

Blanket Bog

Our objective for this habitat is:

To conserve, restore and enhance all Blanket bog in the Harrogate district.



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Introduction

Blanket bog is a globally restricted habitat formed in a cool, wet climate, being rain fed, underlain by peat ranging in depth from 0.5m to 5m. Active Blanket bog is an important provider of ecosystems services; providing sequestration and storage of carbon and contributing to regulation of water flow from upland watersheds. Blanket bog covers most of the district's fell tops, which reach almost 700m and the higher rolling moorland (generally that which is above 400m) of the western fringes of the district. Blanket bog is distinguished from wet heath, with which it intergrades, by virtue of its being underlain by a deeper layer of peat (>0.3m) and the presence of abundant sphagnum mosses with cotton grasses and dwarf shrubs.

Active Blanket bogs build peat as plant decomposition is prevented by the wet, acidic conditions, allowing dead plant matter to build up and form a nutrient deficient soil. A pattern of hummocks and hollows is often formed on non-degraded peat bogs to create bog pools.

The most widespread Blanket bog vegetation type in the Harrogate district is dominated by Hare's tail cotton grass.

The best areas of non-degraded Blanket bog have specialised plants, including Sundews, Butterwort, Bog asphodel, Cranberry and, for one site in the district, Bog rosemary.

Blanket bog supports a rich diversity of invertebrates and, with upland heath, is internationally important for breeding birds.

Blanket bog is mainly managed for red grouse shooting and for sheep grazing. Where grazing pressure is too high, bogs become dominated by Hare's tail cotton grass and bilberry with a loss of Sphagnum mosses.

Moorland management for grouse shooting maintains a mosaic of stands of heather at different ages through burning. However, too frequent burning on Blanket bogs often results in the loss of Sphagnum moss, causing peat erosion and preventing regeneration.

Non-active Blanket bog does not currently support peat formation and is often dominated by heather, giving the appearance of dry heath. Peat loss may occur over time through wind and water erosion. Peat hags may occur where peat has been dried out through inappropriate management.

National status

Blanket bog is one of the most extensive semi-natural habitats in the UK, mostly found in the north and west ranging from Devon to Shetland. The UK BAP estimates a national resource of 1.5 million ha, mostly in Scotland. Active Blanket bog is an EU and UK priority habitat. The UK BAP includes both active and degraded Blanket bogs.

Regional status

The regional resource is around 53,000 ha and is an important habitat in Yorkshire and The Humber.

Local status

The Harrogate district resource is about 6,000 ha (12 per cent of the regional resource), covering almost five per cent of the Harrogate district (in the Phase 1 Habitat survey, this is the second largest area of semi-natural vegetation after upland heath). However, English Nature's (EN) Upland Survey (1994) indicated that pristine Blanket bog is very local and that Sphagnum beds are patchy.

This survey identified three main upland areas in the Harrogate district:

- 1 **east of Nidderdale - including Dallowgill Moor and Colsterdale.**
- 2 **west of Nidderdale to Great Whernside.**
- 3 **Blubberhouses and Barden Moor and on either side of the Washburn Valley.**

All three areas hold significant amounts of Blanket bog, but the area west of Nidderdale is especially important.

Local priority species:

- Merlin
- Golden plover
- Red grouse
- Adder
- Bog rosemary
- Bog asphodel
- Cloudberry

Status of priority species

Cloudberry - although more common on the wetter western side of the Pennines, it is locally abundant on much of the highest peaty ground on the western and northern boundaries of the district. It may be threatened in the district by the likely impacts of climate change.

Bog rosemary - reported from a site near Wherside in the 1970s. May be at threat of local extinction due to climate change.

Golden plover - breeds on open moorland above 230m (see also upland heath HAP).

Merlin - has probably benefited nationally from a reduction in persecution in recent years. Between 15 and 21 pairs probably breed in the district.

Adder - widespread but thinly distributed on Blanket bog, moorland, and in higher woodlands.

Requirements

Blanket bog would benefit from the following:

- No, or only light, grazing by sheep.
- Intact hydrology and Sphagnum moss.
- No burning or other factors causing erosion.
- Control of rate of climate change.

Threats

- Inappropriate drainage causing bogs to dry up and thereby increase the proportion of heather or rough grassland at the expense of more diverse wetland communities.
- Too frequent, extensive or unlicensed burning, which destroys the peat and associated vegetation communities.
- Disturbance to ground nesting birds from uncontrolled dogs.
- Overgrazing, particularly by sheep.
- New engineered tracks and erosion through unmanaged vehicular access from four wheel drives and trail bikes.
- Climate change which may make uncontrolled burning more likely (a positive feedback loop as this releases the carbon stored within peat) and which may undermine the cooler, wetter conditions required by certain species towards the southern and eastern extents of their ranges in the district.

- Airborne sulphur pollution causing acid rain that can kill Sphagnum mosses has alleviated with the decline of heavy industry and coal fired power stations. However, more insidiously, airborne nitrification e.g. from distant traffic pollution may also affect the fragile Blanket bog habitat.

Current local action

- Much of the best habitat is protected by international designations (SAC and SPA) and national designations (SSSIs), where Natural England seeks favourable condition status for wildlife.
- Yorkshire Peat Partnership undertakes restoration of peatland following detailed surveys of moorland gripping, using funding from Environmental Stewardship and initiatives such as Defra's Catchment Sensitive Farming. In Upper Nidderdale, restoration has been completed on Stean Moor and is in progress, in conjunction with Yorkshire Water on Little Wherside and Low and High Riggs Moors. (www.yppartnership.org.uk)

Opportunities

- Apply the management prescriptions from the Natural England's Higher Level Environmental Stewardship Scheme (HLS) to maintain and restore Blanket bog.
- Continue close working and partnership between all parties with an interest in upland land management e.g. Nidderdale AONB's involvement in the Yorkshire Peat Partnership.

LINKS WITH OTHER HDBAP PLANS:

Upland Heath HAP
Moorland Edge HAP
UK Blanket Bog HAP



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UK HAP definition for Blanket Mire <http://jncc.defra.gov.uk/page-5706>