Scottish Natural Heritage

BEN NEVIS
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 192

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Purpose

This is a public statement prepared by SNH for owners and occupiers of the SSSI. It outlines the reasons it is designated as an SSSI and provides guidance on how its special natural features should be conserved or enhanced. This Statement does not affect or form part of the statutory notification and does not remove the need to apply for consent.

We welcome your views on this statement.

This statement is available in Gaelic on request.

Description of the site

Ben Nevis Site of Special Scientific Interest (SSSI) is an extensive and predominantly upland site which encompasses several summits over 1200m, including Britain's highest mountain. Much of the terrain, particularly at higher altitudes is rocky with a range of rock types present. Ben Nevis itself and neighbouring Carn Mor Dearg are composed predominantly of acid granites, whilst Aonach Mor, Aonach Beag and the Grey Corries are composed of rocks of the Moine series. Throughout the site there are localised areas of calcareous schist and other calcareous rocks. Ben Nevis, and in particular the exposures along the Allt a' Mhuilinn, is the best place in the UK to see the effects of a sunken caldera.

Natural features of Ben Nevis SSSI	**Condition of feature** (and date monitored)	**Other relevant designations**
Caledonian Igneous (geology)	Favourable (July 2002)	
Upland assemblage	Favourable (September 2003)	Special Area of Conservation (see below)
Native pinewood	Unfavourable (March 2006)	Special Area of Conservation
Upland oak woodland	Favourable (June 2001)	Special Area of Conservation
Vascular plant assemblage	Unfavourable (September 2002)	
Bryophyte assemblage	Favourable (August 2005)	
Breeding bird assemblage	Favourable (May 2003)	
Fly assemblage	Favourable (July 2003)	
Small mountain ringlet butterfly	Favourable (July 2006)	

The site's varied geology and altitudinal range has led to the development of a range of habitat types, some of which, for example the snow bed communities, are the only semi-permanent snowbeds outside the Cairngorms area. Site condition monitoring of the SSSI's upland assemblage reports only on the area of a limited range of habitats within the site. These habitats are: montane willow scrub, calcareous grassland, high altitude springs, and montane heaths. A clearer understanding of the overall condition of the upland habitats is gained by considering the condition of the Natura habitats listed in the table below. A number of these were considered to be in unfavourable condition, largely in relation to grazing pressure. A considerable number of sheep have been removed from the site since the monitoring was completed, but it is not yet certain whether this has been sufficient to bring the habitats into favourable condition. Discussions on the interpretation of results of a Habitat Impact Assessment of four of the upland habitats and the pinewood are ongoing (July 2009).

Features of overlapping Natura sites that are not notified as SSSI natural features.	**Condition of feature** (and date monitored)	**SPA or SAC**
Acidic scree	Favourable (September 2003)	SAC
Alpine and subalpine calcareous grasslands*	Unfavourable (August 2002)	SAC
Alpine and subalpine heaths*	Unfavourable (September 2003)	SAC
Base-rich scree	Favourable (September 2003)	SAC
Blanket bog	Unfavourable (May 2003)	SAC
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable (August 2004)	SAC
Dry heaths*	Unfavourable, recovering (May 2003)	SAC
High-altitude plant communities associated with areas of water seepage*	Favourable (September 2003)	SAC
Montane acid grasslands*	Unfavourable (September 2003)	SAC
Mountain willow scrub*	Unfavourable (September 2003)	SAC
Plants in crevices on acid rocks	Favourable (September 2003)	SAC
Plants in crevices on base-rich rocks	Unfavourable (September 2003)	SAC
Species-rich grassland with mat-grass in upland areas*	Unfavourable (September 2003)	SAC
Tall herb communities	Favourable (September 2003)	SAC
Wet heathland with cross-leaved heath*	Unfavourable (May 2003)	SAC

* indicates an SAC feature which is a component of the SSSI feature upland assemblage

The site contains an outstanding assemblage of vascular plants, in particular of rare alpine and montane calcium loving species, including several species of saxifrage, of very restricted distribution in Britain. The habitats on Aonach Beag have the most diverse flora outwith the Caenlochan – Breadalbane area. The lower plant assemblage is also particularly diverse because of the range of geology and range in altitude within the site. The acidic scree is the most extensive example of its type in the UK. Both the acidic scree and base-rich screes are important for their rich fern flora and act as refugia for a number of rare species. Ben Nevis has one of the most extensive developments of acid alpine and boreal grasslands in the UK. A moderately rich arctic-alpine flora is present on the alpine and sub-alpine grasslands and includes alpine mouse-ear, arctic mouse-ear, rock sedge, hair sedge, mossy saxifrage and alpine meadow-rue. A high-altitude *Dryas* heath community survives on the open hillside, rather than being restricted to inaccessible ledges. Because limestone occurs up to high

altitude, notably on Aonach Beag, this SSSI is also one of the richest areas outside of the Breadalbane range and Caenlochan for arctic-alpines of calcareous rocks. Ben Nevis is notable for populations of a number of very rare species which are associated with calcareous outcrops of rock faces in high gullies. Crevice communities occur extensively on acidic crags up to a very high altitude and have a diverse flora. Ben Nevis has high-altitude plant communities associated with areas of water seepage. This habitat is one of the rarest natural habitats in the UK, and is almost certainly maintained by the soil conditions and harsh climate.

The vascular plant assemblage has been assessed as being unfavourable overall because a number of the plant species monitored were either below the thresholds set for the number of locations present or the size of the population. However, the surveyor considered that the site was basically in good condition but there were some concerns over grazing pressure and recreational impacts. Because all of the key species are arctic-alpine or boreal-montane species the most likely long-term threat to all of them is climate change, particularly as this has an effect on the distribution and duration of areas of late-lying snow.

The pinewood is a remnant of the once extensive Caledonian forest that existed along the Great Glen. The oakwood is part of the extensive oakwood network that exists in Lochaber and Argyll. The pine wood has been assessed as being in an unfavourable condition because grazing pressure is too heavy to enable widespread natural regeneration of the trees. Although the oak woodland has also experienced a high level of grazing in the past it is considered to be in a favourable condition because a significant number of young birch trees – the commonest species in the canopy – are present and grazing/ browsing has not had a severely detrimental impact on the field layer. There is no significant regeneration of oak but relatively high numbers of young birch trees occur throughout the woodland and there is some evidence that the woodland has expanded on to adjacent open ground in some locations.

The extent of the site and its altitudinal range provides suitable habitat for an assemblage of breeding birds which includes uncommon high altitude species such as dotterel and snow bunting. Both of these species have their breeding ranges restricted to a small number of mountainous areas.

The SSSI supports six species of ‘true’ fly that are nationally rare. It is not unusual for previously undiscovered species to be found during surveys.

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

Past and present management

Recreation

Areas within the SSSI are very popular for hillwalking, sightseeing, winter climbing and rock climbing. These activities have led to the formation of several footpaths, and some paths have become eroded. The Nevis Partnership have organised repair work on substantial lengths of the path with financial assistance from SNH and Highlands and Islands Partnership Programme and the Heritage Lottery Fund. There is a potential specific problem in the use of Ben Nevis’s No. 4 Gully as a summer descent route, as it crosses important plant populations.

Downhill skiing

The Nevis Range ski area on Aonach Mór was constructed in 1989-91, and attracts large numbers of visitors both in winter and in summer. In order to minimise the impacts of the ski area on natural heritage interests a number of conditions were attached to the granting of planning permission. These included careful and sensitive construction methods, and an annual monitoring programme. SNH and other key interests are represented on the Aonach Mor Liaison Group which was formed in order to review progress and advise on appropriate management actions. This includes a Hill Monitoring Group which undertakes twice-yearly site inspections. The monitoring programme uses a Limits of Acceptable Change (LAC) system with the LAC values agreed in advance by the Liaison Group. Overall, the system is working well and the few measures which exceed LAC values are subject to agreed management action and continued monitoring.

Agriculture
There is limited grazing by sheep. The number of sheep using the site has been reduced in the last twenty years, and was further reduced by about 3,000 since 2003. However, although headage per hectare may be low, grazing is preferential on the richer plant communities and could adversely impact on rare plant populations.

Deer management
Stalking is restricted to the eastern part of the site where there is less recreational activity, and participation in the *Hillphones* scheme aims to provide hillwalkers with up to date information on where stalking is taking place so that they can select routes which will minimise disturbance.

Hydro-electric power
Alcan Smelting and Power UK collects water from the main streams on the site for its hydro-electric scheme to supply its factory in Fort William. This water abstraction does not appear to have significantly affected the scientific interests of the SSSI.

Woodland Management
Woodland management to encourage natural regeneration is being carried out in two areas within the SSSI by fencing, with deer control within the fenced areas. The two areas are an exclosure in Glen Nevis, and a Woodland Grant Scheme on Meall an t-Suidhe which commenced in the early 1990s. A new scheme involving a fence includes a small area of the SSSI in Glen Nevis is currently being prepared. Two extensive native woodland forestry schemes are in preparation for application to the Scotland Rural Development Programme.

Objectives for Management (and key factors influencing the condition of natural features)
We wish to work with the owner to protect the site and to maintain and where necessary enhance its features of special interest. SNH aims carry out site survey, monitoring and research as appropriate to increase our knowledge and understanding of the site and its natural features and monitor the effectiveness of the management arrangements.

The EU Habitats and Birds Directives oblige Government to avoid, in SACs and SPAs, the deterioration of natural habitats and the habitats of species, as well as disturbance of the species for which the areas have been designated, in so far as such disturbance could be significant in relation to the objectives of these Directives. The objectives below have been assessed against these requirements. All authorities proposing to carry out or permit to be carried out operations likely to have a significant effect on the European interests of this SSSI must assess those operations against the relevant Natura conservation objectives (which are listed on our website through the SNHi - SiteLink facility).

1. To maintain the condition and accessibility of the geological features by:
- retaining the visibility and accessibility of the rock exposures.

2. To maintain or restore the condition and extent of the open upland habitats by:
- keeping livestock and deer density at a level at which there is no obvious damage to the vegetation from over-grazing or trampling and the vegetation continues to support key species such as saxifrages and the flush communities.
- managing recreation impacts in such a way that there is no obvious damage to the vegetation from trampling and the vegetation continues to support key species such as saxifrages and the flush communities.

3. To maintain or restore the condition and extent of the woodland habitats by:
- keeping stocking and deer density at a level which permits natural regeneration.

4. To maintain the population and distribution of the breeding bird assemblage by:
- ensuring the suitability of habitats and food sources supporting relevant species.

5. To restore the populations and distribution of the vascular plant and lower plant assemblages to favourable condition by:

- keeping livestock and deer density at a level at which there is no obvious damage to the vegetation from over-grazing or trampling. Sourcing rock and surfacing material for pathwork should not be allowed to have a negative impact on the plant assemblages.

6. To maintain the favourable status of the fly assemblage by:

- ensuring the suitability of the habitats supporting relevant species.

7. To maintain the population and distribution of the small mountain ringlet by:

- preventing the spread of bracken onto the *Nardus* grassland habitat, and keeping grazing levels such that food and nectar plants are maintained.

Date last reviewed: 29 July 2009