## SITE SYNOPSIS

## SITE NAME: AGHAVOGIL BOG NHA

## **SITE CODE: 002430**

Aghavogil Bog NHA is a large upland blanket bog site, located 5 km east of the village of Kinlough and 1 km north-west of Rossinver, Co. Leitrim. The site occurs on a broad mountain that forms the north-eastern edge of the Dartry Mountain range and encompasses elevations from 166 m to 408 m. Bedrock geology consists of sandstone.

Blanket bog habitat occurs mainly at middle to higher elevations on the mountain top, within flat, flushed basins and saddle areas between undulating ridges. Much of the blanket bog habitat is transitional to wet and dry heath due to changes in slope and peat depth. The vegetation contains many typical features of upland blanket bog, including hummock-hollow development, small pools, flushes and locally quaking areas. Blanket bog vegetation is typified by nearly equal amounts of Ling Heather (*Calluna vulgaris*) and Deergrass (*Scirpus cespitosus*) forming a tall canopy up to 0.5 m tall, with cottongrasses (*Eriophorum* spp.) and Cross-leaved Heath (*Erica tetralix*). The understorey is comprised of a deep, almost continuous cover of bog moss (*Sphagnum subnitens* and *S. capillifolium*) with *Racomitrium lanuginosum* forming hummocks of up to 0.5 m.

Wet to locally quaking, flushed areas occur throughout the site. These are colonized by Deergrass and cottongrasses with abundant Bog Asphodel (*Narthecium ossifragum*) and occasional quaking lawns of bog moss. In wet hollows and bare peat flats, cottongrasses and Bog Asphodel are also dominant. Small to medium-sized pools are occasionally present, particularly in saddle areas on the western side of the site. Marginal pool vegetation is characterized by bog moss (*Sphagnum cuspidatum, S. recurvum*), Bogbean (*Menyanthes trifoliata*) and rushes (*Juncus bulbosus, J. effusus*). Sinkholes are also a notable feature of the higher elevations and flushes developed on flatter areas often drain into them.

There is evidence of light to moderate sheep grazing throughout the site. Peat erosion features, such as hagging, bare peat and erosion to bedrock, are common in exposed summit areas. On rocky knolls, on drier exposed ridges and on lower slopes where peat depths are shallower, blanket bog grades into dry heath. The notable species, Lesser Twayblade (*Listera cordata*) has been recorded from one of these transitional areas.

The site is underlain by a sequence of Carboniferous sediments and, as elevation increases, the bedrock changes from iron-rich shales and sandstones to calcareous muds and limestone. This variation gives rise to a diverse range of both acidic and calcicole vegetation types within the site. At middle elevations, steep to vertical limestone cliffs and scree support several notable arctic-alpine and calcicole plant species. At higher elevations there are areas of upland grassland on peaty and mineral

soils, supporting small examples of species-rich Mat-grass (*Nardus stricta*) grassland. At lower elevations some peat cutting has occurred in the distant past which has given rise to well regenerated cutover bog. Iron-rich flushes occur within areas of cutover bog and within wet grassland habitat. These flushes are characterized by a diverse range of mosses (e.g. *Drepanocladus revolvens*) and sedges (*Carex panicea, C. flacca*), with Common Butterwort (*Pinguicula vulgaris*), Bog Pondweed (*Potamogeton polygonifolius*), Grass-of-parnassus (*Parnassia palustris*) and Lesser Spearwort (*Ranunculus flammula*).

The site also includes a number of streams and tributaries that flow into Lough Melvin, less than1 km north. Lough Melvin is an important Atlantic Salmon and Brown Trout nursery. Aghavogil Stream, which occurs on the north-west side of Aghavogil Mountain, is of ecological importance for its woodland flora and habitat diversity. Running through a steep, narrow gorge, this stream cuts through the edge of limestone bedrock creating a series of waterfalls, dripping rock faces and wet clay banks. Hazel (*Corylus avellana*) forms much of the canopy in the ravine, but is mixed with Hawthorn (*Crataegus monogyna*), Birches (*Betula pubescens, B. pendula*), Goat Willow (*Salix caprea*), Holly (*Ilex aquifolium*), Ash (*Fraxinus excelsior*), Rowan (*Sorbus aucuparia*), Alder (*Alnus glutinosa*) and very occasional Oak (*Quercus* sp.). The ground flora is diverse, containing a typical calcicole flora as well as two uncommon bryophytes species, *Rhodobryum roseum* and *Trichocolea tomentella*.

In addition, the site hosts a rich butterfly fauna, as well as Irish Hare, an Irish Red Data book species, and several bird species of interest, such as Sand Martins, that nest in dry peat banks.

Grazing by sheep is the predominant land use over most of site. Cattle grazing also occurs on lower slopes. Active machine cutting of peat has occurred on the eastern side of the site within the last 5 years. Threats to the site are from overgrazing, burning, further peat extraction, wind farm development and afforestation. However, as steep slopes throughout the site make it rather remote and inaccessible, the nature conservation potential of the site is high.

Aghavogil Bog NHA is a large upland blanket bog of considerable conservation value. Blanket bog habitat is a globally scarce resource. It is largely confined to coastal regions at temperate latitudes with cool, wet, oceanic climates. North-west Europe contains some of the best-developed areas of blanket bog in the world. The most extensive areas are found in Ireland, Britain and Iceland. Upland blanket bogs, due to their exposure to severe climatic conditions at high elevations, are particularly vulnerable to erosion by human activities and extensive areas are currently undergoing active erosion due mainly to overgrazing. The current area of intact upland blanket bog in Ireland represents only a fraction of the original resource, due to the combined impacts of afforestation and overgrazing, and intact examples are therefore extremely valuable for nature conservation. Their long-term survival requires sensitive management.

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