

Upland heathland and blanket bog

WHAT ARE UPLAND HEATHLAND AND BLANKET BOG ?

Upland heathland and blanket bog is the land above 250m commonly referred to as moorland, where the high levels of rainfall (100 cm or more) and nutrient poor, acid soils leads to the development of acid tolerant plant communities. Although upland heathland and blanket bog frequently grade into each other they can be separated by the dominant species present.

Upland heathlands develop on shallow peat or peaty soils. The dominant plant species is heather with bilberry and crowberry. Other species present may include cross-leaved heath and bell heather. Blanket bog occurs on deeper peat and is characterised by the presence of *Sphagnum* mosses and cotton grass as well as the other species found on upland heath. Some blanket bogs are described as active when the layers of peat are still growing. The age of a bog can be assessed by inspection of the development of the layers of peat with most blanket bogs within the UK being between 2000 and 7000 years old. Generally, blanket bog is much wetter than upland heathland.

Most moorlands contain a mosaic of habitats including dry heathland, wet heathland, blanket bog, flushes and acid grassland.

Red grouse are almost entirely dependent on moorland, being one of the few species which can readily digest heather. Curlew, golden plover, dunlin, hen harrier and merlin all use moorlands as breeding sites. Black grouse make use of moorlands at various times of the year for food.

WHERE ARE THEY FOUND IN THE UK?

Upland heathland and blanket bog are found on all the major upland blocks within the UK, from Dartmoor to Shetland, giving a total of 5 million hectares. Of which over half of this is found in Scotland.

WHY ARE UPLAND HEATHLAND AND BLANKET BOG OF CONSERVATION IMPORTANCE?

Both the quality and quantity of upland heathland and blanket bog are decreasing. Black grouse is a species of national concern having undergone decreases in population throughout its range. This range has also contracted such that the North Pennines now represents the southern limit of the species in England.

The suite of upland breeding birds, which occupy upland heathland and blanket bog, are of national and international importance.

Between 80 and 90% of the UK population of yellow marsh saxifrage occurs in the Moorhouse and Upper Teesdale cSAC. Yellow marsh saxifrage is a species of European concern listed on the EU Habitats Directive.

UPLAND HEATHLAND AND BLANKET BOG IN THE DURHAM AREA

WHAT IS THE STATE OF UPLAND HEATHLAND AND BLANKET BOG IN THE DURHAM AREA?

The upland heathlands and blanket bogs of the Durham area are recognised as being both nationally and internationally important, in particular the North Pennine Moors pSPA and Moor House and Upper Teesdale cSAC.

WHERE DO THEY OCCUR IN THE DURHAM AREA ?

Upland heathland and blanket bog occurs in the North Pennines, mainly within the boundaries of the North Pennines Area of Outstanding Natural Beauty.

UPLAND HEATHLAND AND BLANKET BOG ARE AT RISK FROM:

Over-grazing - removing dwarf shrub heath leaving acid grassland.

Under-grazing - allowing domination by trees.

Winter foddering of stock - which can lead to excessive trampling and nutrient enrichment resulting in removal of dwarf shrub heath.

Badly managed heather burning - can encourage domination by bracken or purple moor-grass and often leads to a lack of heather that is in the late mature/degenerative stage, and so to an imbalance of age classes within heathland. Burning damages bogs regardless of whether or not it is well managed.

Drainage - the use of grips which allows the moorland to dry out and peat erosion to take place.

Recreation pressure - peat is a soft substrate, which is unable to tolerate excessive use, and begins to erode.

Isolation of habitat - loss of connecting moorland habitats.

Loss of habitat - through planting of conifers or agricultural intensification.

Loss of variety of habitat – intensive management for heather, and thus grouse, production leading to a decrease in the mosaic quality of upland moorlands.

UPLAND HEATHLAND AND BLANKET BOG BENEFIT FROM:

Good shepherding techniques - using upland hardy sheep breeds, low densities of sheep and hefted ewes, and winter stock removal.

Twenty to twenty five year burning cycles – leading to the development of a full range of heather age classes from pioneer stage through building to mature and degenerate.

Blanket bog benefits from not being burnt.

Grip blocking – decreasing the removal of water and allowing the development of small pools where the associated insects provide a vital food supply for the chicks of breeding grouse and waders.

Recreation management - the use of structured and seasonal paths to decrease pressure on fragile substrates and protect disturbance sensitive breeding birds.

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IMPORTANT SPECIES FOR UPLAND HEATHLAND AND BLANKET BOG IN THE DURHAM AREA:

Hen harrier	*	Crowberry	
Merlin	*	Cottongrass	
Golden plover	*	Bilberry	
Curlew	*	Sphagnum mosses	
Dunlin		Yellow marsh	
Black grouse	**	Saxifrage	*
Red grouse		Adder	**
Twite		Round-mouthed	
Heather		whorl snail	**
Cross-leaved heath			

OTHER HABITAT ACTION PLANS COVERING ISSUES RELAVANT TO UPLAND HEATHLAND AND BLANKET BOG:

Lowland heathland.	*
Upland calcareous grassland.	**
Upland acid grassland.	**
Upland hay meadow.	**

N.B. ** indicates action plan produced in 1998.

* indicates action plan produced in 2000.

TARGETS FOR THE CONSERVATION OF UPLAND HEATHLAND AND BLANKET BOG IN THE DURHAM AREA:

Target 1	Maintain and enhance the biodiversity value of upland heathland and blanket bog.	DATE ONGOING
Target 2	Restore 100 ha of degraded upland heathland and blanket bog with preference for those areas adjacent to existing moorlands.	2005

UPLAND HEATHLAND AND BLANKET BOG ACTIONS

ACTION	DATE	POSSIBLE PARTNERS	MEETS TARGET NO.
POLICY AND LEGISLATION			
1. Seek designation of all high quality upland heathland and blanket bog as SSSIs.	2004	EN, RSPB, DWT	1
2. Continue designations of best examples of habitat as SPAs and SACs.	2009	EN, RSBP, DWT	1
3. Seek support through agri-environment scheme for effective restoration of all types of degraded moorland.	2004	MAFF, EN, RSPB, DWT	1, 2
4. Work at national policy level to reduce overgrazing in the uplands	2006	MAFF, EN, CA	1
SITE SAFEGUARD AND MANAGEMENT			
4. Promote good burning techniques following MAFF guide to good practice.	ONGOING	MAFF, MKA, EN	1
5. Promote grip blocking.	2004	MAFF, MKA, EN	1, 2
6. Find demonstration site for heather management and restoration techniques.	2004	DBAP, EN, RSPB, MKA	1, 2
RESEARCH AND MONITORING			
7. Collate previous research information to provide targeting for future monitoring work.	2004	DBAP, EN, RSPB, CA	1
8. Develop local monitoring programme for vegetation condition using EN's condition assessment protocols.	2004	EN, DBAP	1
9. Develop six year monitoring programme for moorland birds.	2004	RSPB, DBAP, DUBSG, BGP	1
ADVISORY			
10. Continue to provide management advice to landowners and manager.	ONGOING	EN, DWT, RSPB, FWAG, MAFF, CA, NPP	1
COMMUNICATION AND PUBLICITY			
11. Raise awareness of the biodiversity value of upland heathland and blanket bog.	ONGOING	DBAP, EN, RSPB, CA, NPP	1