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

2. Date this sheet was completed/updated:
   9 March 2006

3. Country:
   UK (Scotland)

4. Name of the Ramsar site:
   Loch of Strathbeg

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):
   57 37 24 N 01 53 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.
   Nearest town/city: Fraserburgh
   Situated inland from Rattray Head, the north-east point of the Buchan coast, 13 km south of Fraserburgh on the east coast of Scotland.
   Administrative region: Aberdeenshire

8. Elevation (average and/or max. & min.) (metres):
   Min.  0
   Max.  16
   Mean  5

9. Area (hectares): 615.94
10. Overview:
Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

This is a shallow naturally eutrophic loch with adjoining reedbeds, freshwater marshes, and alder and willow carr. The calcareous dunes and dune slacks within this site are relatively undisturbed and contain a rich flora. The diversity of plant communities supports a correspondingly diverse invertebrate fauna.

The loch constitutes the largest dune slack pool in Britain (200 ha) and the largest water body in the north-east Scottish lowlands. It is separated from the sea by a dune system 0.5-1 km wide.

This site provides wintering habitat for a number of important wetland bird species, particularly wildfowl, and is also an important staging area for migratory wildfowl from Scandinavia and Iceland/Greenland.

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, 5, 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 loch constitutes the largest dune slack pool in Britain and the largest water body in the north-east Scottish lowlands and is one of very few naturally eutrophic lochs of the size in the region.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

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

Qualifying Species/populations (as identified at designation):
Species with peak counts in spring/autumn:
Pink-footed goose, *Anser brachyrhynchus*, Greenland, Iceland/UK 34797 individuals, representing an average of 14.4% of the population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:
Whooper swan, *Cygnus cygnus*, Iceland/UK/Ireland 290 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation
Species with peak counts in winter:
Barnacle goose, *Branta leucopsis*, Greenland/Ireland, UK 3418 individuals, representing an average of 6.3% of the population (3418)
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](http://www.bto.org/survey/webs/webs-alerts-index.htm).
Details of bird species occurring at levels of National importance are given in Section 20.

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):

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.

<table>
<thead>
<tr>
<th>Soil &amp; geology</th>
<th>sand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geomorphology and landscape</td>
<td>lowland, coastal</td>
</tr>
<tr>
<td>Nutrient status</td>
<td>eutrophic</td>
</tr>
<tr>
<td>pH</td>
<td>circumneutral</td>
</tr>
<tr>
<td>Salinity</td>
<td>fresh</td>
</tr>
<tr>
<td>Soil</td>
<td>mainly mineral</td>
</tr>
<tr>
<td>Water permanence</td>
<td>usually permanent</td>
</tr>
<tr>
<td><strong>Summary of main climatic features</strong></td>
<td>Annual averages (Craibstone, 1971–2000)</td>
</tr>
<tr>
<td></td>
<td>(<a href="http://www.metoffice.com/climate/uk/averages/19712000/sites/">www.metoffice.com/climate/uk/averages/19712000/sites/</a> craibstone.html)</td>
</tr>
<tr>
<td></td>
<td>Max. daily temperature: 11.2° C</td>
</tr>
<tr>
<td></td>
<td>Min. daily temperature: 4.6° C</td>
</tr>
<tr>
<td></td>
<td>Days of air frost: 53.6</td>
</tr>
<tr>
<td></td>
<td>Rainfall: 816.3 mm</td>
</tr>
<tr>
<td></td>
<td>Hrs. of sunshine: 1409.0</td>
</tr>
</tbody>
</table>

**General description of the Physical Features:**

Loch of Strathbeg is a shallow, naturally eutrophic loch with adjoining reedbeds, freshwater marshes, and alder *Alnus glutinosa* and willow *Salix* spp. carr. The calcareous dunes and dune slacks within the site are relatively undisturbed and contain a rich flora. The loch constitutes the largest dune slack pool in the UK (200 ha) and the largest waterbody in the north-east Scottish lowlands. It is separated from the sea by a 0.5-1 km wide dune system.

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).

Loch of Strathbeg is a shallow, naturally eutrophic loch with adjoining reedbeds, freshwater marshes, and alder *Alnus glutinosa* and willow *Salix* spp. carr. The calcareous dunes and dune slacks within the site are relatively undisturbed and contain a rich flora. The loch constitutes the largest dune slack pool in the UK (200 ha) and the largest waterbody in the north-east Scottish lowlands. It is separated from the sea by a 0.5-1 km wide dune system.
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, Marine/coastal wetland

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>% Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Sand / shingle shores (including dune systems)</td>
<td>24</td>
</tr>
<tr>
<td>O</td>
<td>Freshwater lakes: permanent</td>
<td>35</td>
</tr>
<tr>
<td>U</td>
<td>Peatlands (including peat bogs swamps, fens)</td>
<td>25</td>
</tr>
<tr>
<td>Other</td>
<td>Other</td>
<td>16</td>
</tr>
</tbody>
</table>

18. **General ecological features:**
Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

**Open Water:** largest waterbody in north-east Scotland. Largest dune lake in Britain. It is shallow (c. 1.5 m deep) and nutrient-rich.

**Marsh:** wetland habitat is relatively rare in the district and the surrounding marshes are among the richest in north-east Scotland.

Well-developed system of calcareous dunes and slacks also present within the site.

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., including count data. 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.**
- *Ranunculus reptans*, *Corallorhiza trifida*, *Potamogeton filiformis*, *Juncus balticus*
- *Tolypella nidifica*

**Lower Plants.**

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:**
- *Sandwich tern*, *Sterna* (Thalasseus) sandvicensis sandvicensis, W Europe
  - 530 pairs, representing an average of 5% of the GB population (5 year mean 1993-1997)

**Species with peak counts in spring/autumn:**
- *Ruff*, *Philomachus pugnax*, Europe/W Africa
  - 10 individuals, representing an average of 1.4% of the GB population (5 year peak mean 1998/9-2002/3)
- *Common greenshank*, *Tringa nebularia*, Europe/W Africa
  - 8 individuals, representing an average of 1.3% of the GB population (5 year peak mean 1998/9-2002/3)
Species with peak counts in winter:
Greylag goose, Anser anser anser, Iceland/UK, Ireland
560 individuals, representing an average of 0.6% of the GB population (5 year peak mean for 1995/6-1999/2000)
Smew, Mergellus albellus, NW & C Europe
4 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

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.
Aesthetic
Environmental education/interpretation
Scientific research
Sport fishing
Sport hunting
Tourism

22. Land tenure/ownership:

<table>
<thead>
<tr>
<th>Ownership category</th>
<th>On-site</th>
<th>Off-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-governmental organisation (NGO)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>National/Crown Estate</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Private</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

23. Current land (including water) use:

<table>
<thead>
<tr>
<th>Activity</th>
<th>On-site</th>
<th>Off-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature conservation</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Tourism</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Recreation</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Current scientific research</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Fishing: recreational/sport</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Arable agriculture (unspecified)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Grazing (unspecified)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Hunting: recreational/sport</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Sewage treatment/disposal</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Adverse Factor Category</th>
<th>Reporting Category</th>
<th>Description of the problem (Newly reported Factors only)</th>
<th>On-Site</th>
<th>Off-Site</th>
<th>Major Impact?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No factors reported</td>
<td>NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Was 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.

<table>
<thead>
<tr>
<th>Conservation measure</th>
<th>On-site</th>
<th>Off-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site/ Area of Special Scientific Interest (SSSI/ASSI)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Special Protection Area (SPA)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Land owned by a non-governmental organisation for nature conservation</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Management agreement</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Site management statement/plan implemented</td>
<td>+</td>
<td></td>
</tr>
</tbody>
</table>

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.

Contemporary.

Fauna.
Numbers of migratory and wintering wildfowl and waders are monitored annually as part of the national Wetland Birds Survey (WeBS) organised by the British Trust for Ornithology, Wildfowl & Wetlands Trust, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee.
Other regular Bird counts have also been carried out on the Loch.
Environment.
Future work on the nutrient status of the Loch is planned by SNH in partnership with SEPA, RSPB and others.

Completed.
ITE Coastal Survey Invertebrates & Vegetation (1976)
Vegetation Survey (Dunbar & Cutts 1980)
BLS Lichen Survey (1984)
ITE Survey of Sand Dunes in Relation to Grazing (1986)
Study on Distribution of Geese (Paterson & Keller 1989)
Freshwater Macrophyte Survey (Pritchard 1990)
RSPB Vegetation Survey (Prosser & Wallace 1990)
RSPB Land Use and Wildfowl Counts in Relation to Nutrient Status of The Loch of Strathbeg (Raffaelli, Warbrick & Young 1991)

28. Current conservation education:
e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.
There is a RSPB Visitor centre at Starnafin and network of hides around Loch.

29. Current recreation and tourism:
State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.
Activities, Facilities provided and Seasonality.
Bird watching, Walking.

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

Edwards, T (1854) The birds of Strathbeg and its neighbourhood, with a few remarks upon their habitats, etc. Naturalist, 4.
Institute of Terrestrial Ecology (1976) Coastal survey invertebrates & vegetation
Institute of Terrestrial Ecology (1986) Survey of sand dunes in relation to grazing
Paterson, IJ & Keller, V (1989) Study on distribution of geese
Pritchard, DE, Housden, SD, Mudge, GP, Galbraith, CA & Pienkowski, MW (eds.) (1992) Important Bird Areas in the United Kingdom including the Channel Islands and the Isle of Man. Royal Society for the Protection of Birds, Sandy
Pritchard, JS (1990) Freshwater macrophyte survey
Raffaelli, D, Warbrick, S & Young M (1991) RSPB land use and wildfowl counts in relation to nutrient status of the Loch of Strathbeg
www.jncc.gov.uk/UKSPA/default.htm

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