

Site Name: Ballynafagh Bog SAC

Site Code: 000391

This site is a raised bog situated about 1 km west of Prosperous in Co. Kildare. The area is directly underlain by muddy, fossiliferous limestones, interbedded with calcareous shales. The subsoils are predominantly clay-rich tills. All are of low permeability. The site comprises a relatively small core of uncut high bog (approx. 70 ha), which is surrounded by a more extensive area of cutover bog (approx. 90 ha). The high bog area can be divided into a wet core of active bog which covers an area of 23 ha, surrounded by approximately 44 ha of degraded raised bog which is experiencing drying-out at present.

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*).

In the wet, active area towards the centre of Ballynafagh Bog, a system of tear pools occurs, grown over with bog mosses (*S. capillifolium* and *S. magellanicum*). There is a small pool-and-hummock system, with pools colonised by another species of bog moss, *S. cuspidatum*. White Beak-sedge, Cottongrasses (*Eriophorum* spp.) and the insectivorous Great Sundew (*Drosera anglica*) are abundant in wet channels. Bog-rosemary (*Andromeda polifolia*) and Cranberry (*Vaccinium oxycoccos*) are found on the hummocks.

The vegetation of the degraded raised bog tends to be dominated by Heather (*Calluna vulgaris*), Deergrass, Bog Asphodel, Cross-leaved Heath (*Erica tetralix*) and

Hare's-tail Cottongrass (*Eriophorum vaginatum*). In places there is some colonization by low bushes of Downy Birch (*Betula pubescens*) and Gorse (*Ulex europaeus*) which demonstrates the locally dry peat conditions which exist. In the driest marginal areas of the high bog dome the moss *Hypnum cupressiforme* may be locally abundant along with Heather.

A large portion of the site contains old cut-away bog colonised by rushes (*Juncus* spp.) and Common Cottongrass (*Eriophorum angustifolium*), with Downy Birch forming patches of scrub/woodland.

The site is within the territory of a breeding pair of Merlin, a species listed on Annex I of the E.U. Birds Directive. Several pairs of Curlew and Snipe breed on the bog. Scrub species such as Stonechat, Redpoll and Long-tailed Tit occur on the cut-away.

The bog has been damaged by afforestation, mechanised peat-cutting and drainage. These three activities pose the main threats to the survival of raised bogs. In addition, a significant proportion of the bog surface was badly damaged by fire in the mid-1990s.

Ballynafagh Bog is of conservation importance as it contains examples of the Annex 1 habitats active raised bog, degraded raised bog and Rhynchosporion vegetation. Of particular note is that the bog is one of the most easterly examples of a relatively intact raised bog in Ireland and, together with Mouds bog, is one of only two such systems in Co. Kildare.