

Site Name: Lough Lurgeen Bog/Glenamaddy Turlough SAC

Site Code: 000301

The Lough Lurgeen Bog/Glenamaddy Turlough site covers almost 1,200 ha and is situated east of the town of Glenamaddy, Co. Galway. It consists of a large turlough, over 170 ha in extent, and an expanse of over 1,000 ha of typical, intact, western raised bog. A small lake occurs on top of the bog. Water from the bog feeds into the lake, which in turn is linked to the turlough, and thus the three habitats are in close association. This leads to quite a unique ecosystem which is of high conservation value.

The site is a Special Area of Conservation (SAC) selected for the following habitats and/or species listed on Annex I / II of the E.U. Habitats Directive (* = priority; numbers in brackets are Natura 2000 codes):

[3180] Turloughs*
[3270] <i>Chenopodium rubri</i> p.p. and <i>Bidention</i> p.p. vegetation
[7110] Raised Bog (Active)*
[7120] Degraded Raised Bog
[7150] <i>Rhynchosporion</i> Vegetation

Active raised bog comprises areas of high bog that are wet and actively peat-forming, where the percentage cover of bog mosses (*Sphagnum* spp.) is high, and where some or all of the following features occur: hummocks, pools, wet flats, *Sphagnum* lawns, flushes and soaks. Degraded raised bog corresponds to those areas of high bog whose hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration. The *Rhynchosporion* habitat occurs in wet depressions, pool edges and erosion channels where the vegetation includes White Beak-sedge (*Rhynchospora alba*) and/or Brown Beak-sedge (*R. fusca*), and at least some of the following associated species: Bog Asphodel (*Narthecium ossifragum*), sundews (*Drosera* spp.), Deergrass (*Scirpus cespitosus*) and Carnation Sedge (*Carex panicea*).

The site contains an extensive area of uncut raised bog, though the majority of this is classified as degraded bog. The surface is rather flat and the surface morphology is similar to blanket bog in places. A large, peat-bottomed, oligotrophic lake occurs in the middle of the bog and this feature is unique in Ireland. The vegetation on the bog is dominated by peatland species such as Heather (*Calluna vulgaris*), Hare's-tail Cottongrass (*Eriophorum vaginatum*), Deergrass, Cross-leaved Heath (*Erica tetralix*), Bog Asphodel and Carnation Sedge. In common with most areas of degraded raised bog in the country the *Sphagnum* cover is low, with typically less than 30% ground

cover. In these drier bog conditions the main *Sphagnum* tends to be *S. capillifolium*, which is tolerant of drier conditions. The moss *Hypnum cupressiforme* and the lichen *Cladonia portentosa* also tend to have a higher cover in degraded areas.

Within the wet pool systems which occur throughout the high bog area, Rhynchosporion vegetation is well represented. This is typically dominated by the aquatic bog moss *S. cuspidatum*. There are also a number of fairly extensive quaking lawns dominated by White Beak-sedge, some of which are associated with surface drainage features. Other frequent species of the habitat include *Sphagnum auriculatum*, Bogbean (*Menyanthes trifoliata*), Great Sundew (*Drosera anglica*) and Common Cottongrass (*Eriophorum angustifolium*). Some of these sections, and also including flushes, correspond with active raised bog. There is also a small area of alkaline fen at the southern end of the lake – again, a very unusual feature to be present in the centre of a raised bog.

Glenamaddy Turlough has extensive areas of uniform vegetation, containing large stands of peat grassland, Common Sedge (*Carex nigra*) and Amphibious Bistort (*Polygonum amphibium*). Three rivers flow into the turlough, the largest from Lough Lurgeen bog, and a well-defined swallow hole occurs in the north-west corner. Vegetation ascribable to the E.U. Habitats Directive Annex I type 'rivers with muddy banks with *Chenopodium rubri* p.p. and *Bidention* p.p. vegetation' occurs. The rare Fen Violet (*Viola persicifolia*), a protected plant species, has been recorded from the seasonally inundated turlough bed.

The lake is a traditional goose site and the turlough is used by Greenland White-fronted Goose (74). Other birds reported for the site during 2 seasons between 1984 and 1987 (three counts were made) are Bewick's Swan 14, Whooper Swan 8, Wigeon 472, Teal 73, Mallard 229, Shoveler 15, Pochard 20, Golden Plover 23, Lapwing 62, Snipe 20, Curlew 39, Redshank 15.

Threats to water quality from nutrient enrichment are an issue at the site, along with peat cutting, drainage and burning, all of which would be detrimental to the bog.

This is a site of high conservation value due to the presence of a very large turlough in close proximity to an expanse of raised bog. The combination of raised bog, turlough and linking stream is unique in Ireland, and is unlikely to occur anywhere else in the world, and the whole system is therefore of high conservation value.