

SITE SYNOPSIS

SITE NAME: LOUGH CARRA SPA

SITE CODE: 004051

Lough Carra, which extends for over 9 km along its long axis, lies to the north-east of Lough Mask, in the Corrib catchment. It is one of the best examples in Ireland of a hard water marl lake. It is a shallow (mean depth 1.5 m, max depth 18 m), predominantly spring-fed lake with only a few streams flowing into it. It is connected to Lough Mask via the Keel River. The water has an alkaline pH and negligible amounts of iron and manganese. Sodium and chloride are present in relatively high concentrations. Lough Carra is classified as a mesotrophic system. Its well-known pellucid green colour is due to calcareous encrustations. Lough Carra has well-developed stonewort communities in the submerged zones, and includes such species as *Chara curta*, *C. desmacantha*, *C. rudis* and *C. contraria*. The lake has a highly indented shoreline (over 69 km in length) and is fringed by a diverse complex of limestone and wetland habitats. The wetland habitats include both Great Fen-sedge (*Cladium mariscus*) fen and alkaline fen. The *Cladium* occurs as pure stands in places but is also intermixed with Black Bog-rush (*Schoenus nigricans*), Common Club-rush (*Scirpus lacustris*), Common Reed (*Phragmites australis*) and a number of sedge species (*Carex* spp.). The alkaline fens are more extensive than the *Cladium* fens and in these Black Bog-rush is a dominant species. A rich diversity of flowering plant occurs in the fen communities. In addition to the fen habitats, there are widespread reed swamps, wet grassland and some freshwater marsh communities around the lakeshores. There is a good scattering of small islands within the lake.

The site is a significant ornithological site, both in winter and summer. It supports nationally important wintering populations of Shoveler (40) and Gadwall (26), along with a range of other species in relatively low numbers, including Wigeon (67), Teal (63), Mallard (152), Tufted Duck (148), Goldeneye (67), Pochard (36), Lapwing (245), Little Grebe (14) and Great Crested Grebe (14) - all figures are average peaks for 4 of the 5 winters in the period 1995/96-1999/00. In the past, Lough Carra supported a population of Mallard of national importance.

The islands in Lough Carra have traditionally supported nesting gulls. In 1977, a survey recorded Common Gull (436 individuals) and Black-headed Gull (3,341 individuals). In a repeat survey in 1993, the numbers of Common Gull and Black-headed Gull had fallen to 72 and 252 individuals respectively. By 1999 the site supported 65 pairs of Common Gull, a significant increase, and c. 100 pairs of Black-headed Gull. Mink are considered to be a causative factor for the decline.

The site provide excellent habitat for Otter, a species that is listed on Annex II of the E.U. Habitats Directive. White-clawed Crayfish (*Austropotamobius pallipes*), a species that is also listed on Annex II of this directive, has been recorded from Lough Carra.

Eutrophication of this hard water and naturally mesotrophic system is a serious threat. Increased planktonic algal growth was recorded during sampling in 1999. Clearance of lakeshore vegetation for agricultural intensification has occurred and is a continued threat.

This site is of considerable ornithological importance for wintering birds, with nationally importance populations of two duck species. It is also of national importance for two species of nesting gulls, and in 1999 held over 6% of the national total for Common Gull.