

**Site Name: Coolrain Bog SAC**

**Site Code: 002332**

Coolrain Bog is situated in Co. Laois, approximately 4 km north-east of Borris-in-Ossory, mainly within the townlands of Derries, Rosснаclonagh Outside, Coolrain and Caher. The site comprises a raised bog that includes both areas of high bog and cutover bog. The northern margin of the site is bounded by the Tonet River and the eastern boundary by forestry on old cutover.

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*).

Apart from marginal slopes associated with cutover areas Coolrain Bog is relatively flat. Although the bog has no permanent pools it has well-developed *Sphagnum* hummocks. There are four flushes with pines on the bog, three in the centre of the site and one to the north. These flushes may result from subsidence which directs surface water flow through certain areas of the high bog. Cutover bog occurs around the south-west, south and south-eastern margins of the high bog.

Much of the high bog has vegetation typical of the Midland Raised Bog type, consisting of Heather (*Calluna vulgaris*) and Cranberry (*Vaccinium oxycoccos*) on the hummocks, with Bog-rosemary (*Andromeda polifolia*) often found in the hollows. Hare's-tail Cottongrass (*Eriophorum vaginatum*), Common Cottongrass (*E. angustifolium*), Deergrass and Bog Asphodel are all prominent species. *Sphagnum* cover is good with *S. magellanicum*, *S. capillifolium*, *S. imbricatum*, *S. papillosum*, *S.*

*tenellum* and *S. cuspidatum* all recorded at the site. There are four prominent Lodgepole Pine (*Pinus contorta*) flushes found on the high bog. Around the margins of the high bog the lichens *Cladonia portentosa* and *C. uncialis* are found in abundance. The majority of the intact peat surface is fringed by abandoned cutover bog, colonised by grasses and Soft Rush (*Juncus effusus*) or by broadleaved woodland dominated by Downy Birch (*Betula pubescens*).

Current land uses on the site consist of peat-cutting at the margins and forestry on the old cutover. East of the bog old cutover has been planted with Spruce (*Picea sitchensis*) and Lodgepole Pine, some of which have naturally colonised the intact bog surface. Currently, Coolrain Bog is subject to high levels of domestic turf cutting, primarily along the south-east and south-west regions, although the area of high bog has not been significantly decreased over the last decade. The forestry and peat-cutting are activities that have resulted in the loss of habitat and damage to the hydrological status of the site. There is no evidence of recent burning on the bog and it has recovered well from old burns.

Coolrain Bog is a site of considerable conservation significance as it comprises a raised bog, a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. This site supports a good diversity of raised bog microhabitats, including hummock/hollow complexes and flushes. Unlike most other raised bogs, Coolrain Bog developed over Old Red Sandstone rather than limestone, a factor that will have affected the water chemistry of the site and the early development of the bog. Its geographical location is important as, along with the nearby Knockacoller Bog, it is at the most southerly edge of the range of the true Midland Raised Bog type. Active raised bog is listed as a priority habitat on Annex I of the E.U. Habitats Directive. Priority status is given to habitats and species that are threatened throughout the E.U. Ireland has a high proportion of the total E.U. resource of this habitat type (over 60%) and so has a special responsibility for its conservation at an international level.