

SITE SYNOPSIS

SITE NAME: LOUGH FAD BOG NHA

SITE CODE: 001159

Lough Fad Bog NHA is a relatively large and primarily upland blanket bog, situated approximately 7 km from Pettigo, north of the Donegal to Pettigo road. It lies at altitudes between 130 m and 280 m on acidic gneiss bedrock. The site is situated in the townlands of Meensheefin, Belalt North, Lough Fad and Lough Ultan. Plantation forestry largely surrounds the site on its western, eastern and northern sides, while to the south it is bounded by the road between Donegal and Pettigo.

The site contains upland and lowland blanket bog developed as relatively shallow peat. The bog lies on a series of gently sloping plateaux, separated by rocky knolls and east-west trending ridges, situated on a catchment divide (watershed) between the Waterfoot and Ballintra Rivers. A number of lakes occur in the northern part of the site, including Lough Nageage, Lough Natragh, Lough Nacraghan, Lough Fad, Lough Atarriff and Lough Nabrackmore.

The vegetation of the site is characterised by blanket bog species. The most dominant include Ling Heather (*Calluna vulgaris*), Purple Moor-grass (*Molinia caerulea*), Common Cottongrass (*Eriophorum angustifolium*), the locally occurring species Oblong-leaved Sundew (*Drosera intermedia*), Bog-myrtle (*Myrica gale*), Cross-leaved Heath (*Erica tetralix*), White Beak-sedge (*Rhynchospora alba*), Bog Asphodel (*Narthecium ossifragum*), Deergrass (*Scirpus cespitosus*), Carnation Sedge (*Carex panicea*) and lichens (*Cladonia portentosa* and *C. uncialis*). Bog moss lawns and hummocks are locally frequent, consisting of *Sphagnum capillifolium*, *S. subnitens*, *S. imbricatum*, *S. auriculatum*, *S. papillosum* and *S. compactum*. Large cushions of *Racomitrium lanuginosum* and *Leucobryum glaucum* also occur. Localised flushes and wet areas on the bog surface add to the diversity of species, with plants such as Bottle Sedge (*Carex rostrata*), Jointed Rush (*Juncus articulatus*), Common Butterwort (*Pinguicula vulgaris*), Bog Pimpernel (*Anagallis tenella*), Broad-leaved Pondweed (*Potamogeton natans*), Star Sedge (*Carex echinata*) and *Sphagnum recurvum*. Small-scale local hydrological variation in the form of natural drainage channels, a quaking basin bog in a small depression and a swallow hole add substantially to the total species list.

Shallower peat soils support wet heath and acid grassland habitat. Such areas have species such as Wavy Hair-grass (*Deschampsia flexuosa*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Devil's-bit Scabious (*Succisa pratensis*), Bilberry (*Vaccinium myrtillus*), Selfheal (*Prunella vulgaris*), Yorkshire Fog (*Holcus lanatus*), Wild Thyme (*Thymus praecox*), Tormentil (*Potentilla erecta*) and the moss *Hylocomium splendens*.

A series of lakes occur within the site. These are variously colonised by a diverse range of emergent, submergent, floating-leaved and shallow water aquatic plants, including Shoreweed (*Littorella uniflora*), Water Lobelia (*Lobelia dortmanna*), Bottle Sedge, Bog-sedge (*Carex limosa*), Yellow Water-lily (*Nuphar lutea*) and Floating Bur-reed (*Sparganium angustifolium*). A stream that flows through a rocky channel provides suitable niches for a well-developed moss flora.

A number of plant species with a restricted distribution in Co. Donegal occur within the site. These include Cranberry (*Vaccinium oxycoccos*), Long-stalked Yellow-sedge (*Carex lepidocarpa*) and Dioecious Sedge (*Carex dioica*). The Red Data Book species Golden Plover, Hen Harrier, Red Grouse, Atlantic Salmon and Otter also occur.

The primary landuse of the site is sheep grazing and in some areas the bog is heavily overgrazed. Localised peat cutting also occurs. These activities have resulted in habitat loss and have been detrimental to the hydrological condition of the site. They continue to pose a potential threat to the conservation of the site. Plantation forestry is common on the blanket bogs in the immediate vicinity of this site.

Lough Fad Bog NHA is a site of considerable conservation significance comprising a large area of relatively intact 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. Lowland blanket bog comprises less than 3% of the world's peatlands. In Europe this type of blanket bog is restricted to Ireland, Britain, Norway and Iceland. The lowland blanket bog that occurs in Ireland is considered to be an extreme hyperoceanic variant of the habitat type, found nowhere else in the world except on the coastal fringes of north-west Scotland. Flushes, lakes, streams, acid grassland and wet heath add significantly to the habitat diversity of this site and enhance its conservation value. The site also supports a number of plant species that are very local in their distribution in Co. Donegal, including Cranberry, Long-stalked Yellow-sedge and Dioecious Sedge, and provides suitable habitat for several notable birds and animals, including Golden Plover, Hen Harrier, Red Grouse, Atlantic Salmon, Otter and Badger.