

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**

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

9 March 2006

3. Country:

UK (Scotland)

4. Name of the Ramsar site:**Rannoch Moor**

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 39 20 N

04 35 40 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: Perth

The site comprises gently undulating ground, at the western end of the Grampian mountains, in the north-central Highlands of Scotland.

Administrative region: Argyll and Bute; Highland; Perth and Kinross

8. Elevation (average and/or max. & min.) (metres): **9. Area** (hectares): 1519.43

Min. 288

Max. 359

Mean 315

10. Overview:

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

Rannoch Moor is an extensive previously glaciated plateau surrounded by uplands, and represents the most extensive complex of western blanket and soligenous/valley mire in Britain. It is of particular importance for its range of northern mire types. The site also contains part of the open water and shore of Loch Laidon, which runs along the site's north-east boundary. Rannoch Moor is the only remaining British locality for a nationally rare vascular plant species, and contains several other nationally and locally rare plants.

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, 2

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

This site is an excellent example of a complex system of oligotrophic mires, and for its range of northern mire types. It is a particularly good example of a western-type blanket bog and soligenous mire.

Ramsar criterion 2

This is the only British locality for a wetland vascular plant, the Rannoch rush *Scheuchzeria palustris*. It also supports several nationally rare beetles, flies and moths.

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, peat, nutrient-poor, igneous, granite
Geomorphology and landscape	upland, hilly, pools
Nutrient status	oligotrophic
pH	strongly acidic
Salinity	fresh
Soil	mainly organic
Water permanence	usually permanent

Summary of main climatic features	Annual averages (Ardtnaig, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/Ardtnaig.html) Max. daily temperature: 11.9° C Min. daily temperature: 4.9° C Days of air frost: 50.7 Rainfall: 1343.9 mm Hrs. of sunshine: 1147.8
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General description of the Physical Features:

Rannoch Moor lies in a high-level basin at about 300 m altitude. Rannoch is a complex blanket bog with much of the active peat is broken up between rocky knolls and small valleys, and there are many small ladder fens, which separate the ombrotrophic units into relatively small compartments.

Rannoch Moor contains the most extensive complex of western blanket and soligenous/valley mire in Britain and supports a range of nutrient-poor freshwater habitats from dystrophic to oligotrophic waterbodies. The waterbodies vary in size from small lochans to relatively large lochs such as Loch Bà and Loch Laidon. Many of the small lochans have a predominantly peaty substrate resulting in a very low nutrient status, and consequently low species diversity. However the larger lochs support vegetation typical of oligotrophic to mesotrophic standing waters.

The dystrophic lochans of this site exhibit considerable diversity in size, depth and shoreline type, including those with mineral shorelines, a relatively uncommon variant. These upland dystrophic waters are characteristically shallow and base-poor, with an impoverished flora and fauna.

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).

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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

Code	Name	% Area
M	Rivers / streams / creeks: permanent	1.6
O	Freshwater lakes: permanent	10.5
Tp	Freshwater marshes / pools: permanent	8.5

U	Peatlands (including peat bogs swamps, fens)	78.8
Other	Other	0.6

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Blanket bog - *Scirpus cespitosus*-*Eriophorum vaginatum* and *Calluna vulgaris*-*E. vaginatum* blanket mire.

Oligotrophic soligenous mire - with an abundance of sedges *Carex* spp. and rushes *Juncus* spp. Purple moor-grass *Molinia caerulea* dominates in places.

Marginal swamps and fens around loch edges/open water communities - dominated by sedges *Carex* spp., bogbean *Menyanthes trifoliata* and common cottongrass *Eriophorum angustifolium*.

Bladderworts *Utricularia* spp. in open water and pools.

Dry heath - *Calluna vulgaris*-dominated, principally developed on thin peat/shallow podsols. Swamps usually pass into a shoreward zone of *Sphagnum*, often with well developed pool-hummock systems.

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:

- H3130 Oligotrophic to mesotrophic standing waters with vegetation of the *Littorelletea uniflorae* and/or of the *Isoëto-Nanojuncetea*
- H3160 Natural dystrophic lakes and ponds
- H4010 Northern Atlantic wet heaths with *Erica tetralix*
- H4030 European dry heaths
- H7130 Blanket bogs (active)
- H7140 Transition mires and quaking bogs
- H7150 Depressions on peat substrates of the *Rhynchosporion*

Nationally important species occurring on the site.

- Rannoch rush *Scheuchzeria palustris*
- Dwarf birch *Betula nana*

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.*

Species Information

Internationally important species occurring on the site (Habitats Directive Annex II)

- S1029 *Margaritifera margaritifera* Freshwater pearl mussel.
- S1355 *Lutra lutra* Otter.

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
- Archaeological/historical site
- Environmental education/ interpretation
- Livestock grazing

Non-consumptive recreation
 Scientific research
 Sport fishing
 Sport hunting
 Tourism

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Non-governmental organisation (NGO)	+	
Local authority, municipality etc.		+
National/Crown Estate		+
Private		+

23. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	
Recreation	+	
Current scientific research	+	+
Commercial forestry		+
Fishing: recreational/sport	+	+
Grazing (unspecified)		+
Hunting: recreational/sport	+	+
Transport route		+

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)	+	+
National Nature Reserve (NNR)	+	
Special Protection Area (SPA)	+	
Land owned by a non-governmental organisation for nature conservation	+	
Site management statement/plan implemented	+	
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.

None reported

28. Current conservation education:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Public information boards are provided to aid interpretation of the site.

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.

Birdwatching, deer stalking and sport fishing all occur within the Ramsar boundary, but have an insignificant impact on the interest of the site.

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

Bridge, MC, Haggart, BA & Lowe, JJ (1990) The history and palaeoclimatic significance of sub fossil remains of *Pinus sylvestris* in blanket peats from Scotland. *Journal of Ecology*, **78**, 77-99

Flower, RJ *et al.* (1987) *Palaeocological evaluation of the recent acidification of Loch Laidon, Rannoch Moor, Scotland*. Report to Department of the Environment

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

Murray, J & Pullar, L (1903) Bathymetrical survey of the fresh-water lochs of Scotland. Part III – Lochs of the Tay Basin. *Scottish Geographical Magazine*, **19**, 449-479

Ratcliffe, DA (ed.) (1977) *A Nature Conservation Review. The selection of biological sites of national importance to nature conservation in Britain*. Cambridge University Press (for the Natural Environment Research Council and the Nature Conservancy Council), Cambridge (2 vols.)

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

Ward, RGW, Haggart, BA & Bridge, MC (1987) Dendrochronological studies of bog pine from the Rannoch Moor area, western Scotland. In: *Applications of tree-ring studies: current research in dendrochronology and related subjects*, ed. by RGW Ward, 215-225. British Archaeological Reports, Oxford (International Series, No. 333)

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