

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:

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 24 March 2002

3. Country:

UK (Northern Ireland)

4. Name of the Ramsar site:

Turmennan Lough

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

This RIS is for: Updated information on an existing 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):

54 22 46 N 05 42 51 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.

Turmennan is situated some 5 km north of Downpatrick within the drumlin belt of County Down, in the south-east of Northern Ireland.

Administrative region: Down

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 14.83

Min.	0
Max.	0
Mean	0

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 valley mire, transitional between fen and bog, is characterised by a broad range of surface conditions, ranging from slightly base-rich to markedly acidic, influenced by the position of the groundwater table in the surface peat layer, which is partly related to the extent of past peat-cutting over the site. The main plant community of the mire surface is an extensive mixed sedge sward dominated by bottle sedge *Carex rostrata*, growing over a carpet of brown mosses that are replaced by *Sphagnum* bog-mosses where the water is more acidic. The central area at Turmennan consists of swamp dominated by common reed *Phragmites australis*, with other associated fen species. Other, more localised fen communities within the area include a mixed sedge sward dominated by lesser tussock-sedge *Carex diandra*, floating mats of bogbean *Menyanthes trifoliata* and 'soakways' with the notable marsh St John's-wort *Hypericum elodes* prominent. Additional diversity is provided by a range of other habitats, including wet heath associated with areas of more acidic peat, scattered pockets of species-rich wet grassland, areas of species-rich dry grassland on thinner soils over rocky outcrops and small pockets of woodland and scrub. Turmennan contains a number of rare plants, including floating club-rush *Eleogiton fluitans* and least bur-reed *Sparganium natans*. The diversity of wetland habitats also supports a rich invertebrate community that includes notable water beetles and several locally distributed species of Odonata. Thirty-nine species of aquatic Coleoptera have been recorded, including many of the uncommon and rare fen species characteristic of the best fen sites in Down and Armagh.

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).

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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).

Ramsar Criterion 1

Turmennan is a lowland valley mire with a range of edaphic conditions.

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	acidic, mud, nutrient-rich, peat, sandstone, slate/shale
Geomorphology and landscape	lowland, valley
Nutrient status	mesotrophic
pH	acidic, circumneutral
Salinity	fresh
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Aldergrove, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/aldergrove.html) Max. daily temperature: 12.5° C Min. daily temperature: 5.8° C Days of air frost: 39.1 Rainfall: 862.4 mm Hrs. of sunshine: 1313.7

General description of the Physical Features:

No information available

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).

No information available

18. Hydrological values:

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

Flood water storage / desynchronisation of flood peaks

19. Wetland types:

Inland wetland

Code	Name	% Area
U	Peatlands (including peat bogs swamps, fens)	50
4	Seasonally flooded agricultural land	15
Other	Other	10
W	Shrub-dominated wetlands	10
Ts	Freshwater marshes / pools: seasonal / intermittent	10
Xf	Freshwater, tree-dominated wetlands	5

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.

The main plant community of the mire surface is formed by an extensive mixed sedge sward dominated by bottle sedge *Carex rostrata* and includes species such as common sedge *Carex nigra*, star sedge *Carex echinata*, ragged-robin *Lychnis flos-cuculi*, marsh pennywort *Hydrocotyle vulgaris* and water horsetail *Equisetum fluviatile*. These species grow over a carpet of brown mosses dominated by *Calliergon cuspidatum* and *C. cordifolium*. Where the water is more acidic, *Sphagnum* bog-mosses such as *S. squarrosum* and *S. subnitens* replace the brown mosses. The central area at Turmennan consists of swamp dominated by common reed *Phragmites australis*, with associated plants such as water mint *Mentha aquatica*, common marsh-bedstraw *Galium palustre*, marsh cinquefoil *Potentilla palustris*, lesser spearwort *Ranunculus flammula*, meadowsweet *Filipendula ulmaria*, bulrush *Typha latifolia* and creeping bent *Agrostis stolonifera*. Other, more localised fen communities within the area include a mixed sedge sward dominated by lesser tussock-sedge *Carex diandra*, floating mats of bogbean *Menyanthes trifoliata* and ‘soakways’ with the notable marsh St John’s-wort *Hypericum elodes* prominent. Turmennan also includes a range of other habitats providing additional diversity. Wet heath is associated with areas of more acidic peat and is dominated by cross-leaved Heath *Erica tetralix* and heather *Calluna vulgaris*, with purple moor-grass *Molinia caerulea*, common cottongrass *Eriophorum angustifolium* and bog asphodel *Narthecium ossifragum* also present. Scattered pockets of species-rich wet grassland are dominated by sharp-flowered rush *Juncus acutiflorus* and soft-rush *Juncus effusus*. On thinner soils over rocky outcrops, there are areas of species-rich dry grassland, dominated by grasses with frequent herbs including cat’s-ear *Hypochaeris radicata*, common bird’s-foot trefoil *Lotus corniculatus* and lesser stitchwort *Stellaria graminea*, growing over a moss layer dominated by *Rhytidiadelphus squarrosus*. Small pockets of woodland and scrub are also present. Turmennan contains a number of rare plants, including floating club-rush *Eleogiton fluitans* and least bur-reed *Sparganium natans*. The diversity of wetland habitats supports a rich invertebrate community, including 39 aquatic Coleoptera species, many of which are uncommon and rare fen species that have been found to be characteristic of the best fen sites in Down and Armagh. Turmennan also supports a number of locally distributed species of Odonata, characterised by the four-spotted chaser *Libellula quadrimaculata*, large red damselfly *Pyrrosoma nymphula*, azure damselfly *Coenagrion puella* and variable damselfly *C. pulchellum*. Notable water beetles include *Acilius canaliculatus*, *Gyrinus natator*, *Rhantus suturellus*, *R. grapii*, *Hydaticus seminiger* and *Cymbiodyta marginellus*. An uncommon species of pond-skater, *Gerris lateralis* has also been recorded.

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.*

Nationally important habitats occurring at this site

Transition mire

Nationally important species occurring at this site

Higher Plants

Floating Club-rush *Eleogiton fluitans*

Least Bur-reed *Sparganium natans*

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.*

Birds

Species Information

Assemblages of national importance

Aquatic Coleoptera

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.

Environmental education/ interpretation

Livestock grazing

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	+	+

Public/communal	+	+
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25. Current land (including water) use:

Activity	On-site	Off-site
Livestock watering hole/pond	+	
Grazing (unspecified)	+	+

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?
No factors reported	NA				

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)	+	
National Nature Reserve (NNR)	+	
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.

Monitoring 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.

Site is a National Nature Reserve with ad hoc usage for conservation education

31. Current recreation and tourism:

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

Site not utilised for recreation or tourism activities

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

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

Nelson, B (1998) *A survey of the invertebrates of fens in Counties Armagh and Down*. (Contractor: Ulster Museum, Department of Zoology). Report to Environment and Heritage Service, Belfast.
www.ehsni.gov.uk/pubs/publications/Fenrpt.doc

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