

Site Name: Ballyduff/Clonfinane Bog SAC

Site Code: 000641

Clonfinane and Ballyduff bogs are found in Co. Tipperary, and lie some 6 km to the south-west of Birr (Co. Offaly). The two bogs are separated by a small area of cutover bog, with Clonfinane on the west and Ballyduff on the east.

Clonfinane is a large, flat lowland raised bog largely bordered by drains and, except in the immediate vicinity of the drains, is wet and quaking. The bog consists of a southern and a northern lobe, with the southern being wetter and containing a well developed pool and hummock complex. The drier northern lobe has recently been drained and exploited for moss peat and is not included within the SAC. At the western end of Clonfinane Bog there is a small Scots Pine (*Pinus sylvestris*) woodland.

Ballyduff is a smaller, domed bog, with a ridge at the north-eastern end. The south-east margin is wettest, with quaking areas and flushes. Towards the centre of the bog there is a well developed pool and hummock system. A moss peat development has recently affected an area in the south part of Ballyduff.

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
[91D0] Bog Woodland*

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*).

Active raised bog is found in the wet central areas of both Ballyduff and Clonfinane bogs. Here there are well developed pool and hummock systems, with excellent bog

moss growth patterns. A range of vascular plants typical of midland raised bogs is found, including Heather (*Calluna vulgaris*), Cross-leaved Heath (*Erica tetralix*), Bog-rosemary (*Andromeda polifolia*), Common Cottongrass (*Eriophorum angustifolium*) and White Beak-sedge. It is in the wet, active areas that Rhynchosporion vegetation is best represented. The extensive pool complexes (mostly linear in shape) contain the bog mosses *S. cuspidatum*, *S. auriculatum* and *S. papillosum*, along with White Beak-sedge, Great Sundew (*D. anglica*), Bogbean (*Menyanthes trifoliata*) and cottongrasses. *Sphagnum*-rich lawns also occur in these wet central areas and some of this corresponds to Rhynchosporion vegetation. The rare Brown Beak-sedge has been recorded at this site.

Both Ballyduff and Clonfinane bogs contain substantial areas of degraded raised bog and these areas are typically located along the edges of the high bog. In these areas the peat is driest and the vegetation tends to be dominated by Heather, Hare's-tail Cottongrass (*E. vaginatum*), Deergrass, the mosses *Sphagnum capillifolium* and *Hypnum cupressiforme* and the lichen *Cladonia portentosa*. Along the northern margins of Clonfinane bog this dry edge vegetation is characterised by an abundance of Common Reed (*Phragmites australis*) which suggests that the peat is locally shallow and subject to groundwater infiltration. In the wetter areas of degraded raised bog higher up on the high bog surface Bog Asphodel is particularly prominent, forming extensive flats in places. The south-east margin of Ballyduff is wet, with quaking areas and flushes marked by Purple Moor-grass (*Molinia caerulea*), Soft Rush (*Juncus effusus*) and Bulbous Rush (*J. bulbosus*).

An area of bog woodland occurs on the high bog at Clonfinane where it is associated with an area of rather shallow peat which overlies a mineral ridge. This woodland is dominated by Scots Pine (up to 10 m tall), with an understorey of Downy Birch (*Betula pubescens*). The ground layer is dominated by Heather and Scots Pine seedlings and saplings, along with species such as Crowberry (*Empetrum nigrum*), Cranberry (*Vaccinium oxycoccos*) and Ivy (*Hedera helix*). This area of woodland is at the drier end of the bog woodland spectrum, pool areas are absent and *Sphagnum* species other than *S. capillifolium* are rare.

The nationally rare shrub Alder Buckthorn (*Frangula alnus*) grows in tall birch woodland along the northern margins of Clonfinane.

There are a number of areas on the high bog surface of both bogs which have been drained in the past decade and this drainage has led to the degradation of the habitat locally. At Clonfinane these drains have been subsequently dammed with peat dams, an action which should arrest the decline in habitat quality. On both bog areas there are relatively high levels of pine regeneration on the surface, which suggests that the surface is drying out. Burning poses a significant threat to the bog surface and especially to the area of bog woodland due to its rather dry nature.

Ballyduff/Clonfinane bog is of high conservation value as it contains good examples of the Annex I habitats active raised bog, degraded raised bog, depressions on peat substrates (Rhynchosporion) and bog woodland. Both active raised bog and bog

woodland are listed on the Annex with priority status. Although parts of the site have been drained in the past there has been significant restoration of the high bog areas in the Clonfinane portion of the site.