

# ROUND LOUGH AND LOUGH FADDA

## A SPECIAL PLACE...



Round Lough

Round Lough and Lough Fadda is special because of its open water, diverse fen flora and associated invertebrates. The site is comprised of two loughs which lie in close proximity to each other on the outskirts of Fivemiletown, Co. Tyrone. Surrounding both loughs there is a diverse range of habitats including swamp, species-rich fen, calcareous flushes, wet woodland and mature estate woodland.

The open waters of Round Lough are of particular importance, representing a good example of a naturally eutrophic (nutrient rich) lowland lough. The aquatic vegetation is dominated by beds of Long-stalked Pondweed and floating stands of Broad-leaved Pondweed and Curled Pondweed. The floating and submerged vegetation



White Water-lily

includes; Yellow Water-lily, White Water-lily, Ivy-leaved Duckweed and Stoneworts. The lough is fringed by stands of emergent Common Club-rush and Bulrush.

Around both loughs fen communities are species-rich and quite extensive in places, particularly along the eastern and southern shores of Lough Fadda. Brown Sedge and Bottle Sedge frequently dominate the sward, with the notable Lesser Tussock-sedge also occurring. Characteristic fen plants include Bogbean, Wild Angelica, Marsh Cinquefoil, Water Mint, Devil's-bit Scabious and Marsh Marigold. The fen communities also support several species that are rare or notable for Northern Ireland such as Lesser Tussock-sedge, Greater Tussock-sedge and Cowbane. An extensive carpet of mosses and liverworts may be found growing beneath the layer of herbs and sedges.



Bogbean

SITES OF GEOLOGICAL AND BIOLOGICAL IMPORTANCE HAVE BEEN SURVEYED BY THE 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 GUARANTEE THE SURVIVAL OF THESE IMPORTANT SITES FOR THE USE AND ENJOYMENT OF FUTURE GENERATIONS.

Adding to the diversity of the site Lough Fadda displays good examples of natural transitions from open water through marginal swamp communities to fen and in places, wet woodland. This mosaic of wetland habitats makes Lough Fadda an important site for invertebrates, in particular water beetles, spiders, damselflies and dragonflies.



Cowbane

All the habitats and species that make Round Lough and Lough Fadda such a special place depend upon the ASSI being kept in good condition. We therefore need to protect it from certain activities which have been identified as potentially damaging to the site. Environment and Heritage Service is keen to work closely with all landowners/occupiers to maintain and enhance Round Lough and Lough Fadda ASSI.

## DEPARTMENT OF THE ENVIRONMENT

## DECLARATION OF AREA OF SPECIAL SCIENTIFIC INTEREST AT ROUND LOUGH AND LOUGH FADDA, COUNTY TYRONE. 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 'Round Lough and Lough Fadda Area of Special Scientific Interest'.

Round Lough and Lough Fadda is of special scientific interest because of its wetland flora and fauna. It is a diverse site with two distinct, but hydrologically linked lowland loughs which together support areas of open water with a species-rich assemblage of aquatic plants together with fen communities of high scientific value within Co. Tyrone. A wide range of wetland plants are present, some of which are scarce. The area is also important for the overall diversity of its invertebrates including species which have a restricted distribution within the United Kingdom.

The open waters of Round Lough are of particular importance, representing a good example of a naturally eutrophic lowland lough with a predominantly peat substrate. Although Round Lough is set in a landscape surrounded by gently sloping improved grassland, it is comparatively un-enriched compared to other lowland lough types. It is therefore relatively sensitive to nutrient enrichment. The diverse aquatic vegetation is dominated by beds of Long-stalked Pondweed *Potamogeton praelongus*, floating stands of Broad-leaved Pondweed *P. natans* with Curled Pondweed *P. crispus* also occurring. The floating and submerged vegetation includes Yellow Water-lily *Nuphar lutea*, White Water-lily *Nymphaea alba*, Unbranched Bur-reed *Sparganium emersum*, Canadian Waterweed *Elodea canadensis*, Common Duckweed *Lemna minor*, Ivy-leaved Duckweed *Lemna trisulca* and Stoneworts *Chara* spp. The lough is fringed by emergent swamp vegetation including Common Club-rush *Schoenoplectus lacustris* and Bulrush *Typha latifolia* with natural transitions to fen communities.

Around both loughs, fen communities are generally species-rich and quite extensive in places, particularly along the eastern and southern shores of Lough Fadda. The sedge component is frequently dominated by Brown Sedge *Carex disticha* and Bottle Sedge *C. rostrata*, with the notable Lesser Tussock-sedge *C. diandra* also occurring. Associated higher plants with a widespread occurrence include Bogbean *Menyanthes trifoliata*, Wild Angelica *Angelica sylvestris*, Marsh Cinquefoil *Potentilla palustris* and Common Marsh-bedstraw *Galium palustre*. Additional species with a more localised occurrence include Water Mint *Mentha aquatica*, Devil's-bit Scabious *Succisa pratensis*, Marsh Marigold *Caltha palustris*, Meadowsweet *Filipendula ulmaria* and Ragged-Robin *Lychnis flos-cuculi*. A dense mat of brown mosses dominated by Pointed Spear-moss *Calliergon cuspidatum* grows beneath the sedge and herb sward.



Other mosses include Tall Thyme-moss *Plagiomnium elatum* and Marsh Bryum *Bryum pseudotriquetrum*.

Along the eastern shore of Lough Fadda, the fen is fed by a series of calcareous flushes with localised Stonewort *Chara* spp. Beds. Yellow-sedge *Carex viridula* and Lesser Tussock-sedge *C. diandra* are frequent with Jointed Rush *Juncus articulatus*, Marsh Arrowgrass *Triglochin palustre* and Marsh Horsetail *Equisetum palustre* growing over a thick moss carpet which is dominated by Pointed Spear-moss *Calliergon cuspidatum* and locally frequent Curled Hook-moss *Cratoneuron commutatum*. Associated species include Tree-moss *Climacium dendroides*, Marsh Bryum *Bryum pseudotriquetrum* and localised pockets of the more notable Heart-leaved Spear-moss *Calliergon cordifolium*.

Where the fen communities are more extensive and diverse at Lough Fadda, natural successional transitions from open water through marginal swamp communities to fen and in places, wet woodland, are well represented adding to the diversity of the area. The open waters of Lough Fadda support a range of aquatic plants including six species of Pondweed *Potamogeton* spp. Yellow Water-lily *Nuphar lutea* and White Water-lily *Nymphaea alba* are also common in the open waters. The swamp communities are also diverse with Great Fen-sedge *Cladium mariscus*, Common Reed *Phragmites australis*, and Bottle Sedge *Carex rostrata* swamps occurring. A range of associated herbs are found in the swamp communities including Water-plantain *Alisma plantago-aquatica*, Mare's-tail *Hippuris vulgaris*, Common Spike-rush *Eleocharis palustris*, Water Horsetail *Equisetum fluviatile* and more notably Cowbane *Cicuta virosa*. The wet woodland communities that are closely associated with the fen extend from the south-east to the south-west corners of the lough. The canopy varies in composition, but is characteristically comprised of Alder *Alnus glutinosa*, Grey Willow *Salix cinerea*, Goat Willow *S. caprea* and Downy Birch *Betula pubescens* with occasional Ash *Fraxinus excelsior*. The notable Greater Tussock-sedge *Carex paniculata* occurs frequently along the transition between the fen and wet woodland. Pockets of bog woodland also occur where Alder *Alnus glutinosa* and Birch *Betula pubescens* grow over a thick moss carpet that is comprised of Blunt-leaved Bog-moss *Sphagnum palustre*, Flat-topped Bog-moss *S. fallax* and Spiky Bog-moss *S. squarrosum*. Further woodland diversity is provided by drier areas of semi-natural woodland and Estate woodland comprising a mixture of native and exotic tree species.

Lough Fadda supports a rich wetland invertebrate community, largely because of the diversity of the fen communities and associated wetland habitats. The site is species rich across many invertebrate groups, especially water beetles, spiders, dragonflies and damselflies. Notable species include the water beetle *Laccornis oblongus*, a relict fen species, and a sphagnum bug *Hebrus ruficeps*, both of which may be found in the moss layer of fens. Other species of note include the Hairy Dragonfly *Brachytron pratense* and the Variable Damselfly *Coenagrion pulchellum*.

## SCHEDULE

**The following operations and activities appear to the Department to be likely to damage the flora, fauna, geological 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 rock, 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, artificial fertiliser or lime.
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 being 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 stones and grading of rock faces.
13. Operations or activities which would affect wetlands (including 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 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 the scientific interest 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 the scientific interest 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.

## ROUND LOUGH AND LOUGH FADDA

### 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 Round Lough and Lough Fadda 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 on pages 2 - 4 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**

Lakes and fens are an important habitat for wildlife. Environment and Heritage Service would encourage the maintenance and enhancement of the lakes and fens, through the conservation of their associated native plants and animals. The latter include important invertebrate communities.

Lakes depend on water quantity and quality to maintain their conservation value and are generally sensitive to disturbance and nutrient enrichment. Similarly, fen 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 some species at the expense of other valuable plant communities.

Fen communities are also 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 for the open water and fens include:

Encourage the maintenance of natural water levels in the lakes and fens. Where appropriate, Environment and Heritage Service would encourage the blocking of drains.

Environment and Heritage Service 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, Environment and Heritage Service 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 control may be required.

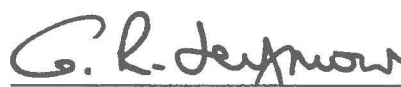
Discourage non-native species, especially those that tend to spread at the expense of native wildlife.

Environment and Heritage Service recognises the important economic and social roles of fishing and welcomes sustainable fishery management that is sensitive to the special interests of the lakes.

Sympathetic recreational practices around the lakes have contributed to the conservation and enhancement of the features of interest. Environment and Heritage Service would encourage the maintenance of these practices to ensure that disturbance to the waters, bed and shore of the lakes and their wildlife is minimised.

Maintain the diversity and quality of habitats associated with the lakes and fens, such as swamp, scrub and woodland through sensitive management. These adjoining habitats can often be very important for wildlife, especially invertebrates.

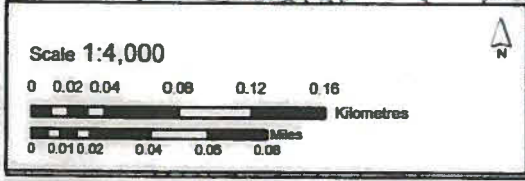
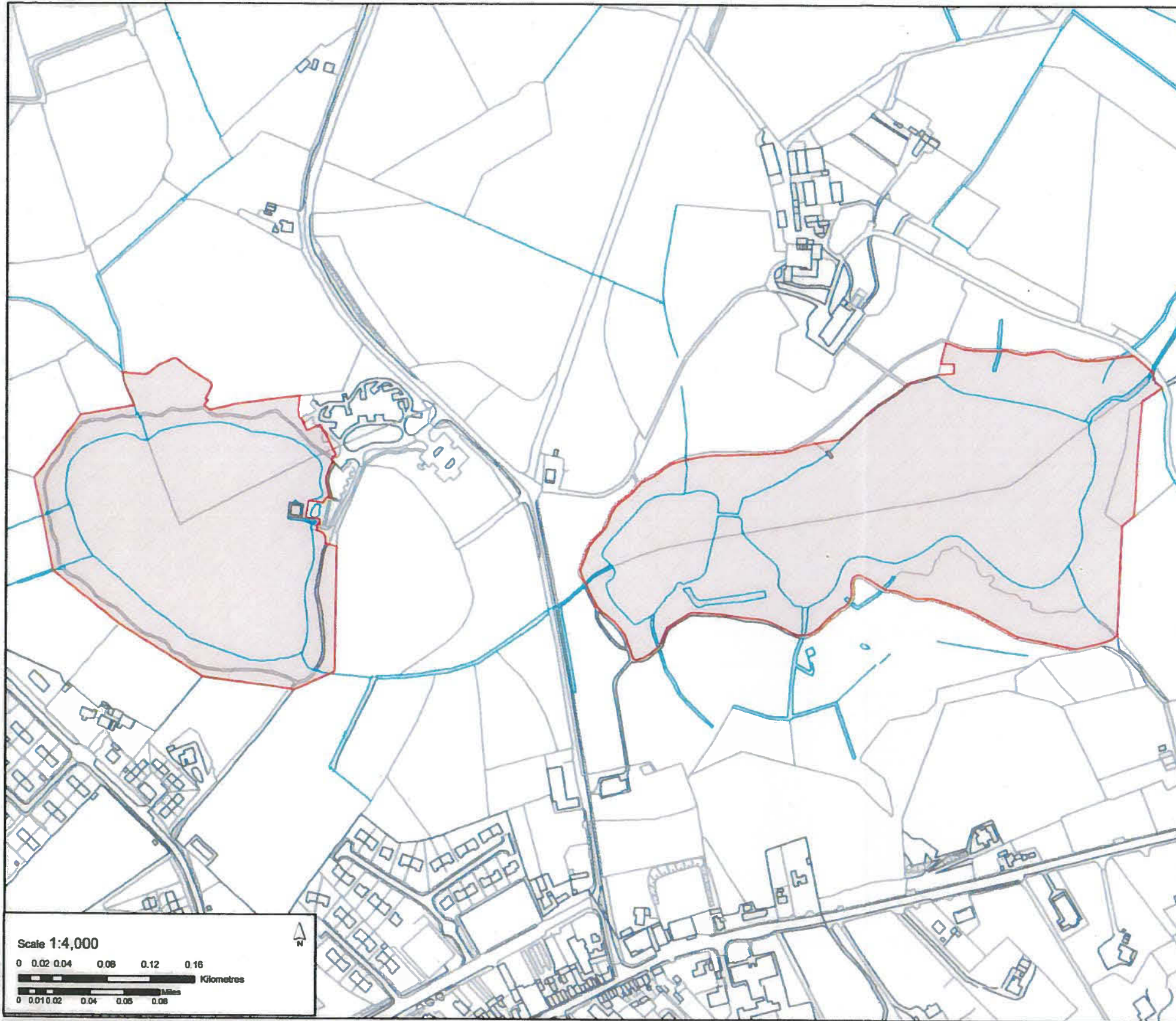
Sealed with the Official Seal of the  
Department of the Environment  
hereunto affixed is authenticated  
by



Mr G R Seymour  
Senior Officer of the  
Department of the Environment

Dated the 15 of MARCH 2007

# ROUND LOUGH AND LOUGH FADDA ASSI



**ROUND LOUGH AND LOUGH FADDA  
AREA OF SPECIAL SCIENTIFIC INTEREST**

Map referred to in the Declaration dated: **15 MARCH 2007**

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

**AREA OF SITE:** 15.42 hectares

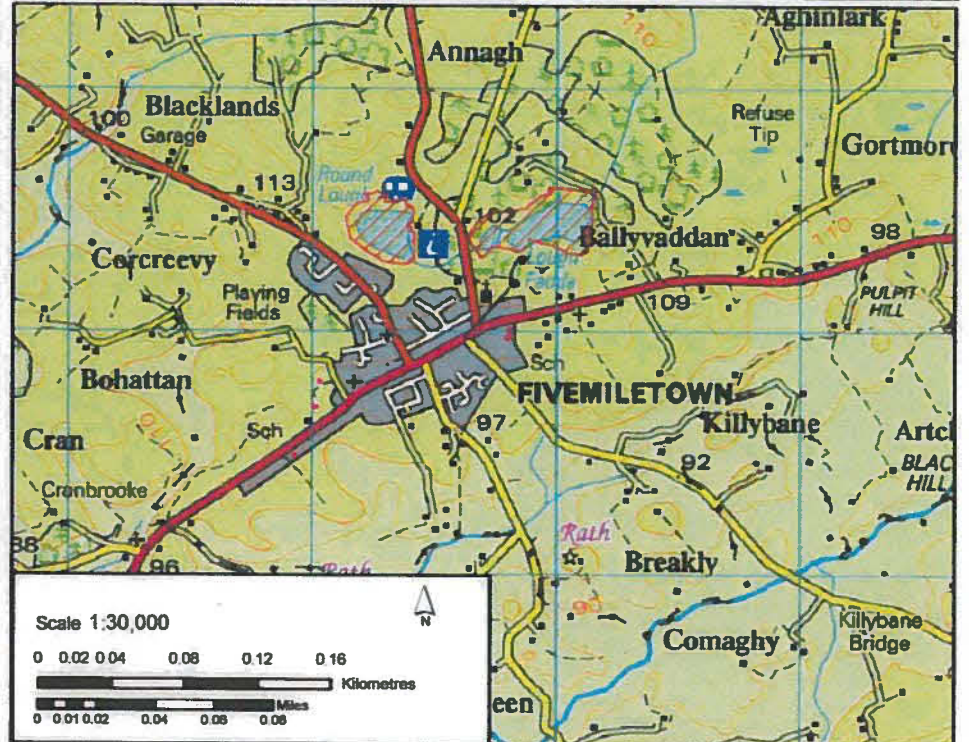
**OS MAPS** 1:50,000: Sheet No. 18  
1:10,000: Sheet No. 194

**IRISH GRID REFERENCE:** H 442 484 H 449 484

**COUNCIL AREA:** DUNGANNON AND SOUTH TYRONE BOROUGH COUNCIL

**COUNTY:** TYRONE

*G. R. Seymour*  
MR G R SEYMOUR  
SENIOR OFFICER OF THE  
DEPARTMENT OF THE ENVIRONMENT



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