

## CITATION

### BEN NEVIS SITE OF SPECIAL SCIENTIFIC INTEREST Highland (Lochaber)

Site code: 192

NATIONAL GRID REFERENCE: NN 205720

OS 1:50,000 SHEET NO: Landranger Series 41  
1:25,000 SHEET NO: Explorer Series 392

AREA: 9539.73 ha

#### NOTIFIED NATURAL FEATURES:

<b>Geological</b>	<b>:</b>	<b>Igneous petrology</b>	<b>Caledonian Igneous</b>
<b>Biological</b>	<b>:</b>	<b>Upland habitats</b>	<b>Upland assemblage</b>
	<b>:</b>	<b>Woodlands</b>	<b>Native pinewood</b>
	<b>:</b>	<b>Woodlands</b>	<b>Upland oak woodland</b>
	<b>:</b>	<b>Vascular plants</b>	<b>Vascular plant assemblage</b>
	<b>:</b>	<b>Non-vascular plants</b>	<b>Bryophyte assemblage</b>
	<b>:</b>	<b>Birds</b>	<b>Breeding bird assemblage</b>
	<b>:</b>	<b>Butterflies</b>	<b>Small mountain ringlet butterfly (<i>Erebia epiphron</i>)</b>
	<b>:</b>	<b>Invertebrates</b>	<b>Fly assemblage</b>

#### DESCRIPTION:

The Ben Nevis Site of Special Scientific Interest (SSSI) is an extensive upland site centred on a massif which stretches for over 12 kilometres from Ben Nevis, the highest ground in the UK, eastwards to Stob Coire na Ceannain, and has an altitudinal range from 30m OD (above sea level) in Glen Nevis to 1344m OD on the summit of 'The Ben'. It encompasses rocks and geological features, of which the 'Ben Nevis Complex' is of particular significance, relating to the Caledonian mountain building period. The range in altitude and geology gives rise to a diversity of habitats including native pine and oak woodlands, montane cliffs, semi-permanent snow beds and upland heaths and grasslands. A wide variety of plants, both vascular and non-vascular are present. The flora and altitudinal range has also affected the fauna of the site, influencing, for example, the range of bird and invertebrate species present.

The Ben Nevis Complex lies within older Dalradian metamorphic rocks and is a well-exposed example of a late Silurian to early Devonian 'Caledonian' granite complex and related lavas. The granites and lavas are now exposed at the same level as a result of the 'cauldron subsidence' which affected the volcano in which the Complex formed. Four major intrusions – the Outer and Inner Quartz Diorites, the Outer Porphyritic Granite and the Inner Granite – were successively and concentrically emplaced as ring dykes and are exposed along the sides of the Allt a' Mhuilinn. The central down-faulted 'cauldron' of lavas forms the core of the Complex. The lavas differ from those seen at Glen Coe and Lorne in their markedly restricted compositional range. Ben Nevis is the best place in the UK to see the sequence from lavas through granites to metamorphic rocks resulting from cauldron subsidence.

Ben Nevis and the associated peaks of Aonach Mor and Aonach Beag form a massif that has the highest land in the UK and contains the only three peaks greater than 1200m outwith the Cairngorms. The SSSI supports an assemblage of upland habitats which includes the only semi-permanent snowbeds outside the Cairngorms, and the most extensive scree snow-beds in the UK; characteristic of the montane vegetation types at higher levels are the widespread *Carex bigelowii* grasslands, *Juncus trifidus* heath, *Racomitrium* heath and dwarf shrub heaths with blaeberry and montane willow scrub, *Nardus stricta* and *Juncus squarrosus* grasslands, *Pohlia wahlenbergii* var. *glacialis* springs, calcareous *Festuca – Agrostis – Thymus* grasslands and a very wide range of snowbed communities including *Cryptogramma crispa – Athyrium alpestre* snowbed.

The vegetation of the lower slopes is mainly acid grassland and heath of various types, some of which are the most extensive in the west Highlands and some stands are at the highest altitude in the UK. The *Dryas* heath on the northern slopes has developed beyond inaccessible ledges, which is unusual in the UK. There is a wide range of soligenous mires and flushes, including calcicolous flushes.

Woodland is restricted mainly to Glen Nevis and some craggy slopes along the northern boundary of the site. The principal types are native pinewood and upland oak woodland, though birch is a significant component, both of which are classed as ancient woodland of semi-natural origin. The pinewood is part of the once extensive network of remaining pine and oak woodland along the Great Glen.

The site contains an outstanding assemblage of vascular plants, in particular of rare alpine and montane calcicolous species, including several species of saxifrage, of very restricted distribution in Britain. Many of the high montane species present are characteristic of poor soils. However, in places where there is seepage from calcareous rocks the flora is much enriched and includes calcicolous flushes. The habitats on Aonach Beag have the most diverse flora outwith the Caenlochan – Breadalbane area.

The non-vascular plant assemblage is also exceptionally rich with a bryophyte flora comprising both calcifuge and calcicole elements in the high montane group. Several woodland areas are rich in Atlantic bryophytes.

The diversity of montane and sub-montane habitats together with the great altitudinal range provide conditions suitable for an important assemblage of upland breeding birds including several species such as snow bunting and dotterel which are of restricted breeding range in Britain.

The fly assemblage includes six species of 'true' fly that are nationally rare. They are *Dolichopus maculipennis*, *Cheilosia sahlbergi*, *Platycheirus melanopsis*, *Calliphora stelviana*, *Delia caledonica*, and *Spilogona alpaca*.

The small mountain ringlet is a nationally scarce butterfly, which on Ben Nevis is at the western edge of its range.

#### **NOTIFICATION HISTORY:**

First notified under the 1949 Act: 1964, 1974 and 1981

Re-notified under the 1981 Act: 25 March 1988 with an increase in area.

Notification reviewed under the 2004 Act: 29 July 2009

**REMARKS:**

Measured area of site corrected (from 9617 ha)

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

- Habitats :
- : Acidic scree
  - : Alpine and subalpine calcareous grasslands
  - : Alpine and subalpine heaths
  - : Base-rich scree
  - : Blanket bog
  - : Caledonian forest
  - : 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
  - : Western acidic oak woodland
  - : Wet heathland with cross-leaved heath

