

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.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:

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

Designated: 02 February 1997

3. Country:

UK (Scotland)

4. Name of the Ramsar site:

Moray and Nairn Coast

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):

57 38 54 N 03 43 48 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: Elgin

Situated between Nairn, east of Inverness and Spey Bay, east of Elgin. It is an integral part of the Moray Firth on the coast of north-east Scotland.

Administrative region: Grampian; Highland

10. Elevation (average and/or max. & min.) (metres): 11. Area (hectares): 2412.27

Min.	-1
Max.	19
Mean	2

12. General overview of the site:

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

The Moray and Nairn Coast site is comprised of two areas: the intertidal flats, saltmarsh and sand dunes of Findhorn Bay and Culbin Bar, and the alluvial deposits and associated woodland of the lower River Spey and Spey Bay. It is of outstanding nature conservation and scientific importance for coastal and riverine habitats, and for migrating geese and over-wintering waders.

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).

1, 2, 5, 6

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 supports a variety of important wetland features, including particularly good examples of intertidal flats, saltmarsh and floodplain alder *Alnus glutinosa* woodland.

Ramsar criterion 2

At least six nationally scarce aquatic and coastal plants are present, sea centaury *Centaureum littorale*, Baltic rush *Juncus balticus*, oysterplant *Mertensia maritima* and the eelgrasses *Zostera noltei*, *Z. angustifolia* and *Z. marina*. The British Red Data Book invertebrates, *Ochthebius lenensis* (a small water beetle) and *Tetanocera freyi* (a snail-killing fly) are also found.

Ramsar criterion 5

Assemblages of international importance:

Species with peak counts in winter:

22609 waterfowl (5 year peak mean 1998/99-2002/2003)

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

Qualifying Species/populations (as identified at designation):

Species with peak counts in winter:

Pink-footed goose , <i>Anser brachyrhynchus</i> , Greenland, Iceland/UK	1855 individuals, representing an average of 0.7% of the population (5 year peak mean 1996-2000)
Greylag goose , <i>Anser anser anser</i> , Iceland/UK, Ireland	3023 individuals, representing an average of 3.3% of the population (Source period not collated)
Common redshank , <i>Tringa totanus totanus</i> ,	757 individuals, representing an average of 0.6% of the GB population (5 year peak mean 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in winter:

Long-tailed duck , <i>Clangula hyemalis</i> , W Siberia/N Europe	1366 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)
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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.

Details of bird species occurring at levels of National importance are given in Section 22

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):

Council Directive 92/43/EEC

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.

Soil & geology	acidic, shingle, alluvium, mud, sand, gravel, pebble, cobble, boulder
Geomorphology and landscape	coastal, floodplain, shingle bar, subtidal sediments (including sandbank/mudbank), intertidal sediments (including sandflat/mudflat), open coast (including bay), estuary
Nutrient status	mesotrophic, oligotrophic
pH	acidic
Salinity	brackish / mixosaline, fresh, saline / euhaline
Soil	mainly mineral
Water permanence	usually permanent
Summary of main climatic features	Annual averages (Kinloss, 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/kinloss.html) Max. daily temperature: 12.2° C Min. daily temperature: 5.1° C Days of air frost: 53.5 Rainfall: 624.4 mm Hrs. of sunshine: 1261.4

General description of the Physical Features:

The site comprises the intertidal flats, saltmarsh and sand dunes of Findhorn Bay and Culbin Bar, and the alluvial deposits and associated woodland of the Lower River Spey and Spey Bay.

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).

The site comprises the intertidal flats, saltmarsh and sand dunes of Findhorn Bay and Culbin Bar, and the alluvial deposits and associated woodland of the Lower River Spey and Spey Bay.

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:

Marine/coastal wetland

Code	Name	% Area
G	Tidal flats	65
H	Salt marshes	17
E	Sand / shingle shores (including dune systems)	8
Other	Other	6
F	Estuarine waters	3
Q	Saline / brackish lakes: permanent	1

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 Spey Bay/Lower River Spey supports a large range of shingle-related habitats reflecting the succession from presently mobile, unstable conditions to those which have been stable for

considerably longer. Areas of recently deposited shingle and sand support a diverse flora of plant species including those associated with coastal habitats and those associated with upland or montane habitats. More stable shingle supports a mosaic of scrub/heath/dry grassland. River channels and adjacent areas of shingle support valley alder woodland and willow scrub. Some of the older channels also support aquatic and fen communities.

Findhorn Bay/Culbin Bars contain a wide variety of coastal habitats including extensive intertidal flats and saltmarsh, sand and shingle bars, dunes, and dune-slacks. Successional processes associated with coastal processes, such as accretion and development of saltmarsh, are of particular interest.

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.*

Assemblage.

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

- H1330 Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
- H2110 Embryonic shifting dunes
- H1220 Perennial vegetation of stony banks
- H91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

Nationally important species occurring on the site.

Higher Plants.

Centaurium littorale, *Juncus balticus*, *Mertensia maritima*,
Zostera angustifolia, *Zostera marina*, *Zostera noltei*

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 currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Osprey , *Pandion haliaetus*, Europe 14 individuals, representing an average of 11% of the GB population (Count as at early 1990s)

Species with peak counts in spring/autumn:

Red-breasted merganser , *Mergus serrator*, NW & C Europe 104 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Greater scaup , *Aythya marila marila*, W Europe 81 individuals, representing an average of 1% of the GB population (5 year peak mean 1998/9-2002/3)

Black (common) scoter , *Melanitta nigra nigra*, 3246 individuals, representing an average of 6.4% of the GB population (5 year peak mean 1998/9-2002/3)

Velvet scoter , *Melanitta fusca fusca*, Baltic/W Europe

1146 individuals, representing an average of 38.2% of the GB population (5 year peak mean 1998/9-2002/3)

Species Information

Nationally important species occurring on the site.

Invertebrates.

Ochthebius lenensis, *Tetanocera freyi*.

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
- Forestry production
- Livestock grazing
- Non-consumptive recreation
- Scientific research
- Sport fishing
- Sport hunting
- Tourism

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:

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

25. Current land (including water) use:

Activity	On-site	Off-site

Nature conservation	+	+
Tourism	+	+
Recreation	+	+
Current scientific research	+	+
Commercial forestry	+	+
Fishing: recreational/sport	+	
Gathering of shellfish	+	
Bait collection	+	
Rough or shifting grazing	+	
Hunting: recreational/sport	+	+
Sewage treatment/disposal	+	
Harbour/port	+	
Transport route		+
Domestic water supply		+
Non-urbanised settlements		+
Military activities		+

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.

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

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.

Conservation measure	On-site	Off-site
Site/ Area of Special Scientific Interest (SSSI/ASSI)	+	+

Special Protection Area (SPA)	+	
Site management statement/plan implemented	+	
Special Area of Conservation (SAC)	+	

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.

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.

Environment.

The Culbin Bars part of the site is used by Aberdeen University for research into intertidal ecology. The Lower River Spey/Spey Bay section is used by Glasgow University for research into coastal and fluvial geomorphological processes.

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.

Interpretative panels have been installed at Findhorn Bay and Spey Bay with support from Scottish Natural Heritage (SNH). SNH has recently produced an education pack for school users to promote the educational use of Findhorn Bay; the potential educational value of this site is considered to be high.

There is an ice house at Spey Bay used as a museum run by the Moray Authority focusing on the salmon-fishing industry. At Findhorn Bay there is a small museum run by the local community funded by Scottish Natural Heritage which provides information on the history and conservation interest of the village and Bay. Both are only open during the summer.

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.

The site is of importance for recreational angling, wildfowling, walking (the Speyside Way Long Distance footpath runs adjacent to part of the site), watersports (concentrated in Findhorn Bay) and birdwatching. No figures for tourism are available but a very rough estimate would be in the order of 50,000-100,000 visitors per annum.

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

- Barne, JH, Robson, CF, Kaznowska, SS, Doody, JP & Davidson, NC (eds.) (1996) *Coasts and Seas of the United Kingdom. Region 3. North-east Scotland: Cape Wrath to St Cyrus*. Joint Nature Conservation Committee, Peterborough (Coastal Directories Series)
- Bennett, TL & McLeod, CR (1998) Chapter 4. East Scotland (Duncansby Head to Dunbar) (MNCR Sector 4). In: *Benthic marine ecosystems of Great Britain and the north-east Atlantic*, ed. by K. Hiscock, 123-154. Joint Nature Conservation Committee, Peterborough. (Coasts and Seas of the United Kingdom. MNCR series)
- Buck, AL (ed.) (1993) *An inventory of UK estuaries. Volume 4. North and east Scotland*. Joint Nature Conservation Committee, Peterborough
- Burd, F (1989) *The saltmarsh survey of Great Britain. An inventory of British saltmarshes*. Nature Conservancy Council, Peterborough (Research & Survey in Nature Conservation, No. 17)
- Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge
- Dargie, T (2001) Sand dune vegetation survey of Scotland: East coast. Volume 2: Site reports. *Scottish Natural Heritage Research, Survey and Monitoring Report*, No. 179
- Dargie, TCD (1993) *Sand dune vegetation survey of Great Britain: a national inventory. Part II: Scotland*. Joint Nature Conservation Committee, Peterborough
- Dargie, TCD (2000) Sand dune vegetation survey of Scotland: national report. *Scottish Natural Heritage, Commissioned Report*, No. F97AA401. www.snh.org.uk/pdfs/strategy/commreports/F97AA401.pdf
- Dean, BJ, Webb, A, McSorley, CA & Reid, JB (2003) Aerial surveys of UK inshore areas for wintering seaduck, divers and grebes: 2000/01 and 2001/02. *JNCC Report*, No. 333. www.jncc.gov.uk/page-2346
- Dean, BJ, Webb, A, McSorley, CA & Reid, JB (2004) Surveillance of wintering seaduck, divers and grebes in UK inshore areas: aerial surveys 2002/03. *JNCC Report*, No. 345
- Dean, BJ, Webb, A, McSorley, CA, Schofield, RA & Reid, JB (2004) Surveillance of wintering seaducks, divers and grebes in UK inshore areas: aerial surveys and shore-based counts 2003/04. *JNCC Report*, No. 357
- Doody, JP, Johnston, C & Smith, B (1993) *Directory of the North Sea coastal margin*. Joint Nature Conservation Committee, Peterborough
- Harding-Hill, R (1993) *The Moray Firth review*. Scottish Natural Heritage, North-West Region, Inverness
- Marshall, S (1987) *Spey Bay SSSI Phase 1 habitat survey*. Scottish Natural Heritage
- Marshall, S (1988) *Culbin Sands, Culbin Forest and Findhorn Bay SSSI Phase 1 habitat survey*. Scottish Natural Heritage
- May, VJ & Hansom, JD (eds.) (2003) *Coastal geomorphology of Great Britain*. Joint Nature Conservation Committee, Peterborough (Geological Conservation Review Series, No. 28)
- 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
- Musgrove, AJ, Langston, RHW, Baker, H & Ward, RM (eds.) (2003) *Estuarine waterbirds at low tide. The WeBS Low Tide Counts 1992–93 to 1998–99*. WSG/BTO/WWT/RSPB/JNCC, Thetford (International Wader Studies, No. 16)
- Musgrove, AJ, Pollitt, MS, Hall, C, Hearn, RD, Holloway, SJ, Marshall, PE, Robinson, JA & Cranswick, PA (2001) *The Wetland Bird Survey 1999–2000: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge. www.wwt.org.uk/publications/default.asp?PubID=14
- Ralph, R (ed.) (1986) *The marine environment of the Moray Firth. Proceedings of the Royal Society of Edinburgh. Series B: Biological Sciences*, 91
- Ramsay, DL & Brampton, AH (2000) Coastal cells in Scotland: Cell 3 – Cairnbulg Point to Duncansby Head. *Scottish Natural Heritage Research Survey and Monitoring Report*, No. 145
- 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.)
- Ross, S (1992) *The Culbin Sands – fact and fiction*. University of Aberdeen, Centre for Scottish Studies, Aberdeen
- Scottish Natural Heritage (1991) *Culbin Sands, Culbin Forest and Findhorn Bay SSSI site management statement*. Scottish Natural Heritage

- Scottish Natural Heritage (1995) *Lower River Spey SSSI site management statement*. Scottish Natural Heritage
- Scottish Natural Heritage (1996) *Spey Bay SSSI site management statement*. Scottish Natural Heritage
- Shirt, DB (ed.) (1987) *British Red Data Books: 2. Insects*. Nature Conservancy Council, Peterborough
- 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
- Tidswell, R (1997) *A botanical survey of the lower Spey Woods*. Scottish Natural Heritage

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