

## DEPARTMENT OF THE ENVIRONMENT FOR NORTHERN IRELAND

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT KNOCKBALLYMORE LOUGH,  
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 delineated and described on the attached map (the area) is of special scientific interest by reason of the flora, fauna, and physiographical 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 'Knockballymore Lough area of special scientific interest'.

The area is of special scientific interest because of its physiography and associated wetland flora and fauna. It includes the open waters of the lough and the surrounding marginal vegetation. Physiographical interest of this largely spring-fed lough is related to the presence of calcium carbonate deposits, or marl, which are precipitated out of the calcium-rich water to produce a marl lake. This is a relatively rare lake type in Northern Ireland. Biological interest is related to the presence of vegetation communities which reflect these calcareous conditions, including the most diverse Stonewort (Charophyte) community found and a number of rare plants; and a rich invertebrate community which includes a number of notable species, in particular the Atlantic Stream Crayfish Austropotamobius pallipes.

The water chemistry reflects the underlying Carboniferous Lower Limestone bedrock and the surface glacial till in this area, which is highly base-rich. Marl deposition and high water quality, clarity and base-richness are characteristic features of marl lakes. Knockballymore Lough is one of the best examples of a marl lake in Northern Ireland and is notable for its clear, clean water and very low phytoplankton productivity.

The lough vegetation exhibits the natural succession from open water to terrestrial vegetation types, and includes a number of scarce plant communities, in addition to a number of rare plant species. The aquatic vegetation is dominated by extensive submerged beds of Stoneworts, consisting of Lesser Bearded Stonewort Chara curta, Bristly Stonewort C. hispida, Hedgehog Stonewort C. pendunculata, Delicate Stonewort C. virgata and Common Stonewort C. vulgaris, and by stands of White Water-lily Nymphaea alba and Yellow Water-lily Nuphar lutea, intermixed with Shining Pondweed Potamogeton lucens. The emergent vegetation of the lough consists of an outer fringe of Common Club-rush Schoenoplectus lacustris, backed by a tall swamp stand of Common Reed Phragmites australis. This is occasionally replaced by Tufted-sedge Carex elata or Great Fen-sedge Cladium mariscus swamp.

Behind the swamp, the shallow waters generally support species-rich stands of calcareous fen vegetation, characterised by the predominance of Lesser Tussock-sedge Carex diandra, Bottle Sedge C. rostrata and Bladder-sedge C. vesicaria, with associated species such as Marsh Cinquefoil Potentilla palustris and Cowbane Cicuta virosa. In some places, the fen extends to an old shoreline bank which is fringed by a narrow strip of Alder Alnus glutinosa carr. The occurrence of several broad calcareous seepage lines along the base of bordering drumlin slopes, gives rise to a number of large calcareous flushes, which run down the slopes to merge with the fen vegetation. The vegetation of these

flushes is species-rich, and is characterised by the abundance of plants like Jointed Rush Juncus articulatus, Glaucous Sedge Carex flacca and Marsh Pennywort Hydrocotyle vulgaris and the occurrence of a number of calcicolous species including Grass-of-Parnassus Parnassia palustris, Knotted Pearlwort Sagina nodosa, Marsh Hawk's-beard Crepis paludosa and Yellow-sedge Carex viridula ssp. brachyrrhyncha.

In addition to the scarce plant communities present, Knockballymore Lough has several rare plant species including the rare Green-flowered Helleborine Epipactis phyllanthes, Fen Pondweed Potamogeton coloratus, Wood Club-rush Scirpus sylvaticus.

Because the waters are clean and largely unpolluted, Knockballymore Lough supports a notable invertebrate community and includes the Atlantic Stream Crayfish Austropotamobius pallipes, a species which is becoming increasingly rare throughout its geographical range. In addition, a number of locally distributed species of aquatic Coleoptera (Waterbeetles) have been recorded, including Halipplus immaculatus, Rhantus grapii, Cymbiodyta marginella and Noterus crassicornis.

#### SCHEDULE

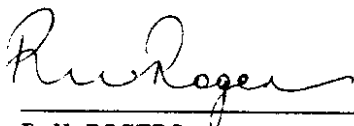
The following operations and activities appear to the Department to be likely to damage the flora, fauna and physiographical features of the area:

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. 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 in 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 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.
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.
17. 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 19 September 1994



R W ROGERS  
Assistant Secretary

ASI94146/CWB

M. Cunningham  
CIVIL SERJEANT OF  
CLARENCE COURT, BELFAST.

/AON

## 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 give consent, particularly if there is a long history of the operation being undertaken in that precise location.