

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:

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:

Signilskär – Märket Archipelago

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):

60° 14' N / 19° 17' 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 western part of the province of Åland, in the Åland Sea and in the municipality of Eckerö, 8 km west of Eckerö village. The municipality (111 sq.km of land) has ca. 800 residents. The site is restricted to Sweden in west.

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

20–0 m

9. Area: (in hectares)

22 566 ha

10. Overview:

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

The site represents a diverse and abundant community of archipelago birds (breeding, migrating and overwintering) and an important area for protection of Grey Seal.

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
----------	----------	---	----------	---	---	---	---

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 (archipelago in shallow marine waters) in the EU Boreal region, including 1 priority natural wetland habitat type of the EU Habitat Directive which is coastal lagoon.

2) Threatened vascular plants (VU in Finnish Red List) include Wall Rue (*Asplenium ruta-muraria*) and Fragrant Orchid (*Gymnadenia conopsea*).

Threatened birds (VU in Finnish Red List) include White-tailed Eagle (*Haliaeetus albicilla*) and Lesser Black-backed Gull (*Larus f. fuscus*) with 20 pairs. Five species of the EU Birds Directive Annex I breed in the area, of which the most abundant is Arctic Tern (*Sterna paradisaeae*) with about 150 pairs.

Finland's responsibility species also include e.g. 2 250 pairs of Eiders (*Somateria mollissima*), 600 pairs of Black Guillemots (*Cepphus g. grylle*), 200 pairs of Razorbills (*Alca torda*) and 40 pairs of Velvet Scoters (*Melanitta fusca*).

Mammals of the EU Habitats Directive Annex II include Ringed Seal (*Phoca hispida botnica*) and Grey Seal (*Halichoerus grypus*) (EN in Northern Europe), which occurs numerously (>200 ind.) in the surrounding waters of Märket Island.

4) The islands also form an important feeding and wintering area for White-tailed Eagle (*Haliaeetus albicilla*).

The site represents a diverse and abundant community of archipelago birds (breeding, migrating and overwintering).

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

Breeding waterfowl, pairs: Mute Swan (*Cygnus olor*) 11, Greylag Goose (*Anser anser*) 5–10, Mallard (*Anas platyrhynchos*) 17, Tufted Duck (*Aythya fuligula*) 39 (FRS), Eider (*Somateria mollissima*) 2250 (FRS), Velvet Scoter (*Melanitta fusca*) 36 (FRS).

Breeding auks, pairs: Razorbill (*Alca torda*) 200–300 (FRS), Black Guillemot (*Cepphus g. grylle*) 600–700 (NT, FRS).

Breeding waders, pairs: Oystercatcher (*Haematopus ostralegus*) 37, Ringed Plover (*Charadrius hiaticula*) 11, Redshank (*Tringa totanus*) 13, Turnstone (*Arenaria interpres*) 30.

Breeding skuas, gulls and terns, pairs: Arctic Skua (*Stercorarius parasiticus*) 13, Black-headed Gull (*Larus ridibundus*) 130 (VU), Common Gull (*Larus canus*) 190, Lesser Black-backed Gull (*Larus f. fuscus*) 20 (VU, FRS), Herring Gull (*Larus argentatus*) 350, Great Black-backed Gull (*Larus marinus*) 50, Arctic Tern (*Sterna paradisaea*) 150 (BD).

Wintering, individuals: Great Cormorant (*Phalacrocorax carbo*) 500–2000, Long-tailed Duck (*Clangula hyemalis*) 300–1500, White-tailed Eagle (*Haliaeetus albicilla*) 10–20 (VU, BD).

Staging, individuals in spring, single counts: Eider (*Somateria mollissima*) 4000–5000 (FRS) in April.

(The Signilskär Bird Station functions mainly as a ringing station in autumn and there are no extensive counts of e.g. staging waterfowl.)

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:

Hemiboreal 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 Rapakivi granites area. Bedrock is composed of rapakivi granite.

Origins: Natural

Soil type: Mainly bedrock terrain.

Water quality: General quality good.

Depth of water: Variable. Mostly 2–8 m near islands, maximum ca. 190 m in open sea. Water-level usually low in spring and high in autumn and winter.

Climate: Duration of growing season ca. 175 days, mean annual temperature ca. +5 °C, mean annual rainfall ca. 500 mm. Waters normally ice-covered only partly in February. Hemiboreal 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.

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: Marine: A & DJ.

<u>A</u>	B	C	<u>D</u>	E	F	G	H	I	<u>J</u>	K	Zk(a)
----------	---	---	----------	---	---	---	---	---	----------	---	-------

Inland: W

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

Human-made:

1	2	3	4	5	6	7	8	9	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.

A – Permanent shallow marine waters

D – Rocky marine shores

W – Shrub-dominated wetlands

J – Coastal brackish lagoons

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 area includes four larger islands in outer archipelago with ca. 60 small and mostly treeless islands and islets. Signilskär Island is characterized by low deciduous forests, meadows and heaths. The area includes >400 ha of land. The great variation of water-depth creates a rich selection of underwater biotopes.

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 Wall Rue (*Asplenium ruta-muraria*) and Fragrant Orchid (*Gymnadenia conopsea*). Near-threatened species include e.g. Purple-stem Cat's Tail (*Phleum phleoides*).

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.***

The breeding bird fauna is characterized by species of outer archipelago. Threatened birds (VU in Finnish Red List) include White-tailed Eagle (*Haliaeetus albicilla*) and Lesser Black-backed Gull (*Larus f. fuscus*) with 20 pairs. 5 species of the EU Birds Directive Annex I breed in the area, of which the most abundant is Arctic Tern (*Sterna paradisaeae*) with ca. 150 pairs. Finland's responsibility species also include e.g. 2 250 pairs of Eiders (*Somateria mollissima*), 600 pairs of Black Guillemots (*Cephus g. grylle*), 200 pairs of Razorbills (*Alca torda*) and 40 pairs of Velvet Scoters (*Melanitta fusca*). The islands also form an important feeding and wintering area for White-tailed Eagle (*Haliaeetus albicilla*).

Mammals of the EU Habitats Directive Annex II include Ringed Seal (*Phoca hispida botnica*) and Grey Seal (*Halichoerus grypus*) (EN in Northern Europe), which occurs numerously (>200 ind.) in the surrounding waters of Märket Island.

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 birdwatching. Signilskär Island has also historical values as a part of an old postal rowing-traffic route, from 16th century to the early 20th century. (Rowing route from Turku to Stockholm)

22. Land tenure/ownership:

(a) within the Ramsar site:

Åland Provincial Government.

(b) in the surrounding area:

Private-owned.

23. Current land (including water) use:

(a) within the Ramsar site:

Hunting of waterfowl and fishing occur in certain areas. A coastguard station is located on Enskär Island and a bird station on Signilskär Island. Furthermore shipping routes cross the area.

(b) in the surroundings/catchment:

Fishing.

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

Oil pollution damage is the main threat. Two main shipping routes cross the area. Fishing and increased boating in the breeding season cause disturbance to birds. Hunting of waterfowl especially in spring affects negatively on the site. The nearby fish farms cause eutrophication.

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 in the Helsinki Commission (Helcom) network of Baltic Sea Protected Areas.

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.

27. Current scientific research and facilities:

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

A bird station, concentrated on the study of migratory birds, has been in operation on Signilskär Island since 1927. The breeding bird fauna was first surveyed in 1931. The site is included in the areas where the development of waterfowl populations of the western Åland archipelago is regularly monitored. The biology of Razorbill has been studied intensively since the 1990s. The carabid beetles were studied in the late 1980s.

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.

Boating is intense in summer.

30. Jurisdiction:

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

a) Åland's government and administrative board, **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.

Åland's government and administrative board, PO Box 60, FIN-22101 Mariehamn, 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.

Hildén, O. & Hario, M. 1993. Muuttuva saaristolinnusto. Forssan kirjapaino Oy.

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 julkaisu 4, Suomen graafiset palvelut, Kuopio.

Niemelä, J., Haila, Y. & Halme, E. 1988. Carabid beetles on isolated Baltic islands and on the adjacent Åland mainland: variation in colonization success. *Ann. Zool. Fennici* 25.

Nordiska Ministerrådet 1996. Marina reservat i Norden – Del II – har djur och växter i havet någon framtid? TemaNord 1996, Köpenhamn.

Tanskanen, A., Yrjölä, R. & Halkka, A. 1995. Tordmulen i Ålands västra skärgård. Ålands fågelskyddsföreningens årsberättelse 1995.

**Please return to: Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland
Telephone: +41 22 999 0170 o Fax: +41 22 999 0169 o e-mail: ramsar@ramsar.org**
