

## DEPARTMENT OF THE ENVIRONMENT

### DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT LOUGH GULLION, COUNTY ARMAGH. ARTICLE 28 OF THE ENVIRONMENT (NORTHERN IRELAND) ORDER 2002.

The Department of the Environment (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 Gullion Area of Special Scientific Interest'.

Lough Gullion is of special scientific interest for its wetland flora and fauna. Good quality fen, swamp and freshwater communities occur, and additional diversity is provided by wet grasslands, cut-over bog, scrub and wet woodland. A wide range of wetland plants are present, some of which are scarce. In addition, the area is locally important for invertebrates and birds.

The lough itself is eutrophic and contains a range of aquatic plants. Macrophytes such as Fennel Pondweed *Potamogeton pectinatus*, Canadian Waterweed *Elodea canadensis* and Spiked Water-milfoil *Myriophyllum spicatum* form mixed submerged beds, while Yellow Water-lily *Nuphar lutea* forms floating rafts on the surface.

The lough margin is fringed by a band of emergent swamp vegetation that has a high diversity of vegetation communities comprising stands of Water Horsetail *Equisetum fluviatile*, Bottle Sedge *Carex rostrata* and Common Reed *Phragmites australis*. Most notably, the swamp community to the east of Lough Gullion supports the scarce Lesser Bulrush *Typha angustifolia*, together with the notable Flowering-rush *Butomus umbellatus*, Gypsywort *Lycopus europaeus* and Cowbane *Cicuta virosa*. This swamp is occasionally interspersed with pockets of wet woodland which is dominated by Grey Willow *Salix cinerea* and Alder *Alnus glutinosa*.

The tall herb fen forms a natural transition from the open water and swamp communities to areas of semi-improved wet grassland, cut-over bog and wet woodland. The tall herb fen is dominated by sedges such as Bottle Sedge *Carex rostrata* and Common Sedge *C. nigra* with associated higher plants including Water Horsetail *Equisetum fluviatile*, Purple-loosestrife *Lythrum salicaria*, Marsh Cinquefoil *Potentilla palustris*, Common Marsh-bedstraw *Galium palustre*, Greater Bird's-foot-trefoil *Lotus pedunculatus* and Water Mint *Mentha aquatica*. Less frequent herbs include Gypsywort *Lycopus europaeus*, Wild Angelica *Angelica sylvestris* and Skullcap *Scutellaria galericulata*. Bryophyte cover is generally high and is dominated by Pointed Spear-moss *Calliergonella cuspidatum*. Where the fen community is slightly more acidic in character, particularly where it forms the transition to cut-over bog, Bottle Sedge *Carex rostrata* and White Sedge *C. curta* predominate with Bogbean *Menyanthes trifoliata*, Marsh Cinquefoil *Potentilla palustris*, Common Marsh-bedstraw *Galium palustre* and occasional Common Cottongrass *Eriophorum angustifolium*.



Semi-natural habitats associated with the swamp and fen provide further structural diversity. Along the western shores of the lough, there is a natural transition from fen into wet grassland and cut-over bog. The wet grassland is dominated by Sharp-flowered Rush *Juncus acutiflorus* and Creeping Bent *Agrostis stolonifera* with species such as Crested Dog's-tail *Cynosurus cristatus*, Sweet Vernal-grass *Anthoxanthum odoratum*, Lesser Spearwort *Ranunculus flammula*, Meadowsweet *Filipendula ulmaria*, Devil's-bit Scabious *Succisa pratensis*, Ragged-Robin *Lychnis flos-cuculi* and Carnation Sedge *Carex panicea*. The cut-over bog is dominated by Purple Moor-grass *Molina caerulea* over a carpet of Bog-mosses *Sphagnum* spp. with Sweet Vernal-grass *Anthoxanthum odoratum*, Tormentil *Potentilla erecta*, Wild Angelica *Angelica sylvestris*, Star Sedge *Carex echinata* and most notably Common Meadow-rue *Thalictrum flavum*. Royal Fern *Osmunda regalis* is prominent on the drier banks within the area of cut-over bog. Pockets of woodland and scrub occur right around the periphery of Lough Gullion. The wet woodland is largely comprised of Grey Willow *Salix cinerea* and Alder *Alnus glutinosa* with Ash *Fraxinus excelsior*, Hawthorn *Crataegus monogyna* and Holly *Ilex aquifolium* occurring in the drier areas. The field layer is comprised of Bramble *Rubus fruticosus* agg. and scattered ferns. The ground flora is highly variable, but generally indicative of transitional wet woodlands with frequent Common Nettle *Urtica dioica*, Common Reed *Phragmites australis* and Yorkshire-fog *Holcus lanatus*, and scattered Wild Angelica *Angelica sylvestris*, Meadowsweet *Filipendula ulmaria*. Most notably, the scarce Cyperus Sedge *Carex pseudocyperus* occurs in the wet woodland to the east of the Lough.

In addition to Cyperus Sedge *Carex pseudocyperus*, a number of additional scarce plant species have been recorded from the area. These include Frogbit *Hydrocharis morsus-ranae* in the open water and Lesser Bulrush *Typha angustifolia* in the swamp. Arrowhead *Sagittaria sagittifolia* is also recorded in the swamp communities. Notable species recorded in the fen include Needle Spike-rush *Eleocharis acicularis*, Cowbane *Cicuta virosa* and Common Meadow-rue *Thalictrum flavum*. Lough Gullion also supports a rich wetland invertebrate community, a direct consequence of the diversity of the swamp and fen communities and associated wetland habitats.

## 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. The 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.
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, 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.
17. Use of vehicles or craft likely to damage or disturb the wildlife of the area.

## **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.
- (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.

# LOUGH GULLION

## Views About Management The Environment (Northern Ireland) Order 2002 Article 28(2)

### A statement of the Department's views about the management of Lough Gullion Area of Special Scientific Interest ("the ASSI")

This statement represents the views of the Department about the management of the ASSI for nature conservation. This statement sets out, in principle, our views on how the area's special conservation interest can be conserved and enhanced. The Department has a duty to notify the owners and occupiers of the ASSI of its views about the management of the land.

Not all of the management principles will be equally appropriate to all parts of the ASSI and there may be other management activities, additional to our current views, which can be beneficial to the conservation and enhancement of the features of interest. It is also very important to recognise that management may need to change with time.

The management views set out below do not constitute consent for any operation or activity. The written consent of the Department is still required before carrying out any operation or activity likely to damage the features of special interest (see the Schedule on pages 2 - 4 for a list of these operations and activities). The Department welcomes consultation with owners, occupiers and users of the ASSI to ensure that the management of this area maintains and enhances the features of interest, and to ensure that all necessary prior consents are obtained.

### MANAGEMENT PRINCIPLES

Fens and swamps are important habitats for wildlife. The Department would encourage the maintenance and enhancement of the fen and swamp through the conservation of its associated native plants and animals. The latter include important invertebrate communities.

Fen and swamp vegetation requires water levels to be at, or just below, the surface all year round. In addition, increases in the nutrient status of the water and underlying soils can lead to the dominance of species, such as Bulrush, at the expense of other valuable plant communities.

Fen communities are susceptible to successional change and generally need some management to retain their interest. Although occasional small patches of scrub can be valuable in providing additional habitat niches for birds and invertebrates, in the absence of management, coarse grasses such as Common Reed can quickly take over and ultimately woody species may become dominant. Over a period of time, these species may shade out valuable plant communities and cause the fen to dry out.

Low intensity summer grazing by cattle (or ponies) that are more adaptable to wet conditions is the most effective way of controlling the growth of more vigorous species and helping to maintain species-rich fen vegetation and a diverse sward structure. In the absence of grazing, cutting and removal of the vegetation to create open areas and reduce the dominance of coarse grasses is desirable.

Specific objectives include:

Where appropriate, the Department would encourage the blocking of drains to prevent the swamp and fen from drying out.

The Department would encourage the maintenance of good water quality through the control of pollution and artificial enrichment.

Ensure that disturbance to the site and its wildlife is minimised.

Where feasible, the Department would encourage the grazing of fen, although overgrazing should be avoided as the wet soils are particularly susceptible to poaching. Where grazing is not possible, other management practices, such as cutting, may be used.

In general, the control of scrub within fen communities can be achieved through the appropriate grazing regime. In some cases, additional scrub management may be required.

Discourage non-native species, especially those that tend to spread at the expense of native wildlife.

Maintain the diversity and quality of habitats associated with the fen and swamp, such as open water, wet grassland, wet woodland and cut-over bog through sensitive management. These adjoining habitats are often very important for wildlife, especially invertebrates.

Sealed with the Official Seal of the  
Department of the Environment  
hereunto affixed is authenticated  
by

*G. R. Seymour*

**G R Seymour**

Senior Officer of the  
Department of the Environment

Dated the 23rd of March 2009