



# Ramsar Information Sheet

Published on 27 April 2023

Update version, previously published on : 1 January 2005

## Finland

### Lemmenjoki National Park



Designation date	2 February 2004
Site number	1521
Coordinates	68°36'N 25°36'29"E
Area	285 990,00 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

Lemmenjoki is Finland's largest National Park and one of Europe's most extensive roadless and uninhabited wilderness areas. The Park is an important conservation area of northern mire, riverine and forest ecosystems. All the mire types of northern Forest Lapland can be found in the area. There are also wide fell areas surrounded by western taiga forests and mountain birch forests. Aapa mires are located in lowland area between fell areas and numerous streams flow from the site to two main River Basins. The site has a rich avifauna and hosts a large number of archaeological sites.

## 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)	Lemmenjoki National Park
Unofficial name (optional)	Lemmenjoen kansallispuisto

#### 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 follows the boundaries of the Natura 2000 site FI1300201 Lemmenjoen kansallispuisto SAC/SPA.
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### 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?	Inari / Kittilä

### 2.2.3 - For wetlands on national boundaries only

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
EU biogeographic regionalization	Alpine region
Other scheme (provide name below)	Northern boreal and (western part) Fjeld Lapland birch forest vegetation zones

#### 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 maintenance of water quality and in flood control.
Other ecosystem services provided	As an active and mostly pristine peat bog, 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 unique example of natural wetland types (dominated by peatlands and rivers) in the EU Alpine region, including 3 priority natural wetland habitat types included in Annex I of the EU Habitats Directive (aapa mires, bog woodland, palsa mires).

- Criterion 2 : Rare species and threatened ecological communities
- Criterion 4 : Support during critical life cycle stage or in adverse conditions
- Criterion 8 : Fish spawning grounds, etc.

Justification	The river Tenojoki has its' upstream sections within the site and is one of the most important breeding rivers for the Atlantic Salmon ( <i>Salmo salar</i> ). The salmon stock is very important both for biodiversity and economy, and fishing is jointly controlled by Finland and Norway.
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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 - Annex 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 <sup>1)</sup>	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 - Annex II, IV	

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								
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 - Annex II, IV	
<b>Fish, Mollusc and Crustacea</b>																	
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	River Tenjoki is one of the most important breeding rivers for the Atlantic Salmon and has its' headwaters on the site.
<b>Birds</b>																	
CHORDATA/ AVES	<i>Anas acuta</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	
CHORDATA/ AVES	<i>Anser fabalis</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	Breeding
CHORDATA/ AVES	<i>Anthus cervinus</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 - VU	
CHORDATA/ AVES	<i>Aythya fuligula</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	
CHORDATA/ AVES	<i>Aythya marila</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	
CHORDATA/ AVES	<i>Bubo bubo</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 Birds Directive - Annex I	
CHORDATA/ AVES	<i>Calidris temminckii</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	
CHORDATA/ AVES	<i>Charadrius morinellus</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"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List - VU; EU Birds Directive - Annex I	
CHORDATA/ AVES	<i>Cinclus cinclus</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 - VU	
CHORDATA/ AVES	<i>Circus cyaneus</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 - VU; EU Birds Directive - Annex I	
CHORDATA/ AVES	<i>Cygnus cygnus</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"/>	EU Birds Directive - Annex I	
CHORDATA/ AVES	<i>Emberiza rustica</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"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		
CHORDATA/ AVES	<i>Lyrurus tetrix</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	Breeding
CHORDATA/ AVES	<i>Melanitta fusca</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"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - EN	
CHORDATA/ AVES	<i>Mergellus albellus</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"/>	EU Birds Directive - Annex I	
CHORDATA/ AVES	<i>Phalaropus lobatus</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 - VU; EU Birds Directive - Annex I	
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"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	National Red List - CR; EU Birds Directive - Annex I	Breeding
CHORDATA/ AVES	<i>Phylloscopus borealis</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 - VU	
CHORDATA/ AVES	<i>Picoides tridactylus</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"/>	EU Birds Directive - Annex I	
CHORDATA/ AVES	<i>Sterna hirundo</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"/>	EU Birds Directive - Annex I	
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	Breeding
CHORDATA/ AVES	<i>Tringa glareola</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"/>	EU Birds Directive - Annex I	

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
Water courses of plain to montane levels with <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachion</i> vegetation	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Alpine rivers and their ligneous vegetation with <i>Myricaria germanica</i>	<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 ( <i>Littorelletalia uniflorae</i> )	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Aapa mires	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Transition mires and quaking bogs	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Palsa mires	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Bog woodland	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Fennoscandian springs and springfens	<input checked="" type="checkbox"/>		Habitats Directive - Annex I
Petrifying springs with tufa formation (Cratoneurion)	<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 region of Northern aapa mires. The area includes ca. 75 000 ha of mires and ca. 3 400 ha of water. The mire complexes reach up to several thousand hectares in size. The largest mires are in the southern part between the rivers Repojoki and Lemmenjoki and beside the upper tributaries of River Ivalojoiki. Repokaira is composed of uplands characterized by Mountain Birch (*Betula pubescens* ssp. *czerepanovii*), and the mires have a special character with barren heaths and numerous small waterbodies. Extensive open mires spread out between forest ridges on both sides of River Ivalojoiki. In these mires grassy flarks are well developed, characterized by extensive growths of the cotton-grass species *Eriophorum russsoleum*. The largest (ca. 4 000 ha) continuous mire area is the barren, hummocky raised bog of Naskama-aapa, which extends to the southern margins of the Park. Blanket mires occur everywhere on the hill-slopes of river valleys, and the springs are accompanied by rich fen-like mires.

The central part of the National Park is dominated by the more than 70 km long River Lemmenjoki and the Maarestatunturi and Viipustunturi fjeld clusters surrounding it. The high fell plateau is crossed by several river valleys, of which the mightiest is the 20 km long Lemmenjoki Valley. The western part of the Park is bordered by the steeply profiled line of Kietsimätunturit Fjelds. The area is rich of lakes and ponds. Old, open and mossy forests of Spruce (*Picea abies*) are abundant in southern parts of the Park. The northern limit of Spruce crosses the southern section of the Park, and the ridges between rivers in the northern parts are dominated by old-growth forests of Pine (*Pinus sylvestris*). The western and northwestern parts lack coniferous forest and Mountain Birch is the only tree species. The river banks are characterized by alluvial meadows with extensive growths of willow (*Salix* spp.).

### 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		2	1635	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	198	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	61473	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	2800	Representative
Fresh water > Flowing water >> Y: Permanent Freshwater springs; oases		4	2	Rare

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Western taiga	133100
Nordic subalpine forests with <i>Betula pubescens</i> ssp. <i>czerepanovii</i>	45000
Boreal heaths	29000

### 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.

River basin Paatsjoki draining into the Arctic Ocean in Norway.

#### 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 glaciogenic ground moraine, peat and bedrock terrain, also glaci-fluvial gravel and sand in river valleys and smaller areas of boulder fields and hummocky moraine.

#### 4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Source of water that maintains character of the site

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

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

Aapa mires are dependent on ground or surface waters.  
Depth of water is mostly shallow. Water-level high in spring because of melting snow.

#### 4.4.5 - Sediment regime

Sediment regime unknown

#### 4.4.6 - Water pH

Unknown

#### 4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Unknown

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

Dystrophic

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

Unknown

Please provide further information on dissolved or suspended nutrients (optional):

General water quality excellent in largest rivers. Mire waters dystrophic.

#### 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)	Medium
Wetland non-food products	Livestock fodder	High

##### 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 climactic processes	High
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	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Spiritual and inspirational	Aesthetic and sense of place values	Medium
Scientific and educational	Educational activities and opportunities	Medium
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	Medium
Nutrient cycling	Carbon storage/sequestration	High

Other ecosystem service(s) not included above:

Significant values include environmental education, scientific research, reindeer husbandry, outdoor recreation, recreation fishing and gold washing. The site includes two provincially (3 ha) and one locally (3 ha) important traditional rural biotopes. "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: 15000

Outside the site: 1000s

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

Description if applicable

Within the Lemmenjoki National Park there are 762 known archaeological sites. About 95 % of them are pitfall traps, located along the banks of the River Lemmenjoki and its tributaries. The pitfall traps indicate the most important prehistoric and early historic subsistence strategy, the hunting of forest reindeer. Other types of archaeological remains are prehistoric dwelling sites. Of them, the sites with rectangular hearts, dating back to ca AD 800-1600, are considered as the most distinct evidence of Sami population. Today the national park is classified as a wilderness, though there have been reindeer herdsman and families living in the area. Two areas in the national park are included in the RKY, the list of nationally significant cultural landscapes. They are the Sami and Gold Prospector settlements of Repokaira-Lemmenjoki and the reindeer round-up site of Sallivaara.

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

Description if applicable

The Lemmenjoki National Park is part of the Sami Homeland, an important domain of the Sami culture. The traditional Sami cultural landscape includes, in addition to the hamlets, houses and archaeological sites, also those places, that are significant for native people through the cultural meanings in the landscape. For an outsider, those places can appear as pure wilderness. Lemmenjoki is important for the traditional livelihood of the Sami: reindeer herding, fishing, hunting, gathering of natural products, and traditional crafts (duodji). Most place names are in Sami language.

## 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 land is completely state-owned apart from one small estate and a road.

#### 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

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

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

#### Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Tourism and recreation areas			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

#### Energy production and mining

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Mining and quarrying	Medium impact	Medium impact	<input checked="" type="checkbox"/>	increase	<input type="checkbox"/>	No change

#### 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"/>	

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

#### Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Vegetation clearance/ land conversion			<input checked="" type="checkbox"/>		<input type="checkbox"/>	

#### Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Habitat shifting and alteration	Low impact	Medium impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Please describe any other threats (optional):

Reindeer husbandry is changing the vegetation. Mechanized goldwashing has weakened the natural state of the tributaries of River Lemmenjoki until the late 1980s. Increasing tourism and hiking cause disturbance. 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	Lemmenjoen kansallispuisto SAC/SPA	<a href="http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=FI1300201">http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=FI1300201</a>	whole

## National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
National Park	Lemmenjoki National Park		whole
Restricted Area			partly

## Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Lemmenjoki-Hammastunturi-Pulju	<a href="http://datazone.birdlife.org/site/factsheet/lemmenjoki-hammastunturi-pulju-iba-finland">http://datazone.birdlife.org/site/factsheet/lemmenjoki-hammastunturi-pulju-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, designated both as SPA and SCI. Lemmenjoki National Park (285 484 ha) was established in 1956, extended in 1971 and 1982. A master plan for the National Park was established in 1988. Restricted Areas have been established at Ravadasköngäs and at Naukusuo Mire, where access is prohibited from early May to mid July. Use of motor vehicles is permitted only for local residents. Mechanized gold washing is prohibited.

The first part of the park was established long before the mire conservation programme existed and also the later parts have been included in programme of national parks, so there was no need to double the programmes in the site to get it protected.

## 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:

Various educational themes are carried out in the Park and it functions as an important education site for the Kevo Research Station of Turku University.

Northern Lapland Nature Centre is situated in Inari village. A nature cabin, two information points, a nature trail, camping sites, ten wilderness huts, boat transport services and over 40 km of marked trails have been constructed in the National Park. The Park had ca. 10 000 visitors in 2003. Licensed recreation fishing is permitted in certain areas.

## 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
Animal species (please specify)	Implemented
Plant species	Implemented

The breeding bird fauna, lepidopteran fauna, flora and geology of the area have been studied intensively since the 1930s. The data is collected systematically by Kevo Research Station of Turku University as a part of Inari-Lapland's biological survey. A part of this material has been published as distribution maps (Kevo Notes and Reports from the Kevo Subarctic Station). A geological study has been carried out of the geomorphological formations of River Lemmenjoki Valley.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

[http://eunis.eea.eu.int/temp/SiteFactsheet\\_C3B2278C8E4EA599899E0D69E9B2EE22.pdf](http://eunis.eea.eu.int/temp/SiteFactsheet_C3B2278C8E4EA599899E0D69E9B2EE22.pdf)  
<http://www.metsa.fi/natural/nationalparks/lemmenjoki/first.htm>

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

Iso-livari, L. 1990. Birds of Inari Lapland (published observations). Turun yliopisto, Lapin biologinen tutkimusasema Kevo.

Koponen, S., Laasonen, E.M. & Linnaluoto, E.T. 1982. Lepidoptera of Inari Lapland. Kevo Notes 6.

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.

Metsähallitus 1988. Lemmenjoen kansallispuiston runkosuunnitelma. Metsähallitus, SU 4:91.

Mäkinen, I. & Kallio, P. 1979. The vascular plants of Inari Lapland, Finland. Kevo Notes 4.

Piirola, J. 1972. The Inari region of Finnish Lapland. Fennia 111.

Rautava, E. 1972. Amphiphytic and aquatic moss vegetation in the rivers Vaskojoki and Kettujoki in Finnish Lapland. Reports from the Kevo Subarctic Research Station 9.

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

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.

#### 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:



The Lemmenjoki River is the heart of the National Park. ( Hannu Vallas, 15-07-2012 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2004-02-02