

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: 30 October 2001

3. Country:

UK (Scotland)

4. Name of the Ramsar site:

Sléibhtean agus Cladach Thiriodh (Tiree Wetlands and Coast)

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):

56 30 00 N 06 52 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.

On the Island of Tiree in the Inner Hebrides

Administrative region: Argyll and Bute

10. Elevation (average and/or max. & min.) (metres): **11. Area** (hectares): 1938.59

Min. -1

Max. 11

Mean 6

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 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.

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, 6

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

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 , *Calidris alpina schinzii*, 157 pairs, representing an average of 1.4% of the breeding population (2004)
Baltic/UK/Ireland

Species with peak counts in winter:

Greenland white-fronted goose, *Anser albifrons flavirostris*, Greenland 1419 individuals, representing an average of 5.2% of the population (1995/96 - 1999/00)

Barnacle goose , *Branta leucopsis*, 1355 individuals, representing an average of 2.5% of the population (5 year peak mean for 1996/7-2000/01)
Greenland/Ireland, UK

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*, 873 individuals, representing an average of 0.9% of the population (1995, 1998, 1999)
NE Canada, Greenland/W Europe & NW Africa

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.

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, 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.

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 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.

18. 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

19. Wetland types:

Inland wetland, Marine/coastal wetland

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

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 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.

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.*

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)

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 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

Species Information

None reported

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.

- Archaeological/historical site
- Livestock grazing
- Non-consumptive recreation
- Scientific research
- Sport fishing
- Sport hunting
- Tourism
- Traditional cultural
- Transportation/navigation

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
Non-governmental organisation (NGO)	+	+
Local authority, municipality etc.		+
Private	+	+
Public/communal	+	+

25. 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		+

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)	+	+
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)	+	+

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

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.

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..

32. 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

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.

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

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

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

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