

Ramsar Information Sheet

Published on 27 April 2023 Update version, previously published on : 1 January 2005

Finland

Sammuttijänkä - Vaijoenjänkä Mires



Designation date 2 February 2004 Site number 1531

Coordinates 69°28'50"N 27°39'49"E

Area 51 749,00 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 site represents Finland's largest continuous mire area in natural state. It is a huge mosaic of palsa mire, aapa mires, streams, ponds and mountain birch forests. Together with next-to Kaldoaivi wilderness area it forms a vast wilderness, peripheral and natural regional entity. It is among the most valuable breeding areas of waterfowl and waders in Fjeld Lapland and palsa mires.

The site is an area with relatively scarce human impact on nature. There are two archaeological sites with storage pits (purnu) and possible pitfall traps. In the vicinity, but outside the Ramsar site, though, there are Sami sacred places (seita). The area is important for local reindeer husbandry, hunting, fishing, and recreation. A reindeer round-up site and two reindeer herder's cottages are located at Paavalijärvi in the northern part of the area.

2 - Data & location

2.1 - Formal data

2.1.1	- Name	and ac	dress c	of the	compiler	of this	RIS
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Responsible compiler

Institution/agency Finnish Environment Institute (SYKE), Natural Environment Centre

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)

Sammuttijänkä - Vaijoenjänkä Mires

Unofficial name (optional)

Sammuttijänkä - Vaijoenjänkä

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 O No

(Update) B. Changes to Site area No change to area

(Update) For secretariat only: This update is an extension □

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?

(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

Boundaries description

The site is included in the much larger Natura 2000 site Fl1302002 Kaldoaivin erämaa SAC/SPA, following the originally delineated mire protection area which has been included in the Natura 2000 site.

2.2.2 - General location

a) In which large administrative region does	
a) in willon large administrative region does	Lapland
a) In which large administrative region does the site lie?	Lapianu
13340 (2.0)	
b) what is the nearest town or population	Utojaki / Ipari
on tro?	OBJORI / Hall
b) What is the nearest town or population centre?	Utsjoki / Inari

2.2.3 - For wetlands on national boundaries only

- a) Does the wetland extend onto the territory of one or more other countries? Yes O No \odot
- b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

2.2.4 - Area of the Site

Official area, in hectares (ha): 51749

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

52828.542

2.2.5 - Biogeography

Biogeographic regions

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

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.
	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 representative example of natural wetland types (dominated by peatlands) in the EU Alpine region, including 2 priority natural wetland habitat types of the European Habitats Directive Annex I (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 in Fjeld Lapland and palsa mires.

Sammuttijänkä - Vaijoenjänkä mires is among the most valuable breeding areas of waterfowl and waders in Fjeld Lapland and palsa mires.

3.2 - Plant species whose presence relates to the international importance of the site

Phylum	Scientific name	Criterion 2	Criterion 3	Criterion 4 R	JCN Red List	CITES Appendix I	Other status	Justification
Plantae								
BRYOPHYTA/ BRYOPSIDA	Meesia longiseta	✓					National Red List - EN	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Ranunculus Iapponicus	✓					EU Habitats Directive - Annex II, IV	

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

Phylum	Scientific name	Species qualifies under criterion 2 4 6 9	r cont under	 es prion S	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others												
CHORDATA/ MAMMALIA	Gulo gulo							LC			National Red List - EN; Habitats Directive Annex II	
CHORDATA/ MAMMALIA	Lutra lutra							NT	₽		Habitats Directive Annex II, IV	
Birds												
CHORDATA/ AVES	Anthus cervinus							LC			National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	Asio flammeus							LC			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Buteo lagopus							LC			National Red List - EN	The Site supports this species during breeding period.
CHORDATA/ AVES	Calidris temminckii							LC			National Red List - EN	The Site supports this species during breeding period.
CHORDATA/ AVES	Circus cyaneus							LC			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Emberiza schoeniclus							LC			National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	Gallinago gallinago							LC			National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	Grus grus							LC			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Lagopus lagopus							LC			National Red List - VU	The Site supports this species during breeding period.
CHORDATA/ AVES	Limosa Iapponica							NT			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Pandion haliaetus							LC			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Phalaropus Iobatus							LC			National Red List - VU; EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Philomachus pugnax										National Red List - CR; EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Pluvialis apricaria							LC			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Tringa glareola							LC			EU Birds Directive - Annex I	The Site supports this species during breeding period.
CHORDATA/ AVES	Tringa totanus							LC			National Red List - VU	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

RIS for Site no. 1531, Sammuttijänkä - Vaijoenjänkä Mires, Finland

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Water courses of plain to montane levels with Ranunculion fluitantis and Callitricho- Batrachion vegetation	2		Habitats Directive - Annex I
Oligotrophic waters containing very few minerals of sandy plains (Littorelletalia uniflorae)	Ø		Habitats Directive - Annex I
Aapa mires	2		Habitats Directive - Annex I
Palsa mires	2		Habitats Directive - Annex I
Transition mires and quaking bogs	2		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. 36 000 ha of mires and ca. 4 000 ha of water. The palsa mires are extensive and well developed, changing gradually into aapa mires. The peat layer is thin. Wide areas of rounded hummocks, riverbank willow (Salix spp.) growths, wet flark fens and rich fens are characteristic of these mires. Areas of rounded hummocks are divided by kilometer-long stretches of mesotrophic sedge (Carex spp.) fens or by rich fens without ridges. The area is rich with pools, ponds and lakes, of which largest cover ca. 170 ha. Mires are intersected by River Vaijoki and its numerous tributaries. The southeastern parts are bordered by Lake lijärvi. The dominant tree in southern parts is Pine (Pinus sylvestris), while Mountain Birch (Betula pubescens ssp. czerepanovii) and treeless fjeld meadows become more abundant northwards.

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	176	
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2	4489	
Fresh water > Marshes on peat soils >> U: Permanent Non- forested peatlands		1	26235	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Boreal heaths	8386
New discount of the format with Details on because of the contract of the cont	0050
Nordic subalpine forests with Betula pubescens ssp. czerepanovii	8959

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

.2 - Geomorphic setting
a) Minimum elevation above sea level (in metres)
a) Maximum elevation above sea level (in alone metres)
Entire river basin
Upper part of river basin 🗹
Middle part of river basin $\ \square$
Lower part of river basin \Box
More than one river basin $lacktriangledown$
Not in river basin \square

Constal [

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 on the water divide between the large river basins of Näätämöjoki and Paatsjoki draining into the Arctic Ocean in Norway.

4.4.3 - Soil

Mineral 🗹

(Update) Changes at RIS update No change

● Increase

O Decrease

O Unknown

O

Organic 🗹

 $^{(Update)}$ Changes at RIS update No change oldot Increase O Decrease O Unknown O

No available information

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

Please provide further information on the soil (optional)

Mainly peat and drumlins of glacigenic ground moraine with small areas of hummocky moraine and glacifluvial 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	✓	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 largely stable	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 dependent on ground or surface waters.

Depth of water: Shallow, ca. 2–10 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

O Decrease

O Unknown

O

Circumneutral (pH: 5.5-7.4)

(Update) Changes at RIS update No change

■ Increase

O Decrease

O Unknown

O

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change

● Increase

O Decrease

O Unknown

O

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic 🗹

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

Mesotrophic 🗹

(Update) Changes at	RIS update No change O Increase O Decrease O Unknown O
	Dligotrophic ☑
^(Update) Changes at	RIS update No change ncrease O Decrease O Unknown O
	Dystrophic ☑
^(Update) Changes at	RIS update No change ncrease O Decrease O Unknown O
	Unknown

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

General water quality excellent in River Näätämöjoki. Mostly oligotrophic–mesotrophic and dystrophic. Oxygen deficiency may occur in late winter in lakes and ponds. Acidity nearly neutral in general. Buffering capacity high in rivers. Flood in 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.

4.4.9 - 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

1 To Woldring Oct Wood		
Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium

Regulating Services

regularing connect		
Ecosystem service Examples		Importance/Extent/Significance
Maintenance of hydrological regimes	Groundwater recharge and discharge	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	Low
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Low
Spiritual and inspirational	Inspiration	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 microorganizms, 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 scientific research and reindeer husbandry.	
Within the site:	100s
Outside the site:	100s
Have studies or assessments been made of ecosystem services prov	f the economic valuation of very lessed on the control of the economic valuation of very lessed on the control of very lessed on the control of the economic valuation of very lessed on the economic va

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

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

lic owners	

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	₽	/

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)		✓

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

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

5.1.2 - Management authority

agency or organization responsible for managing the site

Please list the local office / offices of any 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

Jäämerentie 6 Postal address: 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	Low impact	Low impact	✓	No change	✓	No change

Pollution

	Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
	Air-borne pollutants	Low impact	Low impact	✓	No change	✓	No change

Please describe any other threats (optional):

The acid deposition has weakened the buffering capacity of some lakes and ponds. The acidification has diminished in general since the 1980s. Hunting may have negative effects on the site. We have no exact data of the reindeers' effects in the Mire Protection Area, but as it is the wettest area around, it's more likely that reindeers are not so numerous inside 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	Kaldoaivin erämaa SAC/SPA	http://natura2000.eea.europa.eu/ Natura2000/SDF.aspx?site=FI13020 02	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Mire Protection Area	Skies vaaranjängän- Sammuttijängän- Vaijoenjängän alue		whole
Wilderness Area	Kaldoaivi wilderness area		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Sammutinjänkä- Vaijoenjänkä	http://datazone.birdlife.org/sit e/factsheet/sammutinj%C3%A4nk%C3 %A4-vaijoenj%C3%A4nk%C3%A4-iba-f inland	whole

5.2.3 - IUCN protected areas categories (2008)

	la Strict Nature Reserve
1	Ib Wilderness Area: protected area managed mainly for wilderness protection
	Il National Park: protected area managed mainly for ecosystem protection and recreation
	III Natural Monument: protected area managed mainly for conservation of specific natural features
1	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
1	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 Kaldoaivi Wilderness Area (altogether 351 633 ha), designated both as SPA and SAC. It is the largest Wilderness Area in Finland. Sammuttijänkä–Vaijoenjänkä Mire Protection Area was established in 1988 and Kaldoaivi 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.

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?

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning Yes O No

processes with another Contracting Party?

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 Kevo Research Station of Turku University.

Only few visitors. No facilities. There are six wilderness huts in the Wilderness Area, but none in the Mire Protection Area.

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
Plant community	Implemented

The area is an important study site of northern mires and aquatic ecosystems. The breeding bird fauna was studied in the 1970s and in 1996, geology and soil in the 1990s and the surface waters since the 1980s. The research of flora and fauna is carried out at the moment. The research activities are linked with the management and land use plan which is under construction.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

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.

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.

Länsman, T. 2000. Kaldoaivin erämaa-alueen asutus- ja elinkeinohistoriaa. Metsähallituksen luonnonsuojelujulkaisuja A 126.

Manner, R. & Puro, A. 1999. Kaldoaivin erämaa-alueen kallio- ja maaperä sekä vesistöt. Metsähallituksen luonnonsuojelujulkaisuja A 110.

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



Sammuttijänkä-Vaijoenjänkä mires comprise a mosaic of freshwaters, mineral soil and peatland. (*Jari Kostet, 12-*07-2007)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2004-02-02