## 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:	FOR OFFICE USE ONLY.
Sture Westerberg, Länsstyrelsen i Norrbottens län, S-971 86 Luleå, Sweden. Sture.Westerberg@lansstyrelsen.se	Designation date  Designation date  Site Reference Number
Jenny Lonnstad, Naturvårdsverket (Swedish EPA), S-106 48 Stockholm, Sweden. jenny.lonnstad@naturvardsverket.se	
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 land Alternative names, including in local language(s), should be given in particular Rappomyran	
5. Designation of new Ramsar site or update of existing	ng 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 d	lesignation 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  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  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 is the same as for the Nature Reserve Rappomyran and the Natura 2000 site, SE0820615.
<b>8. Geographical coordinates</b> (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.
66°22'N 20°57'E (central point) 66°26'N 20°52'E (NE corner) 66°18'N 21°03'E (SW corner)

#### 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.

Rappomyran is situated in the northernmost part of Sweden, about 15 km southeast of the community Voullerim in the county of Norrbotten (population 248 400), municipality of Jokkmokk (5 100) and Boden (27 600).

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

Average 175 metres

11. Area: (in hectares)

3 031 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.

Rappomyran is a mire widely stretched along the stream Pulisbäcken. In the west, the mire is delimited by a mountain ridge. Several larger tarns are located within the object and in the northern parts there are larger islands and parts of solid ground. The string-flark fens have flarks with poor to intermediate vegetation and some of the flarks are affected by bog iron. Topogenous fens are spread around in the object and soligenous fens with several spring occur at the foot of the mountain in the western part.

Spruce dominated wet forest grows closest to the stream Pulisbäcken. This forest has plenty of dead deciduous wood and is important habitats for woodpeckers. Through the wetlands the stringed fens containing numerous wet flarks in-between and is rich in pools. The area has a rich bird life.

#### 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.

### 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:** Rappomyran contains a representative example of a natural wetland complex in the EU boreal region. The wetland types present at the site are Non-forested peatlands (U), Shrub-dominated wetlands (W), Forested peatlands (Xp), Permanent freshwater lakes (O), Permanent freshwater marshes and pools (Tp), Permanent rivers and streams (M) and Freshwater tree-dominated wetlands (Xf).

Most of the peatlands consists of well-developed large mixed mires and fens with string and large wet flarks and pools in-between. There are also large areas with topogenous and soligenous fens and an area with a non-raised bog. Along the stream there are wet forests and close to the lakes there are regularly flooded marshes. The mires in the area have good possibilities to continue function as a carbon sink and storage.

**Criterion 2:** The site supports species dependant on wetlands which are nationally red-listed including Jelly lichen *Collema curtisporum* (VU), Hudson Bay sedge *Carex heleonastes* (EN), otter *Lutra lutra* (VU) and Eurasian curlew *Numenius arquata* (VU).

**Criterion 3:** The site with its large areas of wet mires and pools supports a rich avian fauna and is therefore important for maintaining the biological diversity of the biogeographic region. A bird census performed by the County Administrative Board of Norrbotten resulted in 64 observed species (Backe 2001) such as Jack Snipe (*Lymnocryptes minimus*), Common Snipe (*Gallinago gallinago*), Whimbrel (*Numenius phaeopus*), Greenshank (*Tringa nebularia*), Common Cuckoo (*Cuculus canorus*), Whinchat (*Saxicola rubetra*), Garden Warbler (*Sylvia borin*), Great Grey Shrike (*Lanius excubitor*) as well as an additional number of red-listed species and species of annex 1 of the EU Birds Directive (see 22 below).

**Criterion 4:** The site regularly supports significant numbers of birds during the breeding and migration period (for examples see Criterion 3 above and 22. Noteworthy fauna below).

**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.

Rappomyran stretches along the stream Pulisbäcken which drains the mire south towards Lakaträsket. The bedrock in the area consists primarily of granite and pegmatite but also some smaller parts with gabbro and acid igneous rock can be found. The dominating soil type is peat except for some of the western parts which consists of till. The precipitation is low with an annual average rainfall of approximately 500 mm. The annual average temperature is -1 °C and the vegetation period is approximately 140 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 15 246 ha. Approximately 60 % consist of forest (mainly coniferous forest) 35 % mire, 4 % lakes and 0.5 % farmland. The bedrock in the catchment area mainly consists of granite and pegmatite, but there are also some smaller parts with gabbro and acid igneous rocks. The soil types are till and peat and some glaciofluvial sediments.

### 18. Hydrological values:

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

The area is undisturbed from hydrological point of view. There aren't any investigations done about hydrological values at the site. The peatlands store and sequestrates carbon.

## 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)

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

#### 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, Xp, W, O, M, Xf, Tp

## 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 main habitats of Rappomyran are mire, swamp woods, tarns and the stream, Pulisbäcken. It is especially the large mixed mires and fens with strings and wet flarks in-between that gives the site its special character. Habitats included in the EU Habitats Directive present at the site are Aapa mires (7310), Transition mires and quaking bogs (7140), Natural dystrophic lakes and ponds (3160), Fennoscandian natural rivers (3210) and Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) (91E0).

Common species are mud sedge *Carex limosa, Carex chordorrhiza*, buck bean *Menyanthes trifoliata* and livid sedge *Carex livida* (Wahlenb.) Willd. Otter, beaver and mink all live along the stream. Rappomyran is situated in a depression and is surrounded by mountains below the tree line, coniferous forests and mires.

## 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.

Lapland buttercup Ranunculus lapponicus (in the EU Habitats Directive Annex II) can be mentioned.

#### 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 Eurasian curlew *Numenius arquata* (VU), Crane\* *Grus grus*, Wood sandpiper\* *Tringa glareola*, Bean goose *Anser fabalis* (NT), Short-eared owl\* *Asio flammeus* (NT), Whooper swan\* *Cygnus cygnus*, Black-throated diver\* *Gavia arctica*, Arctic tern\* *Sterna* 

paradisaea, Osprey\* Pandion haliaetus, Hazel grouse\* Bonasa bonansia, Capercaillie\* Tetrao urogallus, Black grouse\* Tetrao tetrix, and Northern Hawk Owl\* Surnia ulula.

#### 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:

Rappomyran used to be mowed. Traces from the mowing can still be found in form of remains of hay drying racks and barns. In the beginning of the 20th century, a large part of the wetland in Norrbotten was used for haymaking to provide winter fodder for the cattle. Today only 0.1% of the earlier mowed wetland is in use. The remains from the mowing on Rapppomyran are of great cultural and historical value.

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  $\square$  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:
- 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 site is mostly state-owned, approximately 20 % is privately owned.

b) in the surrounding area:

Mainly state-owned land.

## 25. Current land (including water) use:

a) within the Ramsar site:

Reindeer farming.

b) in the surroundings/catchment:

Forestry is the dominating 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:
Known threats are regulated in the Nature Reserve regulations.
b) in the surrounding area:
Forestry actions like clear-cutting 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 Rappomyran Nature Reserve, established in 2003 and is also included in the Natura 2000 network SCI/SPA-site SE0820615 Rappomyran.
<b>b)</b> If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):
Ia $\square$ ; Ib $\boxtimes$ ; II $\square$ ; IV $\square$ ; V $\square$ ; VI $\square$
c) Does an officially approved management plan exist; and is it being implemented?:
The management plan was officially approved in 2003 and is being implemented. The conservation plan for the Natura 2000 site, SE0820615 Rappomyran was officially approved in 2007.
d) Describe any other current management practices:
The management is based upon the nature reserve and its provisions and management plan. The nature reserve includes provisions against forestry, drainage, building, road constructions etc. 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.

## 29. Current scientific research and facilities:

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

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

There is no current scientific research.

measures are proposed.

# 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 current CEPA activities in the area.

#### 31. Current recreation and tourism:

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

There are no significant recreation or tourist activities in the area.

#### 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, 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, Fältenheten, 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. Artdatabnken, SLU, Uppsala.

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

Länsstyrelsen i Norrbottens län. 2003. Beslut om bildande av Rappomyrans naturreservat i Bodens och Jokkmokks kommun. Länsstyrelsen beslut 511-2033-00.

Länsstyrelsen i Norrbottens län. 2003. Skötselplan för Rappomyrans naturreservat. Länsstyrelsen beslut 511-2033-00.

Länsstyrelsen i Norrbottens län. 2007. Bevarandeplan för Natura 2000 Rappomyran SE0820615.

Länsstyrelsen i Norrbottens län, S Backe. 2001. Fågelinventering av Stormyran, Rappomyran,

Päivävuoma och Tervavuoma. Unpublished.

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

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