

Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 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 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
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:

July 2013

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.

Vattenån

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 .
Included in the GIS file for all Swedish Ramsar sites version 2013.

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 follows the border of the existing and planned nature reserve.

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.

62°34'N 15°25'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.

Central Sweden, in the counties of Västernorrland and Jämtland, 73 km southeast from the town of Östersund (population 59 500). The site is located in Ånge (9 800) and Bräcke (6 800) municipalities.

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

350 m above sea level

11. Area: (in hectares)

3 661 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 site consists of the river Vattenån (in the east) and most of its upstreams tributaries (in the west). The many upstreams tributary rivers and creeks of the river Vattenån includes more than 20 lakes. There are also a number of small mires and some wet forests adjacent to the river system. The river system is surrounded by a vast hilly area with forests untouched by man in modern times. The area around the lakes Smådjuptjärnarna in the northeast of the site is part of another catchment area.

The Vattenån river system has high limnic values and is the purpose of designating the site. The site holds one of Europes' largest populations of freshwater pearl mussel (*Margaritifera margaritifera*) outside Russia. The lakes and streams are naturally limed and are inhabited by a stable population of trout (*Salmo trutta*), necessary for the accomplishment of the life-cycle of the fresh water pearl mussel. Otter (*Lutra lutra*) is also present.

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

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).

Criterion 1: The river and its many tributaries and lakes along the water course are representative Permanent rivers and streams (M) and Permanent freshwater lakes (O) for the boreal region. Due to natural alkaline conditions, the site is not dependent on man-induced actions to counteract the effects of on-going downfall of acid precipitation. Major logging actions in the forests have not been carried out within the site for the last 130 years. Therefore the streams are unaffected by forestry roads and leakage of organic and inorganic particles and nutrients, an environmental state that is not common in the region.

Criterion 2: The area supports the nationally red-listed species such as otter *Lutra lutra* (VU), wolf *Canus lupus* (EN) and freshwater pearl mussel *Margaritifera margaritifera*, (EN).

Criterion 8: The site supports one of the most valuable, protected populations of Freshwater pearl mussel *Margaritifera margaritifera* in Sweden. The site is of outmost importance for the long-term survival and re-colonisation of Brown trout *Salmo trutta* and Fresh water pearl mussels into the adjacent water systems in the region. The site holds all needed prerequisites for a long-term maintenance of the complex life-cycle of the globally endangered freshwater pearl mussel.

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 river Vattenån is dominated by rapids with boulders and stones. Its water has high buffering capacity and is therefore highly resistant to acidification. The water also has very low contents of nutrients and low water-colour. Its torrents are unaffected by human interventions.

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 and the upstreams tributary rivers and creeks of the river Vattenån are split on more than 20 lakes and small streams in-between. The natural liming of the water is caused by intrusions of calcareous bedrock within the area. The geomorphology of the catchment area is dominated of the glacial moraine, mainly constituting of large boulders, covering most of the land area. This ground texture makes the area most unsuitable for any human activities but trekking and fishing. The climate is of inland type with fairly hot summers and rather cold winters. Yearly precipitation amounts to approximately 500 mm/year.

18. Hydrological values:

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

There are no investigations made about hydrological values like ecosystem services. The site is unaffected by forestry, drainage and roads. The wetland area around the lakes and the river with its tributaries is quite small so the wetlands themselves do not play an important role in flood regulation, but the protected land area without forestry contribute to some extent. The site is the source of the watershed and since the site is so undisturbed there are only transport of sediments in a natural amount, and the lakes and tarns catch some of these sediments. The site will probably contribute to sedimentation in slow-flowing parts and water purification. In general water quality is very good and

downstream the site, the local municipality catch water from the river for treatment to drinking water quality.

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 • Q • 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.

O, U, Xf, Xp, Tp, M

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.

Main habitats are forest (2 750 hectares), open and forested mires (300 hectares) and open freshwater (200 hectares). Habitats in the EU Habitats Directive present at the site are: Transition mires and quaking bogs (7140), Aapa mires (7310), Western Taiga (9010), Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoeto-Nanojuncetea (3130), Natural dystrophic lakes and ponds (3160), Fennoscandian natural rivers (3210) and Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation (3260).

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.*

Species include lily of the valley alpine blue-sow-thistle *Cicerbita alpina*, wolf's-bane *Aconitum lycoctonum* *Convallaria majalis*, mezereon *Daphne mezereum*, whorled Solomon's seal *Polygonatum verticillatum* and mountain melick *Melica nutans*. Fungi and lichens found in old forest habitats include the nationally red-listed *Phellinus nigrolimitatus* (NT), *Phellinus pini* (NT), *Haploporus odoratus* (VU) and *Letharia vulpina* (NT).

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.*

The area supports a number of nationally red-listed species such as freshwater pearl mussel (*Margaritifera margaritifera*, EN), lynx (*Lynx lynx*, NT), otter (*Lutra lutra*, VU), wolf (*Canis lupus*, EN). Other species of interest is bear *Ursus arctos*.

Examples of red-listed birds at the site are red-throated diver (*Gavia stellata*, NT), three-toed woodpecker (*Picoides tridactylus*, NT), hen harrier (*Circus cyaneus*, NT), eagle owl (*Bubo bubo*, NT), and Siberian Jay (*Perisoreus infaustus*, NT).

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:

The site is remote but quite popular among locals as a recreation area for fishing and hiking. The area also holds remains and artefacts reminding about earlier practices in forestry and charcoal production.

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:

The State through the Swedish Environmental Protection Agency and private owned land.

b) in the surrounding area:

Other nature reserves or planned extensions owned by Swedish Environmental Protection Agency.
Other land owned by forest companies, both private and governmental.

25. Current land (including water) use:

a) within the Ramsar site:

Nature conservation purposes.

b) in the surroundings/catchment:

Forestry and Nature conservation purposes.

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:

Activities connected with timber-floating in the late 19th century as well as pearl-fishing and the introduction of pike and char in some of the lakes have reduced the number and spread of trout and mussels within the catchment area. The use of rotenone in some of the medium-sized lakes during the 1980's has temporarily affected the number of mussels down-stream.

b) in the surrounding area:

Not known

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 Helvetesbrännan Nature Reserve, established in 2000, has a total area of 2 392 hectares within the county of Västernorrland and 1 000 hectares within the county of Jämtland.

Most of the Ramsar site has been included in the N2000 network (sitecode SE 0710155 and SE 0710176 in the county of Västernorrland and sitecode SE 720201 in the county of Jämtland).

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?:

Partly. A management plan for the Helvetesbrännan Nature Reserve came into effect in 2000, as well as a N2000-management plan in 2006.

d) Describe any other current management practices:

The management policy for the nature reserve includes prescribed fires for the forests on dry land as a natural disturbance in that ecosystem.

28. Conservation measures proposed but not yet implemented:

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

The nature reserve is planned to be extended both within and outside the Ramsar site. The extension will cover the upper eight kilometres of river Vattenån within the Ramsar site. There is a plan to remove remains from an old dam in the east end of lake Vattensjön. There is also a proposal to forbid drainage at the site that will have effect on the parts that aren't protected yet.

29. Current scientific research and facilities:

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

The monitoring programme includes investigations on pearl-mussels and limnic invertebrate fauna.

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.

There are no such activities.

31. Current recreation and tourism:

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

A recreation area exists for the local community used for fishing and hiking. There are also five cottages open for public use as well as marked trails and information signposts.

32. Jurisdiction:

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

The County Administrative Board of Västernorrland.

The County Administrative Board of Jämtland (a minor part of the site, the northwest)

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.

County Administrative Board of Västernorrland, S-871 86 Härnösand, Sweden.

Tel. +46 611 34 90 00. E-mail: vasternorrland@lansstyrelsen.se (to the registry).

County Administrative Board of Jämtland, S-831 86 Östersund, Sweden.

Tel. +46 63 14 60 00. E-mail: jamtland@lansstyrelsen.se (to the registry).

34. Bibliographical references:

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

Arvidsson, B. and Söderberg, H. (red.) 2006: Flodpärlmussla – vad behöver vi göra för att rädda arten? Karlstad Universitet 2006:15.

Gärdenfors, U. (ed.) 2010. Rödlistade arter i Sverige 2010 - The 2010 Red List of Swedish Species. Artdatabanken, SLU, Uppsala

Eriksson, M.O.G., Henriksson, L. och Söderberg, H. 1998. Flodpärlmusslan i Sverige.

Naturvårdsverket, Rapport 4887. Stockholm.

Isaksson, L. 1983. Urskogar och urskogsartade naturskogar i Jämtlands län. Länsstyrelsen i Jämtlands Län 1983:13

Jonsson, P. 1999. Helvetesbrännan – Brandhistorik, kulturhistoria och naturskogs kvaliteten. Publikation 1999:2. Länsstyrelsen i Västernorrlands län. Härnösand.

Länsstyrelsen i Västernorrlands län 2006. Bevarandeplan Natura 2000 - Helvetesbrännan SE 0710155

Länsstyrelsen i Västernorrlands län 2006. Bevarandeplan Natura 2000 - Vattenån SE0710176.

Simonsson, P. 1979. Urskogar och naturskogar i Västernorrlands län. Länsstyrelsen i Västernorrlands län 1979:11. Härnösand.