Scottish Natural Heritage

BEINN EIGHE
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 167

Anancaun
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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 for operations requiring consent.

We welcome your views on this statement.

This statement is available in Gaelic on request.

Description of the site

Beinn Eighe Site of Special Scientific Interest (SSSI) is a major mountain massif located to the south of Loch Maree and south west of Kinlochewe village.

The rocks of Beinn Eighe contain a distinctive sedimentary rock layer sequence within the Cambrian rock succession, known as the Fucoid Beds. These rocks were originally layers of sediment such as sand, silt and mud laid down in a shallow lagoon environment around 540 million years ago. The rock layers contain fossils including several species of trilobites. Trilobites are a group of extinct marine arthropods which are a very diverse group of animals with jointed limbs and include crustaceans. The particular assemblage of trilobite fossils found here show similarities with those in Greenland and Arctic Canada, but are very different to those of a similar age in England. This evidence has been crucial in showing that an ocean existed between Scotland and England during the Cambrian geological period.

The hill of Meall a' Ghiubhais provides exposures of a thrust (a low-angle fracture in the Earth's crust) which was formed about 430 million years ago when two continents collided. This suite is outstanding because it clearly illustrates the complicated processes which operated during thrust faulting, particularly as erosion has revealed the near horizontal Kinlochewe thrust plane right around the hill, effectively forming a geological break between the lower and upper part of the mountain.

The upper slopes support some of the best examples of western upland plant communities habitats including alpine and subalpine heaths, dry heaths, montane

grassland, tall herb ledges and scree communities. The lower north-facing slopes support the most extensive native pinewood in Wester Ross. The geology of the site has played an integral part in the range of plant communities found as well as being a feature of the SSSI itself.

Beinn Eighe is also part of the Loch Maree Complex Special Area of Conservation (SAC) and many of the habitats are of European importance. Not all the features of the SAC are found within the Beinn Eighe SSSI but the site contains extensive areas of the important upland heath, grassland and scree habitats as well as the native pinewood.

Beinn Eighe is also the most botanically interesting of the acidic mountains of the north-west Highlands and is of national importance for its diverse assemblage of upland vascular plants. Species found include tufted saxifrage *Saxifraga cespitosa*, brook saxifrage *Saxifraga rivularis* and curved woodrush *Luzula arcuata*. The important bryophyte assemblage extends over the whole of the site. The assemblage of oceanic liverworts in heathland (the “north Atlantic hepatic mat”) reaches its finest development in Europe at Beinn Eighe and the upper slopes are the only British site of the internationally important liverwort *Herbertus borealis*. The pinewoods also contain the greatest variety of oceanic mosses and liverworts in a British wood. These include the very rare mosses *Daltonia splachnoides* and *Dicranodontium subporodictyon*.

Diverse habitats spread over a broad altitudinal range support diverse invertebrate communities including two nationally scarce species, the argent & sable moth *Rheumaptera hastata* and the pearl-bordered fritillary *Boloria euphrosyne* and at least 14 Red Data Book invertebrate species within different taxonomic groups. Indeed, the 13 species of dragonfly and damselfly comprise a nationally important assemblage that includes the Red Data Book species northern emerald *Somatochlora arctica*. Also of note are the nationally rare moth species *Plutella haasi*, *Aethes rutilana* and *Udea uliginosalis* and several saproxylic beetles and flies, including RDB species restricted to Caledonian pinewood such as the hoverfly *Calilcera rufa.*

Recent monitoring has shown that most of the protected natural features of the SSSI are in favourable condition. Whilst monitoring of the vascular plant assemblage in 2007 failed to relocate all of the notable species, this feature is also considered to be in favourable condition.

There are currently no monitoring results available for the invertebrate feature.

Most of the SAC features found within Beinn Eighe SSSI are also considered to be in favourable condition. However, when monitored during 2006 the dry heath habitat was considered to be in an unfavourable condition across the SAC as a whole with evidence of high levels of trampling by deer recorded within the SSSI. There was also evidence of localised damage to the montane grassland and alpine heath communities due to grazing, trampling and manuring by deer.

The ‘Caledonian forest’ feature is also considered to be in an unfavourable condition in the Loch Maree Complex SAC but is in favourable condition within Beinn Eighe SSSI. The ‘alder woodland’ feature is considered to be in an unfavourable condition within the wider Loch Maree Complex SAC however the condition of the relatively small areas of this habitat within Beinn Eighe SSSI has not been monitored. ’Western acidic oak woodland’ does not occur within this SSSI.

Bryophyte cushion containing *Herbertus borealis* and *Herbertus aduncus ssp. hutchinsiae*	Ancient Caledonian pine woodland
	

Natural features of Beinn Eighe SSSI	**Condition of feature** (and date monitored)	**Other relevant designations**
Cambrian	Favourable, maintained (September 2007)	
Moine	Favourable, maintained (September 2007)	
Native pinewood	Favourable, maintained (May 2001)	SAC (Caledonian forest)
Upland assemblage	Favourable, maintained (June 2006)	
Vascular plant assemblage	Favourable, recovered (August 2007)	
Bryophyte assemblage	Favourable, maintained (June 2008)	
Invertebrate assemblage	Not yet assessed	

Features of overlapping Natura sites that are not notified as SSSI natural features	**Condition of feature (date monitored)**	**SPA or SAC**
Acidic scree	Favourable, maintained (November 2006)	SAC
Alder woodland on floodplains	Unfavourable, no change (July 2004)	SAC
Alpine and subalpine heaths	Favourable, maintained (November 2006)	SAC
Blanket bog	Favourable, maintained (November 2006)	SAC
Bog woodland	Favourable, maintained (August 2008)	SAC
Caledonian forest	Unfavourable, no change (August 2003)	SAC
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable, maintained (August 2004)	SAC

Depressions on peat substrates	Favourable, maintained (November 2006)	SAC
Dry heaths	Unfavourable, no change (November 2006)	SAC
Montane acid grasslands	Favourable, maintained (November 2006)	SAC
Otter	Favourable, maintained (July 2004)	SAC
Plants in crevices on acid rocks	Favourable, maintained (November 2006)	SAC
Plants in crevices on base-rich rocks	Favourable, maintained (August 2008)	SAC
Tall herb communities	Favourable, maintained (November 2006)	SAC
Western acidic oak woodland	Unfavourable, no change (July 2004)	SAC
Wet heathland with cross-leaved heath	Unfavourable, no change (November 2006)	SAC

Past and present management

An early post-glacial history of Beinn Eighe has been derived from pollen studies and evidence of weed species suggests that man has been present for 5000 years. In the area around Beinn Eighe there is also evidence of human settlement dating back to the early Bronze age.

Exploitation of the nearby oak woods is most likely to have started in the 17th century for iron smelting. In the 19th century the introduction of large numbers of sheep, associated muirburn and the creation of deer forests resulted in increased levels of grazing. This had significant effects on native woodland where regeneration was already restricted by climatic constraints. During the Second World War areas of the pinewood were felled to provide timber for ammunition boxes.

The Nature Conservancy (NC) was set up in 1949 (one of SNH's predecessor bodies) with the aim of conserving major examples of semi-natural habitat with characteristic flora and fauna. Coille na Glas Leitire, along with a larger area of the mountain, was the first area purchased by the NC in Scotland and in 1951 became Britain's first National Nature Reserve - named Beinn Eighe. The NNR was extended in 1962 to include a strip of ancient semi-natural woodland along the side of Loch Maree and then again, in 1974 to include part of the Torridon Estate.

The first reserve management plan was produced in 1957 and followed an interventionist approach to address concerns about excessive deer pressure and the apparently degenerating state of the woodland. This involved fencing, drainage, ploughing and planting. The woodland planting was not always of native stock but these have since been removed. Woodland restoration remains a management priority and all planting is now of trees of local origin. Deer management continues to be an important issue on the site, with increasing emphasis being placed on improving the condition of the important plant communities. Management of the land beside the loch is currently being reviewed and the ground on Torridon Estate is managed under a Nature Reserve Agreement with the National Trust for Scotland.

Facilities for environmental education, research, interpretation and informal recreation have been provided at Beinn Eighe NNR since the late 1960s and the provision of opportunities for the public is a high priority of reserve management. The reserve currently caters for visitors through its seasonal Visitor Centre, interpretive panels, car-parks, picnic areas and self guided trails. In addition to this there are a number of footpaths which lead into the mountain and these are popular with walkers and climbers.

The main road to the coastal communities of Wester Ross, the A832, forms the north eastern boundary of the site and the single track A896, forms the southern boundary. In recent decades the A832 has been upgraded to double track however it is not envisaged that any major additional works will be required on either of these roads.

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 to monitor the effectiveness of management.

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 important geological features in favourable condition so that they are available for study and are undamaged by, for example:

- Maintaining footpaths using compatible rock types
- Ensuring key exposures are not obscured by vegetation

2. To ensure that the important native pine woodland habitats are in favourable condition and encourage their expansion by, for example:

- Managing grazing and trampling by deer
- Removing non-native trees and shrubs
- Only planting trees of local origin
- Encouraging the expansion of woodland where it will not adversely affect the integrity of other important habitats
- Converting areas of former plantation to more diverse native pinewood habitats through appropriate planting, thinning etc

3. To ensure that the important upland habitats are in favourable condition by, for example:

- Maintaining footpaths and managing access
- Managing grazing and trampling by deer

4. To maintain appropriate site conditions for the vascular plant, bryophyte and invertebrate assemblages by, for example:

- Gaining a better understanding of the status, location and requirements of their key components on the site

Other factors affecting the natural features of the site

Climate change is likely to have an influence on some of the natural features.

Date last reviewed: 1 December 2010