Scottish Natural Heritage

NORTH ROTHIEMURCHUS PINEWOOD
Site of Special Scientific Interest

SITE MANAGEMENT STATEMENT

Site code: 1241

EAST HIGHLAND AREA
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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

The North Rothiemurchus Pinewood SSSI lies between Aviemore and Glenmore in Strathspey. It is a component of the wider Cairngorms SAC and SPA and is crossed by the River Luineag - part of the River Spey SAC.

Part of the SSSI lies within a much larger area of geomorphological interest which includes the Cairngorm massif - one of the most outstanding areas of glacial and periglacial landforms, tors and erosion surfaces in Britain. Several geomorphological features can be found within North Rothiemurchus Pinewood SSSI, including glacial meltwater landforms such as eskers, kame and kettle topography and kame terraces.

The site has been notified for its extensive native pinewood, the second largest area in Britain, which comprises a variety of different habitats; drier slopes and knolls supporting woodland and moorland communities such as dry heath, while mires and clear water lochans, blanket bog and bog woodland, cover the extensive areas of wet ground in between.

The SSSI provides nesting and feeding areas for many bird species and has been notified specifically for its breeding populations of capercaillie, Scottish crossbill, crested tit and osprey.

It is also notified for its rich and diverse assemblages of fungi, including the 'tooth' fungi (*Bankera, Phellodon, Hydnellum* and *Sarcodon* genera), lichens such as *Bryoria furcellata,* and invertebrates, such as Leptura sanguinolenta, one of the long horn

beetles. These are all species typically associated with native pinewoods.

The principal habitats for fungi in North Rothiemurchus SSSI are the native pinewood and birchwood. Within these woods, long-term continuity of habitat, a mixture of tree ages and deadwood are important habitat components for fungi and should be maintained. Sixteen provisional red data list species of fungus, have been recorded in North Rothiemurchus Pinewood SSSI, most of which live as symbiotic partners (mycorrhizas) with the native pine trees. The Lairig Ghru footpath near Coylumbridge is renowned for its concentration of native pinewood macro-fungi or 'tooth' fungi. These include species in the genera *Bankera*, *Phellodon*, *Hydnellum* and *Sarcodon*, as well as other mycorrhizal genera - especially webcaps *Cortinarius* spp., brittlegills *Russula* spp. and knights *Tricholoma* spp. Tooth fungi tend to produce fruitbodies in areas where mineral soil is exposed such as along track sides and riverbanks. Within the birch woods of the site, the provisional red data list mycorrhizal species violet webcap *Cortinarius violaceus* is found.

Sixty-two lichen taxa were recorded during a recent Site Condition Monitoring survey in 2004, a list that includes three nationally rare and six nationally scarce UK species. This was not a comprehensive survey, and many more species are likely to occur. The principal lichen habitat feature of the site is native pinewood. Here, the range of lichen species is dependent on the both living and dead wood. The deadwood habitat is particularly important, and should include standing and fallen wood, some of which has retained bark (corticate) and some that has lost bark (decorticate). The importance of the native pinewood habitat is supported by the presence of 12 NPIEC (native pinewood indicators of ecological continuity) species. These include the pin-head lichens, *Chaenotheca brunneola* and *C. chrysocephala* as well as *Bryoria capillaris*, *Bryoria furcellata*, *Chrysothrix chrysophthalma*, *Imshaugia aleurites*, *Protoparmelia ochrococca*, *Cladonia cenotea*, *Hypocenomyce friesii*, *Lecidea botryosa*, *Protoparmelia ochrococca* and *Xylographa trunciseda*.

The invertebrate fauna of Rothiemurchus is distinctive and specialised and contains many species characteristic of ancient pinewoods. Rare species include the Elgin shoot moth *Rhyacionia logaea*, the bee beetle *Trichius fasciatus* and the timberman *Acanthocinus aedilis*.

Many vascular plants of national and local importance have been found in North Rothiemurchus including Scottish asphodel *Tofieldia pusilla,* creeping lady's tresses *Goodyera repens* and twinflower *Linnaea borealis*.

North Rothiemurchus Pinewood SSSI is part of the much wider Cairngorms Special Area of Conservation (SAC) and the site includes a number of SAC habitat features and one species. Bog woodland, quaking mire, Caledonian forest, dry heath, juniper on heaths or calcareous grassland and wet heathland with cross leaved heath are all present. Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels are found on site and these, together with the rivers running through the site, are used by otters.

The River Luineag runs through the SSSI and is a tributary of the River Spey Special Area of Conservation (SAC) designated for its salmon, sea lamprey, otter and freshwater pearl mussel populations. The Luineag is an important river for salmon,

providing both spawning habitat and a vital link to Loch Morlich and other tributary spawning areas.

The SSSI is also a part of the Cairngorms Special Protection Area (SPA) and Scottish crossbill, capercaillie and osprey all breed, while peregrine falcon and merlin may often use the site or include it within their home ranges.

Condition of SSSI features

The geomorphological landform, crested tit and osprey populations and various assemblages (fungi, lichens, invertebrates and breeding birds – including the specific features of crested tit, osprey) have been monitored between 2002 - 2008 and all found to be in favourable condition. Populations of Scottish crossbill and the vascular plant assemblage have not yet been monitored. Capercaillie is monitored each year, but results are variable and no conclusion has yet been drawn on long term stability at this site.

However, the condition of the native pinewood was found to be unfavourable – recovering when monitored during 2008. This was due to the presence of non-native species (Norway spruce and larch) within the samples, but management has now been scheduled to undertake the removal of them from the site and this will ensure that in time, the feature recovers.

Condition of Natura features

Many of the habitat and species features of the SAC have been monitored since 2002, but not all features of the wider Natura sites are present on North Rothiemurchus Pinewood SSSI. Of those present within the SSSI, bog woodland, clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels, juniper on heaths or calcareous grassland, quaking mire, otter and sea lamprey were all found to be in favourable condition when monitored.

Caledonian pinewood was considered to be in unfavourable, but recovering condition within North Rothiemurchus Pinewood in 2008, as described above. It should be noted that the Caledonian pinewood feature in the wider Cairngorms SAC (outwith North Rothiemurchus SSSI), was recorded as being in unfavourable condition for different reasons and the overall site condition differs as shown in the table below.

Other Natura features - wet heathland with cross leaved heath and dry heath.- both of which are present on North Rothiemurchus, were also found to be in unfavourable condition when monitored in May 2007 The reasons for these failures include trampling, browsing and burning in sensitive areas.

Peregrine and Osprey, which are bird features of the SPA were considered favourable when monitored in June 2003. However, there are no condition assessments for capercaillie, merlin and Scottish crossbill.

The SSSI overlaps part of the River Spey SAC. In 2004, Atlantic salmon were found to be in unfavourable but recovering condition across the whole of the designated river system, due to the fact there were less than the Scottish average of juvenile salmon present and the autumn component of the adult population had declined since the site was first designated.

Caledonian forest

Bee beetle (Trichius fasciatus)

Natural features of North Rothiemurchus Pinewood SSSI	**Condition of feature** (and date monitored)	**Other relevant designations**
Quaternary of Scotland	Favourable – maintained (June 2003)	
Breeding bird assemblage	Favourable – maintained (May 2002)	SPA
Capercaillie	No monitoring results available	SPA
Crested tit	Favourable – maintained (March 2005)	
Osprey	Favourable – maintained (June 2003)	SPA
Scottish crossbill	Not yet monitored	SPA
Fungi assemblage	Favourable – maintained (October 2008)	
Lichen assemblage	Favourable – maintained (September 2004)	
Invertebrate assemblage	Favourable – maintained (November 2002)	
Vascular plant assemblage	Not yet monitored	
Native pinewood	Unfavourable – recovering (May 2008)	SAC

Features of overlapping Natura sites that are not notified as SSSI natural features (*asterisk denotes present on SSSI)	**Feature condition (date monitored)**	**SPA or SAC**
Acid peat-stained lakes and ponds	Favourable – maintained (July 2004)	SAC

Acidic scree	Favourable – maintained (May 2007)	SAC
Alpine and sub alpine heaths	Unfavourable – no change (May 2007)	SAC
Blanket bog	Unfavourable – no change (May 2007)	SAC
Bog woodland*	Favourable – maintained (September 2002)	SAC
Caledonian forest*	Unfavourable – no change (November 2002)	SAC
Clear-water lakes or lochs with aquatic vegetation and poor to moderate nutrient levels*	Favourable – maintained (July 2004)	SAC
Dry grasslands and scrublands on chalk or limestone	Unfavourable - no change (May 2007)	SAC
Dry heaths*	Unfavourable - no change (May 2007)	SAC
Hard-water springs depositing lime	Favourable - maintained (May 2007)	SAC
High-altitude plant communities associated with areas of water seepage	Unfavourable – no change (May 2007)	SAC
Juniper on heaths or calcareous grassland*	Favourable - maintained (May 2007)	SAC
Montane acid grasslands	Unfavourable - recovering (May 2007)	SAC
Mountain willow scrub	Unfavourable - no change (May 2007)	SAC
Plants in crevices on base-rich rocks	Unfavourable - no change (May 2007)	SAC
Plants in crevices on acid rocks	Favourable – maintained (May 2007)	SAC
Species-rich grassland with mat-grass in upland areas	Unfavourable - no change (May 2007)	SAC
Tall herb communities	Favourable - maintained (May 2007)	SAC
Very wet mires often identified by an unstable 'quaking' surface*	Favourable - maintained (May 2007)	SAC
Wet heathland with cross-leaved heath*	Unfavourable - no change (May 2007)	SAC
Atlantic salmon*	Unfavourable - recovering (October 2004).	SAC
Freshwater pearl mussel	Unfavourable - recovering (October 2000)	SAC
Green shield-moss	Favourable - maintained (January 2003)	SAC

Otter*	Favourable – maintained (September 2004)	SAC
Sea lamprey*	Favourable – maintained (September 2002)	SAC
Dotterel	Favourable - maintained (August 1999)	SPA
Golden eagle	Favourable – maintained (August 2003)	SPA
Merlin*	No monitoring results available	SPA
Peregrine*	Favourable – maintained (June 2002)	SPA

Past and present management

The Caledonian Forest pinewoods of Rothiemurchus have in the past, provided a considerable timber resource which has been harvested heavily during the 18th and 19th Centuries and less intensively until virtual cessation in the late 1940's. The site has also experienced a number of quite major fire events in the last 150 years which has had an influence on age structure and regeneration.

The area has also long been used for small scale settlement and stock grazing, woodland plantings, sporting and recreation. The site is of considerable historical interest.

Management for this site is now agreed within the Rothiemurchus Forest Plan, which promotes natural regeneration of the forest and management for biodiversity and recreation. To achieve this, areas of active management through thinning and felling and broad deer control have been agreed.

Informal recreation is a very important aspect of land use on this site. There are approximately, 300,000 'visits' by members of the public to Rothiemurchus each year and the estate is amongst the most visited natural attractions in Scotland. The road, track and paths network through the SSSI provides a range of low level driving, walking and cycling opportunities and also provides access to the Cairngorm hills.

Rothiemurchus Estate continues to be run as a deer forest and sporting estate. Various corporate activities are hosted on the site and surrounding area including 4x4 driving, adventure and team-building activities. Wildlife tourism and husky-racing also take place within the site. Stock grazing continues in several parts of the 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 monitor the effectiveness of the management.

Grazing by red (and roe) deer is currently the most influential factor in the management

of the native pinewoods. Management of the deer population within the site and in the surrounding areas, is a key issue influencing habitat condition. Existing grazing levels are allowing tree regeneration to occur in some areas. In recent years the use of deer fences has been identified as causing losses to woodland grouse populations and considerable effort has therefore gone into marking or removing deer fences.

The overall impact of visitors and incremental development of infrastructure for estate management and recreation are likely to influence the site's management and condition. Considerable management effort will be required to ensure that conservation, recreation and estate objectives are satisfied.

The significant number of visitors to the site provides considerable scope for interpretation, education and wildlife tourism but there is also considerable potential for damage and disturbance to several 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 maintain the geomorphological features in favourable condition through maintenance of important relict landforms and allowing natural processes to continue to operate.

2. To maintain the extent and continuity of pinewood habitat and promote the continued restoration and regeneration of Caledonian woodland by appropriate management, particularly the continued control of deer.

3. To maintain a long-term structural diversity of woodland habitats (with open areas and a significant deadwood component) which can support associated assemblages of birds, invertebrates and plant species and significant populations of capercaillie, Scottish crossbill, crested tit, and osprey.

4. To increase the populations of those qualifying or typical species which have been reduced (eg capercaillie, twinflower) through targeted management.

5. To avoid significant disturbance to the qualifying species through, for example, appropriate management of events and recreation.

6. To avoid deterioration of the qualifying Natura habitats (or those supporting Natura species) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features

Other factors affecting the natural features of the site

The continuing vulnerable state of the Scottish capercaillie population is a major factor affecting future management of this site. Further positive management for this species is likely but viable populations require larger areas of suitable habitat than exist on this site. Management of areas outside the SSSI will therefore also influence this species status on this site.

North Rothiemurchus is one of the most important areas for informal recreation in the Cairngorms National Park, attracting large numbers of visitors at all seasons who mainly keep to the network of paths and tracks. There is the potential for this use to damage or disturb the features of interest, many of which are sensitive (e.g. Capercaillie) but risks are managed. Future changes in the recreational use of the site and visitor management will be important factors.

Date last reviewed: 30 March 2009