

CITATION

BEN LUI
SITE OF SPECIAL SCIENTIFIC INTEREST
Argyll and Bute, Stirling

Site code: 188

PLANNING AUTHORITY: Loch Lomond and The Trossachs National Park Authority
Argyll and Bute Council

NATIONAL GRID REFERENCE: NN 260268

OS 1:50,000 SHEET NO: Landranger Series 50, 56
1:25,000 SHEET NO: Explorer Series 364, 377

AREA: 2928.26 hectares

NOTIFIED NATURAL FEATURES

Geological: **Structural and metamorphic geology: Dalradian**
Mineralogy: Mineralogy of Scotland

Biological: **Upland habitats: Upland assemblage**
Vascular plants: Vascular plant assemblage
Invertebrates: Invertebrate assemblage

DESCRIPTION

Ben Lui Site of Special Scientific Interest (SSSI) is an extensive site situated in the Southern Highlands at the head of Glen Fyne. The SSSI contains four high peaks, with Ben Lui, at 1,130 m, the best known mountain within this western outlier of the Breadalbane Hills. Together with Ben Oss (1,028 m), Beinn Dubhchraig (978 m), Beinn a' Chleibh (917 m) and Meall nan Tighearn (739 m) the area is renowned for its exceptionally rich and varied upland flora. The range of altitude and geology present at the site supports a diversity of habitats including important late snowbed communities on peaks and high corries, ledge and cliff vegetation, heath, montane willow scrub, grasslands, soligenous mires and on, the southern flanks of Meall nan Tighearn, an extensive blanket bog.

The Dalradian rocks underpinning the biodiversity of the site are of mineralogical importance for three reasons. Firstly, it is one of the few sites in within the Dalradian where proximal-style exhalative sulphide mineralisation can be readily demonstrated. Secondly, it is the only site where a feeder zone for stratabound mineralisation has been positively identified. Thirdly, it provides a unique opportunity to study a singularly unusual Ultramafic Horizon whose origin is poorly understood. The Ultramafic Horizon also contains what is undoubtedly the most extensive exposure in Scotland of the rare chromian muscovite mineral, formerly known as fuchsite.

The Dalradian rocks of Ben Oss provide exceptional exposures of a major fault, the Ben Oss Fault, together with associated minor and major fractures. Many of the features associated with major faults are well displayed, such as fault breccias, fault-gouge clays, slickensides and quartz veins. The fault is a component of the Tyndrum Fault, also exposed at this site, which is one of the major dislocations that traverse the Grampian Terrane from northeast to southwest. The geological evidence suggests that the history of the faults, involved sideways movement in the opposite (right-lateral) sense, as well as vertical movements. Regionally these movements can be linked to the history of the nationally important fault associated mineralization in the area.

The typical montane calcicolous vascular plants and bryophytes of Breadalbane are well represented and there is a notable abundance of mountain avens *Dryas octopetala*, rock speedwell *Veronica fruticans*, mountain bladder-fern *Cystopteris montana*, and alpine bartsia *Bartsia alpina*. Willow scrub is well-developed on an extensive series of schistose crags and rock ledges, with mountain willow *Salix arbuscula* and downy willow *Salix lapponum* among the species present. In places, curtains of vegetation cover almost vertical rock faces and these exhibit a very fine development of tall-herb ledge vegetation, with abundant round-leaved wintergreen *Pyrola rotundifolia*, Alpine woodsia *Woodsia alpina* and false sedge *Kobresia simpliciuscula*. There are banks of different types of saxifrage which includes *Saxifraga nivalis*, and some steep drier ledges support fragmentary examples of a moss-rich *Dryas* heath.

The schists become progressively less calcareous above 760 m so that the strongly calcicolous vegetation occupies the middle level of the mountain, and at higher levels the vegetation becomes increasingly acidophilous adding to the exceptional diversity of the site. At the highest altitudes there is an interesting range of late snow-bed vegetation, much of it dominated by alpine bryophytes.

On the slopes below and around the cliffs other communities are particularly well-developed. Calcareous flushes form a mosaic within the herb-rich grassland vegetation. In contrast the lower flanks away from calcareous schist and limestone outcrops have a largely acidophilous vegetation, with wet heath found on moraine, although heather *Calluna vulgaris* is rather sparse in many locations. Some of the lowest crags have open stands of birch and rowan. The southern flank of Meall nan Tighearn is part of the largest area of *Calluna - Eriophorum vaginatum* blanket bog in the Breadalbane Hills. Furthermore, the peatlands of Ben Lui show a continuous altitudinal succession which is not found elsewhere in the Southern Highlands.

The characteristic montane invertebrate fauna of the Ben Lui range has been shown to include at least five Red Data Book species: the moth *Stigmella dryadella* and the flies *Spilogona depressiuscula*, *Limonia stylifera*, *Platycheirus melanopsis* and *Cheilisia chrysocoma*. There are also strong populations of the mountain ringlet butterfly *Erebia eiphron*, which is a BAP species.

NOTIFICATION HISTORY

First notified under the 1949 Act: 1963, 1975 as Ben Lui NNR.

Re-notified under the 1981 Act: 18 December 1990 as Ben Lui (Beinn Laoigh) SSSI with a 2132 ha increase in area.

Notification reviewed under the 2004 Act: 11 February 2011

REMARKS

Measured area of site corrected (from 2982.2 ha).
Sitename amended to Ben Lui SSSI.

Part of Ben Lui SSSI is designated as Ben Lui Special Area of Conservation (SAC) for the European habitats listed below. Part of Ben Lui SSSI is also part of the Glen Etive and Glen Fyne Special Protection Area (SPA), which is designated for the birds listed below.

- Habitats :
- : Acidic scree
 - : Alpine and subalpine calcareous grasslands
 - : Base-rich fens
 - : High-altitude plant communities associated with areas of water seepage
 - : Montane acid grasslands
 - : Mountain willow scrub
 - : Plants in crevices on acid rocks
 - : Plants in crevices on base-rich rocks
 - : Species-rich grassland with mat-grass in upland areas
 - : Tall herb communities
 - : Wet heathland with cross-leaved heath
- Birds :
- : Golden eagle *Aquila chrysaetos*, breeding

Ben Lui SSSI adjoins Coille Coire Chuilc SSSI which is notified for its native pinewood and invertebrates.