

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes 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. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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

Joint Nature Conservation Committee
Monkstone House
City Road
Peterborough
Cambridgeshire PE1 1JY
UK
Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948
Email: RIS@JNCC.gov.uk

FOR OFFICE USE ONLY.

DD MM YY

--	--	--

Designation date

--	--	--	--	--	--	--	--

Site Reference Number

2. Date this sheet was completed/updated:

Designated: 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:

** 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.

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, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) **hard copy** (required for inclusion of site in the Ramsar List): *yes* ✓ -or- *no* ☐;
- ii) **an electronic format** (e.g. a JPEG or ArcView image) *Yes*
- iii) a **GIS file providing geo-referenced site boundary vectors and attribute tables** *yes* ✓ -or- *no* ☐;

b) **Describe briefly the type of boundary delineation applied:**

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The site boundary is the same as, or falls within, an existing protected area.

For precise boundary details, please refer to paper map provided at designation

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): **11. Area** (hectares): 58.78

Min.	50
Max.	80
Mean	61

12. General overview of the site:

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 13 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 in Northern Ireland.
2. Magheraveely Marl Loughs qualify under Criterion 2 because they support vulnerable vegetation communities and species.

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

General description of the Physical Features:

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

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

19. Wetland types:

Inland wetland

Code	Name	% Area
Other	Other	47.3
O	Freshwater lakes: permanent	24
U	Peatlands (including peat bogs swamps, fens)	23
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, and the ecosystem services of the site and the benefits derived from them.

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.

Ecosystem services

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*.

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:

Describe if the site has any general social and/or 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

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning? **No**

If Yes, describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

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		+

26. Factors (past, present or potential) 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 category 2 factors only.

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.

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)	+	+

b) Describe any other current management practices:

The management of Ramsar sites in the UK is determined by either a formal management plan or through other management planning processes, and is overseen by the relevant statutory conservation agency. Details of the precise management practises are given in these documents.

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 communications, education and public awareness (CEPA) activities related to or benefiting the site:

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 15 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

Please return to: **Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**

Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: ramsar@ramsar.org