

SITE SYNOPSIS

SITE NAME: LOUGH GRENEY BOG NHA

SITE CODE: 002455

Lough Greney Bog NHA contains heath and upland blanket bog habitats and is located approximately 5 km south-west of Westport on the southern shore of Clew Bay, Co. Mayo. It lies in the townlands of Fahburren, Boleybrain, Laghloon and Tawynnameeltoe. The site consists of exposed rock, wet heath, lake, blanket bog and flushes and is bounded by enclosed field systems. The site spans an altitude range of between 90 m and 250 m and is underlain by a bedrock geology of quartzite.

The site is situated on the eastern slopes of Croagh Patrick Mountain and comprises a mosaic of upland blanket bog and wet heath developed at altitudes between 150 and 200m. The blanket bog has developed in isolated depressions separated by heath-dominated rocky outcrops. The vegetation of wetter areas comprises Common Cottongrass (*Eriophorum angustifolium*), Hare's-tail Cottongrass (*E. vaginatum*), Crossed-leaved Heath (*Erica tetralix*) and Deergrass (*Scirpus cespitosus*) and large, quaking areas with hummocks of bog moss, *Sphagnum capillifolium* and lawns of *S. papillosum* (100% cover). There are hummocks of the moss *Racomitrium lanuginosum* with the lichens *Cladonia portentosa* and *Cladonia uncialis* growing on the flatter, wet bog surface with Round-leaved Sundew (*Drosera rotundifolia*). In the wettest area of the bog basin, there are pools vegetated by Bogbean (*Menyanthes trifoliata*) and *Sphagnum cuspidatum*. Bog Asphodel (*Narthecium ossifragum*) is also present and there are scattered pine stumps throughout. Drier areas are dominated by Deergrass, Common Cottongrass, Wavy Hair-grass (*Deschampsia flexuosa*), Ling Heather (*Calluna vulgaris*), Cross-leaved Heath and Bog Asphodel on deep peat.

Rocky outcrops support upland heath dominated by Ling Heather (up to 40cm tall), Common Cottongrass and Heath Rush (*Juncus squarrosus*). There is some overgrazing evident on the heath. Other species present include Green-ribbed Sedge (*Carex binervis*), Hare's-tail Cottongrass, bog moss *Sphagnum capillifolium* and the mosses *Racomitrium lanuginosum*, *Breutelia chrysocoma*, *Hylocomium splendens* and *Hypnum jutlandicum*.

Lough Greney occurs to the east of the site. This is a deep oligotrophic lake with a fringe of Common Reed (*Phragmites australis*) and Great Fen-sedge (*Cladium mariscus*) and is bounded by heathy slopes of Ling Heather, Bog-myrtle (*Myrica gale*), Bracken (*Pteridium aquilinum*) and Purple Moor-grass with rocky outcrops. The hillocks are very lightly grazed with Ling Heather (height 30 - 40cm) locally dominant on drier slopes. Bog-myrtle is tall (up to 1 m high) and in places, locally dominant. Purple Moor-grass is occasional and Bracken is frequent in sheltered spots. Bell Heather (*Erica cinerea*) and Crossed-leaved Heath are occasional with mats of mosses *Hylocomium splendens* and *Pleurozium schreberi*. On the lower valley floors, Bog-myrtle is locally dominant with Ling Heather and occasional Purple Moor-grass. Other species here include Star Sedge (*Carex echinata*), Crossed-

leaved Heath, Sharp-flowered Rush (*Juncus acutiflorus*), Flea Sedge (*Carex pulicaris*), Lesser Spearwort (*Ranunculus flammula*), Marsh Violet (*Viola palustris*), Eared Willow (*Salix aurita*), Meadow Thistle (*Cirsium dissectum*), Common Butterwort (*Pinguicula vulgaris*) and Bog Pimpernel (*Anagallis tenella*). A carpet of bog moss covers about 85% of the ground surface area.

A large area influenced by iron-rich groundwater occurs to the east of Lough Greney. It is dominated by Marsh St. John's-wort (*Hypericum eloides*). A central zone of open water in the flush is surrounded by a zone dominated by Marsh St. John's-wort, and this is further ringed by a carpet of bog mosses and other calcareous groundwater, moss indicator species including, *Scorpidium scorpioides*, *Campylium stellatum*, *Drepanocladus revolvens* and *Philonotis fontana*. Black Bog-rush (*Schoenus nigricans*) and Many-stalked Spike-rush (*Eleocharis multicaulis*) are also present.

Landuse on the site is mainly agricultural. Activities associated with agriculture include overgrazing by sheep and burning of heath.

Lough Greney Bog NHA is a site of considerable conservation significance supporting a variety of upland habitats including 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.