

Site Name: Bellanagare Bog SAC

Site Code: 000592

Bellanagare Bog is a large bog situated 6 km north-north-east of Castlerea in Co. Roscommon. It is classified as a western, or intermediate, raised bog, because it shows features of both raised bog and blanket bog. The bog is underlain by muddy Carboniferous limestone with a low permeability. The sub-soil is predominantly of clayey limestone till. The site lies in an upland area at the top of a surface catchment divide. The surface of the bog is undulating and the peat is concentrated on ridges, with flushes occurring in between. A number of streams, including the Frances River, rise on the site. The bog is traversed by several tracks. A large section of the site is in state ownership.

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*).

The high bog at Bellanagare is predominantly comprised of degraded raised bog. This habitat tends to be drier than the active bog areas and species such as Cross-leaved Heath (*Erica tetralix*), Heather (*Calluna vulgaris*), Common Cottongrass (*Eriophorum angustifolium*), Bog Asphodel, Carnation Sedge and Deergrass tend to be the most frequent and conspicuous. Indicator species of midland raised bogs such as Bog-rosemary (*Andromeda polifolia*) and the bog moss *S. magellanicum* are present, though they are not as common as in raised bogs further east in the country. The cover of bog mosses is relatively low in areas of degraded bog and there are few wet pool areas

Well-developed hummocks and several quaking areas occur in the active area of the high bog at this site. Rhynchosporion vegetation is best developed in the areas of active raised bog where there is deep and quaking peat. Such areas contain numerous pools and quaking flats which support a typical, species-poor vegetation that includes plant species such as *Sphagnum cuspidatum*, Bogbean (*Menyanthes trifoliata*), White Beak-sedge, Great Sundew (*Drosera anglica*) and Common Cottongrass. The rare moss *Sphagnum pulchrum* has been recorded from such areas recently, and Brown Beak-sedge, a relatively scarce species in Ireland, has also been recorded from wet pools. Bog-sedge (*Carex limosa*), a species more usually found on blanket bogs, occurs in some pools.

Bellanagare Bog is also notable for the range of flush types found. These occur quite frequently and are usually located in depressions. Flush types on the site include an in-filling lake, an extensive Purple Moor-grass (*Molinia caerulea*) flush with a high diversity of plant species, a large swallow-hole flush, and flushes associated with springs, rises and streams. One flush is coincident with a bog burst. The site also includes much cut-away bog, small areas of heath, scrub, wet grassland and several small conifer plantations.

The site provides habitat for a relatively large population of Red Grouse, a scarce and declining species in Ireland.

The site is vulnerable to water loss through the extensive drain network in its northern half, and from active peat-cutting which occurs in places all around the site. The site is also very vulnerable to burning because of it being quite a dry bog.

For a raised bog, Bellanagare Bog is floristically unusual, supporting species typically found on raised bogs as well as species more usually found on blanket bogs. Bellanagare Bog is of considerable scientific and conservation significance, in particular for its status as an intermediate raised bog, but also for the wide variety of flush types found, as well as for its large size and for the presence of scarce plant species. Raised bogs are rare and threatened in Europe, and are listed as a priority habitat on Annex I of the E.U. Habitats Directive.