



# Ramsar Information Sheet

Published on 27 April 2023

Update version, previously published on : 1 January 2005

## Finland

### Lätäseno-Hietajoki Mires



Designation date	2 February 2004
Site number	1520
Coordinates	68°39'35"N 22°19'34"E
Area	43 367,00 ha

## Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

## 1 - Summary

### Summary

The Lätäseno-Hietajoki Mire Protection Area is Finland's third largest mire protection area. Together with surrounding area it forms a vast wilderness, peripheral and relatively natural regional entity. Lätäseno–Hietajoki area is an important conservation area of palsa mires, and pristine rivers Lätäseno and Hietajoki at the upper catchment of the Tornionjoki River Basin, which is shared between Finland and Sweden. The site is the northernmost place for occurrence of several mire and aquatic plants and it provides a very valuable spawning and juvenile habitat for a number of migratory fish species, some of which provide to the fishing stocks of the Baltic Sea. 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.

In the southern part of this Ramsar site there is the historical market place of Markkina, that was the ecclesiastical and administrative center of the rather sparsely populated western part of Lapland from the beginning of the 17th century to the year 1826. At the site of the market place, there are the remains of a church, a cemetery, and a sacrificial site. In addition, archaeological finds have been made that indicate the importance of Markkina during the prehistorical period. These include prehistorical artifacts, pitfall traps, and structures that point to the so-called Sami Iron Age, such as remains of huts, cottages, dwelling sites, and Sami sacred places. A German fortress called Sturmbock from the World War II is preserved and partly reconstructed. Markkina is classified as one of the most valuable archaeological sites in Finland.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Responsible compiler

Institution/agency	Finnish Environment Institute (SYKE), Natural Environment Centre
Postal address	PO Box 140 FI-00251 Finland

##### National Ramsar Administrative Authority

Institution/agency	Metsähallitus, Parks and Wildlife Finland
Postal address	PO Box 94 FI-01301 Vantaa Finland

#### 2.1.2 - Period of collection of data and information used to compile the RIS

From year	1996
To year	2017

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Lätäseno-Hietajoki Mires
Unofficial name (optional)	Lätäseno-Hietajoen suot

#### 2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary	Yes <input type="radio"/> No <input checked="" type="radio"/>
(Update) B. Changes to Site area	No change to area
(Update) For secretariat only: This update is an extension	<input type="checkbox"/>

#### 2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?	No
(Update) Optional text box to provide further information	Wetland types and species, and ecosystem services have been reassessed according to current knowledge, but there are no changes to the ecological character.

## 2.2 - Site location

### 2.2.1 - Defining the Site boundaries

b) Digital map/image  
<2 file(s) uploaded>

Former maps	0
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##### Boundaries description

The site overlaps with the southern part of the larger Natura 2000 site FI1300105 Käsivarren erämaa SAC/SPA and with FI1301912 Tornionjoen ja Muonionjoen vesistö SAC.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Lapland
b) What is the nearest town or population centre?	Enontekiö

### 2.2.3 - For wetlands on national boundaries only

## RIS for Site no. 1520, Lätäseno-Hietajoki Mires, Finland

a) Does the wetland extend onto the territory of one or more other countries? Yes  No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes  No

### 2.2.4 - Area of the Site

Official area, in hectares (ha):

Area, in hectares (ha) as calculated from GIS boundaries

### 2.2.5 - Biogeography

#### Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	Fjeld Lapland birch forest vegetation zone
EU biogeographic regionalization	Alpine region

#### Other biogeographic regionalisation scheme

Vegetation zones of Finland according to Ruuhijärvi et al. 2000.

### 3 - Why is the Site important?

#### 3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Hydrological services provided	Virgin aapa mires play an important role in the maintenance of water quality and in flood control.
Other ecosystem services provided	Comprising active and pristine peat bogs and mires, the site is very valuable for carbon storage and flood control. The site also harbours biodiversity and serves as a source of inspiration and recreation.
Other reasons	A representative example of 7 natural wetland types included in Annex I of the EU Habitats Directive (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).

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 4 : Support during critical life cycle stage or in adverse conditions

Optional text box to provide further information	The breeding waterfowl and waders are the most abundant and diverse in the whole Enontekiö biological province.
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- Criterion 8 : Fish spawning grounds, etc.

Justification	Tornionjoki River is the largest River in the Baltic Sea Basin that hosts natural migratory salmon and trout stocks. The migratory salmon ascends all the way to upper sections of the river to spawn, including the Lätäseno section of the river. The Tornionjoki River provides approximately a third of all wild salmon juveniles in the Baltic Sea, thus being internationally significant for the survival and fishing of the Baltic Sea salmon stock. In addition, being a large free flowing river the Tornionjoki with its' tributaries is a very valuable example of a natural river system in the Baltic Sea Basin.
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#### 3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<b>Plantae</b>								
BRYOPHYTA / BRYOPSIDA	<i>Hamatocaulis vernicosus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - VU	
BRYOPHYTA / BRYOPSIDA	<i>Meesia longiseta</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List - EN	
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Ranunculus lapponicus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	EU Habitats Directive - Annexes II, IV	
TRACHEOPHYTA / MAGNOLIOPSIDA	<i>Saxifraga hirculus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LC	<input type="checkbox"/>	National Red List - VU	

#### 3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
		2	4	6	9	3	5	7	8								
<b>Others</b>																	
CHORDATA/ MAMMALIA	<i>Gulo gulo</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN; EU Habitats Directive - Annex II	
CHORDATA/ MAMMALIA	<i>Lutra lutra</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input checked="" type="checkbox"/>	<input type="checkbox"/>	EU Habitats Directive - Annexes II, IV	
CHORDATA/ MAMMALIA	<i>Vulpes lagopus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - CR; EU Habitats Directive - Annexes II, IV	
<b>Fish, Mollusc and Crustacea</b>																	
CHORDATA/ ACTINOPTERYGII	<i>Coregonus lavaretus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	VU in the IUCN red list	spawning
CHORDATA/ ACTINOPTERYGII	<i>Salmo salar</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU	spawning
CHORDATA/ ACTINOPTERYGII	<i>Salmo trutta</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex III of the Bern Convention	spawning
CHORDATA/ ACTINOPTERYGII	<i>Thymallus thymallus</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	Annex III of the Bern Convention	spawning
<b>Birds</b>																	
CHORDATA/ AVES	<i>Asio flammeus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Buteo lagopus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Circus cyaneus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU; EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Emberiza schoeniclus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Gallinago gallinago</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Grus grus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Lagopus lagopus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Phalaropus lobatus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU; EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Philomachus pugnax</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List - CR; EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Pluvialis apricaria</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Surnia ulula</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Tetrao urogallus</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	<i>Tringa glareola</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	EU Birds Directive - Annex I	The Site supports this species during breeding period.

1) Percentage of the total biogeographic population at the site

### 3.4 - Ecological communities whose presence relates to the international importance of the site

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Fennoscandian natural rivers	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Alpine rivers and the herbaceous vegetation along their banks	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Natural dystrophic lakes and ponds	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Aapa mires	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Palsa mires	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Transition mires and quaking bogs	<input checked="" type="checkbox"/>		Habitats Directive - Annex I

## 4 - What is the Site like? (Ecological character description)

### 4.1 - Ecological character

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 Kuonnavaara, 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. The site is also essential for many migratory and river-spawning salmonid fish species. Tornionjoki River is the largest River in the Baltic Sea Basin that hosts natural migratory salmon and trout stocks. The migratory salmon ascends all the way to upper sections of the river to spawn, including the Lätäseno section of the river. The Tornionjoki River provides approximately a third of all wild salmon juveniles in the Baltic Sea, thus being internationally significant for the survival and fishing of the Baltic Sea salmon stock. In addition, being a large free flowing river the Tornionjoki with its' tributaries is a very valuable example of a natural river system in the Baltic Sea Basin.

### 4.2 - What wetland type(s) are in the site?

#### Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		3	521	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2	1664	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4	10	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	17271	Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Boreal heaths	3479
Nordic subalpine forests with <i>Betula pubescens</i> ssp. <i>czerepanovii</i>	18679

### 4.3 - Biological components

#### 4.3.1 - Plant species

<no data available>

#### 4.3.2 - Animal species

<no data available>

### 4.4 - Physical components

#### 4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

#### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Entire river basin

Upper part of river basin



- Middle part of river basin
- Lower part of river basin
- More than one river basin
- Not in river basin
- Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean.

The site is located in the upper part of the Tornionjoki River Basin, draining into the Baltic Sea.

#### 4.4.3 - Soil

Mineral

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Organic

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes  No

Please provide further information on the soil (optional)

Mainly peat and glacial ground moraine with small areas of hummocky moraine and glacial gravel and sand.

#### 4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	
Usually seasonal, ephemeral or intermittent water present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update
Water inputs from surface water	<input checked="" type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change
Water inputs from precipitation	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

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

#### 4.4.5 - Sediment regime

Sediment regime unknown

#### 4.4.6 - Water pH

Acid (pH<5.5)

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Circumneutral (pH: 5.5-7.4 )

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

#### 4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

Please provide further information on salinity (optional):

General water 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.

#### 4.4.8 - Dissolved or suspended nutrients in water

Mesotrophic

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Oligotrophic

(Update) Changes at RIS update No change  Increase  Decrease  Unknown

Unknown

#### 4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar  ii) significantly different  site itself:

### 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

##### Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Low
Wetland non-food products	Livestock fodder	Medium

##### Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Maintenance of hydrological regimes	Storage and delivery of water as part of water supply systems for agriculture and industry	Low
Climate regulation	Regulation of greenhouse gases, temperature, precipitation and other climatic processes	Medium
Hazard reduction	Flood control, flood storage	Medium

##### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Picnics, outings, touring	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Low
Spiritual and inspirational	Aesthetic and sense of place values	Low
Scientific and educational	Educational activities and opportunities	Low
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Low
Scientific and educational	Major scientific study site	Low

##### Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High
Soil formation	Accumulation of organic matter	Low
Nutrient cycling	Carbon storage/sequestration	High

Other ecosystem service(s) not included above:

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.)

Within the site: 100s

Outside the site: 100s

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes  No  Unknown

#### 4.5.2 - Social and cultural values

i) the site provides a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland

ii) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

iv) relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland

<no data available>

#### 4.6 - Ecological processes

<no data available>

## 5 - How is the Site managed? (Conservation and management)

### 5.1 - Land tenure and responsibilities (Managers)

#### 5.1.1 - Land tenure/ownership

##### Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

##### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

The site is on public, state-owned land (100%).

#### 5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

Metsähallitus Parks and Wildlife Finland

Provide the name and/or title of the person or people with responsibility for the wetland:

Ms. Elisa Pääkkö, Specialist

Postal address:

Jäämerentie 6  
99600 Sodankylä  
Finland

E-mail address:

elisa.paakko@metsa.fi

## 5.2 - Ecological character threats and responses (Management)

### 5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

#### Biological resource use

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

#### Pollution

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Air-borne pollutants			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

Please describe any other threats (optional):

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.

#### 5.2.2 - Legal conservation status

##### Regional (international) legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
EU Natura 2000	Käsivarren erämaa SAC/SPA	<a href="http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=FI1300105">http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=FI1300105</a>	whole

##### National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Mire Protection Area	Lätäsenon-Hietajoen mire protection area		whole
Wilderness Area			whole

##### Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Lätäseno and Jietajoki mires	<a href="http://datazone.birdlife.org/site/factsheet/1%C3%A4t%C3%A4seno-and-jietajoki-mires-iba-finland">http://datazone.birdlife.org/site/factsheet/1%C3%A4t%C3%A4seno-and-jietajoki-mires-iba-finland</a>	whole

### 5.2.3 - IUCN protected areas categories (2008)

- Ia Strict Nature Reserve
- Ib Wilderness Area: protected area managed mainly for wilderness protection
- II National Park: protected area managed mainly for ecosystem protection and recreation
- III Natural Monument: protected area managed mainly for conservation of specific natural features
- IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention
- V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation
- VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

### 5.2.4 - Key conservation measures

#### Legal protection

Measures	Status
Legal protection	Implemented

#### Other:

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.

A management and land use plan has been established in 2008 for the Mire Protection Area, and updated to include the whole Wilderness Area in 2020.

### 5.2.5 - Management planning

Is there a site-specific management plan for the site? Yes

Has a management effectiveness assessment been undertaken for the site? Yes  No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes  No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

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

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.

### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

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.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Hyvärinen, E., Juslén, A., Kempainen, E., Uddström, A. & Liukko, U.-M. (eds.) 2019. The 2019 Red List of Finnish Species. Ympäristöministeriö & Suomen ympäristökeskus. Helsinki. 704 p.

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.

Tiainen, J., Mikkola-Roos, M., Below, A., Jukarainen, A., Lehikoinen, A., Lehtiniemi, T., Pessa, J., Rajasärkkä, A., Rintala, J., Sirkiä, P. & Valkama, J. 2016. The 2015 Red List of Finnish Bird Species. Ministry of Environment & Finnish Environment Institute, 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.

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

#### 6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<no file available>

<no data available>

#### 6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



A palsa mound in the Lätäseno wetlands. ( Arto Saikkonen, 28-07-2009 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2004-02-02