# 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 8<sup>th</sup> Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX. 22 of the 9<sup>th</sup> Conference of the Contracting Parties (2005).

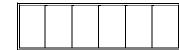
# Notes for compilers:

- 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:

Fredrik von Euler, Länsstyrelsen i Dalarnas län, S-791 84 Falun, Sweden.





Designation date



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

Koppången

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  $\Box$ ; or

- ii) the boundary has been extended  $\Box$ ; or
- iii) the boundary has been restricted\*\*  $\Box$

and/or

# If the site area has changed:

i) the area has been measured more accurately  $\Box$ ; or

ii) the area has been extended  $\Box$ ; or

iii) the area has been reduced\*\*  $\Box$ 

\*\* **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  $\boxtimes$ . 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 coincides with the boundary Nature Reserve Koppången. In the northern part, the railway line "Inlandsbanan" constitutes the western site boundary for almost 5 km. In the southern part of the site, the eastern boundary coincides with a gravel road for 7 km.

#### 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.

Centre: 61°21'N 14°47'E SW corner: 61°18'N 14°46'E. NE corner: 61°24'N 14°50'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 Central Sweden, County of Dalarna (population 276 400), municipality of Orsa (6 800). The town of Orsa is approx. 25 km to the south of the site.

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

Minimum: 450 metres above sea level. Maximum: 615 (wetland); 652 (dry land)

11. Area: (in hectares)

4 936 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.

Koppången consists of a large complex of extensive mires, small lakes and drier, forested patches and hills. Common mire types are sloping fens and string-flark fens. The wetland vegetation is variable and includes both bogs and rich fens. There are some rare species present. The forest is dominated by spruce (*Picea abies*) and some trees are more than 300 years old. Pines (*Pinus sylvestris*) are less frequent and occur mainly scattered along wetland edges. Old pines have been selectively cut in earlier times.

# 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).

**Criteron 1:** Koppången contains a representative example of Non-forested peatlands (U) and Forested peatlands (Xp) in the EU boreal region. The mires are represented by a number of different mire and vegetation types. Habitats in the EU Habitats directive present at the site are Aapa mires (7310), Transition mires and quaking bogs (7140), and Bog woodland (91D0), in conjunction with the forest habitat types Western Taïga (9010) including wet subtypes and Fennoscandian herb-rich forests with Picea abies (9050). The mires in the area have good possibilities to continue function as a carbon sink and storage.

**Criteron 2**: The site supports the nationally red-listed species such as Ruff *Philomachus pugnax* VU, Curlew *Numenius arquata* VU, *Evernia mesomorpha* VU, *Evernia divaricata* VU and *Platismatia norvegica* VU.

**Criteron 3:** The site supports populations of particularly plant species which are important for the biological diversity of the EU boreal region. At least 23 species of *Sphagnum* occur, and the site includes some of few Swedish localities for Angerman's sphagnum (*Sphagnum angermanicum*). The

forested patches and hills are fire refuges and habitat for several threatened lichens, macro-fungi and bryophytes and the variety of the bird fauna (see 22 below) also adds to the great biological diversity of the site.

**Criterion 4**: The extensive wetlands support populations of many breeding bird and mammal species and the naturally fire-protected old-growth forest patches support several lichens, bryophytes and macro-fungi. The site plays an important role as species source for re-colonization of the surrounding, semi-natural landscape.

**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 site is a local highland with relatively high precipitation (average > 800 mm/year) and high humidity. The winter snow cover is heavy and the snow melts late (May). The climate type is weakly continental.

The bedrock consists of volcanites (basic) in the south and central parts, conglomerates and sandstones in the northeastern part, and metavolcanites (acid) in the northwestern part. Covering the bedrock is a glacial moraine with a normal amount of gravel and stones.

Peatlands cover approx. 75% of the site, and extend onto the slopes of the hills. Many of the larger mires have a structure with permanent open water surfaces interspersed by drier peat divisions, forming characteristic patterns. In the south there is an area with dead ice moraine and numerous ponds as well as a few small lakes.

National road No 45 runs in a SW-NE direction through the northern part of the site. The road provides convenient access to the site, while also affecting the hydrology to a limited extent.

#### 17. Physical features of the catchment area:

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

See above (16).

#### 18. Hydrological values:

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

The site is situated on a drainage divide between several local drainage basins surrounding the site. The larger area drains to the east arm of the river Dalälven in the south. The hydrological function of the site is that of a buffer that receives precipitation, unevenly distributed over time, and in turn provides a relativey steady supply of drainage water to the surrounding landscapes. 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: ABCDEFGHIJKZk(a)Inland:LMNOPQRSpSsTpTsUVaVtWXfXpYZgZk(b)Zk(b)

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, 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 - wetlands and forests - interact with each other through ecological processes. For example, the wetlands isolate the forest patches from spreading forest fires, and maintain a high humidity, thereby improving the habitat for many species.

The Capercaillie requires a mix of mature/oldgrowth forest and wetland habitats for successful breeding. The habitat mix is favourable for most other species as well. The vast peatlands constitute substantial carbon storage as well as a regulator of water flow to the streams that drain the site. The pollen record shows that the wetland peat accumulation started about 4500 years BC, and that the latest peatland expansion up the hillsides ended about 1000 years BC. Much, perhaps most, of the wetland has never been drained.

#### 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 site supports a number of nationally red-listed species:

**Bryophytes:** *Lophozia ascendens* VU, *Anastrophyllum michauxii* NT and *Sphagnum angermanicum* NT.

**Lichens:** (in forest patches) Bryoria tenuis EN, Bryoria bicolor VU, Evernia mesomorpha VU, Evernia divaricata VU, Platismatia norvegica VU. Usnea longissima VU, Bryoria nadvornikiana NT, Chaenotheca laevigata NT, Hypogymnia bitteri NT, Letharia vulpina NT, Lobaria pulmonaria NT and Lobaria scrobiculata NT. **Fungi:** (in forest patches) *Skeletocutis stellae* VU, *Clavaria purpurea* NT, *Cystostereum murrayi* NT, *Fomitopsis rosea* NT, *Phellinus nigrolimitatus* NT, *Phlebia centrifuga* NT, and *Trichaptum laricinum* 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 site supports several mammal and bird species which are nationally red-listed 2010 (marked with EN/VU/NT) and/or included in Annexes to the EU Directives (bird or habitats) marked with\*:

**Mammals:** Wolverine *Gulo gulo* VU\* (tracks observed), Lynx *Lynx lynx* NT\* (tracks observed), and Brown bear *Ursus arctos* (feeds and hibernates at the site)

**Birds:** Honey buzzard *Pernis apivorus* VU\*, Ruff *Philomachus pugnax* VU\*, Three-toed woodpecker *Picoides tridactylus* NT\*, Pine grosbeak *Pinicola enucleator* NT, Golden eagle *Aquila chrysaetos* NT, Rough-legged buzzard *Buteo lagopus* NT, Curlew *Numenius arquata* VU, Eagle owl *Bubo bubo* NT (occurs in the vicinity), Siberian jay *Perisoreus infaustus* NT, Whooper swan *Cygnus cygnus*\*, Capercaillie *Tetrao urogallus*\*, Black grouse *Tetrao tetrix*\*, Crane *Grus grus*\*, Golden plover *Pluvialis apricaria*\*, Wood sandpiper *Tringa glareola*\*, Ural owl *Strix uralensis*\*, and Black woodpecker *Dryocopus martius*\*.

#### 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 wetlands have traditionally, for at least 400 years, been used for extensive harvesting of fodder for the livestock. Decaying wooden racks for drying the "mire hay" are still to be seen, as are remnants of small storage houses.

**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?

No.

If Yes, tick the box **D** 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:

# State owned.

b) in the surrounding area:

Privately owned.

# 25. Current land (including water) use:

a) within the Ramsar site:

Recreation (skiing, sled dog travel)

b) in the surroundings/catchment:

Forestry, hunting, recreation (skiing, sled dog travel)

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:

None.

b) in the surrounding area:

Potentially forestry, hunting, and drainage.

# 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 Koppången Nature Reserve was established in 1999 and extended in 2009. The area is about 4 500 hectares. The intent of the provisions and the management plan is basically to allow the habitats to develop without human intervention. For example is no forestry allowed in the area.

The site is included in the Natura 2000 network: SE0620048 Koppången (4 404 ha) – SCI/SPA.

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

Ia  $\Box$ ; Ib  $\boxtimes$ ; II  $\Box$ ; III  $\Box$ ; IV  $\Box$ ; V  $\Box$ ; VI  $\Box$ 

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

The management plan for the Natura 2000 site was adopted in 2007 and is implemented. The management plan for the extended Nature Reserve was adopted in 2009 and is implemented. There is

a management council established and the council includes representatives from the local community, the municipality and the County Administrative Board.

d) Describe any other current management practices:

There is an on-going project that blocks existing ditches in one part of the site. The nature reserve includes provisions against forestry, drainage, building, road constructions etc.

#### 28. Conservation measures proposed but not yet implemented:

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

Koppången has been proposed as a new National Park, but the fulfilment of the plan will not be prioritized in the near future, it will take some years before the work will start. When the plan was presented the idea was rejected by the Board of Orsa municipality (Oct. 2007).

#### 29. Current scientific research and facilities:

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

A breeding bird census has been undertaken, and might be repeated in the future. The site is included in the Basinventeringen (National Baseline Inventory) scheme to monitor the dynamics of identified nature conservation values (e.g. "typical" species) in the Natura 2000 network.

# 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.

#### Parking possibilities for visitors have been improved.

#### 31. Current recreation and tourism:

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

The site is used mainly during winter, for skiing, and sled dog travel. The recreation usage intensity is low due to the low number of visitors and the large 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 Dalarna

#### 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 Dalarna, S-791 84 Falun, Sweden. Tel. +46 23 810 00 E-mail: <u>dalarna@lansstyrelsen.se</u> (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.

Forslund, M., Kolmodin, U., Svenson, S-Å 1982. Skyddsvärda fågelmyrar i Kopparbergs län. Länsstyrelsen 1982:4.

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

Länsstyrelsen i Dalarnas län 2007: Bevarandeplan Natura 2000 - SE0620048 Koppången. Oldhammer, B. 1995. Koppången. En inventering av de skogliga naturvärdena inom Koppångenområdet. Länsstyrelsen 1995:1.

Rynéus, T. & medarbetare 1988. Naturvårdprogram för Kopparbergs län. Länsstyrelsen, meddelande N 1988:1.

Rynéus, T. 1999. Bildande av Koppångens naturreservat i Orsa kommun. Länsstyrelsens beslut 231-3607-98.

Rynéus, T. (in prep). Skötselplan för Koppången i Orsa kommun (revised management plan). Länsstyrelsen Dalarna.

Sjörs, H. et al. 1973. Skyddsvärda myrar i Kopparbergs län (Mires considered for protection in Kopparberg County (Prov. Dalarna), Central Sweden). Växtekologiska studier 3. Uppsala.

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