

DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT LARNE LOUGH, COUNTY ANTRIM. 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 delineated and described on the attached map (the area) is of special scientific interest by reason of the flora, fauna and geological features and accordingly needs to be specially protected, hereby declares the area to be an area of special scientific interest to be known as the 'Larne Lough area of special scientific interest'.

The form of the lough is generally structurally controlled by geological faulting, particularly the Larne Lough Fault, most recently active in Tertiary times. Fossiliferous Jurassic (Lower Lias) rocks of planorbis zone age occur at Barney's Point and White House. Erosion of off-shore reefs of Jurassic age yield an exceptionally well-preserved and diverse crinoid fauna on beaches in the north-west corner of the lough. Notable Recent, post 10,000 years ago, sites include the estuarine clay series at Magheramore tip. These contain abundant remains of the extinct Giant Irish deer Megaceros giganteus.

Rocky shores support patchy fucoid communities on the upper and middle zones and a naturally impoverished community on the lower eulittoral zone, due to the influence of turbid currents.

The mudflats support a single community characterised by a range of polychaete worms including Exogone naidina and Melinna palmata, together with the amphipod Corophium volutator and Baltic Tellin Macoma balthica. The northern mudflats have an abundance of the polychaete Tharyx marioni and Ragworm Hediste diversicolor, the latter typically near the outflows of the brackish lagoons, where salinities are reduced.

The boulder-dominated shore at Barney's Point supports a very unusual community influenced by turbid water currents and characterised by thick mats of the sponge Hymeniacidon spp. on the lower shore. The associated fauna includes bivalves, especially Common Mussel Mytilus edulis, the polychaete worm Polydora ciliata, and the seasquirts Ascidrella scabra and A. conchilega.

The priapulid worm Priapulus caudatus has been noted from the muds at Old Church Bay. This species has only been recorded inter-tidally at one other site in Northern Ireland. The brackish lagoons support an unusual bryozoan community.

Larne Lough is of botanical interest for its maritime plant communities. These include significant areas of saltmarsh, which is generally a scarce habitat in Northern Ireland, and contain a number of notable plant species. The natural transitions from salt to freshwater habitats are also notable.

Beds of Narrow-leaved Eelgrass Zostera angustifolia are present on the intertidal mudflats. These often give way upshore to saltmarsh vegetation, which occurs all around the foreshore, but is most extensive at Ballycarry, in the southern end of the lough. The majority of this has plant communities typical of the middle parts of saltmarsh and is characterised by the dominance of Red Fescue Festuca rubra and Saltmarsh Rush Juncus gerardii. However, the

complete zonation, from lower saltmarsh to upper saltmarsh communities, is also represented. A well-developed transition from maritime to brackish and freshwater fen is also present. Also at Ballycarry, where the saltmarsh plain is more extensive, there is a well-developed pattern of drainage channels (creeks) and pools (saltpans). These communities incorporate many typical saltmarsh species as well as a number of scarce plants, such as Lax-flowered Sea-lavender Limonium humile, Saltmarsh Flat-sedge Elymus rufus, Spring Squill Scilla verna, Frosted Orache Atriplex laciniata and Sea-purslane Atriplex portulacoides.

Some of the saline lagoons on the west shore are also of interest. This is a very rare habitat in Northern Ireland, and the plant communities associated with the transition from open water to terrestrial vegetation are of particular note. The sequence comprises an open water macrophyte community of Eelgrass Zostera marina, Spiral Tasselweed Ruppia cirrhosa, both of which are rare species, and marine algae. The marginal vegetation consists of fringing saltmarsh, which is backed by a series of brackish marsh and fen communities.

Larne Lough provides a significant feeding area for the important tern breeding colony on Swan Island. Over the period 1989-1993 an average of 6 pairs of Roseate Tern Sterna dougallii (1.8% of the European Union's breeding population) was recorded, making this an internationally important area for the species. In addition, over the same period, averages of 174 pairs of Common Tern Sterna hirundo and 123 pairs of Sandwich Tern Sterna sandvicensis (5.6% and 2.7% of the Irish breeding population respectively) occurred. Breeding Arctic Tern Sterna paradisaea are present on occasion.

The first record of Irish nesting Mediterranean Gull, Larus melanocephalus occurred in Larne Lough in 1995.

Larne Lough also holds important numbers of wintering waterfowl. Light-bellied Brent Goose Branta bernicla hrota (an average of 202 birds, 1.01% of the international population) are of international importance. Nationally important species are Goldeneye Bucephala clangula (an average of 182 birds, 1.7% of the Irish wintering population), Great Crested Grebe Podiceps cristatus (121, 4.0%), Red-Breasted Merganser Mergus serrator (180, 9%) and Shelduck Tadorna tadorna (246, 3.5%). The waders Greenshank Tringa nebularia (15, 1.7%) and Redshank Tringa totanus (415, 1.7%) are also present in nationally significant numbers.

SCHEDULE

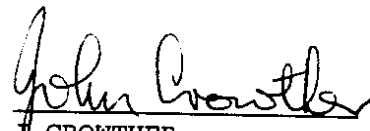
The following operations and activities appear to the Department to be likely to damage the flora, fauna and geological interest of the area:

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, shingle, shell, 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. Excessive sampling of rocks, minerals, fossils or any other material forming a part of the site.
14. Operations or activities which would affect wetlands (including marsh, fen, rivers, streams and open water), e.g.
 - (i) change in the methods or frequency of routine drainage maintenance;
 - (ii) modification to the structure of any watercourse;
 - (iii) lowering of the water-table, permanently or temporarily;
 - (iv) change in the management of bank-side vegetation.
15. The killing or taking of any animal in a manner likely to affect the continued existence of the species within the area except as provided for under the terms of the Wildlife (Northern Ireland) Order 1985, e.g.
 - (i) collection of marine organisms such as shellfish.
 - (ii) bait digging in intertidal areas.
16. 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.
17. Changes in game, waterfowl or fisheries management or fishing or hunting practices.
18. Use of vehicles or craft likely to damage or disturb the wildlife of the area.

Sealed with the Official Seal of the
Department of the Environment for
Northern Ireland on 25 MARCH 1996


J CROWTHER
Assistant Secretary

H. Spratt
CIVIL SERVAANT
CLARENCE COURT
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FOOTNOTES

- (a) Please note that consent by the Department to any of the above operations or activities 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 above 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.