



Scottish Natural Heritage

GORDON MOSS
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 740

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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

Gordon Moss Site of Special Scientific Interest (SSSI), which lies less than 1km west of the village of Gordon, is a remnant of a much larger, partly spring-fed alluvial floodplain mire and includes one of the largest remaining wet birch-willow woodlands in the area (a rare and declining habitat in the Borders). In addition to the mire, the site hosts a range of habitats which are dependent on the variable geology, water chemistry and hydrology. These include wet and dry mineral grasslands and riparian meadows.

The site has a good recorded history with documentation dating back to the middle of the 19th century. Since 1938, 230 higher plant species have been recorded on the site, including several Scottish rarities such as the coral-root orchid, lesser butterfly orchid, dark-leaved willow, lesser tussock sedge, melancholy thistle, moonwort, fen stitchwort and shining pondweed.

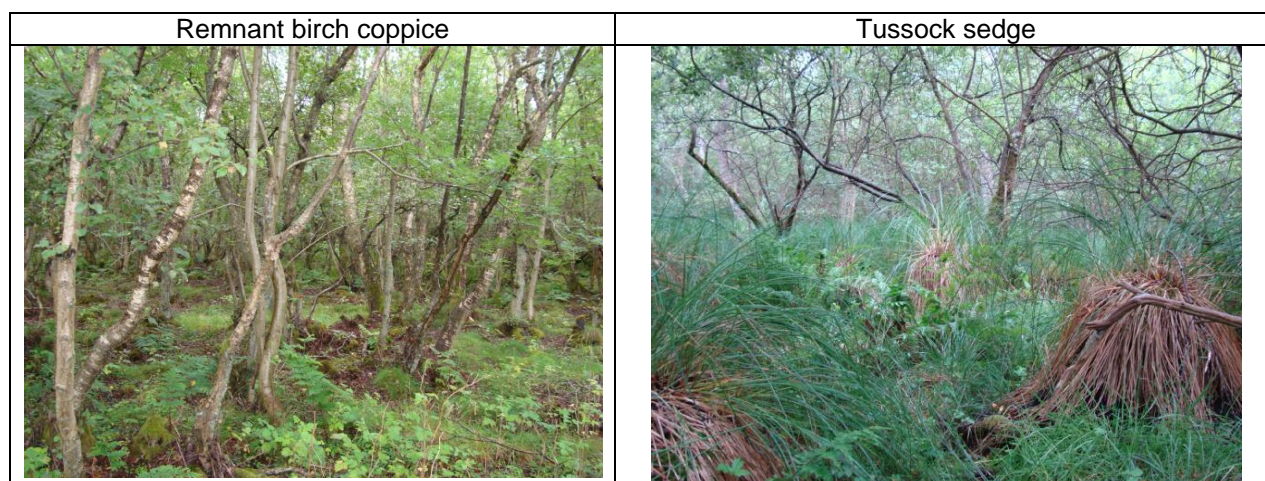
Although not a notified feature of the site, the populations of rare lepidoptera (butterflies and moths) are of national significance. There have been 231 moth species recorded so far and 13 butterfly species. Notable moths include the butterbur, the brindled ochre, the dark tussock and the small chocolate tip. Butterflies include the small pearl-bordered fritillary which occurs only in a handful of locations in the Borders. Several rare or notable micro-lepidoptera have also been recorded on the site.

The flood-plain fen feature was assessed as being in unfavourable, declining condition during the most recent site condition monitoring (SCM) visit in 2008. This decline is attributed to changes in key communities, most notably due to the amount of invasive species within the sward and a general drying out of the site. It is likely that this change is due to the historical diversion of the Hareford Burn, an activity which reduced the level of water entering the site. As a spring-fed mire this has led to the drying out observed during monitoring visits and, as it is unlikely that the burn will be redirected through the site, this change is unlikely to be reversible.

Although not a notified feature of the site, moths were included in the 2004 SCM survey and were also assessed as unfavourable and declining. The woodland on the site is a key habitat for moth species, in particular the bracket fungus associated with birch. The strong association with this fungus during caterpillar stage and a recent decline in its extent on the site has led to a failure to relocate the moths.

Changes in the flood-plain fen and the significance of the woodland at Gordon Moss have led to a revision of the notified feature. To take account of both fen and woodland features, the natural features have been revised to wet woodland and will be monitored appropriately in the next SCM cycle. The site continues to host remnant flood-plain fen habitat which forms an important element of the habitat mosaic at this site. While no longer a notified feature, further research and positive management of the fen habitat should be undertaken to prevent further decline.

Natural features of Gordon Moss SSSI	Condition of feature (date monitored)
Flood-plain fen	Unfavourable, declining (September 2008)
Moths	Unfavourable, declining (June 2004)
Wet woodland	No previous assessment



Past and present management

Gordon Moss has been greatly modified by human activity. Formerly part of a much larger flood-plain peatland, extending from Hume Orchard in the east to almost Earlston in the west, from the 12th Century onwards it was dug for peat. At this time, the Moss was one of the areas providing peat for Kelso Abbey, as well as presumably for local use. Livestock also freely grazed the site. In 1827 the Moss was divided into three sections: one for the laird, one for the minister and one to be retained in communal ownership by the residents of Gordon town. The area under communal ownership was divided amongst 28 people each of whom had a “feu” included in their title deeds, bestowing a legal right to carry out specific activities on the land, but not ownership of it. These “feus” were handed down with ownership of the houses and ensured that the right to use the Moss was retained by town residents and not solely by landed gentry. The “feus” still exist but it is uncertain how many remain as several houses have been demolished or joined together since the “feus” were first established.

In 1860 a railway (now disused) was built through the centre of the Moss in order to provide coal and other commodities to people in Gordon town. Due to the rising availability of coal,

peat-cutting on the Moss declined. Some areas were drained for agriculture in the late 19th Century but this drainage was unsuccessful and the ditches fell into disrepair. However, this drainage (although too little for agricultural purposes) did have some effect on the Moss's hydrology and birch scrub gained a foot-hold on the site. The amount of birch and willow scrub has been increasing ever since, contributing (along with the diversion of the Hareford Burn) to the drying out of the Moss.

There was formerly some cutting of young birch coppice to provide the brush ends for "besom" brooms, and later, around the time of the second World War and after, birch was cut to make hurdle-fences for Kelso race-course.

The area of the "car-park" to the north of the site was a municipal "tip" (dump) for Berwickshire County Council in the 1950's and 1960's, and although now disused, the covering of some of the upwelling springs there may lead to seepage from the tipped material.

In 1966 the Scottish Wildlife Trust (SWT) established a Wildlife Reserve on the Moss by combining the area under their ownership (Laird's Bog) and the area owned by the "feuars" (Feuar's Bog). Since 1991, SWT have managed the land in their ownership only, as the 25-year agreement with the Gordon Feuars expired. Management is carried out by SWT in accordance with the Reserve Management Plan, and has nature conservation as a top priority, with scrub clearance one of SWT's predominant activities, especially on the central areas of the raised mire and the disused railway line. A grid network of white marker poles was established in the 1970's to allow easier orientation around the Moss, and therefore aid vegetation surveying. Small pools were also dug out in 1981 to encourage pondlife and the clearance of tracks has been undertaken to keep them open, both for monitoring purposes and for public access.

The main problems occurring presently on-site include occasional fly-tipping in the vicinity of the Moss's car-park, lack of easy access due to dense areas of scrub and drying of the Moss, as indicated by vegetation changes.

The site is currently ungrazed by domestic stock and is separated from surrounding farmland by large drains and burns on all but the northern side. These drains and outflowing burns may also be contributing to the drying of the Moss.

Past drainage has probably been the primary cause of birch scrub establishing over the Moss. The absence of domestic stock grazing may also have allowed birch woodland to spread unchecked. Removal of scrub from the railway track and from open glades is considered a priority since these areas are important for basking adders and butterflies. Removal of scrub from footpaths is also an urgent management requirement as much of the site is currently inaccessible to the visiting public.

A major drainage scheme carried out by adjacent agricultural proprietors in 1984 cut a deepened channel along the line of the Hareford Burn with subsequent deepening of the mouths of the Tower Burn to the east of the moss and the boundary burn to the west of the site. While this may have had little immediate effect upon ground water seepage, it would undoubtedly have allowed greater and more rapid run-off from the side burns, and may have had a profound effect upon the water table of the Moss.

In 1997, a network of water table loggers (WaLRaGs), and a datalogger were installed by SNH across the site to monitor changes in water levels. SNH and SWT took regular readings from the equipment. There is an incomplete run of data readings for various reasons, including not being able to access farmland during the Foot & Mouth episode of 2001 and failure of the equipment in 2003. However there is a reasonably complete run of data from the water table loggers, which were read monthly by SWT staff and volunteers, and SNH staff, until 2007. This data could be

analysed, but its value may not be great in terms of informing site management, particularly since changes in the vegetation communities present across the site have already been noticed which indicate changes in water levels over time.

There is evidence of deer browsing and bark stripping within the site. At current levels, this does not appear to be having an adverse effect on the woodland as sufficient levels of regeneration were found. If deer activity on the site was to increase, management measures may have to be introduced. However, as the most significant area of woodland of its type in the area, it is likely that the site will continue to attract deer. Careful consideration will therefore be required as introduction of deer management will be a long-term measure.

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.

1. To maintain the wet birch-willow woodland, but to ensure that scrub is maintained at appropriate levels.

The birch-willow woodland is an integral part of the wet woodland feature. However, the woodland and fen habitats must be managed in balance to ensure that representative areas of both are present on site. This objective can be achieved by maintaining the extent of open fen areas and woodland present while allowing for the creation of open areas within the wet woodland to benefit ground flora. Maintenance of fen features will require management of colonisation by birch and willow and a regular cutting regime to address influx of agricultural weeds.

2. To maintain and enhance habitat mosaic at current levels including areas of rich and poor fens, acid bog, heathland and wet mineral grasslands.

This objective can also be achieved by maintaining the extent of open habitat and woodland present on site, and through the creation of open areas within the wet woodland.

3. To maintain and protect the populations of rare plants and Lepidoptera (butterflies and moths) which occur on the site.

This objective can be achieved in tandem with management of the woodland feature as both vascular plants and Lepidoptera on the site are dependent on woodland conditions.

Other factors affecting the natural features of the site

There is evidence of nutrient enrichment on the margins of the site, as shown by the presence of agricultural weeds and the development, in places, of habitats dominated by rank grasses. It is currently unclear how this enrichment has occurred and it is therefore difficult to prescribe management measures to address/mitigate against such nutrient input(s). The site is bounded on two sides by canalised burns (the Hareford and Tower Burns) which are considered likely to restrict run-off into the site from adjacent agricultural land. Further investigation, including a comprehensive hydrological survey of the site, is required.

Date last reviewed: 15 February 2011