

Ramsar Information Sheet

Published on 18 January 2021 Update version, previously published on : 1 January 2005

FinlandRiver Luiro Mires



Designation date 2 February 2004
Site number 1529
Coordinates 67°16'45"N 27°33'43"E
Area 12 345,00 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

River Luiro mires are among the most outstanding mire areas in Finland. The site consists of several aapa mire and raised bogs areas like Lämsänaapa, Hirviaapa, Kairanaapa, Sakkala-aapa, Sudenvaaranaapa and Sokanaapa, which are divided by River Luiro and other small riversstreams. The mire types are extremely diverse and the site includes the most extensive unbroken rich birch fen area in Finland. Lämsänaapa and Sakkala-aapa raised bogs are the largest raised bogs in northern Finland. An important breeding and staging area for waterfowl and waders. There are also several threatened plant and moss species.

2 - Data & location

2.1 - Formal data

2.1.1	 Name 	and a	address	of the	compiler	of this	RIS
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Responsible compiler

Institution/agency Metsähallitus, Parks and Wildlife Finland

PO Box 94
FI-01301 Vantaa
Finland

National Ramsar Administrative Authority

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

Postal address PO Box 140
FI-00251

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

From year 2002

To year 2017

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

River Luiro Mires

Unofficial name (optional)

Luiron 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 O No

(Update) B. Changes to Site 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?

 (\mbox{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 follows the Luiron suot Natura 2000 boundaries (SiteCode: FI1300904).

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?

Pelkosenniemi / Savukoski

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

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): 12345

Area, in hectares (ha) as calculated from 12589.744 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
EU biogeographic regionalization	Boreal region
Other scheme (provide name below)	Northern boreal forest vegetation zone

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 representative example of natural wetland types (dominated by peatlands) in the EU Boreal region, including 4 priority natural wetland habitat types of the Annex I of the EU Habitats Directive (aapa mires, bog woodland, active raised bogs, Fennoscandian deciduous swamp woods).

☑ Criterion 2 : Rare species and threatened ecological communities

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
Plantae								
BRYOPHYTA/ BRYOPSIDA	Hamatocaulis lapponicus	√					National Red List - EN	
BRYOPHYTA/ BRYOPSIDA	Hamatocaulis vernicosus	V					National Red List - VU	
BRYOPHYTA/ BRYOPSIDA	Meesia longiseta	V					National Red List - EN	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Ranunculus Iapponicus	V					EU Habitats Directive - Annexes II, IV	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Saxifraga hirculus	V			LC		National Red List - VU	

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

Phylum	Scientific name	criterion	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est.	% occurrence 1) IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others										
CHORDATA/ MAMMALIA	Lutra lutra					NT	V		EU Habitats Directive - Annexes II, IV	
Birds										
CHORDATA/ AVES	Anas acuta					LC			National Red List - EN	
CHORDATA/ AVES	Anas querquedula		0000			LC			National Red List - EN	
CHORDATA/ AVES	Anser fabalis					LC			National Red List - VU	
CHORDATA/ AVES	Asio flammeus					LC			EU Birds Directive - Annex I	
CHORDATA/ AVES	Aythya fuligula		10000			LC			National Red List - EN	
CHORDATA/ AVES	Circus cyaneus					LC			National Red List - VU; EU Birds Directive - Annex I	
CHORDATA/ AVES	Cygnus cygnus					LC			EU Birds Directive - Annex I	
	Emberiza rustica					W				
CHORDATA/ AVES						LC			EU Birds Directive - Annex I	
CHORDATA/ AVES						LC			EU Birds Directive - Annex I	
CHORDATA/ AVES	Mergellus albellus					LC			EU Birds Directive - Annex I	
CHORDATA/ AVES	Phalaropus Iobatus					LC			National Red List - VU; EU Birds Directive - Annex I	
CHORDATA/ AVES	Philomachus pugnax					LC			National Red List - CR; EU Birds Directive - Annex I	
	tridactylus		10000			LC			EU Birds Directive - Annex I	
	Sterna paradisaea					LC			EU Birds Directive - Annex I	
	Tetrao urogallus					LC			EU Birds Directive - Annex I	
CHORDATA/ AVES	Tringa glareola					LC			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	2		Habitats Directive - Annex I
Water courses of plain to montane levels with Ranunculion fluitantis and Callitricho- Batrachion vegetation	Ø		Habitats Directive - Annex I
Natural dystrophic lakes and ponds	2		Habitats Directive - Annex I
Aapa mires	2		Habitats Directive - Annex I
Active raised bogs	2		Habitats Directive - Annex I
Alkaline fens	2		Habitats Directive - Annex I
Transition mires and quaking bogs	2		Habitats Directive - Annex I
Bog woodland	2		Habitats Directive - Annex I
Fennoscandian decidious swamp woods	2		Habitats Directive - Annex I
Fennoscandian springs and springfens	2		Habitats Directive - Annex I
Petrifying springs with tufa formation (Cratoneurion)	2		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 Main aapa mires of middle and northern types. The area includes ca. 11 000 ha of mires and ca. 120 ha of water. The area is situated on both sides of River Luiro, which is characterized by extensive alluvial meadows and alluvial grove forests. Several brooks and small rivers traverse the mires together with small esker formations, and interchanging open-water flarks are typical of the area. Birch fens are typical of Sakkala-aapa, while Lämsänaapa is an eccentric bog and Kairanaapa is a barren aapa mire. There are plenty of rich Pine (Pinus sylvestris) and Spruce (Picea abies) bogs, and on the riverbanks also grass- and hay-rich Spruce fens. Forests consist mainly of mesic heath forests.

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	21	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	23	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non- forested peatlands		1	9218	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	2111	Representative
Fresh water > Flowing water >> Y: Permanent Freshwater springs; oases		4	1	Rare

Other non-wetland habitat

Other Herr Welland Habitat	
Other non-wetland habitats within the site	Area (ha) if known
Western Taiga	500

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 e	elevation	above sea	a level (in metres)	155
			meues)	

NA - Control of the c	
a) iviaximum elevation above sea level (in l	
a) Maximum elevation above sea level (in metres)	185
motros)	100
metes)	

Entire river basin

Upper part of river basin

Middle part of river basin

✓

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

101 101 1110 1101 1122, 1	Idver Edito Iva	103, 11111	and
Please describe whether,	and if so how, the	landscape	and ecological
			e differ from the i) broadly similar C site itself:
Surrounding ar	rea has greater urb	anisation o	or development
Surrounding	g area has higher	human pon	oulation density
	ing area has more		
			_
Surrounding area has sig	•		
Please describe other ways		•	
The surrounding areas	s are affected i	neavily by	y commercial forest manage
4.5 - Ecosystem s	ervices		
no Ecocyclom c	101 11000		
4.5.1 - Ecosystem serv	ices/benefits		
Provisioning Services			
Ecosystem service	Example	es	Importance/Extent/Significance
Food for humans	Sustenance for (e.g., fish, mollus		Low
Wetland non-food products	Livestock fo		Medium
Regulating Services			In the second se
Ecosystem service	Regulation of gro		Importance/Extent/Significance
Climate regulation	gases, tempe precipitation a dimactic prod	erature, nd other	Medium
Hazard reduction	Flood control, floo		Medium
Cultural Services	- Grand	ne .	Importance/Extent/Cimificance
Ecosystem service	Recreational hu		Importance/Extent/Significance
Recreation and tourism	fishing		Low
Spiritual and inspirational	Cultural heritage and archaeol		Low
	Important kno	wledge	
Scientific and educational	systems, impor		Low
Onlands I i ii ii	reference area	or site)	
Scientific and educational	Major scientific	swaysite	Low
Supporting Services			
Ecosystem service	Example		Importance/Extent/Significance
	Supports a varied forms including		
D: " "	animals a	and	18.1
Biodiversity	microorganizms, they contain, a		High
	ecosystems of v	vhich they	
0-25	form a pa		14 P
Soil formation	matter		Medium
Nutrient cycling	Carbor storage/seque		Medium
<u> </u>	o torago/seque	Juduon	
Other ecosystem service(s)	not included abov	e:	
Significant values incl			/.
		- ',	
	Within the site:	100e	
	Outside the site:		
Have studies or assessme	ents been made of	the econor	mic valuation of Yes O No O Unk
ecosys	stem services prov	ided by this	Ramsar Site?
4.5.2 - Social and cultu	ral values		
i) the site provides a m	odel of wetland wis	selise den	nonstrating the
application of traditional kr			_
	intain the ecologic		_
ii) the site has excep	otional cultural trad	itions or red	cords of former
civilizations that have influe			

iii) the ecological character of the wetland depends on its interaction $\hfill\Box$

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
N	ational/Federal government	2	/

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):

(a) within the Ramsar site:

State-owned for the major part (90 %). The rest is private-owned.

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

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 repeople 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

Water regulation

orp

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Drainage			✓		✓	

Biological resource use

Diological rootal or do						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Hunting and collecting terrestrial animals			/			

Please describe any other threats (optional):

Some drainage has been carried out on the margins of the mires. Hunting may have negative effects on the site.

5.2.2 - Legal conservation status

Regional (international) legal designations

Regional (international) regardesignations					
Designation type	Name of area	Online information url	Overlap with Ramsar Site		
EU Natura 2000	Luiron suot SAC/SPA	http://natura2000.eea.europa.eu/ Natura2000/SDF.aspx?site=Fl13009 04	whole		

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Mre Conservation Programme	Lämsänaavan-Keikkuma- aavan alue		partly
Mre Protection Area	Lämsänaapa- Sakkalanaavan Mre Protection area		partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Lämsänaapa-Sakkala- aapa	http://datazone.birdlife.org/sit e/factsheet/l%C3%A4ms%C3%A4naapa -sakkala-aapa-iba-finland	whole

5.2.3 - IUCN	protected	areas	categories	(2008)

la Strict Nature Reserve □
lb 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 Iandscape/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

20ga: p. 01001011		
Measures	Status	
Legal protection	Implemented	

Other:

The site is included in the Natura 2000 Network, designated both as SPA and SCI, and partly in the Mire Conservation Programme. Lämsänaapa-Sakkala-aapa Mire Protection Area (4 589 ha) was established in 1988. Forestry, ditching, extraction of earth material and damaging of soil or bedrock are prohibited in the Mire Protection Area. Also construction of new buildings 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 Yes O No

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 opposesses 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:

Only few visitors. No facilities. A snowmobile trail crosses the area.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No, the site has already been restored

Further information

Mire area was restored in Sakkala-aapa near Verkko-oja in Pelkosenniemi EU LIFE-project in 2008.

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Birds	Implemented

The breeding bird fauna and flora were studied in the 1970s. The volume of bird populations was estimated in 1995 by using line transect censuses.

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.

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:



Aapa mires in the River Luiro mire complex. (*Juha Paso, 15-09-2008*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2004-02-02