

Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

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 and guidelines 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

Niklas Kemi, The County administrative board of Norrbotten, S-971 86 Luleå, Sweden. Tel. +46 920 96147. E-mail: Niklas.Kemi@bd.lst.se

2. Date this sheet was completed/updated:

11.06.2008

3. Country:

Sweden

4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Lake Persöfjärden (Persöfjärden)

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or
b) 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

The Ramsar site boundary and site area are unchanged:

or

If the site boundary has changed:

- i) the boundary has been delineated more accurately ; or
- ii) the boundary has been extended ; or
- iii) the boundary has been restricted**

and/or

If the site area has changed:

- i) the area has been measured more accurately ; or
- ii) the area has been extended ; or
- iii) the area has been reduced**

** **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:

Refer to Annex III of the *Explanatory Note 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) a hard copy (required for inclusion of site in the Ramsar List): ;
- ii) an electronic format (e.g. a JPEG or ArcView image) ;
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .

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 boundary mainly follows roads.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

65°47'N 022°08'E

9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

The site is situated in northeast Sweden at the head of the Gulf of Bothnia, about 20 km north of the town of Luleå, in the county of Norrbotten (population 250 800), municipalities of Luleå (pop. 73 000) and Boden (pop. 28 000).

10. Elevation: (in metres: average and/or maximum & minimum)

min.–max. 1–15 metres

11. Area: (in hectares)

3 320 hectares

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 Persöfjärden site includes a coastal, shallow freshwater lake, freshwater marshes and shrub marsh. There are extensive beds of *Scirpus* and *Phragmites*, with some *Salix* shrubbery in the southwest, whilst the lake's shore and some of its islands support deciduous woodland and *Juniperus* shrubbery. The wetlands are flooded regularly. The site holds a diversity of breeding wetland birds, and is also important for staging ducks, geese, waders and raptors. About 210 bird species have been observed in the area.

13. Ramsar Criteria:

Tick the box under 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). All Criteria which apply should be ticked.

1	•	2	•	3	•	4	•	5	•	6	•	7	•	8	•	9
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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).

1. Persöfjärden contains a representative example of a near-natural wetland type in the coastal region. The site is a former bay separated from the sea due to isostatic rise.

2. Nationally red listed species include e.g. black tern (*Chlidonias niger*) (VU), hen harrier (*Circus cyaneus*) (VU), ortolan bunting (*Emberiza hortulana*) (VU), ruff (*Philomachus pugnax*) (VU) and slavian grebe (*Podiceps auritus*) (VU). All of the mentioned species are listed in the EU Birds directive, Annex I.

3. The site supports a rich avian fauna such as arctic tern (*Sterna paradisaea*)*, bean goose (*Anser fabalis*), black-throated diver (*Gavia arctica*)*, bluethroat (*Luscinia svecica*)*, common tern (*Sterna hirundo*)*, crane (*Grus grus*)*, curlew (*Numenius arquata*), golden plover (*Pluvialis apricaria*)*, great grey owl (*Strix nebulosa*)*, lapland bunting (*Calcarius lapponicus*), little gull (*Larus minutus*)*, marsh harrier (*Circus aeruginosus*)*, merlin (*Falco columbarius*)*, osprey (*Pandion haliaetus*)*, pintail (*Anas acuta*), red-necked phalarope (*Phalaropus lobatus*)*, short-eared owl (*Asio flammeus*)*, smew (*Mergus albellus*)*, spotted redshank (*Tringa erythropus*), teal (*Anas crecca*), whimbrel (*Numenius phaeopus*), whooper swan (*Cygnus cygnus*)* and wood sandpiper (*Tringa glareola*)*.

* = listed in the EU Birds directive, Annex I.

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:

Boreal

b) biogeographic regionalisation scheme (include reference citation):

European Environment Agency. 2003. Europe's environment: the third assessment, p 231. Environmental assessment report No 10. Luxembourg: Office for Official Publications of the European Communities.

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.

The freshwater lake is shallow (average depth 1-1,5 m), about 15 km long and has flat shores that are flooded regularly. The lake was formed when isostatic rise isolated part of a coastal bay from the sea. To increase the area of land that could be used for cultivation, the lake was lowered in 1937 by about 1.3 m. The climate in the county of Norrbotten is characterized by cold winters and short summers. In the coastal region (where Persöfjärden is located), the average precipitation is app. 400 mm/year and the average temperature is - 9° C (January) and 15° C (July).

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

The catchment area is 40 286 hectares. The bedrock in the area is mainly acid. The soil types consists of fine- grained sediment, sand and clay near the lake but moraine is dominating as a whole. The landscape is highly affected by human activities such as agriculture and forestry.

18. Hydrological values:

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

Persöfjärden most likely has a function of sediment and nutrient trapping.

19. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the *Explanatory Notes & Guidelines*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp Ts • U • Va • Vt • W • Xf • Xp • Y • Zg • Zk(b)

Human-made: 1 • 2 • 3 • 4 • 5 • 6 • 7 • 8 • 9 • Zk(c)

b) dominance:

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

K, Tp, W

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 surroundings of Lake Persöfjärden is a mixture of open, cultivated land, meadows, broad-leaved deciduous woodland and coniferous woodland. The shores are subject to succession due to isostatic rise: The meadows at the shoreline are mainly dominated by

Carex spp., while *Calamagrostis spp.* and *Agrostis spp.* dominate further away from the water. With increasing distance from the shoreline, the succession ends with shrubs and trees (*Salix spp.*, *Betula pubescens*, *Alnus incana*) and finally coniferous woodland (or cultivated land). The main aquatic vegetation in the water consists of *Schoenoplectus lacustris*, *Equisetum fluviatile*, *Phragmites communis*, *Nymphaea spp.*, *Sparganium spp.* and *Potamogeton spp.*.

The site supports a high diversity of breeding and nesting birds. The Ramsar site provides ecosystem services concerning agriculture and grazing, recreation (e.g. hunting, fishing, bird-watching, canoeing) and ecological factors like biodiversity, sediment trapping, etc.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, 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.*

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.*

Gyrfalcon (*Falco rusticolus*), nationally red listed as EN, can be seen passing through the area.

23. Social and cultural values:

a) 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:

Around Persöfjärden, cultural remains consists mostly of historical sites represented by old farm sites, pasture-grounds and barns, dating back to medieval times.

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?

If Yes, tick the box and 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:

a) within the Ramsar site:

Privately owned.

b) in the surrounding area:

Privately owned.

25. Current land (including water) use:

a) within the Ramsar site:

The wetland is used mainly for fishing and agriculture.

b) in the surroundings/catchment:

Forestry and agriculture dominate in the surroundings and catchment.

26. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

a) within the Ramsar site:

The lake was lowered by about 1.3 m in 1937, leading to the virtual disappearance of fish but an increase in birds. However, there is some evidence that bird numbers have declined in recent years. The regular flooding causes problems for local farmers and has prompted requests for further drainage of the area.

b) in the surrounding area:

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

The Persöfjärden site is listed as being of national importance for nature conservation, but is not protected as a nature reserve.

Part of the site has been designated as an EU Special Protection Area (SPA) within the Natura 2000 network (SE 0820738 Persöfjärden, 1587,6 ha).

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?:

There is no management plan and the area is managed by the private landowners.

d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

Consideration is being given to raising the lake level - a process which is already occurring naturally, as outflow channels become blocked with vegetation. The County Administration and the Swedish Environmental Protection Agency have earlier discussed whether actions should be considered to counteract ongoing vegetation succession. No further immediate actions have been done and no or further plans have been considered.

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

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

31. Current recreation and tourism:

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

The site is covered by the special provisions in the Swedish Environmental Code, (Chapter 4, section 2: Special provisions concerning land and water management in certain areas in Sweden), which states that "special consideration shall be given to the interests of tourism and outdoor recreation, in particular outdoor recreational exercise, in connection with assessments of the permissibility of development projects or other environmental intrusion". Some parts of the Ramsar site is used for sport fishing, hunting, canoeing and bird-watching.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

County Administrative Board of Norrbotten

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.

The area is managed by the private landowners.

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

European Environment Agency. 2003. Europe's environment: the third assessment, p 231.

Environmental assessment report No 10. Luxembourg: Office for Official Publications of the European Communities.

Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
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