



**Scottish Natural Heritage**  
**Dualchas Nàdair na h-Alba**  
 All of nature for all of Scotland  
 Nàdair air fad airson Alba air fad

**TRUDERSCAIG**  
**Site of Special Scientific Interest**

**SITE MANAGEMENT STATEMENT**

**Site code: 1567**

**The Links, Golspie Business Park, Golspie, Sutherland, KW10 6UB. Tel 01408 634063**

**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.

<b>Natural features of Truderscaig SSSI</b>	<b>Feature Condition (date monitored)</b>	<b>Other relevant designation</b>
Blanket bog	Favourable, maintained (July 2000)	Special Area of Conservation (SAC), Ramsar
Breeding bird assemblage	Favourable, maintained (June 2002, May 2003, May 2004)	Special Protection Area (SPA), Ramsar
Greenshank	Favourable, maintained (May and June 2004)	SPA

See Annex 1 for a list of natural features of overlapping Natura sites that are not notified features of Truderscaig SSSI.

**Description of the site**

Truderscaig Site of Special Scientific Interest (SSSI) is located in central Sutherland, approximately half way between Altnaharra and Kinbrace. This site is internationally important for its blanket bog and the upland birds that breed here. The site supports particularly high densities of breeding greenshank. The site also forms part of the catchment of the River Naver which has internationally important populations of Atlantic salmon and freshwater pearl mussel and which is important both for conservation of these species and for the contribution that income from angling makes to the local economy.



Truderscaig 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 landscape is gently undulating and most of the site lies between 120 and 180m altitude. The SSSI includes Loch Truderscaig.

The main body of peatland is divided into discrete hydrological areas, separated from each other by burns and in places mounds of moraine (material deposited during the Ice Age). Most of these discrete areas of peatland are valleyside mires (bogs that have formed on the gently sloping sides of shallow valleys), although terrace and basin mires also occur on the site. Terrace mires form discrete areas of blanket bog on flat areas of ground that are separated from other areas of blanket bog by drier slopes and basin mires form in hollows in flat ground. Pools are frequent across the site and Loch Truderscaig lies within the site boundary.

The blanket bog grades into wet heath vegetation as the slope increases and the depth of peat decreases. Dry heaths and acidic grassland are generally scarce on this site and confined to the better-drained knolls and ridges, particularly in the south of the site, closest to the track leading to Loch Choire Lodge.

Rusty bog moss ( <i>Sphagnum fuscum</i> )	Dwarf birch ( <i>Betula nana</i> )
	

Heather, deer sedge and common cotton-grass are common throughout. Hare's-tail cotton-grass is also widespread and is dominant in certain communities. On the flatter, wetter areas, species of bog-moss (*Sphagnum* species) form extensive carpets.

Species of note include the nationally scarce dwarf birch and alpine bearberry. Dwarf birch is largely restricted to areas of pools where fires have been rare. Alpine bearberry is confined to dry exposed areas and is usually associated with higher altitudes in Scotland. The occurrence of this species at such a low altitude is likely to be due to cool summer temperatures and a very exposed location. The hummock forming bog-moss species, rusty bog-moss *Sphagnum fuscum* and the nationally scarce Austin's bog-moss *Sphagnum austinii* are frequent in areas where fires have been rare.

The blanket bog habitat on Truderscaig SSSI was monitored in July 2000. The extent and condition of this habitat had been maintained since previous monitoring visits. The blanket bog was assessed as being in favourable condition.

### **Breeding bird assemblage**

The peatland and open water habitats on Truderscaig SSSI provide nesting and foraging areas for a nationally important range of bird species.

Notable species recorded include wood sandpiper which is a very rare breeding species in the United Kingdom. The peatlands of Caithness and Sutherland support several pairs of breeding wood sandpiper each year, but the birds are notoriously difficult to find and may move from one site to another.

Other species recorded either breeding on the site or seen foraging over the site during the breeding season include; black-throated diver, dunlin, merlin, red grouse and wigeon. This combination of species is typical of peatland habitats in Sutherland but is found in few other places in Scotland.

When the results of monitoring visits between 2002 and 2004 were collated, the diversity of breeding birds was found to be in favourable condition, supporting a surprisingly good range of peatland bird species for such a small site. It is also worth noting that Truderscaig makes an important contribution to overall upland bird populations in Caithness and Sutherland.

### **Greenshank**

In addition to the range of bird species using the site, the mosaic of open water, burns and marshes supports high densities of breeding greenshank. The densities of breeding greenshank in the survey plot within Truderscaig SSSI were monitored in 2004. A very high breeding density of 0.5 pairs per square kilometre was recorded and this feature was assessed as being in favourable condition.

### **Other interests**

Truderscaig SSSI also makes a contribution to supporting other wildlife. The wetland blanket bog vegetation on this site also supports populations of otters, which on occasion may use the site for foraging and perhaps even breeding.

The Mallart River which flows along part of the western boundary of the site is also part of the River Naver SAC, of international importance for its populations of Atlantic salmon and freshwater pearl mussel.

### **Past and present management**

The site is managed for conservation, agricultural and sporting interests. Both sheep and deer have access to the SSSI.

Most of Truderscaig SSSI is within Peatland Management Scheme (PMS) agreement areas. The PMS agreement provides payment for specific conservation management. This agreement includes grazing and sporting management on the site and where necessary identifies areas in which livestock and deer feeding, muirburn and peat cutting can take place without damaging the notified features. The PMS also encourages people to minimise use of all terrain vehicles, keeping to drier ground and avoiding sensitive wet areas rich in *Sphagnum* moss. Where appropriate, the PMS agreement may include shepherding of livestock to ensure that grazing pressure is distributed across the site. Towards the southern edge of the site there is a field

bounded by a stone wall within the site boundary that does not contain blanket bog vegetation.

Access to the site is relatively easy from the south as the main track to Loch Choire Lodge runs adjacent to the SSSI. Despite being adjacent to a track, the number of people visiting the site is likely to be relatively small since Truderscaig SSSI is a long distance from a public road.

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

We wish to work with land managers 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 agreements.

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 bog-moss 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 excess water) and trampling from animals.

Some grazing of peatland habitats is beneficial, but sheep and deer stocks should be maintained at levels which result in no obvious damage to this vegetation from grazing or trampling. Livestock numbers on areas covered by the Peatland Management Scheme should not exceed the agreed stocking levels.

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 and recover.

Muirburn in areas covered by a management agreement (such as a Peatland Management Scheme 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, avoiding blanket bog and deep peat.

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 that allows natural processes to continue with minimal intervention or disturbance.

## **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, breeding bird populations are also expected to be maintained. Breeding bird populations can be maintained by following the advice given in the two Objectives for Management immediately above for the good conservation management of peatland and loch habitats on this site. Disturbance by humans 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 and black-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 period April to June, when they are nesting. 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' is available from SNH on request explaining 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.

#### **5. To maintain water quality of the River Naver SAC for the benefit of the Atlantic salmon and freshwater pearl mussel populations**

Water levels and water quality play a crucial role in the suitability of the River Naver SAC for Atlantic salmon and freshwater pearl mussel. Where possible, any increase in drainage, abstraction or other activities affecting the hydrology of the river catchment should be avoided. Removal of stones and gravel from the River Mallart (River Naver SAC) should be avoided as this is likely to remove some of the habitat used by young Atlantic salmon and will cause sedimentation lower down the river, potentially clogging up the gravel beds that are needed for salmon eggs and smothering freshwater pearl mussels. Removal of river gravel can also inadvertently kill freshwater pearl mussels that may be buried under the gravel and out of sight.

Any agriculture or forestry operations within the catchment should be carefully managed to prevent the input of sediment, chemicals or nutrients, in order to maintain the high water quality required by Atlantic salmon and freshwater pearl mussel. The Forestry Commission's Forests and Water Guidelines should be carefully adhered to when carrying out any forestry operations within the River Naver SAC catchment.

#### **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, water flow rates and water quality in burns downstream of plantations. It may also influence breeding bird populations near plantations.
- Egg collecting: Some of the rare birds that breed on this site are potential targets for illegal egg collecting. Any suspicious activity and description of cars and car numbers should be reported to the Police as soon as possible.

Date last reviewed: 31 March 2009

**Annex 1 Full list of the features of overlapping and adjoining Natura /Ramsar sites that are not notified as natural features of Truderscaig SSSI**

<b>Features of overlapping Caithness and Sutherland Peatlands Natura/Ramsar sites that are not notified as SSSI natural features</b>	<b>Feature condition (date monitored)</b>	<b>Designation (SPA, SAC or Ramsar)</b>
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 (ladder fen)	Favourable, maintained (August 2004)	SAC
Wet heathland with cross-leaved heath	Not assessed	SAC
Black-throated diver	Favourable, maintained (July 2004)	SPA
Common scoter	Favourable, maintained (August 2004)	SPA
Dunlin	Favourable, maintained (July 2004)	SPA
Golden eagle	Favourable, maintained (July 2003)	SPA
Golden plover	Favourable, maintained (July 2004)	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 (October 2004)	SAC

Note - The list of features of overlapping Natura and Ramsar sites 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 Truderscaig SSSI and the presence of some species may vary from year to year.

/see overleaf

**Annex 1 - continued**

<b>Features of adjacent River Naver SAC that are not notified as SSSI natural features</b>	<b>Designation</b>
Atlantic salmon ( <i>Salmo salar</i> )	River Naver SAC
Freshwater pearl mussel ( <i>Margaritifera margaritifera</i> )	River Naver SAC