



Scottish Natural Heritage

**FALA FLOW**  
**Site of Special Scientific Interest**

**SITE MANAGEMENT STATEMENT**

Site code: 622

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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.

**Description of the site**

Fala Flow Site of Special Scientific Interest (SSSI) is located 16km south-east of the town of Dalkeith and 2km south of the village of Fala/Blackshiels. The Flow has been designated as a SSSI for its habitat and ornithological interests, and as a Special Protection Area (SPA) under the EC Directive for its ornithological interest.

Fala Flow SSSI is an area of blanket bog which has developed on much deeper peat, probably on a raised moss, to a depth of over 7m. It contains characteristic peatland plant species including heather, cotton grass, crowberry, sundew, fourteen species of sedge and several species of bryophyte, including the nationally scarce moss *Hypnum imponens*. The blanket bog is relatively undisturbed and is a representative example of this scarce and declining habitat in Midlothian.

Fala Flow is lower-lying than any other intact blanket bog in Midlothian. It is located in the marginal upland zone of the Lammermuir-Moorfoot escarpment where most peatland has been either eliminated or severely modified by cutting, muirburn, drainage, agricultural re-seeding and small scale afforestation.

The Flow is of international importance for the number of pink-footed geese it supports over winter, providing one of the most important inland roost sites for pink-footed geese in the Lothian area. Due to its importance, Fala Flow was designated as an SPA and a Ramsar site in 1990, providing more stringent legislation for the protection of its nature conservation interest. It qualifies as “an internationally important wetland supporting in winter an average of 2,400 pink-footed geese (2% of the Icelandic/Greenland breeding population)”. This designation is under both Article 4.2 of the EC Directive 70/409 on

the Conservation of Wild Birds, and Criterion 1B of the Convention on Wetlands of International Importance.

Fala Flow also provides nesting for breeding birds such as golden plover, dunlin, curlew, redshank and occasionally merlin, although this natural heritage interest is not directly related to the site's SSSI/SPA/Ramsar designation.

Fala Flow SSSI/SPA is located within the Moorfoot Hills Area of Great Landscape Value.

The 2001 site condition monitoring (SCM) assessment of the 'pink-footed goose' feature found the feature to be in favourable condition, with the site appearing to hold good numbers of geese during the 5-year survey period (1996-2001).

The 2005 SCM assessment of the 'blanket bog' feature found the bog to be in an unfavourable condition on account of a low number of positive indicator species recorded over the site. This was due in part to a historical burning regime which has damaged the moss and peat layers, accidental fire damage, overgrazing by sheep, and the presence of a number of active drainage ditches which are adversely affecting the hydrology of the blanket bog.

Natural features of Fala Flow SSSI	Condition of feature (and date monitored)	Other relevant designations
Pink-footed goose ( <i>Anser brachyrhynchus</i> ), non breeding	Favourable – maintained (November 2001)	SPA
Blanket bog	Unfavourable – no change (October 2005)	



### Past and present management

Within the northern area of the SSSI stand the remains of Fala Luggie, a late medieval tower-house, and 18th century maps show a "peat house" located on the SSSI's southern edge. Lying 2 km south of the SSSI is the site of a major Augustinian hospital and church (occupied from 11th - 16th centuries). These habitations are all likely to have encouraged major use of Fala Flow for wood and peat fuel as well as for the

removal of bog-mosses, used as surgical dressings.

Much local use was made of the area for peat-cutting and the “Moor Road” in the north-east corner of the site was probably an access track for peat haulage to the nearby Fala/Blackshiels village. Records (the *First Statistical Account of the United Parishes of Fala and Soutra*) show that there were plans to drain the Flow extensively, an improvement much welcomed by the Fala Parish minister. Luckily, these plans never went ahead and Fala Flow has remained relatively intact. However, there have been obvious attempts at surface drainage on the Flow, and there have been at least two severe fires on the site, the most recent of which occurred in 2000. These factors have modified parts of the semi-natural vegetation.

Pink-footed geese first started roosting at Fala Flow during the years of World War II. This was due to their displacement from the mudflats of Aberlady Bay as these were being used for bombing practice. Moving inland into Midlothian, the Pinkfeet initially favoured Fala Flow before also moving onto Gladhouse Reservoir.

Fala Flow is part of a 300-year-old estate, and is presently managed for grouse by the Fala Estate Trust, with a history of heather management through grazing and muirburn (adopting a 10-12 year burning cycle). Ongoing pest control is carried out by the gamekeeper.

There has also been regular monitoring of the winter pink-footed goose population since 1950, and the estate management is sympathetic to these birds, always attempting to minimise disturbance of the site.

### **Principal Factors Influencing Management**

The SPA legislation requires that the site’s “European interest” be maintained in a favourable condition - that is, the pink-footed geese should be maintained at population levels corresponding to their ecological requirements.

External factors and the density-dependence of the geese influence how many are found at Fala Flow. Weather conditions, the availability of food in the arable/grass fields of the Lothian plain and the degree of disturbance at other major roosting areas all have an impact on the numbers of pinkfeet using Fala Flow at any one time. Currently, little is known about the interrelationship between these factors and how together they then influence the distribution of pink-footed geese throughout the Lothian area. In 2010, a 3-year, SNH-funded study is due to commence at Fala Flow, assessing annual population counts, geese movements, site usage and links to associated feeding areas, which should help inform future site management requirements.

Previous studies at other moorland goose sites have shown that the presence of an open water feature is essential for continued usage of the site and so Fala Loch must be maintained in a favourable condition. Also, from these other studies, it is revealed that the roost area must be surrounded by at least a 0.75 km border of open ground. This means that the open area surrounding Fala Flow must be kept clear of obstructions such as buildings or plantation forests, and also of power lines which could obstruct the flightlines of the geese.

Pink-footed geese are especially sensitive to human disturbance (in comparison to other grey goose species) and the presence of a Scheduled Ancient Monument and a Right of Way (also included as a Core Path within the Midlothian Core Paths Plan 2009) across the site could potentially lead to conflict between human and goose visitors. However, the geese only use the site seasonally from September to May and during this time there are not as many human visitors (hikers, dog walkers, horse-riders and bike-riders) as there are in the summer months. Problems could arise, though, if there were increases in the amount of recreational activity occurring, and so visitor levels should be carefully monitored.

Public access rights across the site are, in the main, exercised responsibly and in keeping with the Scottish Outdoor Access Code. However, there is a history of unauthorised vehicle access onto the site which, if continued, could lead to serious problems. Attempts have been made by drivers of off-road vehicles (namely all-terrain vehicles, four-wheel drive vehicles and "trials" bikes) to take them off the road and onto the fragile peat surfaces. This would damage both natural heritage interests for which the SSSI is designated, churning up the sensitive bog flora besides disturbing the pink-footed geese. Previous attempts to deter unauthorised vehicle access have been made through the installation of notices and signs.

Finally, when considering management of the sensitive bog habitat, it must be considered as an ecological and hydrological unit. This means that management cannot be piecemeal as land use changes in one area have knock-on effects for all the other areas. As Fala Flow is in the hands of a single owner, cohesive management should not be a problem.

The site could benefit from entry into an appropriate Rural Development Contract scheme, run under the Scotland Rural Development Programme (SRDP) (available 2007-2013). This could offer benefits for positive habitat management and should aim to protect and enhance the nature conservation value of the site. Ideally, this would include the production of a management plan, encompassing prescriptions for grazing and ditch-blocking, which could then inform an application for land management funding under SRDP.

### **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.

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 improve the current condition of the blanket bog habitat and maintain the habitat in favourable condition.**

**2. To maintain and increase the diversity and extent of *Sphagna* communities.**

These objectives can be achieved by increasing the overall 'wetness' of the blanket bog through a programme of drain blocking. In addition to this, maintaining stock at an appropriate level will reduce species competition from dominant vegetation, thereby increasing species diversity and encouraging *Sphagnum* colonisation.

**3. To maintain favourable conservation status for the pink-footed goose roost according to the EC Directive, thereby maintaining the nature conservation interest of the pink-footed geese using the Flow.**

**4. To maintain the open nature of the bog and the Fala Loch water feature so that the site remains an acceptable roost for wintering pink-footed geese.**

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

None noted

Date last reviewed: 10 March 2010