine fish:	Fish assemblage
Freshwater habitats:	Oligotrophic loch
Fens:	Flood-plain fen
Non-vascular plants:	Bryophyte assemblage

DESCRIPTION

Loch Eck is located approximately 10.5 km north of Dunoon on the Cowal peninsula of Argyll. The loch comprises a large freshwater body, 9.7 km long and 700 m wide with an average depth of 17.1 m (a maximum of 42.3 m in parts). Situated at less than 10 m above sea level, the loch has formed in a glacial trough.

The loch is of importance for its outstanding fish community which is believed to be one of the most natural remaining in Britain. Loch Eck is one of only two Scottish localities for the powan, a race of the nationally rare whitefish *Coregonus lavaretus* and is also one of two British sites, and the only Scottish site, where Arctic charr *Salvelinus alpinus* and powan co-exist. The Loch Eck charr itself is of interest as a dwarf form and as one of the most distinctive races in Britain. In addition, the presence of the migratory Atlantic salmon *Salmo salar* and sea trout *Salmo trutta trutta* make Loch Eck the only water body in Britain where these four species occur together.

The loch supports a good flora typical of oligotrophic (nutrient-poor) conditions. There are three characteristic open water vegetation associations; namely submerged vegetation on exposed shores, submerged vegetation in deeper water and sheltered bay community where floating species are most abundant. Species of particular note are the nationally-scarce awlwort *Subularia aquatica* and the regionally-uncommon floating bur-reed *Sparganium angustifolium*. Around the loch edge the vegetation is characterised by narrow stands of sharp-flowered rush *Juncus acutiflorus* mire and swampy stands of species such as water horsetail *Equisetum fluviatile* and common reed *Phragmites australis*.

The flood-plain fen around the inflow at the north end of the loch is of particular interest for the intricate mosaic of swamp, mire, fen meadow and swampy carr communities and the hydrological zonation this illustrates. Communities of particular note include bladder sedge *Carex vesicaria*, swamp and yellow flag *Iris pseudacorus* – meadowsweet *Filipendula ulmaria* mire, the latter with abundant hemlock water-dropwort *Oenanthe crocata*. The sharp-flowered rush fen meadow is also of interest for the abundance of whorled caraway *Carum verticillatum*. On drier ridges within the fen mosaic there is a gradation to acid grassland with associated gorse *Ulex europaeus* scrub.

The oak/birch dominated woodland adjacent to Loch Eck at Meall an t-Sith is of outstanding interest for Atlantic bryophytes, for which Scotland holds internationally-important populations, with 175 species currently recorded. Twelve species found here are regarded as threatened in Europe, with one - *Hageniella micans* considered to be endangered. Five of these species are also considered nationally scarce and include *H. micans*, *Plagiochila heterophylla*, *Adelanthus decipiens*, *Jamesoniella autumnalis*, and *Leptoscyphus cuneifolius*.

NOTIFICATION HISTORY

First notified under the 1981 Act: 19 June 1991

Notification reviewed under the 2004 Act: 28 March 2011

REMARKS

Measured area of site corrected (from 559.6 ha)