

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:

Lätäseno – Hietajoki 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):

68°40' N / 22°20' 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 northwestern part of the province of Lapland, in the municipality of Enontekiö, 52 km northwest of Enontekiö village. The area is restricted to Norway in north and to Sweden in south. The municipality (8 050 sq.km of land) has ca. 2 100 residents.

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

530–330 m

9. Area: (in hectares)

43 367 ha

10. Overview:

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

Lätäseno–Hietajoki area is an important conservation area of palsa mires and unmodified rivers and it is the northernmost place for occurrence of several mire and aquatic plants. For its flora and bird fauna the area is a valuable part of an important chain of riverbank mires. The breeding waterfowl and waders are the most abundant and diverse in the whole Enontekiö biological province.

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 & 8

<u>1</u>	<u>2</u>	3	<u>4</u>	5	6	7	<u>8</u>
----------	----------	---	----------	---	---	---	----------

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 natural wetland types (dominated by peatlands and rivers) in the EU Alpine region, including at least 2 priority natural wetland habitat types included in Annex I of the EU Habitats Directive (palsa mires, aapa mires).

2) 6 nationally threatened bird species, 2 nationally (1 globally) threatened mammal species, 1 nationally threatened fish species, 1 nationally threatened vascular plant species.

Threatened vascular plants included in the Annex II of the EU Habitats Directive are the Marsh Saxifrage (*Saxifraga hirculus*) (VU in Finnish Red List) and the hay species *Trisetum subalpestre*.

Threatened birds include Gyrfalcon (*Falco rusticolus*) (EN in Finnish Red List), Peregrine Falcon (*F. peregrinus*) (EN), Golden Eagle (*Aquila chrysaetos*) (VU), Merlin

(*Falco columbarius*) (VU) all are also in the Annex I of the Bird Directive. Scarce species include e.g. Red-throated Diver (*Gavia stellata*), Whooper Swan (*Cygnus cygnus*), Osprey (*Pandion haliaetus*) and Crane (*Grus grus*).

Species of the EU Habitats Directive Annex II include Wolverine (*Gulo gulo*) (EN, globally VU), Otter (*Lutra lutra*) and Arctic Fox (*Alopex lagopus*) (CR).

4) About 21 species of the EU Birds Directive Annex I breed in the area, including significant populations of Wood Sandpiper (*Tringa glareola*) with more than 2 200 pairs, Bluethroat (*Luscinia svecica*) with more than 1 700 pairs, Red-necked Phalarope (*Phalaropus lobatus*) with more than 1 400 pairs, Golden Plover (*Pluvialis apricaria*) with more than 500 pairs, Ruff (*Philomachus pugnax*) with >200 pairs and both Hen Harrier (*Circus cyaneus*) and Bar-tailed Godwit (*Limosa lapponica*) with >50 pairs. 15 species of waterfowl and >40 pairs of Temminck's Stints (*Calidris temminckii*) (VU). 17 species of waders breed in the area. During migration hundreds of Whooper Swans stage along the river area.

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): Willow Grouse (*Lagopus lagopus*) >1350, Crane (*Grus grus*) >4 (BD), Ringed Plover (*Charadrius hiaticula*) >80, Golden Plover (*Pluvialis apricaria*) >400 (BD), Temminck's Stint (*Calidris temminckii*) >40 (VU), Dunlin (*Calidris a. alpine*) >180, Broad-billed Sandpiper (*Limicola falcinellus*) >480 (NT, FRS), Ruff (*Philomachus pugnax*) >230 (NT, BD), Jack Snipe (*Lymnocryptes minimus*) >40 (FRS), Snipe (*Gallinago gallinago*) >500, Bar-tailed Godwit (*Limosa lapponica*) >40 (NT, BD), Whimbler (*Numenius phaeopus*) >110 (FRS), Spotted Redshank (*Tringa erythropus*) >200 (FRS), Greenshank (*Tringa nebularia*) >30 (FRS), Wood Sandpiper (*Tringa glareola*) >2550 (BD, FRS), Common Sandpiper (*Actitis hypoleucos*) >220 (FRS), Red-necked Phalarope (*Phalaropus lobatus*) >1350 (BD), Long-tailed Skua (*Stercorarius longicaudus*) >220, Cuckoo (*Cuculus canorus*) >70 (NT), Meadow Pipit (*Anthus pratensis*) >6900, Yellow Wagtail (*Motacilla flava*) >6100, Bluethroat (*Luscinia svecica*) >1850 (BD), Whinchat (*Saxicola rubetra*) >50 (NT), Wheatear (*Oenanthe oenanthe*) >30 (NT), Sedge Warbler (*Acrocephalus schoenobaenus*) >500, Great Grey Shrike (*Lanius excubitor*) >25 (NT), Lapland Bunting (*Calcarius lapponicus*) >4400, Reed Bunting (*Emberiza schoeniclus*) >1850.

8) River Lätäseno is one of the few rivers where Salmon (*Salmo salar*) (EN) of the Baltic Sea still spawns. Also e.g. Brown Trout (*Salmo trutta*) and Arctic Char (*Salvelinus alpinus*) are common in the area.

Fish species (native):

Salmon (*Salmo salar*): has recently become general because of natural reproduction and restocking.

Brown Trout (*Salmo trutta*): the local Trout is common and Sea Trout (m. *trutta*) is uncommon.

Whitefish (*Coregonus lavaretus*): common.

Grayling (*Thymallus thymallus*): common.

Perch (*Perca fluviatilis*): very common.

Pike (*Esox lucius*): very common.

Burbot (*Lota lota*): very common.

Minnnow (*Phoxinus phoxinus*): very common.

Nine-spined Stickleback (*Pungitius pungitius*): very common.
Three-spined Stickleback (*Gasterosteus aculeatus*): apparently common.
Bullhead (*Cottus gobio*): exists.
Alpine Bullhead (*Cottus poecilopus*): exists.

Salmon (EN in Finnish Red List): River Lätäseno is one of the most productive areas in the River Tornionjoki water system.

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:

Fjeld Lapland birch 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 mafic and felsic metavolcanic rocks, quartzmonzodiorite, quartz monzonite, granodiorite and metasedimentary rocks.

Origins: Natural.

Hydrology: Aapa mires dependent on ground or surface waters.

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

Water quality: General quality excellent in River Lätäseno and good in River Hietajoki. Oligotrophic–mesotrophic. Flood in late spring adds contents of sediment and humus together with iron and nutrients and acidity increases because of acid compounds of melting snow, thus weakening buffering capacity of lakes and ponds.

Depth of water: <10 m in lakes and ponds. Water-level high in spring because of melting snow.

Climate: Duration of growing season ca. 110 days, mean annual temperature ca. -3 °C, mean annual rainfall ca. 450 mm. Ice- and snow-covered normally from mid October to late May. Fjeld Lapland birch 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. Data not available.

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)
---	---	---	---	---	---	---	---	---	---	---	-------

Inland: U, M, O, Tp, Ts & W

L	<u>M</u>	N	<u>O</u>	P	Q	R	Sp	Ss	<u>Tp</u>	<u>Ts</u>	<u>U</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.

- U – Non-forested peatlands
- M – Permanent rivers and streams
- O – Permanent freshwater lakes
- Tp – Permanent freshwater pools
- W – Shrub-dominated wetlands
- Ts – Seasonal 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.

The site represents the Mire vegetation regions of Palsa mires in Fjeld Lapland and of Northern aapa mires. The area includes ca. 26 000 ha of mires and ca. 2 200 ha of water. The area is traversed by the rivers Lätäseno and Hietajoki. Extensive riverbank mires are typical of the area. Largest lakes cover 50–100 ha. Ponds and pools are common. The morphology of Kivikkovuoma palsa mires is exceptionally well developed. A fine palsa mire complex is situated north of the hills Markkavaara and Kuonnaavaara, where wet flark and sedge (*Carex* spp.) fens occur. Rich fens are found also at Lake Vakkovallanjärvi. The northern limit of Pine (*Pinus sylvestris*) crosses the area and Mountain Birch (*Betula pubescens* ssp. *czerepanovii*) is the only common tree species.

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 Marsh Saxifrage (*Saxifraga hirculus*) (VU in Finnish Red List). Species of the EU Habitats Directive Annex II include hay species *Trisetum subalpestre*.

Threatened vascular plants also include Bristle Sedge (*Carex microglochin*) (EN in Finnish Red List), sedge species *Carex heleonastes* (VU) and Early Marsh Orchid (*Dactylorhiza incarnate* ssp. *cruenta*) (VU). Bryophytes include moss species *Campylium laxifolium* (CR in Finnish Red List), *Pseudocalliergon lycopodioides* (VU), *Pseudocalliergon angustifolium* (VU), *Hamatocaulis vernicosus* (VU) and *Bryum neodamense* (VU).

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 Gyrfalcon (*Falco rusticolus*) (EN in Finnish Red List), Peregrine Falcon (*F. peregrinus*) (EN), Scaup (*Aythya marila*) (VU), Golden Eagle (*Aquila chrysaetos*) (VU), Merlin (*Falco columbarius*) (VU) and >40 pairs of Temminck's Stints (*Calidris temminckii*) (VU). Ca. 21 species of the EU Birds Directive Annex I breed in the area, including significant populations of Wood Sandpiper (*Tringa glareola*) with >2 200 pairs, Bluethroat (*Luscinia svecica*) with >1 700 pairs, Red-necked Phalarope (*Phalaropus lobatus*) with >1 400 pairs, Golden Plover (*Pluvialis apricaria*) with >500 pairs, Ruff (*Philomachus pugnax*) with >200 pairs and both Hen Harrier (*Circus cyaneus*) and Bar-tailed Godwit (*Limosa lapponica*) with >50 pairs. Scarce species include e.g. Red-throated Diver (*Gavia stellata*), Whooper Swan (*Cygnus cygnus*), Osprey (*Pandion haliaetus*) and Crane (*Grus grus*). During migration hundreds of Whooper Swans stage along the river area.

Finland's responsibility species also include e.g. >400 pairs of Broad-billed Sandpipers (*Limicola falcinellus*). A strong population (>1 300 pairs) of Willow Grouse (*Lagopus lagopus*) (important gamebird) inhabits the area. 15 species of waterfowl and 17 species of waders breed in the area.

Threatened mammals of the large Wilderness Area include Wolf (*Canis lupus*) (EN) as a rare visitor and Wolverine (*Gulo gulo*) (EN, globally VU) as a sparse inhabitant. Arctic Fox (*Alopex lagopus*) (CR) has vanished as a breeding species, but a few individuals may still wander in the area. Species of the EU Habitats Directive Annex II also include Brown Bear (*Ursus arctos*) as a rare visitor, and both Lynx (*Lynx lynx*) and Otter (*Lutra lutra*) as sparse inhabitants. River Lätäseno is one of the few rivers where Salmon (*Salmo salar*) (EN) of the Baltic Sea still spawns. Also e.g. Brown Trout (*Salmo trutta*) and Arctic Char (*Salvelinus alpinus*) are common in the area.

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, reindeer husbandry, outdoor recreation and recreation fishing. The site includes two locally important traditional rural biotopes (4 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.

(b) in the surrounding area: State-owned and private-owned.

23. Current land (including water) use:

(a) within the Ramsar site:

a) and b) A continuous conservation area of 4 116 sq.km is formed together with Tarvantovaara Wilderness Area in the east, Käsivarsi Wilderness Area and Reisa National Park of Norway in northwest. Reindeer husbandry is an important livelihood in the area. In the large Wilderness Area ca. 5 000–7 000 reindeers are kept by the owners. Hunting is permitted to local residents and licensed to others. The only economically important species in the Wilderness Area is Willow Grouse, which is caught by tripwires. Also fishing and picking of mushrooms and berries (an important species is Cloudberry *Rubus chamaemorus*) are permitted.

(b) in the surroundings/catchment:

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

projects:

The acid deposition may weaken the buffering capacity of some lakes and ponds, although the fallout of sulphur is quite low in western Lapland and the acidification has diminished in general since the 1980s. Acid depositions are caused by a long -distance fallout mainly from the Kola Peninsula (Russia) industrials.

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 as a part of Käsivarsi Wilderness Area (altogether 264 892 ha), designated both as SPA and SCI. It is Finland's second largest Wilderness Area. The Mire Protection Area is contacted with the Wilderness Area on its northwestern edge. Lätäseno–Hietajoki Mire Protection Area was established in 1988 and Käsivarsi Wilderness Area in 1991. Forestry, ditching, extraction of earth material and damaging of soil or bedrock are prohibited in the Mire Protection Area. Also construction of new buildings and roads is prohibited in general.

The mire protection areas are not necessarily included in mire conservation programme if the areas have been decided to be protected with earlier decisions, before the programme has been established.

26. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

A management and land use plan will be established in the near future both for the Mire Protection Area and the Wilderness Area.

27. Current scientific research and facilities:

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

Lätäseno is a study site of Kilpisjärvi Biological Station of Helsinki University and an important research site of northern mire ecosystems in general. The breeding bird fauna was studied in the 1970s and the volume of bird populations was estimated in 1997–98 by using line transect censuses. Studies on geology, archeology and mammals were carried out in the 1990s.

28. Current conservation education:

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

The area is an important education site for the Kilpisjärvi Biological Station of Helsinki University.

29. Current recreation and tourism:

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

Three wilderness huts have been constructed in the Mire Protection Area. There is also a snowmobile trail of Hetta–Kilpisjärvi and a cross-country track crossing the area and a canoe route at River Lätäseno. Käsivarsi Wilderness Area has nearly 6 000 visitors per year. Licensed recreation fishing takes place in summer particularly at River Lätäseno, where the populations of Salmon has recovered.

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, Northern Lapland District for Wilderness Management, **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, Northern Lapland District for Wilderness Management, PO Box 36, FIN-99801 Ivalo, Finland.

32. Bibliographical references:

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

Kajala, L. & Loikkanen, T. (toim.) 2000. Käsivarren erämaa-alueen luonto ja käyttö. Metsähallituksen luonnonsuojelujulkaisuja A 123.

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.

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.

Sihvo, J. 2002. Ylä-Lapin luonnonhoitoalueen ja Urho Kekkosen kansallispuiston luontokartoitus; Loppuraportti osa 2: Ylä-Lapin luontotyypit. Metsähallituksen luonnonsuojelujulkaisuja A 137.

**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**
