# **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:

- 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.
- 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 R        | IS and, where possible, digital copies of maps.      |
|--|--|
| 1. Name and address of the compiler of this form:                      | FOR OFFICE USE ONLY.                                 |
|  | DD MM YY   |
| <b>Joint Nature Conservation Committee</b>                             |  |
| Monkstone House  |  |
| City Road  | Designation date Site Reference Number               |
| Peterborough   |  |
| Cambridgeshire PE1 1JY   |  |
| UK   |  |
| Telephone/Fax: +44 (0)1733 - 562 626 / +44 (0)                         | )1733 – 555 948                                      |
| Email: <u>RIS@JNCC.gov.uk</u>  |  |
|  |  |
|  |  |
| 2. Date this sheet was completed/updated:                              |  |
| 09 March 2006  |  |
| 3. Country:  |  |
| UK (Scotland)  |  |
| 4. Name of the Ramsar site:  |  |
|  |  |
| River Spey – Insh Marshes  |  |
| 5. Map of site included:   |  |
| Refer to Annex III of the Explanatory Notes and Guidelines, for detail | ed guidance on provision of suitable maps.           |
| a) hard copy (required for inclusion of site in the Ramsar             | r List): yes ✓ -or- no                               |
| b) digital (electronic) format (optional): Yes                         | •  |
| 6. Geographical coordinates (latitude/longitude):                      |  |
| 57 05 24 N 03 59 48 W  |  |
| 7. General location:   |  |
| Include in which part of the country and which large administrative re | gion(s) and the location of the nearest large town   |
| Nearest town/city: Aviemore  | gion(s), and the location of the hearest rarge town. |
| •  |  |
| The site is adjacent to the town of Kingussie, west of the             | Cairngorm massif, and south of Inverness.            |
| Administrative region: Highland  |  |
| 8. Elevation (average and/or max. & min.) (metres):                    | <b>9. Area</b> (hectares): 1158.77                   |
| Min. 224   |  |
| Max. 238   |  |
| Mean 227   |  |
| 10. Overview:  |  |

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

The Insh Marshes lie either side of the River Spey upstream of Loch Insh.

| Ramsar Information Sheet: UK13053 Page 1 of 7 | River Spey – Insh Marshes |
|---|---------------------------|
|---|---------------------------|

Partly due to seasonal flooding there is a very large area of swamp, fen and carr which together form the largest single unit of poor-fen floodplain mire in Britain.

The site includes Loch Insh and the River Spey between Newtonmore and Kingussie which support large numbers of wintering wildfowl, as well as a significant assemblage of rare breeding waterfowl. The Feshie-Spey confluence has extensive river shingles which support a large number of rare invertebrates.

### 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, 3 1

## 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

Holds outstanding examples within a UK context of a large, high-altitude slow-flowing river, a mesotrophic loch (a type that is uncommon in Britain and is also notable for its exceptionally high turnover rate), a floodplain mire and a gravel fan.

#### Ramsar criterion 2

Supports a large assemblage of nationally-rare and nationally-scarce aquatic plants and invertebrates (including species with a boreal pine distribution), and is one of the best freshwater sites in Britain for otter *Lutra lutra* (Annex II and IV EU Council Directive Habitats).

## Ramsar criterion 3

A nationally important genetic resource for floodplain mires.

Supports an assemblage of breeding birds indicative of high wetland value and diversity.

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.

See Sections 19/20 for details of noteworthy species

## **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              | neutral, shingle, sand, alluvium, peat, nutrient-rich |
|-----------------------------|---|
| Geomorphology and landscape | valley, floodplain                                    |
| Nutrient status             | mesotrophic   |

<sup>&</sup>lt;sup>1</sup> The site had qualified for the application of criterion 6 at the time of the last update in 1999)

Ramsar Information Sheet: UK13053 Page 2 of 7 River Spey – Insh Marshes

| рН                                | acidic  |  |
|-----------------------------------|---|--|
| Salinity                          | fresh   |  |
| Soil                              | mainly organic  |  |
| Water permanence                  | usually permanent, usually seasonal / intermittent    |  |
| Summary of main climatic features | Annual averages (Braemar, 1971–2000)                  |  |
|                                   | (www.metoffice.com/climate/uk/averages/19712000/sites |  |
|                                   | /braemar.html)  |  |
|                                   | Max. daily temperature: 10.5° C                       |  |
|                                   | Min. daily temperature: 2.8° C                        |  |
|                                   | Days of air frost: 103.3                              |  |
|                                   | Rainfall: 912.7 mm                                    |  |
|                                   | Hrs. of sunshine: 1210.3                              |  |

## General description of the Physical Features:

The Insh Marshes lie either side of the River Spey upstream of Loch Insh. They are over 5 km long and over 1 km wide. Partly due to seasonal flooding, there is a very large area of swamp, fen and carr which together form the largest single unit of poor-fen floodplain mire in the UK.

## 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 Insh Marshes lie either side of the River Spey upstream of Loch Insh. They are over 5 km long and over 1 km wide. Partly due to seasonal flooding, there is a very large area of swamp, fen and carr which together form the largest single unit of poor-fen floodplain mire in the UK.

## 16. Hydrological values:

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

Flood water storage / desynchronisation of flood peaks

## 17. Wetland types

Human-made wetland, Inland wetland

| Code  | Name  | % Area |
|-------|---|--------|
| L     | Inland deltas                                       | 2.1    |
| M     | Rivers / streams / creeks: permanent                | 7.7    |
| О     | Freshwater lakes: permanent                         | 8.4    |
| Тр    | Freshwater marshes / pools: permanent               | 10.2   |
| Ts    | Freshwater marshes / pools: seasonal / intermittent | 10.2   |
| U     | Peatlands (including peat bogs swamps, fens)        | 27.4   |
| W     | Shrub-dominated wetlands                            | 2.9    |
| 4     | Seasonally flooded agricultural land                | 25.7   |
| 9     | Canals and drainage channels                        | 0.8    |
| Other | Other   | 2.1    |
| Xp    | Forested peatland                                   | 2.5    |

### 18. General ecological features:

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

Within this site the main habitat types are: woodland, floodplain mire, bog, swamp, tall herb fen, wet heath, grassland, river shingles, dynamic alluvial fans.

The site supports a large diversity of plant communities, ranging from aquatic to woodland.

The floodplain mires are varied, but S9 *Carex rostrata* swamp, S11 *Carex vesicaria* swamp, S27 *Carex rostrata-Potentilla palustris* tall herb fen and M5 *Carex rostrata-Sphagnum squarrosum* mire are the most important communities.

There are also areas of M15 Scirpus cespitosus-Erica tetralix wet heath; grasslands, particularly MG9 Holcus lanatus-Deschampsia cespitosa. Woodland includes carr W3 Salix pentandra-Carex rostrata & W4 Betula pubescens-Molinia caerulea, riparian woodland W7 Alnus glutinosa-Fraxinus excelsior-Lysimachia nemorum, and small areas of birch Betula woodland on better drained soils W11 Quercus petraea-Betula pubescens-Dicranum majus.

## 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* 

H7140 Transition mires and quaking bogs

H91E0 Alluvial forests with *Alnus glutinosa* and *Fraxinus excelsior* (*Alno-Padion*, *Alnion incanae*, *Salicion albae*)

## Nationally important species occurring on the site.

## **Higher Plants.**

Calamagrostis purpurea, Carex chordorrhiza, Cicuta virosa, Equisetum pratense, Nuphar pumila

## 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.

### **Birds**

## Species currently occurring at levels of national importance: Species regularly supported during the breeding season:

| Osprey, Pandion haliaetus, Europe          | 8 individuals, representing an average of 6.2% of |  |  |
|--|---|--|--|
|  | the GB population (Count as at early 1990s)       |  |  |
| Spotted crake, Porzana porzana, Europe     | 4 individuals, representing an average of 5.4% of |  |  |
|  | the GB population (5 year mean 1997-2001)         |  |  |
| Wood sandpiper, Tringa glareola, Europe    | 2 pairs, representing an average of 50% of the GB |  |  |
|  | population (5 year mean 1991-1995)                |  |  |
| Black-headed gull, Larus ridibundus, N & C | 1644 apparently occupied nests, representing an   |  |  |
| Europe                                     | average of 1.2% of the GB population (Seabird     |  |  |
| -  | 2000 Census)                                      |  |  |

## Species with peak counts in winter:

Hen harrier, *Circus cyaneus*, Europe
11 individuals, representing an average of 1.4% of the GB population (5 winter period 1990/1-1994/5)

## Species/populations, which was identified for application of criterion 6 at designation: Species with peak counts in winter:

| Whooper swan, Cygnus cygnus, | 98 individuals, representing an average of 1.7% |
|------------------------------|---|
| Iceland/UK/Ireland           | of the GB population (5 year peak mean 1998/9-  |
|                              | 2002/3)   |

## **Species Information**

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

## Mammals.

S1355 Lutra lutra Otter

### Invertebrates.

Hammerschmidtia ferruginea, Rhamphomyia trigemina, Tachydromia acklandi, Limonia omissinervis, Nephrotoma aculeata, Dorytomus affinis

## 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

Aquatic vegetation (e.g. reeds, willows, seaweed)

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)                         |         |          |
| Private                       | +       | +        |

## 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)       | +       | +        |
| Hunting: recreational/sport | +       | +        |
| Sewage treatment/disposal   |         | +        |

## 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 | on1  | v  |
|-----|----------|---|---------|------|----|
| 101 | category | _ | ractors | OIII | ·V |

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)                                   |         |          |
| Special Protection Area (SPA)                 | +       |          |
| Land owned by a non-governmental organisation | +       | +        |
| for nature conservation                       |         |          |
| Management agreement                          | +       |          |
| 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.

#### 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.**

Research on site hydrology by Stirling University (e.g. Grieve et al. 1995; Willby et al. 1998).

#### 28. Current conservation education:

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

The Royal Society for the Protection of Birds (RSPB) provides guided walks for visitors, and their birdwatching hides provide interpretative display.

The site is visited by university and school groups.

#### 29. Current recreation and tourism:

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

#### Activities.

Birdwatching, angling, watersports, shooting.

## Facilities provided.

Guided walks, birdwatching observation hides.

## Seasonality.

All year.

#### 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**

Fojt, W (1989) *A vegetation survey of the Insh Marshes SSSI, August 1988*. Unpublished, Nature Conservancy Council Gibbons, B (1993) Classic wildlife sites: Insh Marshes, Speyside. *British Wildlife*, **5**(1), 41-43

Grieve, IC, Gilvear, DG & Bryant, RG (1995) Hydrochemical and water source variations across a floodplain mire, Insh Marshes, Scotland. *Hydrological Processes*. **9**(1), 99-110

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

Prescott, T (2000) RSPB Scotland's Insh Marshes Management Plan (April 2000 – March 2005). Unpublished, Royal Society for the Protection of Birds, Edinburgh

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

Willby, N, Gilvear, DJ, Grieve, IC & Murphy, K (1998) Hydrological–ecological interactions on the Insh Marshes. In: *Floodplain rivers: hydrological processes and ecological significance*, ed. by A.R.G. Large, 40-52. British Hydrological Society, London (Occasional Paper No. 8)

Please return to: Ramsar Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • email: <a href="mailto:ramsar@ramsar.org">ramsar@ramsar.org</a>