SITE SYNOPSIS

Site Name: Glenade Lough SAC

Site Code: 001919

Glenade Lough is situated approximately 9 km north-west of Manorhamilton in Co. Leitrim. It is a relatively small lake situated on the upper reaches of the Bonet River and in a valley between the Arroo and Benbulben Mountain ranges. The lough is underlain by Carboniferous limestone and shales. This confers a calcareous nature to the lake and the marginal vegetation. It is a naturally eutrophic lake, but although eutrophic, the system shows mesotrophic features - the water is clear, well aerated and relatively nutrient poor and the shoreline is stony or sandy. The lake has a maximum depth of 7.25 m. Some areas of surrounding wet grassland, marshes and fens are also included in the site.

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):

[3150] Natural Eutrophic Lakes
[1092] White-clawed Crayfish (*Austropotamobius pallipes*)
[1833] Slender Naiad (*Najas flexilis*)

The aquatic flora of Glenade Lough is diverse and has species characteristic of both eutrophic and oligo-mesotrophic systems. Of particular note is the diversity of pondweeds, with at least four species known to occur (*Potamogeton praelongus, P. pusillus, P. lucens* and *P. natans*). Other species characteristic of eutrophic conditions include Ivy-leaved Duckweed (*Lemna trisulca*), Canadian Waterweed (*Elodea canadensis*), Unbranched Bur-reed (*Sparganium emersum*) and Spiked Water-milfoil (*Myriophyllum spicatum*). Notable plant species which occur at Glenade Lough and are typically associated with oligotrophic systems are Quillwort (*Isoetes lacustris*) and Slender Naiad (*Najas flexilis*). The latter is a species which is listed on Annex II of the E.U. Habitats Directive and legally protected under the Flora (Protection) Order, 1999.

A band of emergent vegetation occurs around much of the lake. This is dominated by Common Reed. (*Phragmites australis*) and Common Club-rush (*Scirpus lacustris*). Bulrush (*Typha latifolia*) occurs in an area in the north-west of the site, while Water Horsetail (*Equisetum fluviatile*) and Common Spike-rich (*Eleocharis palustris*) are common throughout these stands of reeds.

Above the swamp zone there is a mix of calcareous fens and flushes, wet grassland and some freshwater marshes. Much of the vegetation in these areas is sedge-rich with Common Sedge (*Carex nigra*), Bog-sedge (*C. limosa*), Slender Sedge (*C. lasiocarpa*)

and Bottle Sedge (*C. rostrata*) present. Herbaceous species such as Meadowsweet (*Filipendula ulmaria*), Marsh-marigold (*Caltha palustris*), Cuckooflower (*Cardamine pratensis*) and Devil's-bit Scabious (*Succisa pratensis*) also occur. Bryophytes are also common, especially bog mosses such as *Sphagnum palustre* and *S. recurvum*.

Some deciduous woodland, often wet in character, is present around the lake. The main native tree species here are Hazel (*Corylus avellana*), Ash (*Fraxinus excelsior*), Alder (*Alnus glutinosa*) and Sessile Oak (*Quercus petraea*). Introduced species also occur - Beech (*Fagus sylvatica*), Rhododendron (*Rhododendron ponticum*) and Sycamore (*Acer pseudoplatanus*).

Further habitat diversity is added by the presence of dry grassland within the site. Plant species present here include Creeping Bent (*Agrostis stolonifera*), Sweet Vernal-grass (*Anthoxanthum odoratum*), Primrose (*Primula vulgaris*), Tormentil (*Potentilla erecta*) and Common Spotted-orchid (*Dactylorhiza fuchsii*).

A large population of the White-clawed Crayfish, a species listed on Annex II of the E.U. Habitats Directive, and also protected under the Wildlife Act, 1976, has been reported from Glenade Lough. This is a species which is normally found in calcium-rich waters.

The main land use around the site is low to moderate intensity agriculture, mostly grazing. Some boating and fishing occur on the lake. These practises may cause minor disturbances or damage to the site.

This site is of scientific importance because it contains an interesting example of a naturally eutrophic lake, an Annex I habitat on the E.U. Habitats Directive, which also displays some mesotrophic/oligotrophic elements. Furthermore the lake supports populations of two Annex II species, the White-clawed Crayfish and the Slender Naiad.