

### Site Name: Girley (Drewstown) Bog SAC

Site Code: 002203

Girley (Drewstown) Bog SAC occurs within the larger raised bog system that is designated as Girley Bog NHA (001580). It is situated 5.5 km north of Athboy in the townland of Drewstown, Co. Meath. The site is part of a raised bog that includes both areas of high bog and cutover bog. It is bordered by open high bog on its northern and eastern margins, by agricultural land on its western margin and by a conifer plantation on cutover bog on its southern side. The underlying geology is carboniferous limestone.

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):

[7120] Degraded Raised Bog

Degraded Raised Bog corresponds to those areas of high bog where the hydrology has been adversely affected by peat cutting, drainage and other land use activities, but which are capable of regeneration to Active Raised Bog (7110) within 30 years.

Girley (Drewstown) Bog consists of 32.26 ha of raised bog (15.05 ha of high bog and 17.21 ha of cutover bog) which occupies the south-western part of Girley Bog NHA (Site Code 001580). Girley Bog is a Midland type raised bog developed in a basin. It originally covered approximately 190 ha in the early 1800s but by 2010 had been reduced to 72.5 ha (38.4% of the original area) by turf cutting. Most of the SAC and all of the high bog included in the SAC was completely covered by coniferous forestry, which was planted in the 1970s, and was recently clear-felled as part of the restoration program for the site. The areas of high bog that were planted supported a dense plantation of Lodgepole Pine (*Pinus contorta*) and Sitka Spruce (*Picea sitchensis*).

Most of the conifers in the SAC were removed and the intensive drainage system associated with it was blocked by 2013 as part of an EU LIFE-funded Coillte project *Demonstrating Best Practice in Raised Bog Restoration in Ireland* so as to raise the water table and restore Active Raised Bog on the site. With the clear-felling of conifers and blocking of drains, water-levels on the high bog have risen and remain high throughout the year. As a consequence, raised bog vegetation has returned to the wetter areas of the high bog. Hare's-tail Cottongrass (*Eriophorum vaginatum*) dominates these wet hollows with Bilberry (*Vaccinium myrtillus*), Heather (*Calluna vulgaris*) and Cross-leaved Heath (*Erica tetralix*) along with Bog Rosemary (*Andromeda polifolia*) and Cranberry (*Vaccinium oxycoccus*). Bog mosses that are regenerating include *Sphagnum subnitens*, *Sphagnum capillifolium* and *Sphagnum*

*palustre* forming low hummocks with *Sphagnum recurvum* in drains. Overall, the high bog appears to be re-wetting and limited areas of wet flats and hummock/hollows have developed. However, the majority of the restored areas have not yet developed vegetation characteristic of the wettest conditions and there is a considerable amount of conifer and birch regeneration occurring in these areas. Two areas in the north-east of the site covering 2.28 ha have been identified by hydrological modelling as Degraded Raised Bog habitat. They now have standing surface water in the hollows and pools for most of the year with considerable areas of rapidly regenerating *Sphagnum* species. These wet areas with regenerating *Sphagnum* moss are expected to develop into Active Raised Bog habitat within 20 years.

The cutover bog to the south of the site is generally drier and is developing into wet and dry woodland dominated currently by Downy Birch (*Betula pubescens*) scrub with occasional conifers from the former plantation. Cherry Laurel (*Prunus laurocerasus*), Rhododendron (*Rhododendron ponticum*) and conifers are regenerating in this area and are subject to ongoing control programs.

Current landuse on the site consists of conservation management with the removal of conifer plantations and the blocking of the drainage associated with these plantations, both on the high bog and on the cutover. However, active drains are still present on the northern and eastern boundaries of the SAC which are adversely impacting on its restoration and need to be blocked in consultation with other stakeholders. In addition, there have been fires on the adjacent bog and within the SAC causing some damage to the recovering vegetation. These are all activities that have resulted in loss of habitat and damage to the hydrological status of the site, and pose a continuing threat to its viability. There is also some dumping around the site.

Girley Bog SAC is a site of considerable conservation significance comprising as it does a raised bog, a rare habitat in the E.U. and one that is becoming increasingly scarce and under threat in Ireland. The site is being actively managed for conservation as part of the Coillte EU LIFE Project. This site supports regenerating raised bog microhabitats, including hollows and wet flats, which add to the diversity and scientific value of the site. This site is one of the few remaining raised bogs in County Meath and represents the eastern extreme of the range of raised bogs in the country. Ireland has a high proportion of the total E.U. resource of the Atlantic raised bog habitat type (over 50%) and so has a special responsibility for its conservation at an international level.