

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.

Vasikkavuoma

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 catchments boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a water body, etc.

The boundary is the same as for the Nature Reserve and the Natura 2000 site, SE0820400.

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.

67°13'N 23°12'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 the northeast of Sweden, about 8 km west of the community Pajala in the county of Norrbotten (population 248 400), municipality of Pajala (6 300).

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

Average 157 metres

11. Area: (in hectares)

200 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 Vasikkavuoma is one of the largest and best preserved mowed mires in northern Europe. The stream, Vasikkajoki is floating through the wetland and its flooding provides the marshy meadows with nutrients. The mire mostly comprises of the wetland habitat, transition mires and quaking bogs but also contains the habitat aapa mire and an alkaline fen.

The mire has been subjected to restorations through clearing and mowing. Today around 90 hectares are harvested for hay making. The villages around Vasikkavuoma are mowing the grassland on the mire to get hay for reindeers and to keep a part of Sweden's cultural heritage alive. There used to be approximately 200 barns on Vasikkavuoma and around 80 barns can still be found. At least 50 vascular plant species can be found on Vasikkavuoma. Chalk-dwelling orchids as Early marsh orchid (*Dactylorhiza incarnata*) and *Dactylorhiza. incarnata* spp. *cruenta* indicates that the area contains calcareous bedrock. Vasikkavuoma is also a good staging and nesting site for many birds.

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 site contains a representative example of natural wetland types in the EU boreal region. The wetlands types present are Open mires (U), Permanent freshwater marshes and pools (Tp) and Permanent rivers and streams (M). The open mires are flooded every year and that enhance the productivity of the area. Mowing takes place on regular basis. Such management methods are rare for areas like this and the mire is close to unique in Europe being so large and managed by mowing.

Criterion 2: The site supports species which are nationally threatened or red-listed including Hudson Bay sedge *Carex heleonastes* (EN) and Ruff *Philomachus pugnax* (VU) as well as a number of other red-listed species.

Criterion 3: The site supports important populations of plant and wetland bird species which are important for maintaining the biological diversity in the northern part of the boreal region (see 21 - 22 below).

Criterion 4: The site regularly supports significant numbers of birds during the breeding and migration period (see examples of species listed under criterion 2.).

15. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant bio geographic region that includes the Ramsar site, and identify the bio geographic regionalisation system that has been applied.

a) bio geographic region:

Boreal

b) bio geographic 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.

Vasikkavuoma stretches along the stream Vasikkajoki which drains the mire north towards the river Torneälven. The brook is partly used in order to dam the upper mire and thus increase the output. The bedrock in the area consists of basic igneous rocks and the soil types are peat and till. Precipitation is low with an annual average rainfall of approximately 500 mm. The annual average temperature is -2 ° C and the vegetation period is 130 days.

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 catchments area is 4628 ha. Approximately 83 % consists of forest (mainly coniferous forest), 15 % mire and 2 % farmland. The bedrock consists mainly of basic igneous rock and sedimentary rock but smaller parts of the area are dominated by acid and intermediate igneous rock, gneiss and migmatites. The soil types are glaciofluvial sediments, till and peat.

18. Hydrological values:

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

There aren't any investigations done about hydrological values in the area.

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.

U, 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.

The foremost habitats of Vasikkavuoma are marshy meadows and topogenous fens dominated by Water horsetail (*Equisetum fluviatile*) and *Carex chordorrhiza*. The flooding along the stream Vasikkajoki favours the Horsetail (*Equisetum fluviatile*) in particular which makes an excellent reindeer-fodder. In the mire there are areas with springs containing bog iron.

The annually flooding of the meadow gives the mire a particular composition of bryophytes. The mire is surrounded by pine forest, of which a small part is harvested, and in connection to the north-western parts of the mire there are elements of cropland.

Habitats present according to the Habitats Directive are Transition mires and quaking bogs (7140), Aapa mires (7310), Alkaline fens (7230) and Fennoskandian mineral-rich springs and springfens.

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.*

The area supports a number of bryophytes, noteworthy species are: Slender Green Feather-moss *Hamatocaulis vernicosus* (NT), *Palustriella falcata* (rare) and *Catioscopium nigratum* (rare). Marsh Saxifrage *Saxifraga hirculus* (NT) is also present at the site.

Other species of interest are *Pedicularis palustris ssp. borealis*, *Dactylorhiza incarnata cruenta*, Lapland Marsh-orchid *Dactylorhiza lapponica*, Early Marsh-orchid *Dactylorhiza incarnate*, *Stellaria crassifolia*, and Small Cranberry *Vaccinium microcarpum*.

Altogether about 50 vascular plant species can be found on Vasikkavuoma.

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 site support bird species which are nationally red-listed and/or included in Annex 1 of the EU Bird Directive (marked with *), such as Ruff* *Philomachus pugnax* (VU), Eurasian curlew *Numenius arquata* (VU), Siberian Jay *Perisoreus infaustus* (NT), Smew* *Mergus albellus* (NT), Crane* *Grus grus*, Wood sandpiper* *Tringa glareola*, Marsh harrier* *Circus aeruginosus*. Other waterbird species include Whooper swan* (*Cygnus cygnus*), Red-necked phalarope* *Phalaropus lobatus* and

Greenshank *Tringa nebularia*. Other bird species supported by the site are Siberian Jay *Perisoreus infaustus* and Greenshank *Tringa nebularia*.

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 haymaking on Vasikkavuoma has a cultural, historical and economic value. In the beginning of the 20th century, a large part of the wetlands in the county Norrbotten was used for haymaking to provide winter food for the cattle. Today only 0, 1% of the earlier mowed wetland is still in use. A large area, good condition of the meadow, drainage system and the many barns makes Vasikkavuoma a living cultural heritage.

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:

Vasikkavuoma is a good example of the traditional and sensible use of a wetland. Many of the species are dependent on the mowing and the mire gets overgrown quickly if the mowing stops. It is therefore of highest priority that the mire is kept open through mowing.

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:

The genuine interest of the villagers for their mire is unique. It is due to their work that the mire is, and will be kept in good condition in the future.

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:

Private (100%)

b) in the surrounding area:

Private (100%)

25. Current land (including water) use:

a) within the Ramsar site:

Mowing of the mire and periodically damming of Vasikkajoki during spring and early summer. The site is also used by tourists and bird-watchers.

b) in the surroundings/catchment:

Forestry and some agriculture dominate the land use.

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 mire will rapidly get overgrown if the mowing stops.

b) in the surrounding area:

Forestry actions like clear-cuts and water drainage in the adjacent areas could be a future potential problem.

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 whole site is included in Vasikkavuoma nature reserve, established in 1999. The whole site has also been included in the Natura 2000 network, SCI-site SE0820400 Vasikkavuoma (200 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?:

The management plan was officially approved in 1999.

Restoration measures have been taken (clearing of bushes, clearing of the creek and restoration of the barns) and most of the planned management measures have also been implemented.

The conservation plan for the Natura 2000 site, SE0820400 Vasikkavuoma was officially approved in 2007.

d) Describe any other current management practices:

The site is mowed and the conservation values are dependent on the continuation of that management. The nature reserve includes provisions against forestry, drainage, building and road constructions. The continuation of mowing and the provisions are considered to be enough to protect the conservation values in the area.

28. Conservation measures proposed but not yet implemented:

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

The site is well protected, both a nature reserve and a Natura 2000 site, no further conservation measures are proposed.

29. Current scientific research and facilities:

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

There is no current scientific research.

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 is a bird observation tower, fireplaces, dry privy closets, a timbered meeting-place with sleeping accommodation and a long footbridge making the mire accessible for wheelchairs.

31. Current recreation and tourism:

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

The site is visited by tourists and bird-watchers mainly during spring and summer.

32. Jurisdiction:

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

County Administrative Board of Norrbotten, S-971 86 Luleå, Sweden

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 Norrbotten, S-971 86 Luleå, Sweden
Tel. +46 920 960 00. E-mail: norrbotten@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.

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

Jordbruksverket. Ängs och betesmarksinventeringen 2002-2004. Rapport 2005:1.

Länsstyrelsen i Norrbottens län. 1999. Beslut om bildande av naturreservatet Vasikkavuoma.

Länsstyrelsen beslut .

Länsstyrelsen i Norrbottens län. 1999. Skötselplan för Vasikkavuoma naturreservat. Länsstyrelsen beslut

Länsstyrelsen i Norrbottens län. 2004. Våtmarker i Norrbottens län. Rapport 6/2004.

Länsstyrelsen i Norrbottens län 2012. The Natura 2000 standard data form for the site Vasikkavuoma SE0820400.

Länsstyrelsen i Norrbottens län. 2007. Bevarandeplan för Natura 2000 Vasikkavuoma SE0820400.

Naturvårdsverket. 2007. Myrskyddsplan för Sverige, Delrapport - Objekt i Norrland. Rapport 5669.

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