# **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:

Bird Wetlands of Siikajoki

# 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):

64°52' N / 24°48' 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 separate areas (four larger and five smaller areas) are situated in western part of the province of Oulu, on the coast of the Bothnian Bay, in the municipality of Siikajoki, 2–12 km south and north-east of Siikajoki village and 25–45 km southwest of Oulu city. The municipality (277 sq.km of land) has ca. 1 400 residents. Oulu city (328 sq.km of land) has ca. 120 800 residents.

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

28–0 m

9. Area: (in hectares)

2 691 ha

# 10. Overview:

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

The adjacent shore areas form together a unique wetland unit for breeding and migrating bird fauna. It is the most important site for the protection of low-lying sandy beaches with coastal meadows. The area holds important threatened and endemic plant communities.

# 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, 6 & 8



# 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 unique example of near-natural wetland types (dominated by estuarine waters and shallow marine waters) in the EU Boreal region, including 4 priority natural wetland habitat types of the EU Habitats Directive Annex I (boreal Baltic coastal meadows, coastal lagoons, aapa mires, bog woodland).

2) Threatened vascular plants include Siberian Primrose (*Primula nutans*) (EN in Finnish Red List, arctic group), Arctic Salt-grass (*Puccinellia phryganodes*) (EN, arctic group) and Submerged Water-plantain (*Alisma wahlenbergii*) (VU, endemic), all of which listed in the EU Habitats Directive Annex II, Marsh Samphire (*Salicornia europaea*) (EN), Early Marsh-orchid (*Dactylorhiza incarnata ssp. cruenta*) (VU) and Narrow-leaved Marsh-orchid (*D. traunsteineri*) (VU). Bryophytes include moss species *Meesia longiseta* (EN, Habitats Directive).

Threatened birds include Dunlin (*Calidris alpina schinzii*) (CR in Finnish Red List), Little Tern (*Sterna albifrons*) (EN + Habitat Directive A.II), Temminck's Stint (*Calidris temminckii*) and Black-headed Gull (*Larus ridibundus*).

Between 13–16 species of the EU Birds Directive Annex I breed in the area of which the most common are Arctic Tern (*S. paradisaeae*), Ruff (*Philomachus pugnax*) and Smew (*Mergus albellus*). Scarce species include e.g. Whooper Swan (*Cygnus cygnus*), Marsh Harrier (*Circus aeruginosus*), Crane (*Grus grus*) and Wood Sandpiper (*Tringa glareola*). The breeding waterfowl includes ca. 650 pairs of 17 species and the breeding waders ca. 250 pairs of 17 species.

4) Supports endemic and isolated plant communities dependent on special circumstances and provides a refuge for a nearly vanished bird species during migration.

The flora contains two very special groups, the endemic species of the Gulf of Bothnia and the so-called *Primula nutans* –group of arctic species in isolation from the main distribution areas of the Arctic Ocean.

The importance of the area is exceptional in migration periods. The staging population of Lesser White-fronted Goose (*Anser erythropus*) (CR, globally VU + AII Habitats Dir.) is estimated (during the 1990s) at 30 individuals in spring. The peak numbers of Whooper Swans reach more than 900 individuals. Peak counts of waterfowl reach ca. 6 000 individuals at Säärenperä in spring and more than 2 000 at Merikylänlahti. Finland's responsibility species include e.g. 1 500 Tufted Ducks, 1 300 Teals and 700 Wigeons. Ulkonokka Cape is among the most important staging areas of arctic waders in Finland. In autumn, the highest counts reach e.g. 6 000 Dunlins, 1 100 Ruffs, 1 000 Little Stints (*Calidris minuta*), 150 Temminck's Stints and 70 Broad-billed Sandpipers (*Limicola falcinellus*). In spring, waders favour the shores of Säärenperä with numbers reaching e.g. 4 500 Dunlins, 3 000 Ruffs and 1 000 Wood Sandpipers.

6) The peak numbers of Whooper Swans exceed the 1 % level exceeded. On peak days it reach 700–900 ind. in both spring and autumn. In spring peak numbers concentrated at Säärenperä.

8) It's an important spawning area for Whitefish (*Coregonus lavaretus*), Perch (*Perca fluviatilis*) and Pike (*Esox lucius*)

**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 Svecokarelian schist belt. Bedrock is composed of mica gneiss and mica schist with intercalated carbonate rocks, gneissic tonalite and granodiorite.

**Origins:** Natural

**Soil type:** Mainly littoral gravel and sand, silt and clay with a smaller areas of fluvial gravel, sand and silt.

**Water quality:** General quality good in Säärenperä–Karikannanmatala and satisfactory in other sea areas. Mostly mesotrophic, in Siikajoki Estuary eutrophic. Salinity ca. 1–3‰.

**Depth of water:** 1–4 m. Water-level usually low in spring and high in autumn and winter.

**Climate:** Duration of growing season ca. 150 days, mean annual temperature ca. +1 °C, mean annual rainfall ca. 500 mm. Waters ice-covered normally from early November to late May. 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.

None significant.

# **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: Coastal & marine: F, A, E, J, H

<u>A</u>	B	<b>C</b> ] ]	D	E	F	G	H	Ι	<u>J</u>	K	Zk(a)
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Inland: U, Xp, M, Xf, Tp, W, Ts & O



#### Human-made:



#### 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.

- A Permanent shallow marine waters
- F Estuarine waters
- U-Non-forested peatlands
- H Salt meadows
- Ts Seasonally flooded meadows
- E Sand shores and dune systems
- O Permanent freshwater lakes
- Xp Forested peatlands
- Xf Seasonally flooded forests
- J Coastal brackish lagoons
- W Shrub-dominated wetlands
- M Permanent rivers and streams
- Tp Permanent 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.

Wetlands consists of four main areas: Merikylänlahti Bay–Ulkonokka Cape, River Siikajoki Estuary and Hummastinjärvet Mires (2 067 ha), and Säärenperä Cape– Karikannanmatala shoals (624 ha). The area includes >1 200 ha of water. Merikylänlahti is a shallow sea bay fringed by the extensive sandy cape of Ulkonokka. The bay characterized by coastal meadows and is in a process of turning into a gloe lake. The sandy esker plain of Ulkonokka Cape was formed ca. 100 years ago. Low dunes, continually developing sandbanks and coastal meadows are typical of the area. The inner part of the cape is characterized by a sequence of wooded dunes.

Siikajoki estuary is characterized by sandbanks and extensive growths of Water Horsetail (*Equisetum fluviatile*) with herb-rich forests and swampy areas on the banks. Two shallow lakes (Säikänlahti and Hietaniitynlahti), with extensive growths of Common Reed (*Phragmites australis*), have wrinkled apart from the sea as a consequence of the landupheaval. Säärenperä Cape is an extensive and low-lying shore area with extensive coastal meadows and bush zones. The shallow waters reach the shoals of Karikannanmatala 5 km from the coastline. Sedge (*Carex* spp.) meadows are typical of the area, including also zones of Grey Club-rush (*Schoenoplectus tabernaemontani*), Fiorin (*Agrostis stolonifera*), Narrow Small-reed (*Calamagrostis stricta*), Salt-marsh Rush (*Juncus gerardii*) and Red Fescue (*Festuca rubra*). Grey Alder (*Alnus incana*) and Downy Birch (*Betula pubescens*) occur on the edges of meadows.

#### 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.* 

The flora contains two very special groups, the endemic species of the Gulf of Bothnia and the so-called *Primula nutans* –group of arctic species in isolation from the main distribution areas of the Arctic Ocean. Threatened vascular plants include Siberian Primrose (*Primula nutans*) (EN in Finnish Red List, arctic group), Arctic Salt-grass (*Puccinellia phryganodes*) (EN, arctic group) and Submerged Waterplantain (*Alisma wahlenbergii*) (VU, endemic), all of which listed in the EU Habitats Directive Annex II, Marsh Samphire (*Salicornia europaea*) (EN), Early Marsh-orchid (*Dactylorhiza incarnata* ssp. *cruenta*) (VU) and Narrow-leaved Marsh-orchid (*D. traunsteineri*) (VU). Near-threatened vascular plants include 4 species. Endemic species include also Bothnian Hair-grass (*Deschampsia bottnica*) and Bothnian Eyebright (*Euphrasia bottnica*). Bryophytes include moss species *Meesia longiseta* (EN, Habitats Directive).

#### 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 Dunlin (*Calidris alpina schinzii*) (CR in Finnish Red List) with 7 pairs, Little Tern (*Sterna albifrons*) (EN), Temminck's Stint (*Calidris temminckii*) with 10 pairs and Black-headed Gull (*Larus ridibundus*) with 120 pairs. 13–16 species of the EU Birds Directive Annex I breed in the area of which the most common are Arctic Tern (*S. paradisaeae*) with 80 pairs, Ruff (*Philomachus pugnax*) with 25 pairs and Smew (*Mergus albellus*) with 13 pairs. Scarce species include e.g. Whooper Swan (*Cygnus cygnus*), Marsh Harrier (*Circus aeruginosus*), Crane (*Grus grus*) and Wood Sandpiper (*Tringa glareola*). The breeding waterfowl includes ca. 650 pairs of 17 species and the breeding waders ca. 250 pairs of 17 species. Finland's responsibility species include e.g. 160 pairs of Teals (*Anas crecca*), 105 pairs of Tufted Ducks (*Aythya fuligula*) and 100 pairs of Wigeons (*Anas penelope*). Greylag Goose (*Anser anser*) (important gamebird) breeds with 40 pairs.

### 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.

The site includes one provincially (32 ha) and two locally (28 ha) important traditional rural biotopes.

"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.)

Significant values also include scientific research, bird-watching and outdoor recreation.

#### 22. Land tenure/ownership:

(a) within the Ramsar site:

Private-owned and state-owned (ca. 30 %).

(b) in the surrounding area:

Private-owned

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

(a) within the Ramsar site:

Hunting of waterfowl in autumn and fishing are carried out.

(b) in the surroundings/catchment:

Agriculture and forestry are carried out in the surroundings.

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

Drainage ditches in the surroundings of Hietaniitynlahti Bay affect negatively on the site. Landupheaval and soil material brought by rivers are changing the character of the shallow shore areas rapidly. Reeds have started to spread over the sedge meadows of Säärenperä since the 1980s as grazing and hay cutting have diminished. Increased recreation and extension of holiday dwelling constructions are causing disturbance on the shores. The planned road connection to Hailuoto Island threatens the area of Säärenperä. Intense hunting of waterfowl in autumn cause disturbance. (The road project stays as a reservation in provincial plan, but is hardly activated in the near future if at all).

#### 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 area is included in the Finnish Waterfowl Habitats Conservation Programme. A private protected area of 152 ha has been established at Ulkonokka Cape.

A management and conservation plan for Ulkonokka Protected Area was established in 1993. Access is prohibited in the breeding season of birds. Clearing of bushes has been carried out since the late 1980s. 60 ha of grazing areas have been established at Säärenperä. Measures to protect the Lesser White-fronted Goose's (*Anser erythropus*) staging areas are carried out under the EU Life project in 1997–99.

# 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 sites outside the already protected areas will be carried out under the Nature Conservation Act and Water Act. A management and land use plan for Säärenperä–Karikannanmatala was started under the EU Life project in 1998.

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

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

A research station of Oulu University is located at Ulkonokka Cape. The development of Ulkonokka landupheaval area has been studied since the 1890s with several studies on e.g. flora. Tauvo Bird Station was established in 1963 and seasonal data on bird migration is published in the magazine Aureola of the Northern Ostrobothnia Ornithological Society. The autumn migration of Whooper Swan has been studied closely.

#### 28. Current conservation education:

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

Various educational themes are carried out at the research station of Oulu University.

# 29. Current recreation and tourism:

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

Two bird-watching towers have been constructed at Merikylänlahti-Ulkonokka.

# **30. Jurisdiction:**

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

a) North Ostrobothnia Regional Environment Centre, 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.

North Ostrobothnia Regional Environment Centre, PO Box 124, FIN-90101 Oulu, 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.

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.

Oulun lääninhallitus 1993. Siikajoen Tauvon Ulkonokan rauhoitusalueen hoito- ja käyttösuunnitelma. Oulun lääninhallitus 17.2.1993.

Siira, J. 1984. On the vegetation and ecology of the primary saline soils of Bothnian Bay. Aquilo Ser. Bothnica 20.

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