Northern Ireland Priority Habitat Guide: Montane heath

What is Montane heath?

In Northern Ireland, Montane heath communities are restricted to dwarf-shrub heaths, moss heaths and montane grassland with a high sedge component. The presence and numbers of characteristic vascular plants, mosses, lichens and alpine fungi assemblage are important indicators of habitat quality. Montane heath in good condition is typically dominated by a range of dwarf shrubs such as Heather, Bell heather, Cross-leaved Heath, Bilberry and Cowberry. Average dwarf-shrub height is generally short, typically between 5 and 10cm, being wind-pruned by the montane climatic conditions.

Table 1: Linking Habitat types with Annex 1 features, ASSI features and NI Priority Species

Northern Ireland Priority Habitat type: Montane heath		
Habitat Directive Annex 1 habitats (SAC feature)	**ASSI features**	**NI priority species**
H4060 Alpine and boreal heaths H6150 Siliceous alpine and boreal grassland	Montane heath	Skylark

Definition

Montane heath in Northern Ireland is defined as being an upland habitat which:

- Occurs on the summits of the highest mountains generally above 600m.
- Consist of short (5-10 cm) dwarf-shrub heath, moss heaths and montane grassland with a high sedge component.
- Include characteristic plants such as Cowberry and Dwarf Willow, Stiff Sedge, and Alpine Clubmoss and Stag's-horn Clubmoss.

The habitat is generally well characterised but merges into upland heathland at lower altitudes.

Where are they found?

Within Northern Ireland, Montane heath is restricted in distribution. It is known to occur on the highest summits of the Mourne Mountains in County Down, Dart and Sawel Mountains in the Sperrin Mountains and the summit of Cuilcagh Mountain in County Fermanagh. There is a possibility that small fragments of Montane heath may occur very locally on additional summits in other uplands.

DAERA hold priority habitat and species data on the NIEA Natural Environment Map Viewer. See https://appsd.daera-ni.gov.uk/nedmapviewer/ (and link to video tutorial on how to use). Note that the Map Viewer indicates areas which hold NIEA records of habitat / species data, but does not infer the complete coverage of these environmental assets in Northern Ireland.

Why are they important to wildlife?

Montane heath supports a very rare community of upland plants and can be associated with priority species such as Skylark.

The variety and abundance of flowering plants within semi-natural habitats provide good sources of pollen and nectar for many of our pollinating insects such as bumblebees, hoverflies, butterflies and moths. For further information on habitat management for pollinators, refer to the All-Ireland Pollinator Plan resources: www.pollinators.ie.

Pressures & Threats

- Grazing – high stocking levels of sheep can have significant impact on Heather and other dwarf shrubs and affect the condition of Montane heathland.
- Invasive species – although fine-leaved grasses such as Wavy Hair-grass and Sheep's-fescue components of Montane heaths, these species can become dominant as a consequence of heavy grazing. This leads to a loss of the more notable characteristic species of montane communities and reduces biodiversity.
- Recreation- many popular walking routes traverse areas of upland heathland which can be very sensitive to such pressure. Heather is particularly sensitive to trampling.
- Erosion – although some loss of habitat may be due to natural processes, Montane heath on steep slopes, especially those in the Mourne Mountains, are being lost through the erosion of the shallow peat soils due to overgrazing and recreational activities.
- Nutrient enrichment – acidification and nitrogen enrichment caused by atmospheric deposition could potentially lead to vegetation changes.
- Climate change – the vegetation communities occurring in Montane heathlands are likely to be particularly impacted from the prediction of higher temperature, increased rainfall and changed weather patterns.

Favourable management of Montane heath

These important heathlands should be protected and maintained where they occur, and should be restored where their condition has declined. Some of our most important heathland sites are protected through National and International legislation. In the wider countryside, heathlands are protected from development and increased agricultural productivity through planning policies and legislation such as the Environmental Impact Assessment Regulations.

Montane heath is a climax habitat which can be maintained indefinitely without agricultural management. Unfavourable past management may require that a more favourable management regime should be established.

Montane heath is best managed by very light summer grazing. Undergrazing and/or overgrazing should be avoided. Risk of poaching should be minimised and any livestock removed off site in very wet conditions.

Encroaching scrub and tussock forming rushes should be controlled by cutting as these can spread at the expense of the priority habitat. Machinery should only be used where ground conditions permit.

Trees should not be planted on this grassland type and nor should it be used for supplementary feeding or storage areas.

How do we determine the "health" or condition of Montane heath?

The conservation status can be determined by the condition of the habitat. Favourable condition is defined by setting targets or target ranges for a series of different attributes. These are components or characteristics of the vegetation that are relatively easy to measure, but which are reliable indicators of the "health" of the habitat.

Habitat Keys and Rapid Condition Assessments have been developed for several broad habitat types (grassland, moorland, lowland raised bog, woodland and parkland, coastal and wetlands). Identification and rapid habitat assessment must be undertaken using the **Moorland Rapid Condition Assessment**.

NIEA has developed Rapid Condition Assessments for several broad habitat types (grassland, moorland, woodland, coastal and wetlands). These will be made available online in the future. In the interim copies can be requested by contacting NIEA by E-mail: NIEA.EFSHigher@daera-ni.gov.uk.

Appendix 1: Montane heath Indicator species

Positive Indicators:

Calluna vulgaris	Heather
Carex bigelowii	Stiff Sedge
Cladonia spp.	Bushy lichens
Diphasiastrum alpinum	Alpine Clubmoss
Empetrum nigrum	Crowberry
Erica cinerea	Bell Heather
Erica tetralix	Cross-leaved Heath
Huperzia selago	Fir Clubmoss
Lycopodium clavatum	Stag's-horn Clubmoss
Racomitrium lanuginosum	Woolly Hair-moss
Salix herbacea	Dwarf Willow
Vaccinium myrtillus	Bilberry
Vaccinium vitis-idaea	Cowberry

Negative Indicators:

Campylopus spp.	Swan-neck Moss
Deschampsia flexuosa	Wavy Hair-grass
Festuca ovina / vivipara	Sheep's-fescue / Viviparous Sheep's-fescue
Galium saxatile	Heath Bedstraw
Juncus squarrosus	Heath Rush
Potentilla erecta	Tormentil

Appendix 2: Montane heath National Vegetation Classification codes

Montane heath in Northern Ireland encompass a range of plant communities that broadly reflect a number of those communities described in the National Vegetation Classification (NVC) of Great Britain (Rodwell, 1991a) where descriptions and codes are given to associations of plants that are characteristic of particular environmental and management conditions.

In Northern Ireland, the three main NVC communities which make Montane heath are:

H10b - *Calluna vulgaris – Erica cinerea* heath, *Racomitrium lanuginosum* sub-community

H14 - *Calluna vulgaris– Racomitrium lanuginosum* heath

U10 - *Carex bigelowii* **-** *Racomitrium lanuginosum* moss heath