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.

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- 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:

Timo Asanti & Pekka Rusanen, Finnish Environment Institute, Nature Division, PO Box 140, FIN-00251 Helsinki, Finland. Timo. Asanti@ymparisto.fi

2. Date this sheet was completed/updated:

January 2005

3. Country:

Finland

4. Name of the Ramsar site:

Siikalahti Bay Area

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):

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 three separate areas are situated in northeastern corner of the province of Southern Finland, in the municipality of Parikkala, 3 km east of Parikkala village and 5 km west of Russian border. The distance between the areas is 2-4 km. The municipality (324 sq.km of land) has ca. 4 600 residents.

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

77-69 m, mean 69 m.

9. Area: (in hectares)

682 ha

10. Overview:

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

Siikalahti Bay is the most valuable bird-lake in Finland. It represents a transitional stage in the succession of water ecosystems, with the vegetation and bird fauna most diverse and richest at the present stage.

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).

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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 a near-natural wetland type (freshwater bays) in the EU Boreal region.
- 2) The site supports a rich occurrence of naiad species such as *Najas tenuissima* and *N. flexilis* nationally endangered and included in the Annex II of the Habitats Directive.
- 12–15 species of the EU Birds Directive Annex I breed in the area, including e.g. Slavonian Grebe (*Podiceps auritus*) with 25 pairs, Bittern (*Botaurus stellaris*) with 10 pairs, Whooper Swan (*Cygnus cygnus*) with 3 pairs, Marsh Harrier (*Circus aeruginosus*) with 10 pairs and Spotted Crake (*Porzana porzana*) with 20–50 pairs.

Threatened butterflies include the Large Copper, *Lycaena dispar* (Habitats Directive Annex II).

- 4) "Siikalahti is an important staging area for migratory birds including Whooper Swans, ducks and waders". "The breeding waterfowl of Siikalahti Bay includes ca. 180–230 pairs of 15 species".
- **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:

Southern 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 intermediate and felsic metavolcanic rocks and metasediments, mica schist, mica gneiss, granodiorite, tonalite and quartz diorite.

Origins: Natural. Water-level of Lake Simpeleenjärvi was lowered by 2.5 m in the 1830s and 1940s.

Soil type: Mainly silt and clay.

Water quality: General quality passable in Siikalahti, except in northernmost part where satisfactory. General quality good in Sammallampi and Rautalahti. Eutrophic. **Depth of water:** Shallow, 0.5–0.8 m on average in Siikalahti Bay. Water-level high in spring because of melting snow.

Climate: Duration of growing season ca. 165 days, mean annual temperature ca. +3 °C, mean annual rainfall ca. 600 mm. Ice- and snow-covered normally from late November to mid April. Southern 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).

General geology and geomorphological features as well as soil types and climate are of same type than in the site. General land use includes mainly private forestry and agriculture.

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:



Inland: O, W, Ts



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.

O – Permanent freshwater lakes

W – Shrub swamps

Ts – Seasonally flooded meadows and sedge marshes

18. General ecological features:

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

Siikalahti covers 455 ha, Rautalahti 147 ha and Sammallampi 80 ha. The area includes ca. 600 ha of water. Siikalahti and Rautalahti are inlets of Lake Simpelejärvi. Sammallampi is a small lake with an outlet to Lake Simpelejärvi. Siikalahti is formed by a narrow and ca. 5 km long bay with only 60 ha of open-water area. Submerged vegetation is rich. Extensive growths of Bulrush (*Typha latifolia*) and Common Reed (*Phragmites australis*) dominate the area, followed by a 5–100 m broad inner zone of alluvial meadows covered by willows (*Salix* spp.) and sedge (*Carex* spp.) meadows. The bay is surrounded by herb-rich forests and agricultural land. Rautalahti Bay and

Lake Sammallampi are characterized by extensive growths of Common Reed. All the areas are in the process of overgrowing. The nutrient-rich bedrock and soil maintain a demanding and luxuriant vegetation.

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 include Water Parsnip (Sium latifolium -CR in Finnish Red List), Golden Dock (Rumex maritimus) (EN), Near-threatened species include e.g. Shetland Pondweed (Potamogeton rutilus).

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 White-backed Woodpecker (*Dendrocopos leucotos*) (CR in Finnish Red List), Moorhen (*Gallinula chloropus*) (VU), Black-headed Gull (*Larus ridibundus*) (VU) with 500 pairs, Lesser Spotted Woodpecker (*D. minor*) (VU) and Great Reed Warbler (*Acrocephalus arundinaceus*) (VU). Yellow-breasted Bunting (*Emberiza aureola*) (CR) was a regular breeding species up to the 1980s but has been absent since then.

Siikalahti is an important staging area for migratory birds including Whooper Swans, ducks and waders.

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 socioeconomic values.

Significant values include environmental education, birdwatching and outdoor recreation.

22. Land tenure/ownership:

(a) within the Ramsar site:

State-owned for the major part (60 %).

(b) in the surrounding area:

Private-owned

23. Current land (including water) use:

(a) within the Ramsar site:

Hunting of waterfowl in autumn at Sammallampi and Rautalahti. Only few holiday cottages at Rautalahti.

(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:

Siikalahti has become rapidly overgrown during the last decades. Wastewaters of Parikkala village were lead into the bay still in the early 1980s, and nutrients leaching from surrounding fields have further accelerated the eutrophication. Oxygen depletion is common in winter. Regulation of water-level prevents its natural variation and spring flood. Drainage ditches dug in 1985 have diminished the number of wetland species in southern parts to one third of previous numbers. Alluvial meadows turn slowly unfavourable for wetland bird species as a consequence of the cessation of grazing. Hunting of waterfowl in autumn affects negatively on Sammallampi and Rautalahti. American Mink (*Mustela vison*) and Raccoon Dog (*Nyctereutes procyonoides*) may cause damage to the breeding of birds.

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 as SPA and an area of 465 ha also as SCI. The areas are also included in the Waterfowl Habitats Conservation Programme.

Water-level of Siikalahti is regulated by embankments and pumps in southern part. The summer water-level has been raised by dams by 40 cm since 1988. Removal of vegetation was carried out in 1997–98, and further conservation and management of Siikalahti are carried out in 2001–2004 under the EU Life Nature project. Open-water area will be added by 46 ha, and shore meadows are managed by mowing and grazing.

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 will be carried out under the Nature Conservation Act and Water 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 of Siikalahti Bay has been monitored since the late 1940s, and annually since the early 1970s. Observation of migratory birds has been regular since the late 1960s. Several detailed studies have been carried out on the vegetation

since 1977. In the 1980s research has been intensified, and detailed monitoring of all the bird and plant species has been initiated to study the effects of the raised water-level and of other management measures. The lepidopteran fauna was surveyed in 1997. The water quality has been studied since 1988. The breeding bird fauna of Rautalahti and Sammallampi was surveyed in the mid 1990s.

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 Siikalahti Bay.

29. Current recreation and tourism:

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

Siikalahti is a very popular birdwatching site especially in spring and summer. An information centre, two birdwatching towers, a camping site and a nature trail have been constructed.

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, Eastern Finland; Southeast Finland 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.

Metsähallitus – Forest and Park Service, Natural Heritage Services, Eastern Finland, Akselinkatu 8, FIN-57130 Savonlinna, Finland.

Southeast Finland Regional Environment Centre, PO Box 1023, FIN-45101 Kouvola, Finland.

32. Bibliographical references:

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

Hynynen, J. & Veijola, H. 1999. Siikalahden kasvillisuus vuonna 1996. Metsähallituksen luonnonsuojelujulkaisuja A 102.

Koskimies, P. 1999. Siikalahden linnusto. Metsähallituksen luonnonsuojelujulkaisuja A 98.

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.

Mäkelä, H. (toim.) 1992. Parikkalan Siikalahden veden laatu, kasvillisuus ja pesimälinnusto vuonna 1992. Vesi- ja ympäristöhallituksen monistesarja 528.

Pöysä, H. 1984. Temporal and spatial dynamics of waterfowl populations in a wetland area – a community ecological approach. Ornis Fennica 61.

Sundell, P. 1997. Siikalahden perhosselvitys. Manuscript. Metsähallitus

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