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.

strongly urged to provide	an electronic (MS Word) copy of the RIS	and, where possible, digita	al copies of maps.
1. Name and address	of the compiler of this form:	FOR OFFICE USE ONLY.	
Joint Nature Con Monkstone House City Road Peterborough Cambridgeshire UK Telephone/Fax: Email:	PE1 1JY +44 (0)1733 – 562 626 / +44 (0)17 RIS@JNCC.gov.uk	DD MM YY Designation date 733 – 555 948	Site Reference Number
2. Date this sheet was Designated: 24 Ju	s completed/updated: ly 1981		
3. Country: UK (Scotland)			
4. Name of the Rams Silver Flowe	ar site:		
-	anatory Notes and Guidelines, for detailed	-	suitable maps.
a) hard copy (required f	or inclusion of site in the Ramsar L	ist): <i>yes</i> ✓ -or- <i>no</i>	
b) digital (electronic) fo	rmat (optional): Yes	_	_
6. Geographical coor 55 07 03 N	dinates (latitude/longitude): 04 24 08 W		
Nearest town/city: Dumf	n the Galloway Forest Park about 1		-
8. Elevation (average Min. 262	and/or max. & min.) (metres): 9.	Area (hectares):	619.54

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609 448

Max.

Mean

10. Overview:

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

This series of patterned blanket mires constitutes the least-disturbed and most varied extent of acid peatland in southern Scotland and is one of the most important systems of blanket mire in Great Britain. These mires, which have developed on the floor of a broad glacial valley in the Galloway Hills, exhibit a complete gradation from discrete mires along the valley bottom which, in their external features, have obvious affinities with raised mire topography to others at the head of the valley which are indisputably blanket mire.

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).

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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

Contains one of the most outstanding examples of patterned mire and blanket bog in Great Britain.

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, igneous, granite	
Geomorphology and landscape	upland, valley	
Nutrient status	oligotrophic	
pH	acidic	
Salinity	fresh	
Soil	mainly organic	
Water permanence	usually permanent	
Summary of main climatic features	Annual averages (Eskdalemuir, 1971–2000)	
	(www.metoffice.com/climate/uk/averages/19712000/sites	
	/eskdalemuir.html)	
	Max. daily temperature: 11.0° C	
	Min. daily temperature: 3.6° C	
	Days of air frost: 87.3	
	Rainfall: 1634.6 mm	
	Hrs. of sunshine: 1174.7	

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General description of the Physical Features:

No information available

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).

The site includes the most southerly of the characteristic oceanic blanket bogs in the west of Scotland. It has an exceptionally wet climate, reflected in the range of pool patterns, from watershed mire to valleyside flow, and in the vegetation.

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	0.8
О	Freshwater lakes: permanent	1.6
U	Peatlands (including peat bogs swamps, fens)	97.6

18. General ecological features:

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

The principal habitat is *Sphagnum*-dominated mire, exhibiting a complete gradation from discrete valley mires with raised mire characteristics to blanket mire. Pools and hollows are occupied by *Sphagnum cuspidatum*, *S. [auriculatum]*, *Menyanthes trifoliata* and *Eriophorum angustifolium*. On the flat carpets and low hummocks this community gives way to *Sphagnum papillosum*, *S. magellanicum*, *Rhynchospora alba*, *Narthecium ossifragum* and *Drosera anglica*, *Calluna vulgaris*, *Erica tetralix*, *Eriophorum vaginatum* and *Trichophorum cespitosum*. On higher mounds *S. rubellum* is the usual bog moss. The frequency of *S. imbricatum* and *S. fuscum* on these bogs indicates, in this region, a high water table and relative freedom from disturbance. Unusually tall hummocks have a dry crown typified by *Empetrum nigrum*, *Racomitrium lanuginosum*, *Leucobryum glaucum*, hypnoid mosses and lichens.

The alluvial river banks carry a *Festuca-Agrostis* community. The lagg channels receive drainage water from the adjacent bogs and hillsides and are usually flanked by oligotrophic fen or flush-bog communities, whilst the slow-moving open water supports a growth of aquatic plants. *Carex rostrata*, *Juncus acutiflorus*, *Potamogeton polygonifolius* and *Sphagnum recurvum* all occur in these areas.

The sloping rands are distinguished by a luxuriant, tussocky growth of *Molinia caerulea*. *Myrica gale* is especially abundant around the margins of Snibe Bog and is spread over most of Craigeazle.

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.

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The site is internationally important because it contains the following Habitats Directive Annex I features:

H7130 Blanket bogs

H7150 Depressions on peat substrates of the *Rhynchosporion*Blanket bogs; Depressions on peat substrates of the *Rhynchosporion*

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

Mammals

Otter Lutra lutra (Habitats Directive Annex II species (S1355))

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

22. Land tenure/ownership:

Ownership category	On-site	Off-site
Private		+
Other	+	

23. Current land (including water) use:

Activity	On-site	Off-site
Nature conservation	+	+
Tourism		+
Recreation		+
Current scientific research	+	
Commercial forestry		+
Fishing: recreational/sport		+
Grazing (unspecified)		+
Rough or shifting grazing	+	
Hunting: recreational/sport	_	+
Military activities		+

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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
101	category	_	ractors	OIII y .

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)		
Site management statement/plan implemented	+	
Other	+	
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.

Environment.

Yearly visit carried out to inspect and (if necessary) repair board walk.

28. Current conservation education:

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

Very occasional guided walks by Forest Enterprise or Scottish Natural Heritage staff.

29. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

None reported

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

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- Boatman, DJ (1977) Observations on the growth of *Sphagnum cuspidatum* in a bog pool on the Silver Flowe NNR. *Journal of Ecology*, **65**, 119-126
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- Nature Conservancy Council (1982) Silver Flowe NNR. Second Management Plan. Nature Conservancy Council
- Ratcliffe, DA (1964) Mires and bogs. In: The vegetation of Scotland, ed. by JH Burnett. Oliver & Boyd, Edinburgh
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- Ratcliffe, DA & Walker, D (1958) The Silver Flowe, Galloway, Scotland. Journal of Ecology, 46, 407-445
- Tomlinson, RW (1970) Studies on the development and morphology of a peat bog in Kirkcudbrightshire. Unpublished PhD thesis, University of Hull

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