

CITATION

**BEN HEASGARNICH
SITE OF SPECIAL SCIENTIFIC INTEREST**
Perth and Kinross, Stirling, Argyll and Bute

Site code: 180

PLANNING AUTHORITY: Loch Lomond and The Trossachs National Park Authority,
Perth and Kinross, Stirling, Argyll and Bute Councils

NATIONAL GRID REFERENCE: NN 400370

OS 1:50,000 SHEET NO: Landranger Series 50, 51
1:25,000 SHEET NO: Explorer Series 377, 378

AREA: 4048.77 hectares

NOTIFIED NATURAL FEATURES

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| Geological: Mineralogy: | Mineralogy of Scotland |
| Biological: Upland habitats: | Alpine calcareous grassland Rocky slopes (includes inland cliff, rocky outcrops, chasmophytic vegetation) Snowbed |
| Vascular plants: | Vascular plant assemblage |
| Non-vascular plants: | Bryophyte assemblage Lichen assemblage |
| Invertebrates: | Flies Sawflies |

DESCRIPTION

Ben Heasgarnich is a montane area located 14 km west of Killin and directly to the south of Loch Lyon. A number of areas of rock exposures in the north east part of the site contain excellent examples of distal synsedimentary exhalative barium-enriched mineralisation. This resulted from warm brine, rich in dissolved barium, iron, manganese, zinc and lead, percolating through the sediments, which now form the Dalradian bedrock, before they became lithified (changed into rock). The main barium-enriched minerals are muscovite (with up to 10% barium oxide), and the barium-rich potassium feldspar hyalophane. The minerals present suggest that this site is at the edge of (distal to) the area of brine influx.

The site is one of a series of arctic-alpine sites on calcareous schist in the Breadalbane range; such sites are a rare type in Britain. Ben Heasgarnich is one of the few upland sites where the altitudinal range of semi-natural habitats has remained intact and the montane fauna is consequently diverse and representative.

Alpine calcareous grasslands are represented by the sheep's fescue *Festuca ovina*, alpine lady's-mantle *Alchemilla alpina*, moss campion *Silene acaulis* dwarf-herb communities. This is a form of calcareous grassland found only on a few upland sites.

Ben Heasgarnich is particularly notable for its extensive cliff face, rocky outcrop and rich flush vegetation which contains many nationally rare species. Small-herb ledge communities are infrequent on wet rock and include banks characterised by yellow mountain saxifrage *Saxifraga aizoides* and smooth lady's mantle *Alchemilla glabra*, another nationally-rare community. Calcareous rock crevice communities are widespread at higher levels on the site. These have representative species such as green spleenwort *Asplenium viride* and brittle bladder fern *Cystopteris fragilis*, and support an outstanding flora including hoary whitlowgrass *Draba incana*, rock whitlowgrass *Draba norvegica*, alpine meadow grass *Poa alpina*, holly fern *Polystichum lonchitis* and alpine woodsia *Woodsia alpina*.

At the high summits and corries there are important areas of calcicolous snowbed vegetation, including species-rich stiff sedge *Carex bigelowii* and *Racomitrium lanuginosum* moss-heath. There are also late-lie snowbed communities, especially species-rich alpine ladies mantle and sabbaldia *Sibbaldia procumbens* dwarf-herb communities. Ben Heasgarnich holds excellent examples of the closed form of the community. The flora includes much mossy cyphel *Minuartia sedoides*, moss campion, alpine lady's-mantle and alpine bistort *Persicaria vivipara*.

The vascular plant assemblage includes alpine bartsia *Bartsia alpina*, scorched alpine sedge *Carex atrofusca*, mountain bladder fern *Cystopteris montana*, rock speedwell *Veronica fruticans*, alpine woodsia, simple bog sedge *Kobresia simpliciuscula*, close headed alpine sedge *Carex norvegica*, alpine fleabane *Erigeron borealis* and snow pearlwort *Sagina nivalis*. These are mainly species of calcareous rocky montane habitats, mostly occurring in inaccessible localities, but some occur on open slopes and two species occur in base-rich flush mires.

The bryophyte feature of interest on the site is the assemblage of arctic-alpine calcicole (calcium-loving) mosses and liverworts on the crags, in the screes and in base-rich flushes. Habitats in Coire Sheasgarnaich and Coire Cheathaich on Creag Mhor are of particular interest. Areas of late snow-lie have only patchy areas of bryophyte-dominated vegetation but add further importance to the site. Twenty seven species within the rich bryophyte assemblage are rare or scarce in the rest of the UK including *Cirriphyllum cirrosum*, *Hypnum bambergeri*, *Pseudoleskea incurvata*, *Pseudoleskeella rupestris*, *Didymodon icmadophilus*, *Brachythecium reflexum*, *Heterocladium dimorphum*, *Pseudoleskea incurvata* and *Ptychodium plicatum*. Populations of the Scottish endemic Scottish beard-moss *Bryoerythrophyllum caledonicum*, and the large population of *Odontoschisma macounii* are of particular interest. On the crags and screes of Creag Mhor, the frequency of Himalayan fringe-moss *Racomitrium himalayanum*, a species that has its only European sites in the Breadalbane Hills, rivals that on Ben Lawers SSSI.

The important lichen assemblage includes a large number of rare montane species associated with high ground, crags and corries, especially where there is some calcareous influence, such as limestone or mica schist exposures. Eighty-three species are scarce and thirty-nine are rare elsewhere in the UK. Notable species include the endemic *Halecania rhypodiza*, as well as *Solorina bispora*, *Stereocaulon plicatile*, *Polyblastia gothica*, *Peltigera elisabethae* and Hooker's matted lichen *Pannaria hookeri*.

The site is notified for the Dipteran flies *Clinocera nivalis* and *Dolichopus maculipennis*, which are boreal moorland species. Uncommon and rare fly species recorded for the site also include *Delia piliventris*, *Hydrophorus rufibarbis* and *Hydrophorus albiceps*.

The site is notified for the Red Data Book (RDB) sawfly (Symphyta) *Pachynematus arcticus*. Other common or notable species recorded include *Dolerus aeneus*, *Pontania viminalis* and *Pristiphora staudingeri*.

In addition to the notified features the site also holds a number of non-alpine calcareous grasslands of note such as sheep's fescue, common bent *Agrostis capillaris* and creeping thyme *Thymus praecox* grassland. Other calcareous grasslands include grass-heath with representative species such as sheep's fescue, common bent and alpine lady's-mantle. There are also large areas of the more mat-grass rich forms of these grasslands. The rocky ledge habitats often include mountain avens *Dryas octopetala*, moss campion ledge community. There are also mat-grass and heath bedstraw *Galium saxatile* grasslands, with representative carnation sedge *Carex panacea* and common dog-violet *Viola riviniana* sub community.

NOTIFICATION HISTORY

First notified under the 1949 Act: 1955, 1972

Re-notified under the 1981 Act: 19 April 1985 with a 179 ha net increase in area

Notification reviewed under the 2004 Act: 14 January 2011 and

3 December 2019 (citation only)

REMARKS

Measured area of site corrected (from 4064 ha)

Most of Ben Heasgarnich SSSI is designated as Ben Heasgarnich Special Area of Conservation (SAC) for the European habitats listed below.

Habitats : 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

On the southern edge of Ben Heasgarnich SSSI along the River Lochay, there is an overlap with the River Tay Special Area of Conservation, designated for the European habitat and species listed below.

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

Species : Otter (*Lutra lutra*)
: Atlantic salmon (*Salmo salar*)
: Brook lamprey (*Lampetra planeri*)
: River lamprey (*Lampetra fluviatilis*)
: Sea lamprey (*Petromyzon marinus*)