

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.

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:

09 March 2006

3. Country:

UK (Scotland)

4. Name of the Ramsar site:

Sléibhteann agus Cladach Thiriodh (Tiree Wetlands and Coast)

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):

56 30 00 N

06 52 00 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.

On the Island of Tiree in the Inner Hebrides

Administrative region: Argyll and Bute

8. Elevation (average and/or max. & min.) (metres): **9.** **Area** (hectares): 1938.59

Min. -1

Max. 11

Mean 6

10. Overview:

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

The site is comprised of two sectors, an intertidal sector comprising of rocky shore, sandy bays and shingle shore. A second, inland sector consists of machair plain, marsh, and wet moorland with several small lochs and numerous pools, and also one large freshwater loch. The inland areas provide roost

sites for internationally important numbers of wintering geese from Greenland and breeding sites for a variety of wader species, while the intertidal sectors support internationally important numbers of wintering wader populations. Several of the lochs are of international importance for their rich aquatic plant communities which include a range of nationally scarce and nationally rare species, while the site provides excellent representation of dune and machair habitats, also of international importance.

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

The site supports substantial areas of freshwater loch, freshwater marsh, wet machair and maritime grassland all of which are in near-natural condition. One of the lochs is of international importance as an example of a eutrophic machair loch; this and several other lochs are of international importance for their rich aquatic plant communities which include the nationally rare Shetland pondweed *Potamogeton rutilus* and a range of nationally scarce aquatic vascular plants and charophytes. The site provides one of the best examples in Britain of machair habitat (including the associated machair loch) which has a very restricted world distribution.

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

Qualifying Species/populations (as identified at designation):

Species regularly supported during the breeding season:

Dunlin, <i>Calidris alpina schinzii</i> , Baltic/UK/Ireland	157 pairs, representing an average of 1.4% of the breeding population (2004)
--	---

Species with peak counts in winter:

Greenland white-fronted goose, <i>Anser albifrons flavirostris</i> , Greenland	1419 individuals, representing an average of 5.2% of the population (1995/96 - 1999/00)
Barnacle goose, <i>Branta leucopsis</i> , Greenland/Ireland, UK	1355 individuals, representing an average of 2.5% of the population (5 year peak mean for 1996/7-2000/01)

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, basic, shingle, sand, mud, alluvium, nutrient-rich, nutrient-poor, metamorphic, gravel, cobble
Geomorphology and landscape	intertidal sediments (including sandflat/mudflat), open coast (including bay), pools, intertidal rock
Nutrient status	eutrophic, oligotrophic
pH	acidic, alkaline, strongly alkaline
Salinity	fresh, saline / euhaline
Soil	mainly organic
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Tiree, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/tiree.html) Max. daily temperature: 11.6° C Min. daily temperature: 6.6° C Days of air frost: 14.0 Rainfall: 1236.4 mm Hrs. of sunshine: 1399.0

General description of the Physical Features:

The site consists of several areas of wetland, including habitats such as machair, heath and freshwater lochs, and extensive sections of the coastline, taking in the islet of Soa.

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 consists of several areas of wetland, including habitats such as machair, heath and freshwater lochs, and extensive sections of the coastline, taking in the islet of Soa.

16. Hydrological values:

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

Recharge and discharge of groundwater, Water supply

17. Wetland types

Inland wetland, Marine/coastal wetland

Code	Name	% Area
D	Rocky shores	19
E	Sand / shingle shores (including dune systems)	29
O	Freshwater lakes: permanent	11
Tp	Freshwater marshes / pools: permanent	41

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 intertidal sector comprises rocky shore, shingle shore and sandy shore.

The inland sector is largely moorland with frequent pools and lochans. The predominant vegetation is wet heathland with abundant *Calluna vulgaris*, *Erica tetralix* and *Trichophorum cespitosum*; there are also areas of marsh and fen. The substrate is generally wet and locally boggy. There is also an area of machair plain grading from low dune into wet machair. There is one large eutrophic freshwater loch

(Loch a'Phuill) with high pH levels, and several smaller lochs. Several of the lochs support diverse communities of aquatic plants including a variety of *Potamogeton* species.

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”)
- H2190 Humid dune slacks
- H21A0 Machairs
- H3150 Natural eutrophic lakes with *Magnopotamion* or *Hydrocharition*-type vegetation

Nationally important species occurring on the site:

Higher Plants:

Potamogeton rutilus
Potamogeton filiformis
Potamogeton coloratus
Dactylorhiza traunsteineri
Elatine hexandra
Isoetes echinospora
Juncus balticus
Deschampsia setacea

Lower Plants:

Chara aspera (a stonewort)
Tolypella glomerata (a stonewort)

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 regularly supported during the breeding season:

Ringed plover, *Charadrius hiaticula hiaticula*, 101 pairs, representing an average of 1.2% of the breeding in southern Scandinavia/Baltic, British Isles, N & E continental Europe; wintering in Europe, Med. & N Africa GB population (1994-1995)

Little tern, *Sterna albifrons albifrons*, W Europe 53 apparently occupied nests, representing an average of 2.7% of the GB population (Seabird 2000 Census)

Species with peak counts in winter:

Whooper swan, *Cygnus cygnus*, 103 individuals, representing an average of 1.8% of the GB population (5 year peak mean 1998/9-2002/3)
 Iceland/UK/Ireland

Ringed plover, *Charadrius hiaticula*, 653 individuals, representing an average of 0.9% of the population (1995, 1998, 1999)
 Europe/Northwest Africa

Ruddy turnstone, *Arenaria interpres interpres*,
NE Canada, Greenland/W Europe & NW Africa

873 individuals, representing an average of 0.9%
of the population (1995, 1998, 1999)

Species Information

None reported

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.

Archaeological/historical site
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.		+
Private	+	+
Public/communal	+	+

23. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Collection of non-timber natural products: (unspecified)	+	+
Fishing: recreational/sport	+	
Livestock watering hole/pond	+	
Rough or shifting grazing	+	+
Permanent pastoral agriculture	+	+
Hunting: recreational/sport	+	+
Mineral exploration (excl. hydrocarbons)		+
Domestic water supply	+	+
Non-urbanised settlements		+
Other		+

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
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	+
Management agreement	+	
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.

Monitoring of goose populations throughout the site and all bird populations at the Reef sector of the site is undertaken by RSPB.

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.

Parts of the site used for informal recreation (walking, wildlife watching, etc) by locals and visitors, particularly in summer. Wind-surfing takes place on several of the beaches, mainly in autumn. There is occasional freshwater angling on Loch a'Phuill. Wildfowling takes place in season..

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

- Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP, Davidson, NC & Buck, AL (eds.) (1997) *Coasts and seas of the United Kingdom. Regions 15 & 16. North-west Scotland: the Western Isles and west Highland*. Joint Nature Conservation Committee, Peterborough. (Coastal Directories Series.)
- Boyd, JM & Bowes, DR (eds.) (1983) *The natural environment of the Inner Hebrides. Proceedings of the Royal Society of Edinburgh. Series B: Biological Sciences*, 83
- Connor, DW & Little, M (1998) Chapter 13. West Scotland (MNCR Sector 13). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 355-370. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Dargie, TCD (1993) *Sand dune vegetation survey of Great Britain: a national inventory. Part II: Scotland*. Joint Nature Conservation Committee, Peterborough
- Dargie, TCD (2000) Sand dune vegetation survey of Scotland: national report. *Scottish Natural Heritage, Commissioned Report*, No. F97AA401. www.snh.org.uk/pdfs/strategy/commreports/F97AA401.pdf
- Johnston, RD, Riley, HT & Shepherd, M (1994) *A 1994 survey of the breeding wader populations on Tiree pSPA/proposed Ramsar site*. Scottish Natural Heritage, Edinburgh (Internal report)
- Johnston, RD, Riley, HT & Shepherd, M (1995) *A 1995 survey of breeding dunlin on Tiree pSPA/proposed Ramsar site*. Scottish Natural Heritage, Edinburgh (Internal report)
- 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
- 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
- Scottish Natural Heritage (1998) *Machair*. Scottish Natural Heritage, Edinburgh (Scotland's Living Landscapes)
- Shepherd, KB, Green, M, Knight, AC & Stroud, DA (1988) The breeding birds of Tiree and Coll in 1987/88 with special emphasis on breeding waders. *Nature Conservancy Council, CSD Report*, No. 827
- Shepherd, KB & Stroud, DA (1991) Breeding waders and their conservation on the wetlands of Tiree and Coll, Inner Hebrides. *Wildfowl*, 42, 108-117
- Stewart, NF (2004) *Important stonewort areas. An assessment of the best areas for stoneworts in the United Kingdom*. Plantlife International, Salisbury
- Stroud, DA (ed.) (1989) The birds of Coll and Tiree: status, habitats and conservation. (Contractor: Scottish Ornithologists' Club, Edinburgh). *Nature Conservancy Council, CSD Report*, No. 927
- Stroud, DA (1992) Crofting and bird conservation on Coll and Tiree. *British Wildlife*, 3(6), 340-349
- 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
- Weighell, AJ, Donnelly, AP & Calder, K (eds.) (2000) *Directory of the Celtic coasts and seas*. Joint Nature Conservation Committee, Peterborough

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**