LURGAN LOUGH - A SPECIAL PLACE



Sites of geological and biological importance have been surveyed by Environment and Heritage Service to assess their scientific interest. The best sites are now being declared as Areas of Special Scientific Interest (ASSIs). In doing so, we aim to safeguard these important sites for future generations.

Lurgan Lough consists of 3 separate sub-sites, which are a series of irregular basins within gently undulating land. It is a relatively large and diverse wetland with substantial areas of cut-over bog supporting fen and swamp communities. The ASSI also contains two lakes, surrounded by marginal swamp.



Common Cottongrass

Lurgan Lough has developed a complex mosaic of different wetland habitats as a result of peat cutting in the past. The deepest peat cuttings support Bottle Sedge and Water Horsetail swamp. Intermediate peat cuttings contain fen vegetation dominated by Bottle Sedge, White Sedge, Star Sedge and Marsh Cinquefoil, growing over mounds of *Sphagnum* mosses. The shallowest peat cuttings support bog and wet heath vegetation characterised by Purple Moorgrass, Heather and Common Cottongrass.

The two lakes support a rich aquatic flora with Yellow Water-lily, White Water-lily and Branched Bur-reed. Lurgan Lough Upper is of particular interest, as it is one of the best examples of a lake of its type in Northern Ireland.



White Water-lily

A wide range of other semi-natural habitats provide further structural diversity and add to the conservation value of the site. These include dry heath, acid grassland, rush pasture, wet woodland and scrub.

The fen vegetation at Lurgan Lough is one of the most important wetland habitats in South Armagh for invertebrates. It supports a number of rare species of water beetles, ground beetles and spiders.



Heather

All of the plant communities which make Lurgan Lough such a special place depend upon the ASSI being kept in good condition. The sensitive wetland species can only be maintained by sympathetic management. Environment and Heritage Service is keen to work closely

with all landowners/
occupiers to maintain
and enhance Lurgan
Lough ASSI, one of
the best wetland sites in
County Armagh.







DEPARTMENT OF THE ENVIRONMENT

DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT LURGAN LOUGH, 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 'Lurgan Lough Area of Special Scientific Interest'.

The area is of special scientific interest for its wetland flora and fauna. Lurgan Lough ASSI is a diverse area of good quality fen and freshwater vegetation, interspersed with wet heath and bog. On more elevated ground, dry heath, scrub and acid grassland occur. This mosaic of semi-natural habitats, combined with the relatively large extent, makes it a valuable area for wildlife. A wide range of wetland plants occur, some of which are scarce. In addition, the invertebrate community is important for its overall diversity and includes several rare species.

Lurgan Lough ASSI is made up of four individual sub-sites which occur as a series of irregular basins within gently undulating land. The basins are linked by low ridges that still retain some semi-natural vegetation. Two of the sub-sites contain lakes surrounded by marginal swamp.

The fen vegetation is scattered over the area and often occurs as part of an intricate mosaic with cut-over bog. Past cutting has resulted in a range of different peat depths, with the mosaic of plant communities reflecting these varying environmental conditions. The lowest cuttings contain standing water and support swamp with Bottle Sedge *Carex rostrata* and Water Horsetail *Equisetum fluviatile*. Where the water is shallow, Common Cottongrass *Eriophorum angustifolium* grows over a carpet of *Sphagnum* mosses. On intermediate peat levels, these bog pool communities are replaced by poor fen vegetation, with Bottle Sedge *Carex rostrata*, White Sedge *C. curta*, Star Sedge *C. echinata* and Marsh Cinquefoil *Potentilla palustris* growing over mounds of *Sphagnum* mosses and other bryophytes. The higher levels of peat support bog and wet heath vegetation. Common species include Purple Moor-grass *Molinia caerulea*, Heather *Calluna vulgaris* and Common Cottongrass *Eriophorum angustifolium*.

The two lakes included within the site support a rich aquatic flora, with species such as Yellow Water-lily *Nuphar lutea*, White Water-lily *Nymphaea alba*, Branched Bur-reed

Sparganium erectum and Unbranched Bur-reed S. emersum. Within Northern Ireland, Lurgan Lough Upper represents one of the best examples of a naturally eutrophic lake in the low-to mid-altitudes. This lake type is characterised by clear water with low phosphate levels, and includes Red Pondweed Potamogeton alpinus as one its typical species.

Other semi-natural habitats provide further diversity and add to the conservation interest of the area. Wet grassland dominated by Soft-rush *Juncus effusus* occurs with carr woodland dominated by Willow *Salix* spp. Habitats on more elevated ground with rocky outcrops include dry heath with Heather *Calluna vulgaris* and occasional Bell Heather *Erica cinerea*, Gorse *Ulex europaeus* scrub and stands of Bracken *Pteridium aquilinum*. Patches of acid grassland also occur, where soils are thinner and well-drained.

Lurgan Lough supports a number of notable plant species, including Cowbane *Cicuta virosa*, Royal Fern *Osmunda regalis* and Narrow Buckler-fern *Dryopteris carthusiana*. In addition, the notable bryophytes *Calliergon cordifolium*, *Sphagnum fimbriatum* and *S. squarrosum* have been recorded.

The fen vegetation at Lurgan Lough ASSI represents one of the most important habitats in South Armagh for invertebrates. A number of these species are notable in Northern Ireland, including the water beetle *Hydroporus scalesianus*, a relict fen species and the ground beetle *Pterostichus aterrimus*, which seems to be confined to large fen sites. The spiders *Clubiona stagnatilis* and *Trochosa spinipalpis* were recorded and are uncommon elsewhere in Northern Ireland. Similarly, the horse fly *Chrysops sepulcralis* is present and has been recorded from very few wetland sites in Ireland.

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 not specified under paragraph 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, 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.

LURGAN LOUGH

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

A statement of Environment and Heritage Service's views about the management of the Lurgan Lough Area of Special Scientific Interest ("the ASSI")

This statement represents the views of Environment and Heritage Service 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. Environment and Heritage Service 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 Environment and Heritage Service is still required before carrying out any operation or activity likely to damage the features of special interest (see the Schedule to your ASSI declaration papers for a list of these operations and activities). Environment and Heritage Service 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

Wetlands are an important habitat for wildlife and generally need management to retain their interest. Environment and Heritage Service would encourage the maintenance and enhancement of the wetland, through the conservation of its associated native plants and animals.

Specific objectives include:

Increases in the nutrient status of the water and underlying peat soils can lead to an increase in the dominance of some species at the expense of other valuable plant communities. EHS would encourage the maintenance of good water quality through the control of pollution and artificial enrichment.

Encourage the maintenance of natural water levels in the loughs and fens. Fen vegetation requires water levels to be at, or just below, the surface all year round. Where necessary, EHS would encourage the blocking of drains to prevent the fen from drying out.

The more species-rich types of fen vegetation can be maintained through very light summer grazing by cattle (or ponies) that are adapted to the wet conditions. EHS would encourage the continuation and extension of this practice, although overgrazing should be avoided as the wet soils are particularly susceptible to poaching.

Patches of scrub and woodland provide valuable habitats for birds and invertebrates. However, the spread of scrub into the fen could shade out valuable plant communities and cause the fen to dry out. In general, the control of scrub and rank growth can be achieved through the appropriate grazing regime. In some cases, other methods of control such as cutting, 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 wetland, such as bog, heath, scrub and wet grassland through sensitive management. These adjoining habitats can often be very important for wildlife.

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

Dr J S Faulkner

Senior Officer of the

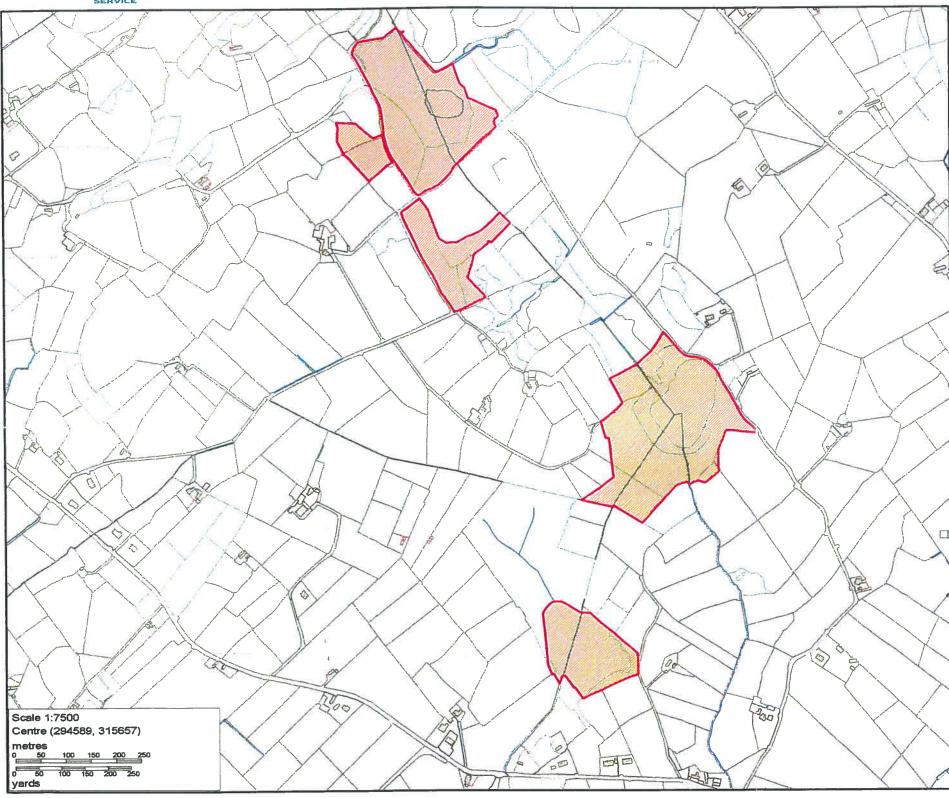
Department of the Environment

Dated the 18th of September 2003



LURGAN LOUGH ASSI





DEPARTMENT OF THE ENVIRONMENT

LURGAN LOUGH AREA OF SPECIAL SCIENTIFIC INTEREST

Map referred to in the Declaration dated: 18 September 2003

SITE BOUNDARY: The Area of Special Scientific Interest (ASSI) includes all the lands highlighted within the solid coloured lines.

AREA OF SITE: 16.20 hectares

OS MAPS 1:50,000: Sheet No. 28

1:10,000: Sheet Nos. 275, 281

IRISH GRID REFERENCE: H 945162, H 945159, H 950156, H 948152

COUNCIL AREA: NEWRY AND MOURNE DISTRICT COUNCIL

COUNTY: ARMAGH

DR J S FAULKNER
SENIOR OFFICER OF THE
DEPARTMENT OF THE ENVIRONMENT

