



**Site Name: Lough Melvin SAC**

**Site Code: 000428**

Lough Melvin is situated in the extreme north-west of Co. Leitrim, about 4 km south of Bundoran. The area is underlain by sedimentary calp-limestone, shale and sandstone. Lough Melvin is an oligo-mesotrophic lake and is approximately 13 km long by 3 km wide. The mean depth of the lake is 8.5 m, the maximum depth being 45 m. A number of inflowing and outflowing streams and rivers are included in the site, for instance, the Drowes River links the lake to Donegal Bay. Several large islands occur on the lake.

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):

[3130] Oligotrophic to Mesotrophic Standing Waters
[6410] <i>Molinia</i> Meadows
[1106] Atlantic Salmon ( <i>Salmo salar</i> )
[1355] Otter ( <i>Lutra lutra</i> )

The lake has a good diversity of aquatic plants, including Quillwort (*Isoetes lacustris*), Shoreweed (*Littorella uniflora*), Alternate Water-milfoil (*Myriophyllum alterniflorum*), Water Lobelia (*Lobelia dortmanna*), Canadian Waterweed (*Elodea canadensis*) and several species of pondweed (*Potamogeton gramineus*, *P. lucens* and *P. x nitens*). Swamp vegetation is generally sparse, being best developed in the sheltered bay areas. Species include Reeds (*Phragmites australis*), Common Spike-rush (*Eleocharis palustris*) and Common Club-rush (*Scirpus lacustris*).

The most extensive terrestrial habitat in the site is lowland wet grassland. This is highly variable throughout the site in both its species composition and species richness. Grassland ascribable to the E.U. Habitats Directive Annex I type *Molinia* Meadows has been reported by the Irish Semi-natural Grasslands Survey (2009) from Gubacreeny (site no. 802) and Gubalaun (site no. 804). Common species include Jointed Rush (*Juncus articulatus*), Soft Rush (*J. effusus*), Marsh Pennywort (*Hydrocotyle vulgaris*), Yellow Iris (*Iris pseudacorus*), Water Mint (*Mentha aquatica*), Silverweed (*Potentilla anserina*), Creeping Soft-grass (*Holcus mollis*) and Devil's-bit Scabious (*Succisa pratensis*).

Wet deciduous woodland, dominated by Alder (*Alnus glutinosa*), Goat Willow (*Salix caprea*) and Downy Birch (*Betula pubescens*), is common in places. Ground flora species under these canopies include Lesser Burdock (*Arctium minus*), Wild Angelica (*Angelica sylvestris*) and Common Spike-rush (*Eleocharis palustris*).

Drier woodland exists in other areas, with Hazel (*Corylus avellana*), Ash (*Fraxinus excelsior*), Holly (*Ilex aquifolium*) and Hawthorn (*Crataegus monogyna*). Some stands have a rich ground flora that includes Primrose (*Primula vulgaris*), Wood-sorrel (*Oxalis acetosella*), Bluebell (*Hyacinthoides non-scripta*), Honeysuckle (*Lonicera periclymenum*) and Sanicle (*Sanicula europaea*). The fern community is well developed too, with such species as Male-fern (*Dryopteris filix-mas*) and Hart's-tongue (*Phyllitis scolopendrium*) present.

Four plant species which are listed in the Irish Red Data Book, Globeflower (*Trollius europaeus*), Marsh Helleborine (*Epipactis palustris*), Blue-eyed-grass (*Sisyrinchium bermudiana*) and Tea-leaved Willow (*Salix phylicifolia*), are found in this site. Globeflower is also protected under the Flora (Protection) Order, 2015.

The main interest of the site is the unique fish community which the lake supports. Lough Melvin is an excellent example of a natural, post-glacial salmonid lake. A relict population of the Arctic Char (*Salvelinus alpinus*), which constitutes an arctic-alpine element of the Irish fauna, occur there, as does the Atlantic Salmon (*Salmo salar*). Both of these species are listed in the Irish Red Data Book, and Salmon is listed on Annex II of the E.U. Habitats Directive.

Lough Melvin has three races of Brown Trout (*Salmo trutta*) - Ferox, Sonaghen and Gillaroo - which have distinctive characteristics and separate spawning grounds. The lake's inflowing and outflowing streams which are used for spawning by these Brown Trout races are included in the site.

Otter have been recorded from the Drowes River and the main inflowing rivers, and are likely to be widespread throughout the site. Recently, Pine Marten has been recorded from within the site. Both of these species are listed in the Irish Red Data Book, and Otter is listed on Annex II of the E.U. Habitats Directive.

Moderate numbers of waterfowl use the lake and Greenland White-fronted Goose, a species listed on Annex I of the E.U. Birds Directive, have occasionally been reported from the site.

The lake is used for boating, fishing and water abstraction, while much of the terrestrial part of the site is used for grazing. Consequently, the main threats to the site are from agricultural pollution and recreational pressure.

Lough Melvin is an example of a lake type that is of conservation significance and that is listed on Annex I of the E.U. Habitats Directive. The site is also important for *Molinia* Meadow grassland, Otter and for the presence of a unique fish community, including Atlantic Salmon, a species that is listed on Annex II of the E.U. Habitats Directive, and for a diverse flora which includes a number of rare plants, most notably, the protected Globeflower.