

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note 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. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Bureau. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

FOR OFFICE USE ONLY.

DD MM YY

Designation date Site Reference Number

1. Name and address of the compiler of this form:

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2. Date this sheet was completed/updated:

January 2005

3. Country:

Finland

4. Name of the Ramsar site:

Teuravuoma – Kivijärvenvuoma Mires

5. Map of site included:

Refer to Annex III of the Explanatory Note and Guidelines, for detailed guidance on provision of suitable maps.

a) hard copy (required for inclusion of site in the Ramsar List):

Yes.

b) digital (electronic) format (optional):

Yes.

6. Geographical coordinates (latitude/longitude):

67°20' N / 24°05' E

7. General location:

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

The unbroken area is situated in west-central part of the province of Lapland, in the municipality of Kolari, 8 km east of Kolari village. The municipality (2 563 sq.km of land) has ca. 4 000 residents.

8. Elevation: (average and/or max. & min.)

185–170 m, mean 176 m.

9. Area: (in hectares)

5 788 ha

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Teuravuoma–Kivijärvenvuoma is the most representative mire complex in western Lapland and an important protection area of rich fens. It is the largest unbroken aapa mire in the area of River Tornionjoki and an important breeding and staging area for waterfowl and waders.

11. Ramsar Criteria:

Circle or underline 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).

1, 2 & 4

<u>1</u>	<u>2</u>	3	<u>4</u>	5	6	7	8
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12. Justification for the application of each Criterion listed in 11. 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) A representative example of natural wetland types (dominated by peatlands) in the EU Boreal region, including several priority natural wetland habitat types (7310, 91D0, 9010, 3260, 3160) e.g. aapa mires and bog woodland listed in Annex I of the EU Habitats Directive.

2) 3 nationally threatened bird species, 2 nationally threatened vascular plant species. Threatened vascular plant species (VU) in Finnish Red List and Annex II of the EU Habitats Directive is Marsh Saxifrage (*Saxifraga hirculus*). Threatened birds listed in the EU Bird Directive Annex I include Peregrine Falcon (*Falco peregrinus*) (EN in Finnish Red List), Golden Eagle (*Aquila chrysaetos*) (VU) and Merlin (*F. columbarius*) (VU). Scarce species include e.g. Whooper Swan (*Cygnus cygnus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*), Crane

(*Grus grus*), Ruff (*Philomachus pugnax*) and Short-eared Owl (*Asio flammeus*).
Mammals of the EU Habitats Directive Annex II include the Otter (*Lutra lutra*).

4) About 17 species of the EU Birds Directive Annex I breed in the area, of which the most common are Wood Sandpiper (*Tringa glareola*) with >200 pairs and Capercaillie (*Tetrao urogallus*) with >40 pairs.

The area of River Tornionjoki is an important breeding and staging area for waterfowl and waders. (copied from section 10)

Bird list (Status in Finnish Red List, BD=Birds Directive Annex I, FRS=Finland's Responsibility Species):

Breeding grouses, waders, wetland passerines and/or valuable species (woodpeckers–passerines), pairs, minimum estimation (based on line transect counts): Willow Grouse (*Lagopus lagopus*) >80, Black Grouse (*Tetrao tetrix*) >3 (NT, BD, FRS), Capercaillie (*Tetrao urogallus*) >90 (NT, BD, FRS), Crane (*Grus grus*) >10 (BD), Broad-billed Sandpiper (*Limicola falcinellus*) >50 (NT, FRS), Jack Snipe (*Lymnocyptes minimus*) >5 (FRS), Snipe (*Gallinago gallinago*) >80, Whimbler (*Numenius phaeopus*) >2 (FRS), Curlew (*Numenius arquata*) >3 (FRS), Spotted Redshank (*Tringa erythropus*) >3 (FRS), Greenshank (*Tringa nebularia*) >10 (FRS), Wood Sandpiper (*Tringa glareola*) >300 (BD, FRS), Red-necked Phalarope (*Phalaropus lobatus*) >8 (BD), Cuckoo (*Cuculus canorus*) >25 (NT), Three-toed Woodpecker (*Picoides tridactylus*) >20 (NT, BD, FRS), Meadow Pipit (*Anthus pratensis*) >350, Yellow Wagtail (*Motacilla flava*) >500, Bluethroat (*Luscinia svecica*) >20 (BD), Whinchat (*Saxicola rubetra*) >20 (NT), Sedge Warbler (*Acrocephalus schoenobaenus*) >15, Siberian Jay (*Perisoreus infaustus*) >50 (NT, FRS), Rustic Bunting (*Emberiza rustica*) >50, Reed Bunting (*Emberiza schoeniclus*) >250.

13. 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:

Northern boreal forest vegetation zone.

b) biogeographic regionalisation scheme (include reference citation):

Etelä-Suomen ja Pohjanmaan metsien suojelun tarve-työryhmä. Puheenjohtaja: Ruuhijärvi, R., Sihteerit: Kuusinen, M., Raunio, A. and Eisto, K. 2000. Metsien suojelun tarve Etelä-Suomessa ja Pohjanmaalla. Etelä-Suomen ja Pohjanmaan metsien suojelun tarve-työryhmän mietintö. Suomen ympäristö 437. Ympäristöministeriö. Helsinki.

Working group on the need for forest protection in southern Finland and Ostrobothnia. Chairman Ruuhijärvi, R., Secretaries Kuusinen, M., Raunio, A. and Eisto, K. 2000. Forest protection in southern Finland and Ostrobothnia. The Finnish Environment 437. Ministry of the Environment.

14. 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.

Geology: Geochemically included in Central Lapland granitoid area. Bedrock is composed mainly of mafic and ultramafic metavolcanic rocks, granite and granodiorite with gneissic inclusions.

Origins: Natural.

Hydrology: Aapa mires dependent on ground or surface waters.

Soil type: Peat with small areas of glacial ground moraine.

Water quality: Mesotrophic mostly. Lakes, ponds and mire waters dystrophic.

Depth of water: Shallow. Water-level high in spring, because of melting snow.

Climate: Duration of growing season ca. 120 days, mean annual temperature ca. -1 °C, mean annual rainfall ca. 550 mm. Ice- and snow-covered normally from late October to mid May. Northern boreal forest vegetation zone.

15. Physical features of the catchment area:

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

The climate and general geological features are much the same in the catchment areas as in the Ramsar sites. Look partly chapter 14. Data not available.

16. Hydrological values:

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

Virgin aapa mires play an important role in maintenance of water quality and in flood control.

17. 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)
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Inland: U, Xp, M, Tp, O, Xf & Ts

L	<u>M</u>	N	<u>Q</u>	P	Q	R	Sp	Ss	<u>Tp</u>	<u>Ts</u>	U	Va	Vt	W	<u>Xf</u>	<u>Xp</u>	Y	Zg	Zk(b)
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Human-made:

1	2	3	4	5	6	7	8	9	Zk(c)
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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 – Non-forested peatlands
- Xp – Forested peatlands
- Xf – Seasonally flooded forests
- M – Permanent rivers and streams
- Tp – Permanent freshwater pools
- O – Permanent freshwater lakes
- Ts – Seasonal freshwater pools

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The site represents the Mire vegetation region of Main aapa mires of southern types. The area includes ca. 5 200 ha of mires and ca. 60 ha of water. A typical aapa mire and a diverse mire complex. A major part of the mires consists of representative grass or flark fens. *Sphagnum fuscum* bogs with Spruce (*Picea abies*) and poor Pine (*Pinus sylvestris*) bogs occur on margins. The area is traversed by small rivers and includes three small lakes and numerous ponds.

19. Noteworthy flora:

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. ***Do not include here taxonomic lists of species present - these may be supplied as supplementary information to the RIS.***

Threatened vascular plant species (VU in Finnish Red List) include Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri*) and Marsh Saxifrage (*Saxifraga hirculus*).

20. 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.***

Threatened birds include Peregrine Falcon (*Falco peregrinus*) (EN in Finnish Red List), Golden Eagle (*Aquila chrysaetos*) (VU) and Merlin (*F. columbarius*) (VU). Ca. 17 species of the EU Birds Directive Annex I breed in the area, of which the most common are Wood Sandpiper (*Tringa glareola*) with >200 pairs and Capercaillie (*Tetrao urogallus*) with >40 pairs. Scarce species include e.g. Whooper Swan (*Cygnus cygnus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*), Crane (*Grus grus*), Ruff (*Philomachus pugnax*) and Short-eared Owl (*Asio flammeus*). Mammals of the EU Habitats Directive Annex II include Brown Bear (*Ursus arctos*) and Otter (*Lutra lutra*).

21. Social and 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.

Significant values include reindeer husbandry.

22. Land tenure/ownership:

(a) within the Ramsar site:

State-owned for the major part (89 %).

(b) in the surrounding area: State-owned and private-owned.

23. Current land (including water) use:

(a) within the Ramsar site:

a) and b) Reindeer husbandry is an important livelihood in the surrounding areas and also permitted in the Mire Protection Area. Hunting, fishing and picking of mushrooms and berries are permitted.

(b) in the surroundings/catchment:

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

The alluvial meadows are in the process of overgrowing because of the diminished hay cutting. Some ditching has been carried out on the margins of the mires. Hunting may have negative effects on the site. We have no exact data of the possible effects. Negative effects are of course always possible in areas where hunting is carried out.

25. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

The site is included in the Natura 2000 Network, designated both as SPA and SCI. Most of the area is included in the Mire Conservation Programme. A major part of the area was first protected as a primeval forest area in 1975. Teuravuoma–Kivijärvenvuoma Mire Protection Area (5 008 ha) was established in 1988. Forestry, ditching, extraction of earth material and damaging of soil or bedrock are prohibited in the Mire Protection Area. Also construction of buildings and roads is prohibited in general.

26. Conservation measures proposed but not yet implemented:

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

Conservation of the Natura 2000 site outside the already protected areas will be carried out under the Nature Conservation Act. A management and land use plan for the Mire Protection Area will be established in the near future.

27. Current scientific research and facilities:

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

The breeding bird fauna and flora was studied in the 1970s. The volume of bird populations was estimated in 1995 by using line transect censuses.

28. Current conservation education:

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

None significant.

29. Current recreation and tourism:

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

Only few visitors. No facilities.

30. Jurisdiction:

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

a) Metsähallitus – Forest and Park Service, Natural Heritage Services, Northern Finland, **b)** Ministry of the Environment.

31. 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.

Metsähallitus – Forest and Park Service, Natural Heritage Services, Northern Finland,
PO Box 8016, FIN-96101 Rovaniemi, Finland

32. Bibliographical references:

scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Leivo, M., Asanti, T., Koskimies, P., Lammi, E., Lampolahti, J., Mikkola-Roos, M. & Virolainen, E. 2002. Suomen tärkeät lintualueet FINIBA. BirdLife Suomen julkaisu 4, Suomen graafiset palvelut, Kuopio.

Rassi, P., Alanen, A., Kanerva, T. & Mannerkoski, I. (eds.) 2001. The 2000 Red List of Finnish Species. Ministry of the Environment & Finnish Environment Institute, Helsinki.

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