

**Site Name: Carrowmore Lake Complex SAC**

**Site Code: 000476**

This site is located north and east of Bangor Erris, in Co. Mayo. There are two main parts to the site: Carrowmore Lake, a large, shallow oligotrophic/mesotrophic lake, and Largan More Bog, an impressive tract of blanket bog. From an altitude of 6 m at the lake, the site grades upwards in a general south-easterly direction, reaching 199 m on Largan More Bog.

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):

- [7130] Blanket Bogs (Active)\*
- [7150] Rhynchosporion Vegetation
- [1393] Slender Green Feather-moss (*Drepanocladus vernicosus*)
- [1528] Marsh Saxifrage (*Saxifraga hirculus*)

Three areas of blanket bog are incorporated into the site: Glenturk, Carrowmore (or Glencullin) and Largan More. Glenturk Bog has relatively uniform vegetation and Carrowmore Bog is more diverse, with quaking lawns formed by bog mosses (*Sphagnum* spp.), hummocks (including some formed by *Sphagnum fuscum*), bog pools and an inter-connecting pool system. Largan More is the most extensive and interesting, with a fine inter-connecting pool system and large areas of typical, intact blanket bog vegetation. Bog pools are a feature of the bog surface, and these are colonised by a range of mosses and higher plants including Lesser Bladderwort (*Utricularia minor*), White Water-lily (*Nymphaea alba*), Water Lobelia (*Lobelia dortmanna*) and Pipewort (*Eriocaulon aquaticum*).

Rhynchosporion vegetation is well-represented along the margins of pools and in the wet, quaking flats between pool areas. Typically the vegetation is dominated by the bog mosses *Sphagnum cuspidatum* and *S. auriculatum*, with vascular species such as Bogbean (*Menyanthes trifoliata*), White Beak-sedge (*Rhynchospora alba*), Common Cottongrass (*Eriophorum angustifolium*) and Great Sundew (*Drosera anglica*) also present. Species-rich flush communities occur on streamsides and stream-heads. Sedges (including *Carex limosa*, *C. rostrata* and *C. lepidocarpa*) are abundant in flushes, with a rich variety of calcicole herbs and mosses. Cranberry (*Vaccinium oxycoccos*) occurs in some flushes - this species is uncommon outside the centre of Ireland.

Carrowmore Lake is a large (960 ha), shallow lake, with a maximum depth of approximately 2.5 m and a generally stony bottom. The lake water is almost neutral in terms of acidity (i.e. pH) and generally rather nutrient-poor. The shallow waters

support species such as Common Spike-rush (*Eleocharis palustris*), Shoreweed (*Littorella uniflora*), Bulbous Rush (*Juncus bulbosus*), Marsh Pennywort (*Hydrocotyle vulgaris*) and Perfoliate Pondweed (*Potamogeton perfoliatus*). The shoreline is dominated by Soft Rush (*Juncus effusus*), Yellow Iris (*Iris pseudacorus*) and stands of Common Club-rush (*Scirpus lacustris*) or Common Reed (*Phragmites australis*). This emergent vegetation grades landward into freshwater marsh and acid wet grassland, backed by blanket bog. Along this transition zone, bushes of Irish Heath (*Erica erigena*) are prominent. This species is frequent in parts of west Mayo, but rare in west Galway and unknown elsewhere in Ireland.

The rare Marsh Saxifrage (*Saxifraga hirculus*) occurs at the site. This species is protected under the Flora (Protection) Order, 1999, and is listed under Annex II of the E.U. Habitats Directive. It is confined in its distribution to north-west Co. Mayo. Recently, a population of the rare moss *Drepanocladus vernicosus* was discovered in a flushed lawn within the extensive blanket bog complex. This species is also legally protected and is listed on Annex II of the Habitats Directive.

The site supports a number of bird species which are of international conservation significance and which are listed on Annex I of the E.U. Birds Directive. In winter, Greenland White-fronted Goose arrive to feed around the lake and in some nearby fields. These birds are a sub-flock of the nationally important Bog of Erris flock. In summer, Merlin and Golden Plover breed on the boglands within the site. An Irish Tern Survey (1984) revealed that Sandwich Tern (164 pairs) and Arctic Tern (18 pairs) formerly bred within the site, and although the terns have not bred in recent years, Derreen's Island still supports a large and important colony of Common Gulls (600 individuals, 1993).

A variety of wildfowl also occur, including Tufted Duck, Pochard and Wigeon. Goosander, a very rare species in Ireland, has been recorded here.

Blanket bog in the site is used for grazing cattle and sheep and for turf-cutting, which is largely done by machine. Angling and water abstraction are the main land uses at Carrowmore Lake.

This site is of considerable ecological value, primarily for its extensive, intact blanket bog, which has a typical range of good-quality habitats, but also as a site for the very rare Marsh Saxifrage and the moss *Drepanocladus vernicosus*. The north-western part of the site supports a number of Greenland White-fronted Goose, while other important bird species which occur are Golden Plover, Merlin, Sandwich Tern and Arctic Tern.