

Site Name: Clara Bog SAC

Site Code: 000572

Clara Bog is situated some 2 km south of Clara village in Co. Offaly. Much of it is State-owned and designated a statutory Nature Reserve.

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):

[6210] Orchid-rich Calcareous Grassland*
[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 where 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*).

Clara Bog has long been regarded as one of the most important raised bogs in the country, being the largest remaining example of the true midland sub-type. It has well-developed hummock and hollow complexes, and one of the few remaining soak systems. The bog vegetation at this site has been much-studied. Variations in the proportions of bog mosses (*Sphagnum* spp.), Heather (*Calluna vulgaris*) and cottongrasses (*Eriophorum* spp.) have been related to ecological features such as pools, soaks and ridges.

Rhynchosporion vegetation is widespread at this site but is best developed in the wettest areas of active raised bog. This vegetation occurs along pool edges and on flats underlain by deep, wet and quaking peat. Typical plant species which have been recorded from the habitat at the site include the bog mosses *S. cuspidatum* and *S.*

auriculatum, Bogbean (*Menyanthes trifoliata*), White Beak-sedge, Common Cottongrass (*Eriophorum angustifolium*) and the nationally scarce Brown Beak-sedge.

The largest part of the uncut high bog surface is comprised of degraded raised bog. Although the areas of degraded raised bog have a relatively well-developed raised bog flora, they are affected by water loss, to varying degrees, and thus they tend to be associated with the more marginal, sloping areas of the high bog. Common vascular plant species of degraded raised bog areas include Heather, Bog Asphodel, Hare's-tail Cottongrass (*Eriophorum vaginatum*), Deergrass, Cross-leaved Heath (*Erica tetralix*) and Carnation Sedge. Indicator species of midland raised bog habitat, such as Bog-rosemary (*Andromeda polifolia*) and *Sphagnum magellanicum*, are present even within areas of degraded bog, however their cover is generally low. The cover of *Sphagnum* is also low (typically < 30%) due to low water levels and perhaps other factors such as burning.

Bog woodland on Clara Bog occurs in several small stands associated with flushes on the western side of the bog, the largest of which lies to the west of Shanley's Lough. There is a good example of a wet birch (*Betula* sp.) woodland which has a diverse vegetation, and the most easterly flush has open water associated with it.

The transitions into calcareous woodland, to the east, and to the esker ridge, to the north, are contained within the site, and some excellent examples of esker grassland also occur. Some peripheral reclaimed farmland is also included in the site, because management undertaken in these areas can affect the hydrology of the bog.

Several rare invertebrate species are associated with the soak on this bog, including the midge, *Lasiodiamesa sphagnicola* (Order Diptera), for which Clara Bog is its only known Irish site, a click beetle, *Ampedus pomorum* (Order Coleoptera), and another midge, *Parhelophilus consimilis* (Order Diptera). Marsh Fritillary (*Euphydryas aurinia*, Order Lepidoptera), a butterfly listed on Annex II of the E.U. Habitats Directive, has been recorded from the site, but in its present condition the habitat is only marginally suitable for the species and any populations present are likely to be intermittent, small and short-lived. Natural and human-induced changes are likely to make the habitat less suitable in the future. The bog is also important at the only known Irish station for the rare moss *Tetraplodon angustatus*.

Clara Bog supports breeding Merlin (1-2 pairs), a scarce species in Ireland and one that is listed on Annex I of the E.U. Birds Directive. Red Grouse also breeds, along with other common bogland species such as Meadow Pipit and Skylark.

The site has been divided into a western and an eastern section by a road. The eastern part of the site has been damaged by previous drainage works, although restoration work is in progress. Continuing peat extraction from the southern margins is also damaging and has a potential effect upon much of the internal bog, including the soak system. Ideally the whole bog should be managed as a hydrological unit.

Active raised bogs, once characteristic of central Ireland, are now rare and vulnerable, and have been recognised by the E.U. as habitats of international importance. Ireland has a special responsibility to conserve the best of its remaining bogs. Further drainage, peat extraction, burning or attempted land reclamation is not consistent with this responsibility.