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:

- 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.
- Once completed the RIS (and accompanying man(s)) should be submitted to the Ramsar Secretariat. Compilers are

	e an electronic (MS Word) copy of the RIS	S and, where possible, digital copies of maps.
1. Name and addres	s of the compiler of this form:	For office use only.
Joint Nature Con Monkstone House City Road Peterborough Cambridgeshire UK Telephone/Fax: Email:		Designation date Site Reference Number 1733 – 555 948
2. Date this sheet wa	s completed/updated:	
	March 1997 / updated 12 May 2005	
3. Country:	<u> </u>	
UK (Northern In	reland)	
4. Name of the Ram	sar site:	
Upper Lough F	Erne	
5. Map of site include Refer to Annex III of the Exp	led: lanatory Notes and Guidelines, for detailed	d guidance on provision of suitable maps.
a) hard copy (required	for inclusion of site in the Ramsar	List): <i>yes</i> ✓ -or- <i>no</i> □
b) digital (electronic) f	ormat (optional): Yes	
6. Geographical coo 54 12 00 N	rdinates (latitude/longitude): 07 29 40 W	
Nearest town/city: Enni	skillen uated in Co. Fermanagh, in the wes	ion(s), and the location of the nearest large town. st of Northern Ireland.
		A (h) . 5010.07
8. Elevation (average Min. 40	e and/or max. & min.) (metres): 9	Area (hectares): 5818.07
Max. 75		
Mean 46		

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10. Overview:

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

Upper Lough Erne is a very large and complex freshwater system. A series of flooded drumlins in the course of the River Erne give rise to a complex of islands, bays and many lakes bordered by damp pastures, fens, reedswamp and alder/willow carr and oak woodland.

11. 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, 3, 6

Secretariat comment: The RIS provides information requiring the application of Criterion 4. This needs to be included in the next update.

12. 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).

Ramsar criterion 1

The site is a particularly good representative example of a eutrophic lake and associated swamp, fen and wet grassland.

The site is a particularly good representative example of a wetland which plays a substantial hydrological, biological and ecological system role in the natural functioning of a major river basin which is located in a trans-border position with the Republic of Ireland.

Ramsar criterion 2

The site supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant and animal. Plant species in published or draft Irish Red Data Books include: fen violet *Viola stagnalis*, Irish lady's tresses *Spiranthes romanzoffiana*, pointed stonewort *Nitella mucronata* and the moss *Fissidens monguillonii*. Vertebrate species in the Irish Vertebrate Red Data Book include whiskered bat *Myotis mystacinus*, shoveler *Anas clypeata*, pochard *Aythya farina* and brook lamprey *Lampetra planeri*. Rare or vulnerable invertebrate species include white-clawed crayfish *Austropotabius pallipes*, lunar hornet moth, *Sesia bembeciformis*, a pondskater *Limnoporus rufoscutellatus*, the water beetles, *Donacia aquatica*, *D. bicolora*, *Gyrinus distinctus*, *G. natator* and *Hydroporus glabriusculus* and the carabid *Lebia cruxminor*.

Ramsar criterion 3

The site is of special value for maintaining the genetic and ecological diversity of Northern Ireland because of the quality and peculiarities of its flora and fauna. Furthermore, a large number of plant and animal species are confined or almost confined to this area within Northern Ireland including most of the rare species listed in Criterion 2.

The site regularly supports substantial numbers of individuals from particular groups of waterfowl which are indicative of wetland values, productivity and diversity. Wintering wildfowl species which occur in at least nationally important numbers include great crested grebe *Podiceps cristatus*, cormorant *Phalacrocorax carbo*, whooper swan *Cygnus cygnus*, mute swan *Anser olor*, tufted duck *Aythya fuligula*, wigeon *Anas penelope*, teal *Anas crecca*, goldeneye *Bucephala clangula*, coot *Fulica atra* and mallard *Anas platyrhynchos*.

Ramsar criterion 6

The site regular supports internationally important numbers of wintering Whopper Swan *Cygnus cygnus*. The birds using the site form the core of a population of birds which use both the site and the extensive improved agricultural grassland surrounding the areas.

Ramsar criterion 6 – species/populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

Whooper swan, Cygnus cygnus, Iceland/UK/Ireland

875 individuals, representing an average of 4.1% of the population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on waterbird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

See Sections 19/20 for details of noteworthy species

13. 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

14. 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, alluvium, peat, nutrient-rich, limestone		
Geomorphology and landscape	lowland, island, floodplain		
Nutrient status	eutrophic		
pH	alkaline		
Salinity	fresh		
Soil	mainly mineral		
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:

Upper Lough Erne is a very large and complex freshwater system within the catchment of the River Erne. A series of flooded drumlins in the course of the River Erne give rise to a complex of islands, bays and many lakes bordered by damp pastures, fens, reedswamp, alder *Alnus glutinosa*-willow *Salix* sp. carr, and oak *Quercus* sp. woodland.

15. 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).

Upper Lough Erne is a very large and complex freshwater system within the catchment of the River Erne. A series of flooded drumlins in the course of the River Erne give rise to a complex of islands, bays and many lakes bordered by damp pastures, fens, reedswamp, alder *Alnus glutinosa*-willow *Salix* sp. carr, and oak *Ouercus* sp. woodland.

16. Hydrological values:

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

No special values known

17. Wetland types

Inland wetland

Code	Name	% Area
О	Freshwater lakes: permanent	64.9
Тр	Freshwater marshes / pools: permanent	8.6
Ts	Freshwater marshes / pools: seasonal / intermittent	10.3
U	Peatlands (including peat bogs swamps, fens)	0.9
4	Seasonally flooded agricultural land	0.7
Other	Other	14.6

18. General ecological features:

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

The extensive nature of the open water and shoreline of this site has resulted in the site containing exceptionally extensive swamp and fen transitions and associated Magnopotamion and Hydrocharition vegetation. The site contains important associated habitats, most notably wet grassland and woodland.

19. 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.

Nationally important species occurring on the site.

Higher Plants.

Viola stagnalis, Spiranthes romanzoffiana.

Lower Plants.

Nitella mucronata, Fissidens monguillonii.

20. 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.

Rirds

Species currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Black-headed gull , $Larus\ ridibundus$, N & C Europe

1527 apparently occupied nests, representing an average of 2.8% of the all-Ireland population (Seabird 2000 Census)

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89 individuals, representing an average of 1.7% of

160 individuals, representing an average of 4.5%

the all-Ireland population (5 year peak mean

1998/9-2002/3)

Species with peak counts in winter:

Little grebe, *Tachybaptus ruficollis ruficollis*, Europe to E Urals, NW Africa

Great crested grebe, *Podiceps cristatus cristatus*, NW Europe

Great cormorant, *Phalacrocorax carbo carbo*, NW Europe

Eurasian teal, Anas crecca, NW Europe

Mallard, *Anas platyrhynchos platyrhynchos*, NW Europe

Common pochard , *Aythya ferina*, NE & NW Europe

Tufted duck, Aythya fuligula, NW Europe

Common coot, Fulica atra atra, NW Europe

of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Great cormorant . *Phalacrocorax carbo carbo*. 135 individuals, representing an average of 2.79

135 individuals, representing an average of 2.7% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

857 individuals, representing an average of 1.3% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

523 individuals, representing an average of 1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

451 individuals, representing an average of 1.1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

839 individuals, representing an average of 2% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

1043 individuals, representing an average of 4.1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Mammals.

Lutra lutra, Myotis mystacinus

21. 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.

Aesthetic

Aquatic vegetation (e.g. reeds, willows, seaweed)

Archaeological/historical site

Environmental education/interpretation

Fisheries production

Livestock grazing

Non-consumptive recreation

Scientific research

Sport fishing

Sport hunting

Tourism

Traditional cultural

Transportation/navigation

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation	+	
(NGO)		
Local authority, municipality etc.	+	
National/Crown Estate	+	
Private	+	+

23. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Tourism	+	
Recreation	+	
Current scientific research	+	
Fishing: recreational/sport	+	
Grazing (unspecified)	+	
Hunting: recreational/sport	+	

24. 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	hecause no	factors hav	heen renorted
IVA - IVOI Applicable	vecuuse no	juciois nuv	e been reported.

Adverse Factor Category	Reporting Category	Description of the problem (Newly reported Factors only)	On-Site	Off-Site	Major Impact?
Eutrophication	2		+	+	+
Introduction/invasion of non-native animal species	2		+	+	+
Pollution – agricultural fertilisers	2	Pollution/fertilisers, land runoff from surrounding intensively managed agricultural land.	+	+	+

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors? Eutrophication - Eutrophication is a threat to all the lakes which comprise the site. The problem is being addressed through a cross-border water quality management strategy. For smaller satellite loughs ASSI and Environmentally Sensitive Area management agreements will also continue to offer some control of nutrient enrichment from agriculture and also offer the potential for creating additional habitat for whooper swans *Cygnus cygnus*. Water quality will be subject to regular monitoring. No further conservation measures are currently proposed. Water Catchment Management Plan will be developed under the Water Framework Directive.

Introduction/invasion of non-native animal species - Introduction/invasion of exotic animal species: Undertaking studies on effects of non-native zebra mussel *Dreissena polymorpha* on lough ecology. Enhanced water clarity possibly due to zebra mussels, resulting in extensive aquatic macrophtye growth. Published strategy for containment of zebra mussels to existing areas. Monitoring programme undertaken and selective clearance of aquatic macrophytes in progress.

Pollution – agricultural fertilisers - Pollution from fertilisers is a threat to all the lakes which comprise the site. The problem is being addressed through a cross-border water quality management strategy. For smaller satellite loughs

ASSI and Environmentally Sensitive Area management agreements will also continue to offer some control of nutrient enrichment from agriculture and also offer the potential for creating additional habitat for whooper swans *Cygnus cygnus*. Water quality will be subject to regular monitoring. Water Catchment Management Plan will be developed under the Water Framework Directive.

Is the site subject to adverse ecological change? YES

25. 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)		
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation	+	
for nature conservation		
Management agreement	+	
Site management statement/plan implemented	+	
Environmentally Sensitive Area (ESA)	+	+
Special Area of Conservation (SAC)	+	

26. Conservation measures proposed but not yet implemented:

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

No information available

27. Current scientific research and facilities:

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

None reported

28. Current conservation education:

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

None reported

29. Current recreation and tourism:

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

None reported

30. 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

31. 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

32. Bibliographical references:

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

Site-relevant references

- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Crowe, O (2005) Ireland's wetlands and their waterbirds: status and distribution. BirdWatch Ireland, Newcastle, Co. Wicklow
- Gibbons, B (1993) Reserve focus Crom Estate, Ulster. British Wildlife, 4(3), 177-179
- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge. www.wwt.org.uk/publications/default.asp?PubID=14
- Patrick, S (1986) Influence of sanitary and other social change on the eutrophication of Lough Erne, Ireland. Unpublished PhD thesis, University College, London
- Rosell, RS (1997) The status of pollan *Coregonus autumnalis* Thompson in Lough Erne, Northern Ireland. In: *Biology and the Environment: Proceedings of the Royal Irish Academy*, **97B**(2), 163-171
- Stewart, NF (2004) Important stonewort areas. An assessment of the best areas for stoneworts in the United Kingdom. Plantlife International, Salisbury
- Stroud, DA, Chambers, D, Cook, S, Buxton, N, Fraser, B, Clement, P, Lewis, P, McLean, I, Baker, H & Whitehead, S (eds.) (2001) *The UK SPA network: its scope and content.* Joint Nature Conservation Committee, Peterborough (3 vols.) www.jncc.gov.uk/UKSPA/default.htm
- Way, LS, Grice, P, MacKay, A, Galbraith, CA, Stroud, DA & Pienkowski, MW (1993) *Ireland's Internationally Important Bird Sites: a review of sites for the EC Special Protection Area network.* Joint Nature Conservation Committee, Peterborough, for Department of the Environment (Northern Ireland), Belfast, and Irish Wildlife Service, Dublin
- Wolfe-Murphy, SA, Lawrie, EW, Smith, SJ & Gibson, CE (1993) Northern Ireland Lakes Survey. Unpublished report to Northern Ireland Department of Environment, Countryside and Wildlife, Belfast

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