

## SITE SYNOPSIS

**SITE NAME: TULLAGHAN BAY AND BOG NHA**

**SITE CODE: 001567**

Tullaghan Bay and Bog NHA supports lowland blanket bog and coastal habitat and is located approximately 10 km south-west of Bangor on the west coast of Co. Mayo. It is situated in the townlands of Tullaghaunnashammer, Muingnanarnad, Aughness, Tristia, Ballina, Srahnamanragh and Tullaghanduff. The site is bounded by local roads and peat cuttings. The blanket bog areas surround a large shallow sea bay with small estuarine rivers. Altitude range is between sea level and 21 m. Bedrock geology consists of quartzite, schist and gneiss.

The site contains a range of habitat types including coastal systems of sandy beaches, pebble shores, saltmarsh, sand dunes and machair, as well as extensive areas of intertidal mudflats, sandflats and estuarine channels. The bay is fringed by saltmarsh and in some places this adjoins areas of machair and blanket bog.

Blanket bog adjoining the bay supports vegetation characteristic of lowland blanket bog of the western seaboard with small lakes, inter-connecting pools and quaking areas. Where grazing pressure is slight and there is no haggling or bare peat, the bog vegetation is dominated by Hare's-tail Cottongrass (*Eriophorum vaginatum*), Purple Moor-grass (*Molinia caerulea*) and Ling Heather (*Calluna vulgaris*), which grows to 60 cm high in a leggy form. On the flat surfaces between hummocks, there are species such as Black Bog-rush (*Schoenus nigricans*), Carnation Sedge (*Carex panicea*), Deergrass (*Scirpus cespitosus*), Bog Asphodel (*Narthecium ossifragum*), Cross-leaved Heath (*Erica tetralix*) and White Beaked-sedge (*Rhynchospora alba*). Wet hollows occur with Bogbean (*Menyanthes trifoliata*) and bog mosses *Sphagnum capillifolium*, *S. subnitens*, *S. papillosum* and *S. cuspidatum* (30% cover). Sundews (*Drosera rotundifolia* and *D. anglica*) are widespread and the moss *Campylopus introflexus* is also present. Notable plant species of these blanket bog areas include Cranberry (*Vaccinium oxycoccos*), Mediterranean Heath (*Erica erigena*) and the hummock-forming bog moss *Sphagnum fuscum*.

Degraded bog with numerous dead hummocks, peat hags and erosion channels occurs on trampled areas with a high density of sheep. Species such as Carnation Sedge and Common Cotton-grass (*Eriophorum angustifolium*) occur, with cushions of moss *Campylopus introflexus* and Round-leaved Sundew (*Drosera rotundifolia*) in erosion channels and bare peat areas. There are also isolated tussocks of Ling Heather, Purple Moor-grass, Hare's-tail Cottongrass, Black Bog-rush, Deergrass and Bog-myrtle (*Myrica gale*). Wet erosion channels contain the bog mosses *Sphagnum cuspidatum* and *S. auriculatum* with some *S. capillifolium*. Bare peat areas are covered with algae. Some of the haggled hummocks support cushions of lichens *Cladonia portentosa* and *Cladonia uncialis*. Erosion is mainly due to overstocking by sheep but some areas have also been damaged by extensive burning, and here the dried out hollows are colonised by Bog Asphodel.

Deep oligotrophic lakes with small islands occur within the blanket bog and there are also inter-connecting pool systems. Quaking areas with White Beaked-sedge, Bogbean and the bog moss *S. cuspidatum* occur in the wet hollows between these pools. Aquatic vegetation includes Bogbean, Pipewort (*Eriocaulon aquaticum*), Oblong-leaved Sundew (*Drosera intermedia*), Water Lobelia (*Lobelia dortmanna*), Broad-leaved Pondweed (*Potamogeton natans*) and bog mosses *Sphagnum auriculatum* and *S. cuspidatum*. Quaking pool margins support *S. papillosum*. The lake islands can support ungrazed and unburnt vegetation with a lush growth of Purple Moor-grass, Common Cotton-grass, Ling Heather, Bog-myrtle, Marsh Willowherb (*Epilobium palustre*), Royal Fern (*Osmunda regalis*), lichen *Cladonia portentosa* and occasional Willow (*Salix* spp.). The lakeside vegetation includes Bog Asphodel, Marsh Pennywort (*Hydrocotyle vulgaris*) and Round-leaved Sundew. These grow on quaking beds of bog mosses, with lichens *Cladonia portentosa* and *Cladonia uncialis*, and hummocks of *Sphagnum capillifolium* which support Bog-myrtle and Royal Fern. On drier areas a fringe of grassy vegetation has developed consisting of Creeping Bent-grass (*Agrostis stolonifera*) and Wavy-hair Grass (*Deschampsia flexuosa*). The presence of epiphytic lichens growing on Ling Heather in such areas indicates an absence of burning.

Tullaghan Bay and Bog NHA is internationally important for Brent Geese and is visited by Greenland White-fronted Geese. It is also widely used by several other important waterfowl species including Wigeon, Teal, Ringed Plover, Golden Plover, Oystercatcher, Curlew, Bar-tailed Godwit, Redshank, Dunlin and Sanderling.

Landuses on and adjacent to the site include peat cutting, forestry and agriculture. Activities associated with these landuses include drainage, burning and overgrazing by sheep. Some dumping of domestic waste also occurs. All these activities have resulted in habitat modifications and damage to the hydrological condition of the site.

Tullaghan Bay and Bog NHA is a site of considerable conservation significance comprising a tidal bay with a variety of coastal habitat types and areas of lowland blanket bog. Transitions between saltmarsh and machair vegetation and blanket bog habitat are of particular ecological interest. Blanket bog habitat is a globally scarce resource. It is largely confined to coastal regions with cool, wet, oceanic climates at temperate latitudes. North-west Europe contains some of the best-developed areas of blanket bog in the world. 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.