# **Information Sheet on Ramsar Wetlands** (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

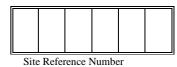
- 1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

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I.	Name and	address	of the	compiler	of this form:	

## DD MM YY

Designation date

FOR OFFICE USE ONLY.



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2. Date this sheet was completed/updated:

07 February 2007

3. Country:

**UK (Northern Ireland)** 

4. Name of the Ramsar site:

**Magheraveely Marl Loughs** 

5. Designation of new Ramsar site or update of existing site:

**This RIS is for:** Designation of a new Ramsar site

- 6. For RIS updates only, changes to the site since its designation or earlier update:
- a) Site boundary and area:

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

7. Map of site included:

Refer to Annex III of the Explanatory Notes and Guidelines, for detailed guidance on provision of suitable maps.

- a) hard copy (required for inclusion of site in the Ramsar List): yes ✓ -or- no
- b) digital (electronic) format (optional): No

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<sup>\*\*</sup> Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

#### **8.** Geographical coordinates (latitude/longitude):

054 11 21 N

007 16 00 W

#### 9. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

The Magheraveely Marl Loughs are situated in the south-west of Northern Ireland, approximately 35 km south-east from Enniskillen, within the local government district of Fermanagh. Three of the six loughs are intersected by the border with the Republic of Ireland.

Administrative region: Fermanagh

#### **10.** Elevation (average and/or max. & min.) (metres):

Min. 50 Max. 80 Mean 61

#### **11. Area** (hectares): 59

#### **Component waterbodies:**

Anachullion Lough 9.08 ha
Burdautien 6.25 ha
Drumacritten Lough 11.14 ha
Kilroosky Lough 12.76 ha
Knockballymore Lough 14.87 ha
Summerhill Lough 4.68 ha

#### 12. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland

The six Loughs are characterised by the presence of calcium carbonate deposits, or marl, which are precipitated out of the calcium-rich water to produce marl loughs, a relatively rare lake type in Northern Ireland. (There are 23 loughs of this type in Northern Ireland, of which these are the best examples.) Biological interest is related to the presence of vegetation which reflects these calcareous conditions, including rich and extensive stonewort (charophyte) communities. The loughs are surrounded by an inundation zone containing significant stands of alkaline fen vegetation. This is generally composed of a sward rich in sedges and herbs. The clean unpolluted waters of the loughs support populations of White-clawed crayfish *Austropotamobius pallipes*, a species which is becoming increasingly rare throughout its geographical range.

#### 13. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2

#### 14. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

- 1. Magheraveely Marl Loughs qualify under Criterion 1 because they represent a rare wetland type both in Northern Ireland and in the EU's Atlantic region.
- 2. Magheraveely Marl Loughs qualify under Criterion 2 because they support vulnerable vegetation communities and species as specified in section 20 of this RIS.

### **15. Biogeography** (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

#### a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

#### 16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology	basic, clay, peat, nutrient-poor, limestone		
Geomorphology and landscape	lowland, valley		
Nutrient status	oligotrophic		
pH	alkaline		
Salinity	fresh		
Soil	mainly organic		
Water permanence	usually permanent		
Summary of main climatic features	Annual averages (Armagh, 1971–2000)		
	(www.metoffice.com/climate/uk/averages/19712000/sites		
	/armagh.html)		
	Max. daily temperature: 12.9° C		
	Min. daily temperature: 5.8° C		
	Days of air frost: 40.4		
	Rainfall: 795.4 mm		
	Hrs. of sunshine: 1191.6		

#### 17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

The Magheraveely Marl Loughs lie in the calcareous lowlands of the River Finn catchment where the underlying Carboniferous lower Limestone and shales have been masked by a thick calcareous glacial drift. This glacial drift was deposited as drumlins resulting in a drainage pattern characterised by numerous small wetlands within the inter-drumlin hollows.

The general land use in the catchment is livestock grazing and permanent pastoral agriculture. The climate is temperate oceanic.

#### 18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

No special values known

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#### 19. Wetland types

Inland wetland

Code	Name	% Area
О	Freshwater lakes: permanent	24
U	Peatlands (including peat bogs swamps, fens)	23
Other	Other, including	47.3
	(Dry grassland	1.5%)
	(Humid, mesophile grassland	17.7%
	(Improved grassland	1%)
	(Broad-leaved deciduous woodland	12.0%)
Xf	Freshwater, tree-dominated wetlands	5.7

#### 20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

A combination of hard water and low nutrient status has produced loughs that approach the classic marl lake condition. In addition they are surrounded by wetlands whose interest is also promoted by high calcium concentration. Biological interest is related to the presence of vegetation which reflects these calcareous conditions, including rich and extensive stonewort (charophyte) communities with several rare and local species, including *Chara aspera*, *C. curta*, *C. hispida*, *C. pedunculata* and *C. rudis*.

The loughs exhibit the natural succession from open water to terrestrial vegetation types and include a number of rare and unusual plant communities. The aquatic vegetation of the loughs is dominated by submerged beds of charophytes. Other open water species include white water lily *Nymphaea alba*, yellow water lily *Nuphar lutea* and pondweeds such as *Potamogeton natans* and *P. lucens*.

The loughs are surrounded by an inundation zone containing significant stands of alkaline fen vegetation. This is generally composed of a sward rich in sedges and herbs. Characteristic species include the lesser tussock sedge *Carex diandra*, long-stalked yellow sedge *Carex viridula* and glaucous sedge *Carex flacca*. Other frequent species include marsh arrowgrass *Triglochin palustre*, quaking-grass *Briza media* and more notably, marsh helleborine *Epipactis palustris*, grass-of-Parnassus *Parnassia palustris*, knotted pearlwort *Sagina nodosa* and fen bedstraw *Galium uliginosum*. The latter are all scarce species in Northern Ireland.

Calcareous fen with Cladium mariscus is also present within the site.

The clean unpolluted waters of the loughs support populations of White-clawed crayfish *Austropotamobius pallipes*, an Annex II species which is becoming increasingly rare throughout its geographical range.

#### 21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.* 

The rich and extensive stonewort (charophyte) communities include several rare and local species, including *Chara aspera*, *C. curta*, *C. hispida*, *C. pedunculata* and *C. rudis*.

Open-water species include white water lily *Nymphaea alba*, yellow water lily *Nuphar lutea* and pondweeds such as *Potamogeton natans* and *P. lucens*.

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The inundation zone contains significant stands of alkaline fen vegetation, generally composed of a sward rich in sedges and herbs. Characteristic species include the lesser tussock sedge *Carex diandra*, long-stalked yellow sedge *Carex viridula* and glaucous sedge *Carex flacca*. Other frequent species include marsh arrowgrass *Triglochin palustre*, quaking-grass *Briza media* and more notably, marsh helleborine *Epipactis palustris*, grass-of-Parnassus *Parnassia palustris*, knotted pearlwort *Sagina nodosa* and fen bedstraw *Galium uliginosum*. The latter are all scarce species in Northern Ireland.

The following Habitats Directive Annex II features are present within the SAC:

H3140 Hard oligo-mesotrophic waters with benthic vegetation of *Chara* spp.

H7210 Calcareous fens with Cladium mariscus and species of the Caricion davallianae

H7230 Alkaline fens

#### 22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present* – these may be supplied as supplementary information to the RIS.

#### **Species Information**

The clean unpolluted waters of the loughs support populations of White-clawed crayfish *Austropotamobius pallipes*, a Habitats Directive Annex II species (S1092) which is becoming increasingly rare throughout its geographical range. Four of the marl loughs have strong isolated crayfish populations.

In addition the fen vegetation supports a number of notable invertebrate species.

#### 23. Social and cultural values:

e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Livestock grazing

Scientific research

Sport fishing

Sport hunting

#### 24. Land tenure/ownership:

Ownership category	On-site	Off-site
Private	+	+

#### 25. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Recreation	+	+
Current scientific research	+	
Fishing: recreational/sport	+	
Grazing (unspecified)	+	+
Rough or shifting grazing	+	+
Permanent pastoral agriculture		+
Hay meadows	+	
Hunting: recreational/sport		+
Non-urbanised settlements		+

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## 26. Factors adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

- 1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.
- 2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.

NA = Not Applicable because no factors have been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Overgrazing by domestic livestock	1		+		
Vegetation succession	1		+		
Drainage/land-claim for agriculture	1		+		
Eutrophication	1		+		

For cate	gory 2	factor	s only	7.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Is the site subject to adverse ecological change? NO

#### 27. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

	1	
Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest	+	
(SSSI/ASSI)		
Management agreement	+	
Site management statement/plan implemented	+	
Special Area of Conservation (SAC)	+	+

#### 28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

#### 29. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Site monitored regularly by EHS staff.

#### **30.** Current conservation education:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

#### None reported

#### 31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Local promotion of walking and cycling. Low intensity with no predicted adverse impact on the interst features.

#### 32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.

Department of the Environment (Northern Ireland), Environment and Heritage Service, Commonwealth House, Castle Street, Belfast, Northern Ireland, BT1 1GU

#### 33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Department of the Environment (Northern Ireland), Environment and Heritage Service, Commonwealth House, Castle Street, Belfast, Northern Ireland, BT1 1GU

#### 34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

#### **Site-relevant references**

Environment and Heritage Service (2005) Northern Ireland Habitat Action Plan. Marl lakes. Environment and Heritage Service, Belfast. www.ehsni.gov.uk/pubs/publications/marllakes\_pdf.pdf

Environment and Heritage Service, Habitat Survey Team (1995) Finn Lackey Marl Lake Survey. Environment and Heritage Service, Belfast

Gallagher, M (2000) Survey of the white-clawed crayfish, Austropotamobius pallipes, at eight marl loughs, Finn-Lackey Valley. July 2000. Queen's University Belfast

McLeod, CR, Yeo, M, Brown, AE, Burn, AJ, Hopkins, JJ & Way, SF (eds.) (2004) *The Habitats Directive: selection of Special Areas of Conservation in the UK*. 2nd edn. Joint Nature Conservation Committee, Peterborough. www.jncc.gov.uk/SACselection

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