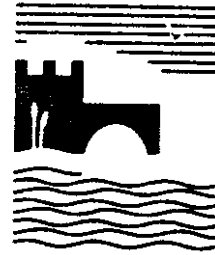


DOCUMENT B



**ENVIRONMENT  
AND HERITAGE  
SERVICE**

**DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND**

**DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT LOUGH  
MELVIN, COUNTY FERMANAGH. ARTICLE 24 OF THE NATURE  
CONSERVATION AND AMENITY LANDS (NORTHERN IRELAND) ORDER 1985.**

The Department of the Environment for Northern Ireland (the Department), having consulted the Council for Nature Conservation and the Countryside and being satisfied that the area described and delineated on the attached map (the area) is of special scientific interest by reason of the flora and fauna and accordingly needs to be specially protected, hereby declares the area to be an area of special scientific interest to be known as the 'Lough Melvin Area of Special Scientific Interest'.

The area is of special scientific interest because of its flora and fauna. It encompasses the northern shoreline of Lough Melvin and includes the open waters of the lough within the territorial limits of Northern Ireland, in addition to a range of associated wetland and other communities. The lough itself is characterised by open water plant communities typical of mesotrophic (unenriched) conditions, a narrow fringe of emergent swamp and fen and a number of wooded islands. In addition, some of the surrounding lands contain traditionally-managed grasslands that are rich in plant species. The wide range of habitats is reflected in the diversity of plant and animal communities present. Lough Melvin is of particular importance for its fish population.

The waters of the lough have not been artificially enriched by pollutants and are therefore in a relatively pristine state. They contain a variety of aquatic species, including Canadian Waterweed *Elodea canadensis* and a number of Pondweeds, such as Various-leaved Pondweed *Potamogeton gramineus*, Fennel Pondweed *P. pectinatus* and Perfoliate Pondweed *P. perfoliatus*. Most of the shoreline and shallow margins of the lough are exposed to wave action and have a rocky character, with Shoreweed *Littorella uniflora*, Alternate Water-milfoil *Myriophyllum alterniflorum* and Quillwort *Isoetes lacustris* typically found. The emergent vegetation consists of small stands of Water Horsetail *Equisetum fluviatile*, Common Spike-rush *Eleocharis palustris* and Lesser Water-plantain *Baldellia ranunculoides*. Locally, stands of Reed Canary-grass *Phalaris arundinacea* and Common Club-rush *Schoenoplectus lacustris* have developed.

The generally sparse swamp communities are often backed by fen vegetation, in which Sharp-flowered Rush *Juncus acutiflorus*, Lesser Spearwort *Ranunculus flammula*, Meadowsweet *Filipendula ulmaria* and Water Mint *Mentha aquatica* are prominent. Associated herbs and grasses include Marsh-marigold *Caltha palustris*, Purple-loosestrife *Lythrum salicaria*, Marsh Pennywort *Hydrocotyle vulgaris*, Yellow Iris *Iris pseudacorus*, Wild Angelica *Angelica sylvestris* and Common Sedge *Carex nigra*.

Sheltered parts of the lough shore are fringed by wet woodland, dominated by Alder *Alnus glutinosa* and Willow *Salix* spp. The ground flora beneath this generally resembles that of the swamp and fen zone. Around the exposed fringes of the islands, a more mixed woodland occurs, with Aspen *Populus tremula*, Guelder-rose *Viburnum opulus*, Grey Willow *S. cinerea*, Hazel *Corylus avellana* and Alder *Alnus glutinosa*. The ground flora contains such species as Meadowsweet *Filipendula ulmaria*, Primrose *Primula vulgaris* and Common Dog-violet *Viola riviniana*.

Drier woodland is found on more elevated ground at the Lakeshore Plantation and on the islands of the lough. This is generally of high quality and contains mature stands of mixed deciduous species, with a canopy that includes Sessile Oak *Quercus petraea*, Downy Birch *Betula pubescens* and occasionally Ash *Fraxinus excelsior*. The understorey is fairly dense and includes Holly *Ilex aquifolium*, Hawthorn *Crataegus monogyna* and Hazel *Corylus avellana*, with a herb layer of such species as Wood-sorrel *Oxalis acetosella*, Great Wood-rush *Luzula sylvatica*, Bramble *Rubus fruticosus* agg. and Ivy *Hedera helix*. The ground layer is variable, with more acid soils containing such species as Hard-fern *Blechnum spicant*, Bilberry *Vaccinium myrtillus* and Hairy Wood-rush *Luzula pilosa*.

In many places along the shoreline, there is a natural transition to wet grassland. This is very variable in species content, with grasses and rushes generally dominant, especially Creeping Bent *Agrostis stolonifera*, Soft-rush *Juncus effusus* and Sharp-flowered Rush *J. acutiflorus*. There is also a range of herbs, such as Common Knapweed *Centaurea nigra*, Selfheal *Prunella vulgaris*, Lesser Spearwort *Ranunculus flammula* and Common Bird's-foot-trefoil *Lotus corniculatus*. Where flushing by more base-rich waters occurs, a sward dominated by sedges such as Glaucous Sedge *Carex flacca* and Carnation Sedge *C. panicea* are found. In places, the latter grades into well-developed fen meadow communities. Here, Meadow Thistle *Cirsium dissectum*, Purple Moor-grass *Molinia caerulea* and Black Bog-rush *Schoenus nigricans* are prominent, within a sward that is generally very species-rich.

The area contains many vascular plants with a restricted distribution in the British Isles. In addition to some of those listed above, rare plants include Lesser Meadow-rue *Thalictrum minus*, Chaffweed *Anagallis minima*, Fragrant Agrimony *Agrimonia procera*, Upland Enchanter's-nightshade *Circaea x intermedia*, Northern Bedstraw *Galium boreale*, Slender-leaved Pondweed *Potamogeton filiformis* and Water Lobelia *Lobelia dortmanna*. Of particular note are Blue-eyed-grass *Sisyrinchium bermudiana* and Globeflower *Trollius europaeus*, both of which are on Schedule 8 of the Wildlife (Northern Ireland) Order 1985. Indeed, the wooded islands of Lough Melvin are one of the strongholds for the latter species in Ireland.

Lough Melvin has a unique salmonid fish community which dates back to the end of the Last Ice Age, some 13,000 years ago. The unpolluted waters and isolated position of the lough, together with the absence of Pike *Esox lucius* and large cyprinids (e.g. Roach *Rutilus rutilus*),

have maintained Lough Melvin in a relatively pristine state. Indeed, it is believed to be one of few remaining lakes in a pristine post-glacial salmonid condition.

The existence of reproductively isolated populations in a single lough has important ecological implications. Each population represents a separate stock. Three "sub-species" of trout are found in Lough Melvin: sonaghen *Salmo nigripinnis*, gillaroo *Salmo stomachius* and ferox *Salmo ferox*. These sub-species are distinct, and can be readily identified on the basis of their morphological features, meristics (internal structures), and biochemically determined genetic characters. With its three brown trout demes (races), Lough Melvin may be one of the few remaining examples of a once widespread situation of sympatric populations.

There are also unique stocks of Atlantic Salmon *Salmo salar*, which is listed in Annex II of the EC Habitats and Species Directive. In addition, the lough has a substantial population of Arctic Charr *Salvelinus alpinus*, which represents an arctic-alpine element in the Irish fauna and is an Irish Red Data Book species. Other species of fish found in Lough Melvin include Eel *Anguilla anguilla*, Perch *Perca fluviatilis* and several smaller species.

## SCHEDULE

**The following operations and activities appear to the Department to be likely to damage the flora and fauna of the area:**

1. Any activity or operation which involves the damage or disturbance by any means of the surface and subsurface of the land, including ploughing, rotovating, harrowing, reclamation and extraction of minerals, including sand, gravel and peat.
2. Any change in the present annual pattern and intensity of grazing, including any change in the type of livestock used or in supplementary feeding practice.
3. Any change in the established method or frequency of rolling, mowing or cutting.
4. Any change in the annual pattern of application of manure, slurry or artificial fertiliser.
5. The application of herbicides, fungicides or other chemicals deployed to kill any form of wild plant, other than plants listed as being noxious in the Noxious Weeds (Northern Ireland) Order 1977.
6. The storage or dumping, spreading or discharge of any material not specified under paragraphs 4 or 5 above.
7. The destruction, displacement, removal or cutting of any plant, seed or plant remains, other than for
  - (i) plants listed as noxious in the Noxious Weeds (Northern Ireland) Order 1977;

(ii) normal cutting or mowing regimes for which a consent is not required under paragraph 3 above.

8. The release into the area of any animal (other than in connection with normal grazing practice) or plant. 'Animal' includes birds, mammals, fish, reptiles, amphibians and invertebrates; 'Plant' includes seed, fruit or spore.

9. Burning.

10. Changes in tree or woodland management, including afforestation, planting, clearing, selective felling and coppicing.

11. Construction, removal or disturbance of any permanent or temporary structure including building, engineering or other operations.

12. Alteration of natural or man-made features, the clearance of boulders or large stones and grading of rock faces.

13. Operations or activities which would affect wetlands (including marsh, fen, bog, rivers, streams and open water), e.g.

(i) change in the methods or frequency of routine drainage maintenance;

(ii) modification of the structure of any watercourse;

(iii) lowering of the water-table, permanently or temporarily;

(iv) change in the management of bank-side vegetation.

14. The killing or taking of any wild animal except where such killing or taking is treated as an exception in Articles 5, 6, 11, 12, 16, 17, 20, 21 and 22 of the Wildlife (Northern Ireland) Order 1985.

15. The following activities undertaken in a manner likely to damage or disturb the wildlife of the area:

(i) Educational activities;

(ii) Research activities;

(iii) Recreational activities;

(iv) Exercising of animals.

16. Changes in game, waterfowl or fisheries management or fishing or hunting practices.

Sealed with the Official Seal of the  
Department of the Environment for  
Northern Ireland on 19 MARCH 1997

*R. MacLellan*  
*Chief Secretary to the Government*  
*Belfast*

*Robert C Martin*

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**ROBERT C MARTIN**  
Chief Executive

### FOOTNOTES

- (a) Please note that consent by the Department to any of the operations or activities listed in the Schedule does not constitute planning permission. Where required, planning permission must be applied for in the usual manner to the Department under Part IV of the Planning (Northern Ireland) Order 1991. Operations or activities covered by planning permission are not normally covered in the list of Notifiable Operations.
- (b) Also note that many of the operations and activities listed in the Schedule are capable of being carried out either on a large scale or in a very small way. While it is impossible to define exactly what is large and what is small, the Department would intend to approach each case in a common sense and practical way. It is very unlikely that small scale operations would give rise for concern and if this was the case the Department would normally give consent, particularly if there is a long history of the operation being undertaken in that precise location.