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 (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:

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: 31 December 1998

3. Country:
UK (Northern Ireland)

4. Name of the Ramsar site:
Ballynahone Bog

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):
54 49 25 N 06 39 40 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: Maghera.

Ballynahone Bog is situated in County Londonderry in the centre of Northern Ireland about 3 km south of Maghera. It is situated on low-lying ground immediately north of the Moyola River about 14 km from its mouth at Lough Neagh.

Administrative region: Northern Ireland

Min. 0  Max. 0  Mean 257

12. General overview of the site:
Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Ballynahone Bog is one of the largest lowland raised bogs in Northern Ireland. The raised bog which covers most of the site exhibits the full range of characteristic vegetation and structural features associated with this type of habitat such as bog pools and hummocks. The raised bog dome is surrounded by cut-over bog with poor fen and birch woodland. The bog vegetation is characterised by a high percentage cover of *Sphagnum* mosses, ericoid dwarf-shrubs such as cross-leaved heath *Erica tetralix* and heather *Calluna vulgaris*, and other associated species such as hare's-tail cottongrass *Eriophorum vaginatum*, common cottongrass *Eriophorum angustifolium*, deergrass *Trichophorum cespitosum* and sundew species *Drosera* spp.

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).

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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 is a large and relatively intact example of a lowland raised bog and one of the best examples of this habitat in the UK.

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, peat, nutrient-poor, basalt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geomorphology and landscape</td>
<td>lowland</td>
</tr>
<tr>
<td>Nutrient status</td>
<td>no information</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>acidic, strongly acidic</td>
</tr>
<tr>
<td>Salinity</td>
<td>fresh</td>
</tr>
<tr>
<td>Soil</td>
<td>mainly organic</td>
</tr>
<tr>
<td>Water permanence</td>
<td>usually permanent</td>
</tr>
<tr>
<td></td>
<td>Max. daily temperature: 12.5° C</td>
</tr>
<tr>
<td></td>
<td>Min. daily temperature: 5.8° C</td>
</tr>
<tr>
<td></td>
<td>Days of air frost: 39.1</td>
</tr>
<tr>
<td></td>
<td>Rainfall: 862.4 mm</td>
</tr>
<tr>
<td></td>
<td>Hrs. of sunshine: 1313.7</td>
</tr>
</tbody>
</table>

**General description of the Physical Features:**
Ballynahone is one of the two largest intact active raised bogs in Northern Ireland with hummock and hollow pool complexes. Recently-constructed surface drains have been filled and the site is recovering.

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).

   Ballynahone is one of the two largest intact active raised bogs in Northern Ireland with hummock and hollow pool complexes. Recently-constructed surface drains have been filled and the site is recovering.
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>U</td>
<td>Peatlands (including peat bogs swamps, fens)</td>
<td>75</td>
</tr>
<tr>
<td>Xp</td>
<td>Forested peatland</td>
<td>25</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.

The classic domed profile of the deep peat exhibits a wide range of characteristic vegetation and structural features, with pool, hummock and lawn complexes. The bog vegetation is characterised by a high percentage cover of *Sphagnum* mosses, ericoid dwarf-shrubs and other associated species.

On the greater part of the bog plain the prominent species include heather *Calluna vulgaris*, cross-leaved heath *Erica tetralix*, hare's-tail cottongrass *Eriophorum vaginatum*, common cottongrass *Eriophorum angustifolium*, and deergrass *Trichophorum cespitosum*. Additional species which are also well represented within the sward include bog asphodel *Narthecium ossifragum* and white beak-sedge *Rhynchospora alba*, with occasional patches of bog-myrtle *Myrica gale* also occurring. *Sphagnum* mosses generally form scattered hummocks throughout the area.

Flat, waterlogged 'lawns' alongside pools are characterised by the prominence of such species as cross-leaved heath *Erica tetralix*, bog asphodel *Narthecium ossifragum*, white beak-sedge *Rhynchospora alba* and common cottongrass *Eriophorum angustifolium*, over a *Sphagnum* moss carpet dominated by *S. papillosum* and *S. magellanicum*. The abundance of cranberry *Vaccinium oxycoccos* in these areas is also notable. Typically, the pools are dominated by *Sphagnum cuspidatum*, with bogbean *Menyanthes trifoliata* abundant in a number of them. Lesser bladderwort *Utricularia minor* and great sundew *Drosera longifolia* are also frequent in some pools with the nationally rare *Sphagnum pulchrum* often occurring around the edges. Within the pool system, the main hummock-forming moss is *Sphagnum magellanicum* with *S. papillosum* and *S. subnitens* frequent. The liverwort *Pleurozia purpurea*, a species generally associated with more oceanic areas to the west, is also found occasionally.

The lagg surrounding the lowland raised bog has been extensively cut for turf, creating a mosaic of habitats which are dependent on peat depth and age of cutting. Vegetation communities vary from 'poor' fen, through purple moor-grass *Molinia caerulea* grassland and heath, to extensive areas of scrub and young woodland, mainly dominated by downy birch *Betula pubescens*.

The peatland species occurring on the site include a number of scarce species typical of lowland raised bogs such as the bog-rosemary *Andromeda polifolia* and invertebrates such as the large heath butterfly *Coenonympha tullia*.

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.

**Nationally important species occurring on the site.**

**Higher Plants.**

*Andromeda polifolia.*

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.

No special values known

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>National/Crown Estate</td>
<td>+</td>
<td></td>
</tr>
<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>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</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SSSI/ASSI)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Nature Reserve (NNR)</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>
<tr>
<td>Special Area of Conservation (SAC)</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 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.
The site was subject to detailed habitat and species surveys prior to its designation as an ASSI. The integrity of the site is regularly monitored.
A basin profiling and hydrological survey was carried out in 1996.

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.
None reported

32. **Jurisdiction:**
Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/Dept. of Environment, etc.
Department of the Environment (Northern Ireland), Environment and Heritage Service,
Commonwealth House, Castle Street, Belfast, Northern Ireland, BT1 1GU

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.
Department of the Environment (Northern Ireland), Environment and Heritage Service,
Commonwealth House, Castle Street, Belfast, Northern Ireland, BT1 1GU

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**

Grant, M, Tomlinson, RW & Harvey, J (1997) Hydrological monitoring for peatlands. Queens University of Belfast, School of Geosciences, report to Department of the Environment (Northern Ireland), Belfast