



Scottish Natural Heritage

**MOFFAT HILLS**  
Site of Special Scientific Interest

**SITE MANAGEMENT STATEMENT**

Site code: 1172

**Carmont House**  
**The Crichton**  
**Bankend Road**  
**DUMFRIES**  
**DG1 4ZF**

**Tel 01387 247010**  
**Fax 01387 259247**

**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.

<b>Natural features of Moffat Hills SSSI</b>	<b>Condition of feature (and date monitored)</b>	<b>Other relevant designations</b>
Stratigraphy :Caradoc-Ashgill	Favourable, maintained August 2006	
Stratigraphy :Llandovery	Favourable, maintained December 2006	
Quaternary of Scotland Geology and geomorphology	Favourable, maintained August 2006	
Fluvial Geomorphology of Scotland	Favourable, maintained August 2006	
Upland assemblage	Unfavourable, declining September 2005	SAC
Vascular plant assemblage	Feature not monitored	

<b>Features of overlapping Natura sites that are not notified as SSSI natural features</b>	<b>Condition of feature (and date monitored)</b>	<b>SPA or SAC</b>
Acidic scree	Unfavourable, no change September 2005	SAC
Alpine and subalpine heath	Unfavourable, declining August 2005	SAC
Blanket bog	Unfavourable, declining September 2005	SAC

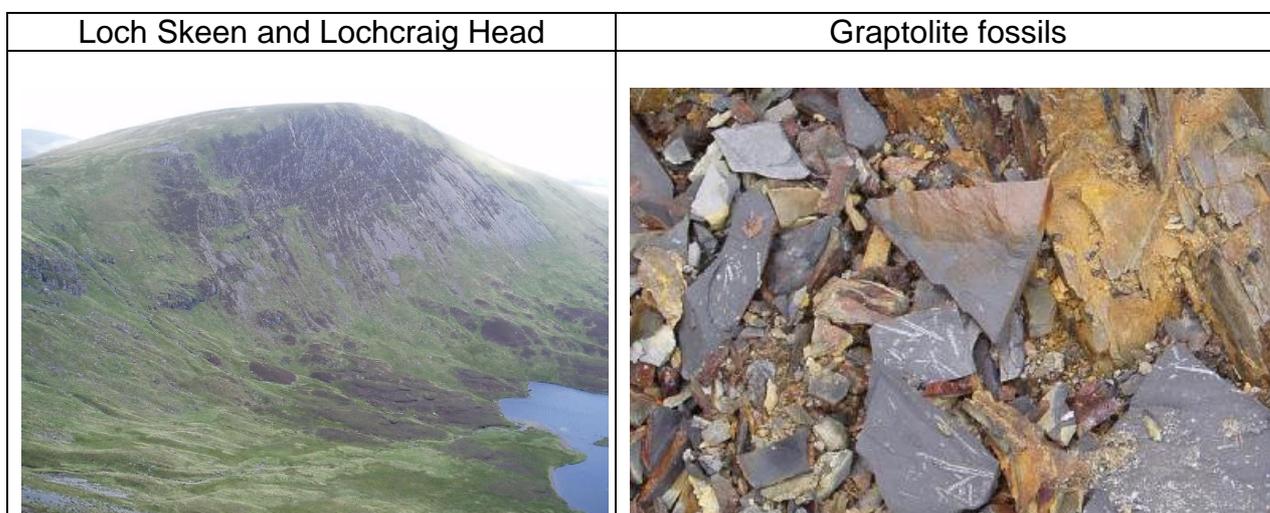
Dry heaths	Unfavourable, declining September 2005	SAC
Montane acid grasslands	Unfavourable, declining August 2005	SAC
Plants in crevices on acid rocks	Favourable, maintained September 2005	SAC
Plants in crevices on base-rich rocks	Unfavourable, no change September 2005	SAC
Tall herb communities	Favourable, maintained September 2005	SAC

### Description of the site

This extensive upland massif forms the watershed between the Annan and Tweed river systems. Many of the landforms show the classic signs of glaciations, such as hanging valleys, corries and U-shaped valleys.

The site has the richest assemblage of montane plant species in the Southern Uplands with *Racomitrium* moss and sedge heath blanketing the tops of the highest hills, giving way to grass and bilberry, in areas where snow persists until late in the spring. The steeper slopes are broken by crags, with ledges and spring lines holding a wide range of rare plants such as holly fern, purple saxifrage and downy willow. The lower slopes are dominated by bent and fescue grasslands, extensive areas of heather, with blanket bog on the more gently sloping ground, such as around Loch Skeen. The Loch is the best example of a nutrient poor waterbody in the District. Recently the rare fish, the vendace, was introduced to the Loch as part of a programme to maintain populations under threat at natural locations. Parsley fern is abundant on the numerous scree slopes. Small patches of oak/ash/elm wood survive in cleuchs and on crags, where the steepness of the ground prevents access by grazing stock. The site hosts a wide selection of breeding birds and a number of rare moths and sawflies.

The landforms, such as the hanging valley and the moraines, are of considerable importance in understanding the effects of glaciers in the area. The rock exposures around Dob's Linn are used internationally as a reference section for dating similar rocks from the Ordovician and Silurian periods (500-395 million years ago).



## **Past and present management**

Recorded use of the area dates back around 6,000 years, with the finding of a Mesolithic long bow from the Rotten Bottom area. Norse place names suggest that the area was farmed and grazed in the 10th century. Many of the drystone dykes are believed to date back to the first act of enclosure in the late 17th century, and suggest a continuing pastoral land use from that time.

The dominant land use over large parts of the site continues to be grazing by domestic stock, both sheep and, more particularly on the lower ground, cattle. Pest control and deer management takes place on some areas. Establishment of native woodland and montane scrub within the Carrifran Glen has been carried out by Borders Forest Trust since 2000. This covers approximately a quarter of the SSSI. The National Trust for Scotland property around the Grey Mare's Tail forms a focus for recreational activities, with a footpath leading to the foot of the waterfalls, to Loch Skeen and access to the higher summits. A Ranger/Naturalist Service operates over the NTS owned area of the site. Fishing for brown trout occurs on the loch and a thriving population of Vendace has been established in Loch Skeen as part of a wider programme to maintain the species, as there are significant threats to the natural populations in the Lake District. Extensive successful re-introduction of oblong woodsia has been carried out on part of the site from plants grown on from spores collected from the remnant natural populations within the Moffat Hills. Two of the owner/occupiers of the site have SNH Natural Care schemes which support positive management to bring features into or maintain them in favourable condition. These schemes cover approximately two thirds of the SSSI. Further encouragement for land managers to apply to take up Scotland Rural Development Programme (SRDP) options will be made for the duration of the scheme. Increased grazing by cattle in Black Hope has aimed to improve grazing on the valley bottom to attract sheep off the summit heath. Exclusion of grazing from Carrifran has allowed re-establishment of tall herb communities and heath on this part of the site.

## **Objectives for Management** (and key factors influencing the condition of natural features)

We wish to work with the owners and occupiers to protect the site and to maintain and where necessary enhance its features of special interest. SNH aims to 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.

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 extent of upland habitats through management of grazing over the site to reduce impacts on sensitive habitats such as dry heaths and blanket bogs through adjustment in the location, intensity and timing of grazing.**

Grazing by sheep, cattle, feral goats and deer occurs on most parts of the site. Grazing by domestic stock is excluded from Carrifran. Grazing has reduced opportunities for positive habitat enhancement through tree generation and the extent of dwarf shrub heath. In addition the feral goats can access ledges and other areas which sheep and deer are unable to reach. The range and abundance of plants in such areas could be reduced by uncontrolled goat browsing in such areas. An increase in grasses at the expense of *Racomitrium* and sedges in the summit heath has occurred due to grazing and dunging. A recent Natural Care Scheme with the aim of seasonal reductions in stock levels has been agreed on the Grey Mare's Tail property. Grazing over this part of the site is held by a third party.

**2. To maintain/increase the extent of scrub and native woodland avoiding significant impacts on the Natura habitats.**

Grazing by livestock, by deer and goats minimises any tree growth or regeneration on the open hill ground. Any regeneration of woodland will have to exclude grazing stock. Work to recreate woodland will have to ensure that rare montane plant communities and geological and geomorphological features are retained and that such features are not obscured.

**3. To maintain/increase the extent of rare plant communities.**

The precarious state of some of the populations of rare plants requires special management. Particular protection from further loss by grazing and opportunities to expand and strengthen some populations is increasing or being considered.

**4. To maintain and expand the condition of the dwarf shrub heath communities.**

There are limited opportunities to carry out muirburn. Burning on a long rotation, in a very limited number of areas away from deep peat and scree, could be carried out. Where these occur it should be done to diversify the vegetation structure and for the benefit of ground nesting birds. Management to maintain, and where possible expand, the extent of summit heath, blanket bog and dwarf shrub heath (heather and blaeberry) will be encouraged.

**5. To encourage enjoyment of the site, research and responsible recreation.**

Increasing recreational use of the area could exacerbate localised erosion around footpaths and summit features. An increased risk of accidental summer fires is also possible. The presence of visitors may increase disturbance for a number of the breeding bird species. Operation of the Ranger/Naturalist service by NTS over part of the property addresses much of these potential issues. Continued active management of the upland footpath access and the promotion of responsible access under the SOAC will be encouraged through work with all the owners and occupiers and through the key focus for access at Grey Mare's Tail. CCTV initiatives such as on the peregrine nest at Grey Mare's Tail and the rarer plants on inaccessible ledges, encourages positive efforts to minimise disturbance and raise awareness of the significance and threats to these species.

The impacts of recreational use on the sensitive summit vegetation and on individual plant and animal populations should be monitored and remedial action taken if the effects become severe. Action should be taken to raise the profile of the site interests and awareness by visitors of the sensitivities of the site, whilst ensuring there is a positive benefit for visitors and their enjoyment of the site.

**6. To maintain the integrity and access to the geological features of the site including the Ordovician /Silurian system boundary stratotype.**

The responsible access, research and sampling of the fossil interest and geomorphological features will be encouraged through the Scottish Fossil Code. The continued interest by amateur and academic research will continue to be promoted and the educational value of the resource promoted through responsible access and collection.

**Other factors affecting the natural features of the site.**

Changes in climate, including the extent of snow cover, changes in rainfall pattern, summer temperatures and extremes of weather conditions may have unpredicted impacts on plant communities which are outliers of more northerly populations. Nutrient deposition from atmospheric pollutants may have impacts on the extent and species composition of the summit heaths. Management of the feral goat population to maintain the natural features of the site whilst recognising the cultural interest in the population is being progressed through a Feral Goat Management Plan.

Date last reviewed: 8 January 2010