SITE SYNOPSIS

Site Name: Lough Owel SAC

Site Code: 000688

Lough Owel is a large hard water lake located approximately 4 km north-west of Mullingar in Co. Westmeath. It is a relatively shallow lake with a rocky, marl-covered bottom.

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):

[3140] Hard Water Lakes
[7140] Transition Mires
[7230] Alkaline Fens
[1092] White-clawed Crayfish (*Austropotamobius pallipes*)

Submerged vegetation at Lough Owel includes a number of stoneworts, notably *Chara rudis* and *C. tomentosa*. The rocky nature of the shoreline has given rise to marginal vegetation which is patchy and sparse. Apart from some reedswamp formed by Common Reed (*Phragmites australis*) and Common Club-rush (*Scirpus lacustris*), shoreline vegetation is dominated by occasional patches of Alder (*Alnus glutinosa*).

Two areas of wetland vegetation of particular interest occur at the north-west (Bunbrosna) and south-west (Tullaghan) of the lake. These areas contain a mosaic of vegetation types of varying degrees of wetness, with quaking bog, alkaline fen, wet grassland and wet woodland all present. At the waters edge there is often a fringe of vegetation dominated by Bottle Sedge (*Carex rostrata*) and Lesser Water-parsnip (*Berula erecta*), and at times, Common Spike-rush (*Eleocharis palustris*). Common Reed also occurs. This vegetation type grades into areas dominated by Lesser Tussock-sedge (*C. diandra*), and in places Common Cottongrass (*Eriophorum angustifolium*) and Purple Moor-grass (*Molinia caerulea*) also occur. Downy Birch (*Betula pubescens*), Rusty Willow (*Salix cinerea* subsp. *oleifolia*) and Alder are common invading tree species in the quaking areas. Some of the so-called brown mosses, indicative of alkaline conditions, such as *Drepanocladus revolvens*, have been recorded at this site.

In places the quaking mire grades into alkaline fen. Some characteristic species such as Black Bog-rush (*Schoenus nigricans*) and Long-stalked Yellow-sedge (*C. lepidocarpa*) occur, as well as brown fen mosses. Scarce fen species have been recorded here, including Fen Bedstraw (*Galium uliginosum*) and Marsh Fern (*Thelypteris palustris*).

The Bunbrosna wetland area contains a number of rare plant species, namely Marsh Pea (*Lathyrus palustris*), Marsh Fern and Round-leaved Wintergreen (*Pyrola rotundifolia*). In addition, four other rare plant species are found along the lake margins - White Sedge (*C. curta*), Fibrous Tussock-sedge (*C. appropinquata*), Marsh Stitchwort (*Stellaria palustris*) and Frogbit (*Hydrocharis morsus-ranae*). Tullaghan fen hosts the uncommon Bog-sedge (*C. limosa*), Fibrous Tussock-sedge and Marsh Fern.

Lough Owel is one of the most important fishing lakes in the midlands and is especially good for Trout. Scharff's Char (*Salvelinus scharffi*), a distinct race of char which was once found only in Lough Owel and Lough Ennell, is now thought to be extinct. Notable invertebrates recorded from the lake include three caddis fly (Order Trichoptera) species: *Tinodes maculicornis, Metalype fragilis* and *Limnephilus nigriceps*.

White-clawed Crayfish, a species listed in Annex II of the E.U. Habitats Directive, is found at this site.

There are small populations of Mallard, Shoveler, Pochard and Tufted Duck present at Lough Owel. Farmland adjacent to the lake provides feeding grounds for internationally important numbers of Greenland White-fronted Goose.

Potential threats to the conservation interest of Lough Owel include the increasing level of water supply to Mullingar, overfishing, eutrophication caused by local farming practices and pressure from amenity uses such as boating and fishing.

With the exception of Lough Carra in Co. Mayo, Lough Owel is the best example of a large, spring-fed calcareous lake in the country. The site is of major conservation significance and contains three habitats that are listed on Annex I of the E.U. Habitats Directive, i.e. alkaline fens, transition mires and hard water lakes. Additionally, the site supports bird populations of conservation significance.