



Scottish Natural Heritage

**Flanders Moss  
Site of Special Scientific Interest**

**SITE MANAGEMENT STATEMENT**

Site code: 641

The Beta Centre  
Innovation Park  
Stirling University  
Stirling  
FK9 4NF

Tel. 01786 450362

E-mail: [Argyll\\_stirling@snh.gov.uk](mailto:Argyll_stirling@snh.gov.uk)

**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 Flanders Moss SSSI</b>	<b>Condition of feature (and date monitored)</b>	<b>Other relevant designations</b>
Quaternary of Scotland	Favourable, maintained (December 2006)	
Raised bog	Unfavourable, recovering (March 2008)	SAC
Moth assemblage	Not yet monitored	
Spider ( <i>Heliophanus dampfi</i> )	Favourable, maintained (June 2003)	

<b>Features of overlapping Natura sites that are not notified as SSSI natural features</b>	<b>Condition of feature (date monitored)</b>	<b>SPA or SAC</b>
Degraded raised bog still capable of natural regeneration	Unfavourable recovering (March 2008)	SAC

## Description of the site

Flanders Moss site of special scientific interest (SSSI) is one of the last fragile remnants of the great bogs that once covered much of Scotland. Lying 15 km west of Stirling, it is one of the largest lowland raised bogs in Britain and one of the most intact bogs in Europe. The site forms part of the Flanders Mosses Special Area of Conservation (SAC) which is of European importance for its active raised bog and degraded raised bog. This SAC also includes four other raised bogs in the Carse of Stirling. Active raised bogs consist of a deep accumulation of waterlogged peat and a surface covered by a living layer of plants - peat is still able to accumulate because of the growth of this surface vegetation.

Flanders Moss displays many of the classical raised bog features. Its distinctive domes support a rich carpet of bog mosses with large areas of the bog still accumulating peat. Important bog features such as endotelmic streams (where the bog is the main source of the water), rand (steep slope at the bog's edge) and intact lagg fen (wetland beyond the edge of the bog) can still be found on the site. As the surface of the bog is raised above the local water table the only source of water and nutrients feeding the bog is rainwater. The plants, mainly heaths, sedges, cotton-grasses and bog-mosses (*Sphagna*), are all specially adapted to live in waterlogged, nutrient-poor conditions. The site also supports a number of locally uncommon plants such as white beaked sedge, bog rosemary and Labrador tea, for which Flanders is famous although it is now believed to have been introduced.

The 'raised bog' feature of Flanders Moss SSSI (last monitored in 2008) was found not to have met all the targets for vegetation composition, and is therefore in unfavourable condition, however given the ongoing positive management being implemented on the SSSI, this feature should be considered as being in an unfavourable, recovering condition. The main areas of concern were the overabundance of heather and haretail cotton grass in some areas, the level of scrub cover and the species composition and abundance of various bog mosses. Current management of the site should still be reviewed to ensure that all issues identified by Site Condition Monitoring will be addressed by the current management regime. It is recognised that it will take time for appropriate management to have the desired effect.

Part of Flanders falls within the Western Forth Valley Geological Conservation Review (GCR) site. The sequence of deposits which underlies the ground surface provides information about sea-level changes over the last 10,000 years, since the end of the last ice age. Peat deposits at Flanders also contain important archaeological, paleo-environmental (past environments) and paleo-ecological (past habitats) information. The geological feature at Flanders moss was monitored in December 2006 and found to be in favourable condition as the features of interest remain visible and undisturbed.

Flanders Moss also supports a rich invertebrate fauna - many notable moth species and a rare species of 'jumping spider' *Heliophanus dampfi* are found on the site.

The moth feature has not yet been monitored as an assemblage. The spider feature was surveyed in 2003 and found to be in favourable (and most likely maintained) condition. The presence of *Heliophanus dampfi* was not confirmed during this survey, however this species of spider is well known for being difficult to find.

<i>Sphagnum</i> mosses carpet the bog surface	The argent and sable moth
	

### Past and present management

In the past the site has been subject to drainage, stock grazing, muirburn and peat cutting. Conifers were planted on 40 hectares of the site during the 1970s but these have now been removed. Recent management of the moss has primarily been for nature conservation and public access purposes, involving ditch blocking, tree and scrub clearance and construction of a boardwalk with interpretation. Domestic stock now graze parts of the edges of the site at relatively low intensities, and some rearing and management of pheasants takes place in peripheral woodland areas.

Part of the moss was owned and managed in the past by The Scottish Wildlife Trust, but this area has now been bought by SNH.

Flanders Moss was first declared a National Nature Reserve (NNR) in 1982. Since then the reserve has been expanded and now covers an area of approximately 822 hectares, 96% of the whole Flanders Moss peat body. SNH currently has three Nature Reserve Agreements and one lease with various landowners of the site. These agreements support appropriate low intensity agricultural and sporting use as well as other appropriate site management. We also encourage people to visit the NNR and provide interpretation and events to enhance understanding of the fragile species and habitats present; as well as fostering research projects and undertaking studies of the natural and cultural heritage of the site.

There is a draft NNR management plan for the site covering the period 2008 – 2014.

Flanders Moss SSSI also forms part of the wider Flanders Mosses Special Area of Conservation (SAC), along with four smaller adjacent bogs in the Carse of Stirling. Management to maintain and enhance the SSSI is also appropriate for the conservation of these features of European importance.

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

We wish to work with the owners 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 agreements.

The EU Habitats and Birds Directives oblige Government to avoid, in SACs, 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 open raised bog habitat by controlling the rate of spread of birch scrub in order to maintain an equilibrium of scrub cover, and by encouraging appropriate grazing levels by both stock and deer.**

The spread of trees and scrub across the site can pose a damage risk to the bog. As well as clearing trees and scrub by felling, grazing is a sustainable and long term way of controlling their spread.

### **2. To maintain/ increase populations of the key moth and spider species by maintaining suitable habitat on site to meet their specific requirements.**

The habitat requirements of the spider are currently poorly understood and further research is required to clarify this. Further information will also be required to fully understand the requirements of the important moths present so that suitable habitat is maintained on the site for these species.

### **3. To maintain the water table close to the surface by blocking ditches, and to recreate and maintain a lagg fen system around the edge of the bog.**

Maintaining a high water table is essential for restoring the bog habitat, whilst an effective lagg fen system around the site helps to keep the bog wetter and the water table higher.

### **4. To keep the geomorphological exposures clearly visible and undisturbed by maintaining an open raised bog habitat.**

The peat deposits contain important deposits revealing the past history and past habitats of the site – disturbance of this could destroy this resource.

### **5. To use Flanders Moss to raise public awareness, understanding and enjoyment of the habitats and species of raised bogs, and to encourage research, survey and monitoring at the site.**

The NNR management focuses on encouraging management of the site for people and for research.

Date last reviewed: 5 June 2009