

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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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

9 March 2006

3. Country:

UK (Scotland)

4. Name of the Ramsar site:

Loch of Inch and Torrs Warren

5. 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): Yes

6. Geographical coordinates (latitude/longitude):

54 50 30 N

04 52 30 W

7. General location:

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

Nearest town/city: Wigtown.

Loch of Inch is 2.5 km east of Stranraer; Torrs Warren is approx. 7 km south-east of Stranraer.

Administrative region: Dumfries and Galloway

8. Elevation (average and/or max. & min.) (metres): **9. Area** (hectares): 2111.39

Min. -2

Max. 13

Mean 3

10. Overview:

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

The Ramsar site is comprised of two separate sites: a large eutrophic freshwater loch (Loch of Inch) and an area of foreshore and sand dunes (Torrs Warren). The latter system contains several sand dune habitats of international importance and nationally important examples of dune slacks. Both components of the site support, in winter, internationally important numbers of Greenland white-fronted geese and a nationally important number of hen harrier; the overall assemblage of wintering waterfowl is also of interest.

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, 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

There are outstanding examples of sand dune and dune slack habitats in the dune system at Torrs Warren.

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

Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

Greenland white-fronted goose, <i>Anser albifrons flavirostris</i> , Greenland (w)	641 individuals, representing an average of 2.3% of the biogeographic population (5 year peak mean for 1996/7-2000/01)
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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.

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	acidic, sand, mud, alluvium, nutrient-poor, sedimentary
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Geomorphology and landscape	lowland, coastal, floodplain, intertidal sediments (including sandflat/mudflat), enclosed coast (including embayment), estuary
Nutrient status	mesotrophic
pH	acidic
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Aspatria, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/aspatria.html) Max. daily temperature: 12.5° C Min. daily temperature: 5.6° C Days of air frost: 49.4 Rainfall: 1002.5 mm Hrs. of sunshine: 1499.4

General description of the Physical Features:

The site comprises two separate areas: a large eutrophic freshwater loch (Loch of Inch) and an area of foreshore and sand dunes (Torrs Warren). The latter system contains important examples of dune slacks.

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).

The site comprises two separate areas: a large eutrophic freshwater loch (Loch of Inch) and an area of foreshore and sand dunes (Torrs Warren). The latter system contains important examples of dune slacks.

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

Marine/coastal wetland

Code	Name	% Area
E	Sand / shingle shores (including dune systems)	68
F	Estuarine waters	13.6
H	Salt marshes	4.9
O	Freshwater lakes: permanent	2.8
Ts	Freshwater marshes / pools: seasonal / intermittent	10.7

18. General ecological features:

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

Loch of Inch: shallow freshwater lake; eastern shore is fringed by well developed fen communities; aquatic plants grow down to a depth of about 2 metres. Uncommon plant species present include the nationally scarce six-stamened waterwort *Elatine hexandra*.

Torrs Warren: acidic sand dune system with highly varied dune morphology; includes areas of accretion and erosion and well developed pools or slacks. Important habitats are the Annex I types: Embryonic shifting dunes; Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”); Fixed dunes with herbaceous vegetation (“grey dunes”); Atlantic decalcified fixed dunes

(*Calluno-Ulicetea*). The dunes support a large variety of flowering plants including nationally scarce cowbane *Cicuta virosa*, sea radish *Raphanus maritimus*, lesser tussock-sedge *Carex diandra* and coralroot orchid *Corallorhiza trifida*.

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.*

Assemblage.

The site is internationally important because it contains the following Habitats Directive Annex I features:

- H2110 Embryonic shifting dunes
- H2120 Shifting dunes along the shoreline with *Ammophila arenaria* (“white dunes”)
- H2130 Fixed dunes with herbaceous vegetation (“grey dunes”)
- H2150 Atlantic decalcified fixed dunes (*Calluno-Ulicetea*)

Nationally important species occurring on the site.

Higher Plants.

Elatine hexandra, *Cicuta virosa*, *Corallorhiza trifida*

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.*

Birds

Species currently occurring at levels of national importance:

Species with peak counts in winter:

Hen harrier, *Circus cyaneus*, Europe 8 individuals, representing an average of 1% of the GB population (5 year peak mean 1991/92-1995/96)

Species Information

Nationally important species occurring on the site.

Amphibians

S1166 *Triturus cristatus* Great crested newt (Habitats Directive Annex II species)

Invertebrates.

Hydroporus brevis (British Red data book species) recorded from the site in 1943; looked for in 1999 but not found.

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

Archaeological/historical site

Scientific research

Sport hunting

22. Land tenure/ownership:

Ownership category	On-site	Off-site
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	+	
Commercial forestry		+
Fishing: recreational/sport		+
Bait collection	+	+
Permanent arable agriculture		+
Permanent pastoral agriculture	+	+
Hunting: recreational/sport		+
Sewage treatment/disposal		+
Mineral exploration (excl. hydrocarbons)		+
Transport route		+
Urban development		+
Non-urbanised settlements		+
Military activities	+	

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 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

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
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Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	
Special Protection Area (SPA)	+	
Management agreement	+	
Site management statement/plan implemented	+	
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.

Geomorphological studies - Glasgow University and SNH.

Fixed point photography - conservation liaison group.

Lichen surveys & monitoring - conservation liaison group.

Goose and hen harrier roost monitoring - local ornithologists.

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.

Activities:

There are a number of caravan sites in the vicinity of the site, and the area is popular in the summer due to the easy access to good quality beaches. However, because of MoD activities/restrictions, people are restricted to the beach area and therefore do not affect the dune habitats. The beach is used by geese for roosting but at different times from the majority of visitors to the beach, so these recreational activities have no adverse affect on the interest of the site. There is limited sport shooting (wildfowl) in the area, but this tends to be on farmland and away from the Ramsar site. There has been some disturbance in these areas in the past to the Greenland white-fronted geese but this does not appear to be a problem currently.

There are formal paths around the Loch of Inch, but the gardens are only open during the summer months and again, there is no effect on the bird interest.

Facilities provided:

Caravan sites

Seasonality:

Mainly during the summer months. Wildfowling over winter.

30. Jurisdiction:

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

Scottish Executive, Environment and Rural Affairs Department

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.

Scottish Natural Heritage, 2 Anderson Place, Edinburgh, EH6 5NP

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

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- 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
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