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:

Levaneva 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):

62°46' N / 22°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 Western Finland, in the municipalities of Laihia and Jurva, 18 km south of Laihia village. The municipalities (951 sq.km of land) have ca. 12 200 residents.

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

92-77 m, mean 81 m.

9. Area: (in hectares)

3 343 ha

10. Overview:

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

Levaneva Mire is one of the largest, nearly virgin mire complexes in Southern Ostrobothnia. The mires are particularly important as a breeding area of 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).

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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 and near-natural wetland types (peatlands) in the EU Boreal region, including 3 priority natural wetland habitat types of the European Habitat Directive (active raised bogs, aapa mires, bog woodland).
- 2) 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 130 pairs, Golden Plover (*Pluvialis apricaria*) with 80 pairs, Ruff (*Philomachus pugnax*) with 50 pairs and Black Grouse (*Tetrao tetrix tetrix(?)*) with 30 pairs. Scarce species include e.g. Slavonian Grebe (*Podiceps auritus*), Whooper Swan (*Cygnus cygnus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*), Crane (*Grus grus*), Red-necked Phalarope (*Phalaropus lobatus*), Short-eared Owl (*Asio flammeus*) and Tengmalm's Owl (*Aegolius funereus*).

Furthermore the Russian Flying Squirrel (*Pteromys volans*) and Lynx (*Lynx lynx*) are listed in the EU Habitats Directive Annex II.

This means 2 nationally threatened mammal species, 1 nationally threatened vascular plant species.

4) The breeding waders include more than 370 pairs of 13 species. The site is also an important staging area for Bean Goose (*Anser fabalis*) and Crane in migration periods.

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 Volcanic sedimentary zone of SW Finland. Bedrock is composed of mica gneisses and mica schists with granodiorite, tonalite and quartz diorite.

Origins: Natural. Kivilammi–Levalammi reservoir artificial.

Hydrology: Raised bogs dependent on rain water.

Soil type: Peat with smaller areas of glacigenic ground moraine and end moraine. **Water quality:** General quality passable in Kivilampi–Levalampi Reservoir. Mire waters dystrophic.

Depth of water: Shallow. Water-level high in spring because of melting snow. **Climate:** Duration of growing season ca. 160 days, mean annual temperature ca. +3 °C, mean annual rainfall ca. 550 mm. Ice- and snow-covered normally from early December to early 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. 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.

Virgin mires play an important role in maintenance of water quality.

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: U, Xp, Tp, Ts & M

Human-made:

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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

Tp – Permanent freshwater pools

Ts – Seasonal freshwater pools

M – Permanent rivers and streams

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 Concentric bogs. The area includes ca. 3 000 ha of mires and ca. 240 ha of water. Levaneva consists of three vast, more or less separated concentric raised bogs with plenty of hollows and ponds and with a mosaic of forested islands. Kuuttoneva is a representative of aapa mires. On the edges of mires there are barren sedge (*Carex* spp.) fens, Pine (*Pinus sylvestris*) bogs and Spruce (*Picea abies*) mires. Minerotrophic fens and alluvial meadows occur in western part beside Kivilampi–Levalampi reservoir, which is partly included in the site. The area is surrounded by forests and mires.

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 Narrow-leaved Marsh-orchid (*Dactylorhiza traunsteineri*) (VU in Finnish Red List). Near-threatened species include e.g. Early Marsh-orchid (*Dactylorhiza incarnata*).

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*.

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 130 pairs, Golden Plover (*Pluvialis apricaria*) with 80 pairs, Ruff (*Philomachus pugnax*) with 50 pairs and Black Grouse (*Tetrao tetrix*) with 30 pairs. Scarce species include e.g. Slavonian Grebe (*Podiceps auritus*), Whooper Swan (*Cygnus cygnus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*), Crane (*Grus grus*), Red-necked Phalarope (*Phalaropus lobatus*), Short-eared Owl (*Asio flammeus*) and Tengmalm's Owl (*Aegolius funereus*). The breeding waders include >370 pairs of 13 species. The site is also an important staging area for Bean Goose (*Anser fabalis*) and Crane in migration periods.

Threatened mammals include Wolfe (*Canis lupus*) (EN in Finnish Red List) and Russian Flying Squirrel (*Pteromys volans*) (VU). Mammals of the EU Habitats Directive Annex II also include Lynx (*Lynx lynx*).

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.

None significant.

22. Land tenure/ownership:

(a) within the Ramsar site:

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

(b) in the surrounding area:

Private-owned.

23. Current land (including water) use:

- (a) within the Ramsar site:
- **a**) and **b**) The western edge of the site is a part of Kivilampi–Levalampi reservoir. Forestry is carried out in the surroundings.

(b) in the surroundings/catchment:

Private forestry and agriculture. The water-level of the reservoir is regulated.

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 small areas on edges of Levaneva. Kivilampi–Levalampi reservoir has caused some eutrophication in western part of the area. Regulation of water-level of the reservoir may affect negatively on mire edges.

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, and a major part is included in the Mire Conservation Programme. Levaneva Protected Area (3,226 ha) was established in 1993. Forestry, ditching, extraction of earth material and damaging of soil or bedrock are prohibited in the Protected Area. 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.

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 surveyed in the late 1970s, in 1989 and 1996. The volume of bird populations was estimated in 1994 by using line transect censuses. The vegetation was surveyed in 1994.

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, Western 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, Western Finland, PO Box 38, FIN-39701 Parkano, Finland.

32. Bibliographical references:

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

Heikkilä, R. 1990. Vaasan läänin uhanalaiset suokasvit. Vesi- ja ympäristöhallituksen julkaisuja A 46.

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.

Viitasaari, R. & Kananoja, P. 1990. Levanevan–Kuuttonevan alueen soiden pesimälinnusto 1989. Hippiäinen 20.

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