



Scottish Natural Heritage
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STRATH DUCHALLY
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 1489

The Links, Golspie Business Park, Golspie, Sutherland, KW10 6UB.

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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.

Natural features of Strath Duchally SSSI	Condition of feature (and date monitored)	Other relevant designations
Blanket Bog	Favourable, maintained (May 2009)	Special Area of Conservation (SAC), Ramsar
Dunlin	Unfavourable, declining (July 2004)	Special Protection Area (SPA), Ramsar
Golden plover	Unfavourable, declining (July 2004)	SPA
Greenshank	Favourable, maintained (July 2004)	SPA

Description of the site

Strath Duchally Site of Special Scientific Interest (SSSI) is situated on a ridge of high ground to the north-east of Loch Shin in central Sutherland. The site is notified for the nationally important blanket bog habitat and the wading birds (dunlin, greenshank and golden plover) that breed there.

Strath Duchally SSSI forms part of an internationally important peatland and is one of the most extensive areas of blanket bog in the world. The peatlands of Sutherland and Caithness also support internationally important populations of upland birds and otters. These species naturally occur at low densities and require large areas of undisturbed land. The body of peat under the blanket bog is also a large store of carbon. Keeping this carbon locked up in the peat and continuing land management that maintains the peat-forming process makes an important contribution to reducing Scotland's carbon emissions, helping to combat climate change.

Blanket Bog

The site has several different types of blanket bog characteristic of exposed locations with a very high number of pools and extensive erosion features. Typical blanket bog vegetation comprises deer sedge, heather, cotton grass and bog-mosses. A range of flush, swamp and heath types add to the diversity of the habitats and species at this site.

The site contains an abundance of erosion features including a large number of pools, which are of irregular shape and size, reflecting the different stages of erosion. In places this erosion has resulted in the creation of isolated peat hags, which typically support bell heather. Elsewhere, plants such as the bog moss *Sphagnum tenellum* and common cotton grass have begun to recolonise areas of bare peat, initiating regeneration of peat-forming vegetation. Throughout these erosion complexes, woolly-fringe moss tends to replace *Sphagnum* as the dominant moss and in places *Cladonia* lichens are abundant. Of particular interest is the local occurrence of the nationally scarce dwarf birch.

Although erosion features predominate across much of the site, there are also areas of intact mire, some of which support extensive carpets of the bog moss *Sphagnum spp.* In several places, but particularly in those with pools and wet hollows, *S. fuscum*, and the nationally scarce *S. austinii* occur. These species are particularly sensitive to disturbance so their presence is an indicator of the high quality of the bog vegetation on this site.

The blanket bog on Strath Duchally was monitored in May 2009. The area of blanket bog with its characteristic vegetation had been maintained since previous surveys. There were no indicators of damage such as draining or burning and it was concluded that the blanket bog was in favourable condition. Red deer trampling pressure was evident over parts of the site, for example where deer were walking alongside the fence that crosses the site, but it was concluded that deer trampling pressure was within acceptable limits. Although the blanket bog was found to be in favourable condition, it could be enhanced by a decrease in trampling by deer.

Dunlin, golden plover and greenshank

The site supports a variety of moorland birds. The bog pools and extensive areas of wet bog are favoured by waders such as dunlin, golden plover and greenshank. In the past, all three species have been recorded at densities substantially greater than the average for similar habitat in Caithness and Sutherland, with greenshank at more than twice the average density.

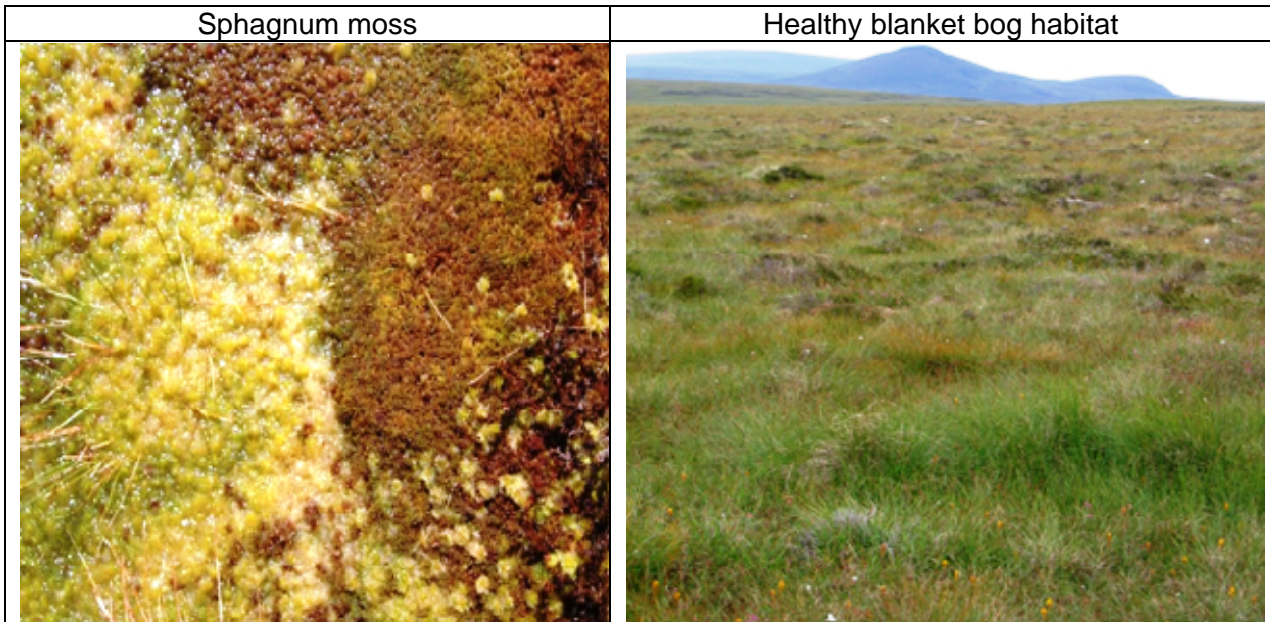
Breeding densities of golden plover, dunlin and greenshank were monitored in 2004. Numbers of both golden plover and dunlin were below the threshold levels so, although the habitat was reported as favourable, these features were assessed as unfavourable declining. The reason for the low numbers of these species in 2004 is not known, though land management on the site is not suspected to be the problem. By contrast, numbers of greenshank were in excess of the threshold and the condition of this species was assessed to be favourable maintained.

Other interests

Several lochs lie within the site, of which the largest, Loch Strath Duchally, supports breeding mallard, teal and red-throated diver. Strath Duchally SSSI also makes a

contribution to supporting a variety of other wildlife including part of an internationally important population of otters, which use the site for foraging and perhaps even breeding.

In addition to these bog communities, the site supports a range of flush, swamp and heath types. Some of the dry heath areas are characterised by the presence of mountain bearberry, another nationally scarce species.



Past and present management

The SSSI forms part of a number of sporting estates and part of the site is currently used for low intensity sporting purposes. All terrain vehicles are used for access and removal of carcasses. There are no surfaced tracks allowing access by road for vehicles.

Merkland Estate has entered a Peatland Management Scheme (PMS) agreement which supports good conservation management of the site. No livestock are present on the agreement area and no muirburn or peat cutting take place. Vehicles are used occasionally for deer carcass removal, the routes taken to avoid soft, wet areas.

When the current PMS agreements end, we would encourage applications for the Rural Development Contract schemes that will replace PMS.

The southern section of the site formed part of a forestry proposal in the late 1980s. The ground was deemed unplantable and has been left unplanted, though a forestry deer fence that crosses the site is maintained, as part of the management of the forest adjacent to the site.

There are no popular walking routes through this area and few people visit this site.

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 to 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 the management agreement.

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, where 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).

A list of Operations Requiring Consent forms part of the formal notification documents of the SSSI. These, and the discussions on land management involved in the issuing of formal consents, are intended to minimise the threat of any damage to the natural features.

1. To maintain the condition, extent and distribution of the peatland habitats.

Blanket bog depends on a continuous cover of special vegetation which continues the peat-forming process and protects the underlying body of peat. Damage to the moss cover exposes the peat surface to erosion from extremes of weather (drying, frost, wind) and trampling from animals.

Some grazing of peatland habitats is beneficial, but deer stocks should be maintained at levels which result in no obvious damage to this vegetation from grazing or trampling. The fence which crosses the site should be removed when the opportunity arises since this is leading to localised trampling by deer that are walking along the fence line.

Use of vehicles can also cause damage. Off prepared tracks, only low ground pressure vehicles should be used and care should be taken in their use. The choice of route is important: soft ground, sharp turns and areas where erosion is beginning to start should be avoided as any bare peat can be very slow to revegetate.

Muirburn in areas covered by a management agreement (such as a PMS agreement or Rural Development Contract) must follow the agreed muirburn plan. Outwith areas covered by a management agreement, any muirburn should be carried out following the Muirburn Code which recommends avoiding the burning of blanket bog and deep peat. Muirburn can cause serious long term damage to blanket bog.

It is important to maintain the natural water table in peatland habitats so no new drains should be made, nor existing ones cleared. It would be beneficial to block old drains that are still active as these drains alter the natural water table and dry out the peat either side of the drain. They will also continually cut down through the peat until the underlying mineral layer is reached, creating further bare peat erosion surfaces.

2. To maintain the water levels, water quality, extent and distribution of the clear water lochs and dubh lochans.

Management in the areas around lochs should avoid activities that would release sediment, excessive nutrients or chemicals into the water. Activities that might alter water levels of lochs should be avoided. This objective can readily be achieved by maintaining the present management of lochs.

- 3. To maintain breeding bird populations and to avoid significant disturbance of birds during the breeding season.** If the habitats on this site are maintained, following the advice given in the two Objectives for Management immediately above, breeding bird populations are also expected to be maintained. Disturbance can reduce the breeding success of nesting birds. It is important that any potential activities on the site are carefully planned to safeguard the nesting birds.

Red-throated divers are particularly sensitive to human presence and, along with other uncommon species, are protected by special legislation. Their nests should not be disturbed during the breeding season since eggs may fail to hatch if they become chilled due to the parent birds being disturbed from the nest. Both eggs and young chicks are more likely to be eaten by predators if the parent birds are not there to protect them. It is important that anglers avoid disturbing these birds during the nesting period from April to June inclusive. Anglers should look out for divers when fishing on lochs and keep as far away from their nests as possible if fishing on larger lochs. On small lochs, anglers should move to a different loch if breeding divers are present. A leaflet on 'Black-throated divers and anglers' which also provides advice that would benefit the red-throated diver that breed on this site is available from SNH on request. This leaflet explains how anglers can help divers by avoiding their nests.

Bird eggs and chicks are vulnerable to predation. Foxes, crows and mink are potential predators of eggs or young. Legal control of these species as part of general estate management is likely to be beneficial to breeding birds.

- 4. To maintain suitable otter habitat and access routes for otter across the site and avoid activities that might disturb otters.** This objective can also be achieved by maintaining the present management that allows natural processes to continue with minimal intervention. Any known otter holts should not be disturbed. To safeguard the food supply of otters, water quality in burns, rivers and lochs should be maintained by avoiding activities that might add excess chemicals, nutrients or sediment. If any management is planned that might affect banks or piles of boulders where there could be otter holts, advice should be sought from SNH on how to avoid impacts on otters. Any fencing on the site that is likely to cross otter routes should have mesh with a large enough gauge to allow otters to pass through.

Other factors affecting the natural features of the site

- Forestry: Tree seedlings could potentially spread into the SSSI from the adjacent coniferous plantations damaging the blanket bog habitat. Forestry could also influence the hydrology of the peatland adjacent to the plantation. It may also influence breeding bird populations near plantations.

Date last reviewed: 21 December 2009

Annex 1: List of natural features of overlapping Natura / Ramsar sites that are not notified features of Strath Duchally SSSI

Features of overlapping Natura / Ramsar sites that are not notified as SSSI natural features	Feature condition (date monitored)	Designation
Acid peat-stained lakes and ponds (dubh lochans)	Favourable, maintained (August 2004)	SAC
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels	Favourable, maintained (July 2004)	SAC
Depressions on peat substrates	Favourable, maintained (August 2004)	SAC
Very wet mires often identified by an unstable 'quaking' surface	Favourable, maintained (August 2004)	SAC
Wet heathland with cross-leaved heath	Not assessed	SAC
Breeding bird assemblage	Not assessed	Ramsar
Black-throated diver	Favourable, maintained (July 2004)	SPA
Common scoter	Favourable, maintained (August 2004)	SPA
Golden eagle	Favourable, maintained (July 2003)	SPA
Greylag goose	Not assessed	Ramsar
Hen harrier	Favourable, maintained (June 2003)	SPA
Merlin	Favourable, maintained (July 2004)	SPA
Red-throated diver	Not assessed	SPA
Short-eared owl	Not assessed	SPA
Wigeon	Not assessed	SPA
Wood sandpiper	Favourable, maintained (June 2004)	SPA
Marsh saxifrage	Not assessed	SAC
Otter	Favourable, maintained (Oct 2004)	SAC

Note: The Caithness and Sutherland Peatlands SAC, SPA and Ramsar site comprises 39 SSSIs. The list of overlapping Natura and Ramsar features in the table above includes habitats and species found in the whole of the Caithness and Sutherland Peatlands SAC, SPA and Ramsar site. Some of these features may not be present on Strath Duchally SSSI and the presence of some species may vary from year to year.