

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:

Olvassuo 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):

65°07' N / 27°15' 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 central part of the province of Oulu, in the municipalities of Pudasjärvi, Puolanka and Utajärvi, 12 km south of Pudasjärvi village. The municipalities (9 787 sq.km of land) have ca. 17 200 residents.

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

210 – 115 m, mean 133 m.

9. Area: (in hectares)

27 073 ha

10. Overview:

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

Olvassuo is one of the most representative mire areas in Finland as a breeding site of mire birds.

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 3 priority natural wetland habitat types of the Habitats Directive Annex II (aapa mires, bog woodland, active raised bogs).

2) Threatened vascular plants (VU in Finnish Red List) include sedge species *Carex heleonastes*, Early Marsh-orchid (*Dactylorhiza incarnata* ssp. *cruenta*), Narrow-leaved Marsh-orchid (*D. traunsteineri*) and Marsh Saxifrage (*Saxifraga hirculus*). Bryophytes include moss species *Hamatocaulis vernicosus* (VU) and the most vital occurrence of moss species *Hamatocaulis lapponicus* (EN) in Finland, both also listed in the Annex II of the EU Habitats Directive.

Threatened birds include Peregrine Falcon (*Falco peregrinus*) (EN in Finnish Red List) and Golden Eagle (*Aquila chrysaetos*) (VU), both also listed in Annex I of the Bird Directive.

About 25 further bird species of the EU Birds Directive Annex I breed in the area, including significant populations of Wood Sandpiper (*Tringa glareola*) with more than 500 pairs, Ruff (*Philomachus pugnax*) with more than 200 pairs, Golden Plover

(*Pluvialis apricaria*) with more than 100 pairs and Hazel Grouse (*Bonasa bonasia*), Black Grouse (*Tetrao tetrix*), Capercaillie (*T. urogallus*) and Crane (*Grus grus*) with more than 50 pairs each. Scarce species include e.g. Red-throated Diver (*Gavia stellata*), Black-throated Diver (*G. arctica*), Whooper Swan (*Cygnus cygnus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*) and Short-eared Owl (*Asio flammeus*). Tens of pairs of Bean Goose (*Anser fabalis*) (Finland's responsibility species) breeds in the area.

Mammals of the EU Habitats Directive Annex II include Brown Bear (*Ursus arctos*), Lynx (*Lynx lynx*) and Otter (*Lutra lutra*).

4) About 25 bird species of the EU Birds Directive Annex I breed in the area (see criterion 2). Tens of pairs of Bean Goose (*Anser fabalis*) (Finland's responsibility species) breeds in the area. In total 17 species of waterfowl and 16 species of waders breed in the area.

Criteria 4. 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): Hazel Grouse (*Bonasa bonasia*) >110 (BD), Willow Grouse (*Lagopus lagopus*) >100, Black Grouse (*Tetrao tetrix*) >250 (NT, BD, FRS), Capercaillie (*Tetrao urogallus*) >120 (NT, BD, FRS), Crane (*Grus grus*) >150 (BD), Ringed Plover (*Charadrius hiaticula*) >6, Golden Plover (*Pluvialis apricaria*) >180 (BD), Lapwing (*Vanellus vanellus*) >90, Broad-billed Sandpiper (*Limicola falcinellus*) >30 (NT, FRS), Ruff (*Philomachus pugnax*) >90 (NT, BD), Jack Snipe (*Lymnocyptes minimus*) >30 (FRS), Snipe (*Gallinago gallinago*) >390, Whimbler (*Numenius phaeopus*) >160 (FRS), Curlew (*Numenius arquata*) >210 (FRS), Spotted Redshank (*Tringa erythropus*) >20 (FRS), Greenshank (*Tringa nebularia*) >130 (FRS), Green Sandpiper (*Tringa ochropus*) >20, Wood Sandpiper (*Tringa glareola*) >750 (BD, FRS), Common Sandpiper (*Actitis hypoleucos*) >5 (FRS), Cuckoo (*Cuculus canorus*) >150 (NT), Wryneck (*Jynx torquilla*) >25 (VU), Three-toed Woodpecker (*Picoides tridactylus*) >70 (NT, BD, FRS), Black Woodpecker (*Dryocopus martius*) >10 (BD), Meadow Pipit (*Anthus pratensis*) >2 200, Yellow Wagtail (*Motacilla flava*) >1 700, Whinchat (*Saxicola rubetra*) >180 (NT), Wheatear (*Oenanthe oenanthe*) >10 (NT), Sedge Warbler (*Acrocephalus schoenobaenus*) >20, Lesser Grey Shrike (*Lanius collurio*) >7 (NT, BD), Siberian Jay (*Perisoreus infaustus*) >40 (NT, FRS), Rustic Bunting (*Emberiza rustica*) >280, Little Bunting (*Emberiza pusilla*) >10, Reed Bunting (*Emberiza schoeniclus*) >250.

The bird lists are based on line transect counts. Waterfowl, raptors, gulls and terns are not included because the method does not fit for these bird groups. Some information of these groups is found on the original RIS sheets. Migration data is not available on these large areas.

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:

Middle 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 Archaean basement gneiss area. Bedrock is composed mainly of tonalite-trondhjemite-granodioritic gneiss and migmatite.

Origins: Natural

Hydrology: Aapa mires dependent on ground or surface waters.

Soil type: Mainly peat and glacial ground moraine with smaller areas of hummocky moraine and glacial fluvial, littoral and fluvial gravel and sand.

Water quality: Oligotrophic–mesotrophic. 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. 140 days, mean annual temperature ca. +1 °C, mean annual rainfall ca. 600 mm. Ice- and snow-covered normally from mid November to late April. Middle 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.

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, O, Tp, Y, Ts & Xf

L	<u>M</u>	N	<u>O</u>	P	Q	R	Sp	Ss	<u>Tp</u>	<u>Ts</u>	<u>U</u>	Va	Vt	W	<u>Xf</u>	<u>Xp</u>	<u>Y</u>	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

M – Permanent rivers and streams

O – Permanent freshwater lakes

Tp – Permanent freshwater pools

Ts – Seasonal freshwater pools

Xf – Seasonally flooded forests

Y – Freshwater springs

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 Southern aapa mires. The area includes ca. 21 000 ha of mires and ca. 1 000 ha of water. The aapa mires are very extensive and well developed. Sedge (*Carex* spp.) fens with flarks and *Sphagnum papillosum* sedge fens are the most common mire types with nutrient levels varying from raised bogs to rich fens. The area is traversed by tributaries and brooks of River Kiiminkijoki. Alluvial river shores are characterized by meadowy poor fens and Spruce (*Picea abies*) mires. Thirteen lakes with several ponds are situated beside the mires. Representative esker formations, wooded dunes and ancient shorebanks give variety to the landscape. Most of the coniferous forests are old-growth and dominated by Pine (*Pinus sylvestris*).

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 plants (VU in Finnish Red List) include sedge species *Carex heleonastes*, Early Marsh-orchid (*Dactylorhiza incarnata* ssp. *cruenta*), Narrow-leaved Marsh-orchid (*D. traunsteineri*) and Marsh Saxifrage (*Saxifraga hirculus*). Bryophytes include moss species *Hamatocaulis vernicosus* (VU) and the most vital occurrence of moss species *Hamatocaulis lapponicus* (EN) in Finland.

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) and Golden Eagle (*Aquila chrysaetos*) (VU). Ca. 25 bird species of the EU Birds Directive Annex I breed in the area, including significant populations of Wood Sandpiper (*Tringa glareola*) with >500 pairs, Ruff (*Philomachus pugnax*) with >200 pairs, Golden Plover (*Pluvialis apricaria*) with >100 pairs and Hazel Grouse (*Bonasa bonasia*), Black Grouse (*Tetrao tetrix*), Capercaillie (*T. urogallus*) and Crane (*Grus grus*) with >50 pairs each. Scarce species include e.g. Red-throated Diver (*Gavia stellata*), Black-throated Diver (*G. arctica*), Whooper Swan (*Cygnus cygnus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*) and Short-eared Owl (*Asio flammeus*). Tens of pairs of Bean Goose (*Anser fabalis*) (Finland's responsibility species) breeds in the area. 17 species of waterfowl and 16 species of waders breed in the area. Mammals of the EU Habitats Directive Annex II include Brown Bear (*Ursus arctos*), Lynx (*Lynx lynx*) 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 scientific research and reindeer husbandry. The site includes a locally important traditional rural biotope (2 ha) "Traditional rural biotope" is a synonym for a group of biotopes as semi-natural grassland, wooded pastures and grazed forests. (They are the most important areas for biodiversity in the agricultural landscape and also unreplaceable for the cultural heritage. They are classified as nationally, provincially or locally valuable. Most of these areas are very small. Most valuable areas are threatened because of e.g. overgrowing and enrichment caused by fertilization.)

22. Land tenure/ownership:

(a) within the Ramsar site:

State-owned for the major part (94 %).

(b) in the surrounding area:

Private-owned and state-owned.

23. Current land (including water) use:

(a) within the Ramsar site:

a) and b) Reindeer husbandry is carried out in the areas. Hunting and fishing are permitted for local residents in the Mire Protection Areas and in other areas outside the Strict Nature Reserve. Picking of mushrooms and berries is permitted, in the Strict Nature Reserve only for local residents.

(b) in the surroundings/catchment:

Forestry, Reindeer husbandry, hunting and fishing.

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

Drainage ditching has been carried out in some areas. Hunting may have negative effects on the site.

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. A major part of the site is included in the Finnish Mire Conservation Programme and the hills of Kälväsvaara and Iso Palovaara are included in the Finnish Esker Conservation Programme. Olvassuo Strict Nature Reserve (6 009 ha) was established in 1982. Oravisuo–Näätäsuo–Sammakkosuo Mire Protection Area (6 419 ha) was established in 1982 and Leväsuo–Kärppäsuo Mire Protection Area (2 229 ha) in 1988. The protected areas comprise 14 266 ha.

Restoration of mires was carried out under the EU Life project in 1996–99 by filling up ditches and cutting trees. In the Strict Nature Reserve visiting is prohibited all-year, except for local residents when concerning reindeer farming and picking of mushrooms and berries. Special permits to visit the Reserve are given in purposes of scientific research and education. Forestry, ditching, extraction of earth material and damaging of soil or bedrock are prohibited in the Mire Protection Areas. Also construction of new 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, Forest Act and Land Extraction Act.

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 was studied in 1985–87 and 1992–94. The volume of bird populations was estimated in 1993–94 by using line transect censuses. The vegetation was surveyed in 1996. The impact of restoration measures is monitored.

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.

None significant. 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, Ostrobothnia-Kainuu, 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, Ostrobothnia-Kainuu, Torangintaival 2, FIN-93600 Kuusamo, Finland.

32. Bibliographical references:

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

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.

Heikkilä, H. & Lindholm, T. 1997. Soiden ennallistamistutkimus vuosina 1987–96. Metsähallituksen luonnonsuojelujulkaisuja A 81.

Leivo, M. 2000. Suomen kansainvälisesti tärkeät lintualueet. Linnut-vuosikirja 1999. (English summary: Important Bird Areas in Finland).

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

Palojärvi, E. 1996. Olvassuon luonnonpuisto – kasvisto ja kasvillisuus. Manuscript. Metsähallitus.

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