

## SITE SYNOPSIS

**SITE NAME: MEENAGARRANROE BOG NHA**

**SITE CODE: 002437**

Meenagarranroe Bog NHA is part of a series of upland blanket bogs just outside Barnesmore Gap, 2 km north-east of Donegal town, in south-east Co. Donegal. The site occurs within the townlands of Meenagarranroe and Meenabrack. The altitude range over this site is from 175 m to 204 m. Bedrock geology is granite and metamorphosed sediments.

The site lies within a watershed between the Mourne Beg and Burn Darnett Rivers. At the northern end of the site, several separate areas of very deep, intact blanket bog occur, surrounded by mature conifer plantation. Two of these areas are slightly domed and are completely undisturbed by human influences. They are ungrazed, except by small numbers of Red Deer, and undamaged by burning, drainage or peat cutting. To the south, a more shallow and drier area of blanket bog grazed by sheep and cattle, extends up to a mineral ridge on Meenalughoge Hill.

The areas of intact blanket bog support a continuous cover of characteristic blanket bog vegetation comprising a deep canopy of Ling Heather (*Calluna vulgaris*), Deergrass (*Scirpus cespitosus*), cottongrasses (*Eriophorum* spp.) with frequent White Beak-sedge (*Rhynchospora alba*) and Bog Asphodel (*Narthecium ossifragum*) in wet hollows. The moss and liverwort cover is deep and species-rich. Up to 75% of intact areas consist of quaking bog with extensive interconnecting pool systems. Pools are colonised by a relatively rare species Intermediate Bladderwort (*Utricularia intermedia*), while pool margins contains quaking lawns of bog moss (*Sphagnum auriculatum*, *S. magellanicum*, *S. cuspidatum*) with Sundews (*Drosera anglica*, *D. rotundifolia*), Bogbean (*Menyanthes trifoliata*) and frequent patches of other mosses (*Campylopus atrovirens*, *C. brevipilus*).

In between the pool systems there is an excellent hummock-hollow microtopography with large hummocks of bog mosses (*S. subnitens*, *S. capillifolium*, *S. imbricatum*, *S. papillosum*) and other mosses (*Racomitrium lanuginosum*, *Breutelia chrysocoma*), liverworts (*Odontoschisma sphagni*, *Pleurozia purpurea*) and lichens (*Cladonia* spp.) in abundance. Islands within the pools also contain large hummocks, but unusually, there is no difference in vegetation on the islands as there is virtually no grazing impact on the surrounding bog.

On the slightly drier margins of the bog, a tall, ungrazed canopy of Ling Heather occurs with abundant Bog-myrtle (*Myrica gale*), Purple Moor-grass (*Molinia caerulea*) and Bell Heather (*Erica cinerea*). There are also occasional flushes characterised by Common Reed (*Phragmites australis*) and Purple Moor-grass on the wetter margins of the site where conifer plantation has failed. Other habitats that occur within the site include scrub woodland, small streams and lowland wet grassland. Several extensive drains transect parts of the site. These were probably

excavated over 40 years ago during adjacent afforestation, but are now wholly re-vegetated and thus have a reduced impact.

The site hosts several Irish Red Data Book species, including Irish Hare, Hen Harrier, Golden Plover and Merlin, as well as a diverse dragonfly fauna.

There is no active land use within the northern part of the site, which was possibly targeted for afforestation but proved to be too wet to plant. There are no other activities disturbing the vegetation in these areas, apart from light grazing by Red Deer. The southern part of the site is moderately grazed and there is active mechanical peat-cutting occurring to the south and south-west of the site. The main threats to the site are from damaging activities associated with forestry development and peat extraction, particularly drainage and burning.

Meenagarranroe Bog NHA is a site of considerable conservation value due to the high state of integrity of the blanket bog habitat and the occurrence of particularly wet areas with notable and characteristic species. 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 and Britain. 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.