

CITATION

**BEINN EIGHE
SITE OF SPECIAL SCIENTIFIC INTEREST
HIGHLAND (Wester Ross)**

Site code: 167

NATIONAL GRID REFERENCE: NG 985625

OS 1:50,000 SHEET NO: Landranger Series 19 and 25
1:25,000 SHEET NO: Explorer Series 433

AREA: 4,818.39 hectares

NOTIFIED NATURAL FEATURES

Geological

Stratigraphy: Cambrian
Structural and metamorphic geology: Moine

Biological

Woodlands: Native pinewood
Upland habitats: Upland assemblage
Vascular plants: Vascular plant assemblage
Non-vascular plants: Bryophyte assemblage
Invertebrates: Invertebrate assemblage

DESCRIPTION

Beinn Eighe Site of Special Scientific Interest (SSSI) is an extensive mountain massif located to the south of Loch Maree and south west of Kinlochewe in Wester Ross.

The rocks of Beinn Eighe comprise a sequence from ancient Lewisian gneiss up through younger Torridonian sandstone and a succession of Cambrian sedimentary rocks. A distinctive rock layer sequence within the Cambrian rocks, known as the Furoid Beds, is fossiliferous and includes various species of trilobite. Trilobites are a group of extinct marine arthropods which are a very diverse group of animals with jointed limbs and include crustaceans. The particular assemblage of fossils found here is different to those of a similar age in England, and this has been crucial in providing evidence of the existence of an ocean between Scotland and England during the Cambrian period. The distinctive *Olenellus armatus* fossil is known only from this locality.

The hill of Meall a' Ghiubhais provides exposures of a thrust (a low-angle fracture in the Earth's crust) which has carried older Torridonian sandstone over the top of younger Cambrian rocks. This is part of the Moine Thrust Zone, a zone of heavily deformed rocks which was formed about 430 million years ago when continents collided, compressing rock sequences and deforming them. This suite is outstanding

because it clearly illustrates the complicated processes which operated during thrust faulting, particularly as erosion has exposed the thrust plane right around the hill, leaving a klippe or isolated block above the thrust.

The upper slopes of Beinn Eighe support some of the best examples of western upland plant communities associated with a range of rock types. These upland habitats include alpine and subalpine heaths, dry heaths, montane grassland, tall herb ledges and scree communities. The crags of the upper areas have a rich herb flora whilst the summit supports a species rich moss heath and bare ground. Within the heath there is an abundance of bryophytes including nationally and internationally rare species. This is the only known British location for the liverwort *Herbertus borealis*. In areas of calcium rich mudstones lime seeking plants are found and snow bed communities are present but restricted on the upper slopes where snow lies only moderately late. Stony moraines on the middle slopes support dwarf shrub heath.

The lower north facing slopes support the most extensive native pinewood in Wester Ross and are dominated by Scots pine with birch, rowan and holly. The woodland has a variable canopy and shows a range of age classes. The ground flora is dominated by dwarf shrub heath with a large diversity of mosses, liverworts and lichens.

As a result of the varied habitats found on Beinn Eighe the site supports a diverse range of vascular plants including several nationally uncommon species and 22 nationally scarce species including tufted saxifrage *Saxifraga cespitosa* and Highland saxifrage *Saxifraga rivularis*. The site also supports more Atlantic or oceanic bryophytes than any other upland site.

Diverse habitats spread over a broad altitudinal range support diverse invertebrate communities, including the nationally scarce argent & sable moth *Rheumaptera hastata* and the nationally scarce pearl-bordered fritillary *Boloria euphrosyne* butterfly and at least other 14 threatened species. The 13 species of dragonfly and damselfly comprise a nationally important assemblage that includes the nationally rare northern emerald *Somatochlora arctica*. Also of note are the nationally rare moth species *Plutella haasi*, *Aethes rutilana* and *Udea uliginosalis* and several saproxylic beetles and flies, including species restricted to Caledonian pinewood such as the hoverfly *Callicera rufa*.

NOTIFICATION HISTORY

First notified under the 1949 Act: 1974

Re-notified under the 1981 Act: 26 February 1985

Notification reviewed under the 2004 Act: 1 December 2010

REMARKS

Measured area of site corrected from 4,758 ha.

Beinn Eighe SSSI is designated as part of Loch Maree Complex Special Area of Conservation (SAC) for the European habitats and 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*