

SITE SYNOPSIS

SITE NAME: ILLIES HILL BOG NHA

SITE CODE: 001127

Illies Hill Bog NHA is a good example of upland blanket bog in the Inishowen peninsula. It is located in the Owenassop River valley, south of Slieve Snaght, about 10 km north-east of Buncrana and 10 km south-west of Carndonagh town in the townland of Illies in Co. Donegal. It is bordered to the north by rushy fields, the north-east and west by forestry and to the east and south by the Pollan Dam Reservoir. The bedrock geology of the area is of metamorphosed limestone and the groundwater appears to be locally base-enriched. The bog is situated on the slopes of Illies Hill and extends from 200 m down to 145m at the Reservoir margin.

Most of the original bog on this site was flooded by the construction of the Pollan Dam Reservoir in the early 1990's. The remaining bog consists of upland blanket bog on the slopes of Illies Hill, and flatter areas of bog along the northern edges of the reservoir. A small area of blanket bog with the appearance of a raised bog is located adjacent to the forest plantation along the north-eastern margin.

Three main habitat types are identified in the area - blanket bog, heath and flushes. Blanket bog vegetation is dominated by Deergrass (*Scirpus cespitosus*), Purple Moor-grass (*Molinia caerulea*), cotton grasses (*Eriophorum* spp.), Cross-leaved Heath (*Erica tetralix*) and Ling Heather (*Calluna vulgaris*). Tormentil (*Potentilla erecta*), Carnation Sedge (*Carex panicea*), Bilberry (*Vaccinium myrtillus*), Crowberry (*Empetrum nigrum*) and Bog-myrtle (*Myrica gale*) are also present. There are small hummocks of mosses (*Racomitrium lanuginosum* and *Sphagnum capillifolium*) and lichens (*Cladonia portentosa* and *Cladonia uncialis*). Other moss species include *Sphagnum papillosum*, *S. subnitens*, *S. recurvum*, *S. contortum* and *Hypnum jutlandicum*. There are localised quaking areas of bog mosses (*Sphagnum auriculatum* and *S. cuspidatum*) and White Beak-sedge (*Rhynchospora alba*).

There are several flushed areas throughout the site. The water channels of these flushed areas are colonized mainly by Bottle Sedge (*Carex rostrata*), Bog-sedge (*Carex limosa*) and Bog Pondweed (*Potamogeton polygonifolius*). Other species occurring here include Bogbean (*Menyanthes trifoliata*), Round-leaved Sundew (*Drosera rotundifolia*), Bog-myrtle, and Water Horsetail (*Equisetum fluviatile*). The small calcareous flushes contain Dioecious Sedge (*Carex dioica*), Long-stalked Yellow-sedge (*Carex lepidocarpa*), Brown Sedge (*Carex disticha*), White Sedge (*Carex curta*) and mosses (*Campylium stellatum* and *Scorpidium scorpioides*), all species associated with base-enriched conditions. The banks of the Pollan Burn are lined with Bay Willow (*Salix pentrandia*).

Heath vegetation within the site is characterised by Ling Heather, Bilberry, Tormentil, Heath Bedstraw (*Galium saxatile*) and Heath Rush (*Juncus squarrosus*).

The presence of Globeflower (*Trollius europaeus*), a protected and Irish Red Data Book species, Lemon-scented Fern (*Oreopteris limbosperma*), a scarce species in Ireland, and Bay Willow (*Salix pentandra*), which occurs as native species only in the northern counties and is scarce in Co. Donegal, are all of note. The liverwort *Cladopodiella fluitans* and the lichens *Cladonia portentosa* and *C. strepsilis* are also of local occurrence in the north-west region. The presence of Long-stalked Yellow-sedge, Brown Sedge, Dioecious Sedge and White Sedge are all of note as these are rare or locally occurring species in the north-west.

The Red Data Book species Hen Harrier and Merlin have been recorded on the site.

Current land uses within the site include grazing by sheep. The construction of the Pollan Dam and creation of the reservoir in the 1990's resulted in the loss through permanent inundation of a significant area of lowland intact blanket bog in this valley.

Illies Hill Bog NHA is a site of considerable conservation significance. It contains an important example of upland blanket bog. 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. The presence of heath and base-rich flushes, with a diversity of species, including the protected Globeflower, adds considerably to the conservation value of the site.