

Site Name: Mongan Bog SAC

Site Code: 000580

Mongan Bog is a midland raised bog of medium size situated immediately east of the monastic site of Clonmacnoise, Co. Offaly, and 12 km south of Athlone. It is situated in a basin, surrounded on 95% of its perimeter by high ground on mineral soil. At two points in the north it shares a common boundary with Pilgrim's Road Esker SAC. Most of the bog is a Statutory Nature Reserve, established in 1987. The bog has been the subject of ongoing intensive research since 1972.

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):

[7110] Raised Bog (Active)*
[7120] Degraded Raised Bog
[7150] Rhynchosporion 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 high bog has a very well-developed micro-topography of hummocks, pools and lawns, with the active core area being particularly wet. A variety of vascular plants, bog mosses and other bryophytes are found. An unusually large number of hummocks, sometimes 1 m high, largely composed of the moss *Leucobryum glaucum*, are widespread on the bog.

Rhynchosporion vegetation is best represented in the central core area, where there are numerous wet pools. Species which have been recorded from these pools include the bog mosses *S. cuspidatum* and *S. auriculatum*, the liverwort *Cladopodiella fluitans*, Bogbean (*Menyanthes trifoliata*), Great Sundew (*Drosera anglica*), White Beak-sedge, Lesser Bladderwort (*Utricularia minor*) and Common Cottongrass (*Eriophorum*

angustifolium). The relatively rare sedge Brown Beak-sedge has also been noted from wet pools within the site.

The high bog is dominated by degraded raised bog. Although degraded through drainage, the vegetation is still typical of a raised bog flora with species such as Heather (*Calluna vulgaris*), Bog Asphodel and Carnation Sedge often being dominant in species-poor areas. Other frequent vascular plant species include Hare's-tail Cottongrass (*Eriophorum vaginatum*), Deersedge, Cross-leaved Heath (*Erica tetralix*) and White Beak-sedge. Characteristic species of midland raised bogs such as Cranberry (*Vaccinium oxycoccos*) and Bog-rosemary (*Andromeda polifolia*) also occur, however their cover is low. The *Sphagnum* cover in degraded raised bog areas is generally low, typically covering less than 30% ground cover.

The presence of the moss *Pleurozium scheberi* and Carnation Sedge indicate an oceanic influence. The bog supports a rich lichen flora, including *Cladonia portentosa*, *C. arbuscula*, *C. tenuis*, *C. floerkeana* and *C. glauca*, due in part to the absence of burning over much of the site. Many of the lichens occur on old Heather.

The uncut high bog core is surrounded by old cutover surface which is regenerating into a mosaic of heath and low scrub. The scrub is mostly willow (*Salix* spp.) and birch (*Betula* spp.). These marginal habitats add diversity to the site.

Several rare invertebrate species are known to occur on the bog, including *Chrysops sepulchralis* (Order Diptera), *Dixella serotina* (Order Diptera), *Coenonympha tullia* (Order Lepidoptera), *Tachina grossa* (Order Diptera) and *Saturnia pavonia* (Order Lepidoptera). One species of spider, *Gongylidiellum latebricola*, and two species of moth, *Biselachista serricornis* and *Aristotelia ericinella*, were first recorded from Ireland from the bog.

A study of the birds of Mongan Bog has shown that Mallard, Snipe, Curlew, Skylark and Meadow Pipit breed on the peat dome. In winter, the bog was occasionally used as a refuge by Greenland White-fronted Goose, but they appear to have abandoned the site in recent years.. The cut-away area of bog provides habitat for a range of bird species, including birds of prey, thrushes, warblers and finches.

Although there have been only low levels of disturbance in the recent past, the hydrology of the bog has been adversely affected by drainage, due mainly to the effects of domestic peat-cutting. The presence of algal mats in many of the pools indicates a serious lowering of water levels due to drainage. Burning is a further threat though there have been no serious fires in recent years. As most of the high bog lies within a Nature Reserve the future prospects for the site are good.

Mongan Bog is of high conservation importance as it is a good example of a raised bog site which contains examples of the Annex 1 habitats active raised bog, degraded raised bog and depressions on peat substrates (Rhynchosporion). It is mostly intact and has classic hummock and pool formations over a large proportion of the surface. It has several features of special zoological interest. Scenically it is part of an area rich

in intact natural features (callows, eskers, limestone pavement) which enhances its importance further. The ongoing intensive research on aspects of bog ecology at the site reinforces its international importance.