

CITATION

BEN LAWERS
SITE OF SPECIAL SCIENTIFIC INTEREST
Perth and Kinross; Stirling

Site code: 185

NATIONAL GRID REFERENCE: NN 640420; NN 583388

OS 1:50,000 SHEET NO: Landranger Series 51
1:25,000 SHEET NO: Explorer Series 378

AREA: 5964.33 hectares

NOTIFIED NATURAL FEATURES

Geological: Structural and metamorphic geology: Dalradian

Biological: Upland habitats: Montane assemblage

Vascular plants: Vascular plant assemblage

Non-vascular plants: Bryophyte assemblage

Non-vascular plants: Lichen assemblage

DESCRIPTION:

Ben Lawers lies on the north side of Loch Tay and 6 km east of Killin and consists of the Ben Lawers massif and, to the west, the ridge from Meall nan Tarmachan to Creag na Caillich. It has an elevation from 310m to 1,200m. The site is important as it forms part of the series of arctic-alpine sites on calcareous Dalradian mica schist which lies across the southern Grampians; these sites are amongst the richest montane botanical sites in Britain. The combination of high-altitude, late-lying snow and differing rock and soil types has led to a well developed and wide range of alpine flora.

The site is particularly important for its extensive calcareous rock outcrops and crags which include tall herb communities and fragments of montane willow scrub, extensive high altitude and calcareous flushes, the complex of montane dwarf shrub heaths and grasslands, its species rich and calcareous grasslands, and late-snow bed vegetation. Its arctic-alpine flora of vascular plants, bryophytes and lichens is exceptionally rich, and as a whole is probably unparalleled in Britain. Geologically, Ben Lawers is of interest for its Dalradian meta-sedimentary rocks and structure.

The landscape of Ben Lawers is dominated by carved ridges and sculptural landforms as a result of the effects of an intense folding and mountain building phase ca. 425 to 395 million years ago. The current underlying geology is mainly Dalradian calcareous schist. The calcareous rocks, originally deposited as sands, muds and calcareous limestones in an ancient sea ca. 600 million years ago were subsequently subjected to a phase of mountain building (ca. 425 to 395 million years ago). The intense heat and pressure during this phase changed the original rocks into completely new forms, in this case schists, whilst the intense folding and mountain building phase resulted in the formation of the large-scale folds and high peaks of the Ben Lawers range. One particularly large fold structure, the Tay Nappe, resulted in large areas of the original rock layering being turned completely upside down.

This base rich geology and the glacial drift on the lower slopes has resulted in highly fertile soils which supports the outstanding montane flora, chiefly on rock outcrops, cliff ledges and in flushes. Amongst the more notable vascular plants on the crags and associated habitats are montane willows (such as woolly willow *Salix lanata* and mountain willow *Salix arbuscula*), alpine forget-me-not *Myosotis alpestris*, drooping saxifrage *Saxifraga cernua*, alpine gentian *Gentiana nivalis* and alpine woodsia *Woodsia alpina*. In the flushes important species include bristle sedge *Carex microglochin*, scorched alpine-sedge *C. atrofusca*, russet sedge *C. saxatilis*, chestnut rush *Juncus castaneus* and two-flowered rush *Juncus biglumis*.

Ben Lawers is also considered to be the most important mountain in Britain for bryophytes and lichens. The diversity of these species is similarly encouraged by the lime-rich nature of the geology and the high elevation, and most of the notable species are associated with rock outcrops. Amongst the rarer bryophytes are *Hypnum vaucheri* at one of its two British locations and *Scorpidium turgescens*. Similarly Ben Lawers boasts a rich lichen flora, 25 species of which are only known from this site in Britain, for example *Psora rubiformis* and *Stereocaulon spathuliferum*.

NOTIFICATION HISTORY

Notified under the National Parks and Access to the Countryside Act 1949: 1955 (as Meall nan Tarmachan SSSI and Ben Lawers SSSI); and subsequently 1972 (Ben Lawers SSSI); 1975 (Meall nan Tarmachan Extension SSSI).

Re-notified under the Wildlife and Countryside Act 1981 Act: 23 August 1985
Notification reviewed under the Nature Conservation Act 2004: 25 March 2011

REMARKS

Measured area of site corrected (from 5943.2 ha).

Part of Ben Lawers SSSI is also designated as Ben Lawers Special Area of Conservation (SAC) for the European habitats listed below:

- Alpine and subalpine calcareous grasslands
- Alpine and subalpine heaths
- Base-rich fens
- Blanket bog
- Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels
- Dry heaths
- 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