Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VII.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 (2003).

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: 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:
   Designated: 15 March 1996

3. Country:
   UK (Scotland)

4. Name of the Ramsar site:
   Greenlaw Moor

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):
55 44 06 N  02 27 06 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.
Nearest town/city: Berwick-upon-Tweed
Located in the southern Lammermuir Hills, in the Scottish Borders west of Berwick-upon-Tweed.

Administrative region: Scottish Borders

10. Elevation (average and/or max. & min.) (metres):
Min.  229
Max.  232
Mean  231

11. Area (hectares): 247.6

12. General overview of the site:
Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.
This area consists of heather moorland to the east, and raised mire to the west. The heather is the largest remaining example of moorland at mid-altitude in the Borders. There are two pools at Hule Moss which support an internationally important wintering population of pink-footed geese. The area of raised moss is well developed with a fairly typical flora, including some regionally uncommon bryophytes.

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).

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 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*, 8504 individuals, representing an average of 3.5% of the population (5 year peak mean 1998/9-2002/3)
Greenland, Iceland/UK

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):

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.

<table>
<thead>
<tr>
<th>Soil &amp; geology</th>
<th>acidic, neutral, alluvium, peat, nutrient-poor, sandstone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geomorphology and landscape</td>
<td>lowland, hilly, slope</td>
</tr>
<tr>
<td>Nutrient status</td>
<td>highly 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></td>
<td>Max. daily temperature: 12.2° C</td>
</tr>
<tr>
<td></td>
<td>Min. daily temperature: 5.1° C</td>
</tr>
<tr>
<td></td>
<td>Days of air frost: 54.5</td>
</tr>
<tr>
<td></td>
<td>Rainfall: 676.2 mm</td>
</tr>
<tr>
<td></td>
<td>Hrs. of sunshine: 1405.8</td>
</tr>
</tbody>
</table>

**General description of the Physical Features:**
Greenlaw Moor lies in the southern Lammermuir Hills. The site consists of heather moorland in the east and raised mire in the west. The heather *Calluna vulgaris* moorland is the largest remaining example of its type at mid-altitude in the Scottish Borders. There are two pools at Hule Moss.
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).

Greenlaw Moor consists of heather moorland in the east and raised mire in the west. The heather *Calluna vulgaris* moorland is the largest remaining example of its type at mid-altitude in the Scottish Borders. There are two pools at Hule Moss.

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

No special values known

19. **Wetland types:**
Inland wetland

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>% Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>Freshwater lakes: permanent</td>
<td>96.8</td>
</tr>
<tr>
<td>U</td>
<td>Peatlands (including peat bogs swamps, fens)</td>
<td>3.2</td>
</tr>
</tbody>
</table>

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.

This site consists of two lochans set within an area of heather moorland showing sparse representation of other typical moorland species. The west loch is 'perched' and very exposed with a thin marginal surround of *Juncus effusus* tussocks which merges into a fringe of *Deschampsia* and *Eriophorum* and the heather moorland with acid grassland patches. Other shoreline species are very limited and include *Carex rostrata*, *C. nigra*, and *Rumex obtusifolius*. The lochan shoreline and substrate are entirely mineral, unlike the east loch, which is more varied and deeper with a peaty substrate. This loch supports marginal poor-fen with *Sphagnum recurvum* with scattered *Salix cinerea* ssp. *oleifolia* with fringing *Carex rostrata*, *C. nigra*, *Juncus effusus* and *Agrostis stolonifera*. At the outer edges of the basin other *Sphagnum* species occur with *Eriophorum vaginatum*, *Calliergonella cuspidata*, *Carex echinata* and *Juncus articulatus*. Flushes around the outflow of the east loch at the south-east corner support *Ranunculus repens*, *R. flammula*, *Trifolium repens* with *Agrostis* and *Rumex*. *Callitriche* species also occur here. Around this outlet further species of aquatic and terrestrial zone *Sphagna* occur. There are no significant invasive or introduced species. The hydroseral development of particularly the east loch may be expected to proceed in the long term to more extensive poor-fen, limited only by the deeper water. There is no indication of rafting taking place.

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.*

None reported

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
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.

Aesthetic
Environmental education/ interpretation
Non-consumptive recreation
Scientific research
Sport hunting

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:

<table>
<thead>
<tr>
<th>Ownership category</th>
<th>On-site</th>
<th>Off-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>

25. 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>Collection of non-timber natural products: (unspecified)</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Commercial forestry</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Cutting of vegetation (small-scale/subsistence)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Arable agriculture (unspecified)</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Permanent arable agriculture</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Livestock watering hole/pond</td>
<td>+</td>
<td></td>
</tr>
<tr>
<td>Grazing (unspecified)</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Rough or shifting grazing</td>
<td>+</td>
<td>+</td>
</tr>
</tbody>
</table>
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.

<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?

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.

<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>Management agreement</td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Site management statement/plan implemented</td>
<td></td>
<td>+</td>
</tr>
</tbody>
</table>

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 practices 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.

**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.
PhD study involving site on 'Aspects of the ecology of the Lepidoptera associated with *Calluna vulgaris* on managed northern heath' (Haysom 1998; Haysom & Coulson 1998).

**Miscellaneous.**
Extensive bibliography available.
No other facilities.

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.
An informal moorland management demonstration. Local gamekeeping course is held on site.
A bird hide is situated on the site at Hule Moss.

31. **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.**
Walking, riding and bird watching.
Bird hide on Hule Moss only.
Bird watching principally takes place in winter.

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**
[See separate list]
www.jncc.gov.uk/UKSPA/default.htm
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