

Ramsar Information Sheet

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

FinlandKoitelainen Mires



Designation date 28 May 1974 Site number 12

Coordinates 67°47'35"N 27°10'03"E

Area 48 938,00 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

Koitelainen Ramsar-site is one of the most representative aapa mire (string-flark fen) areas. It is an extensive and mire-rich watershed area between the rivers Luiro and Kitinen. There are almost 100 km of small streams and several ponds and small lakes in the area. Alluvial habitats like swamps and flooded forests occur along the streams. Koitelainen itself is a fell area in the middle of the site. The western taiga forests grow on the slopes Koitelainen fell and also in forest islets in aapa mire area. In Central Lapland Koitelainen is the most important area for the conservation of rare or threatened birds and mammals because of the untouched wilderness and the extremely watery bogs. Along the stream of Louejoki there are cottages and barns that were used in haymaking on wet meadows.

2 - Data & location

2.1 - Formal data

2.1.1 - Name	and	address	of	the co	ompiler	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 2005

To year 2017

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)

Unofficial name (optional) Koitelainen Mires

Koitelainen Mires

Koitelainen Mires

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 follows the KOITELAINEN Natura 2000 boundaries (SiteCode: FI1301716).

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?

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): 48938

Area, in hectares (ha) as calculated from 48938.011 GIS boundaries

2.2.5 - Biogeography

Biogeographic regions

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

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 rare example of natural wetland types (dominated by peatlands) in the EU Boreal region, including 3 priority natural wetland habitat types (aapa mires, bog woodland, Fennoscandian deciduous swamp woods) listed in Annex I of the EU Habitats Directive.

- ☑ Criterion 2 : Rare species and threatened ecological communities
- ☑ Criterion 3 : Biological diversity

Justification

The site is one of the most important areas for the conservation of rich-fen plant species.

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 vernicosus	/	₽				National Red List - VU	
BRYOPHYTA/ BRYOPSIDA	Meesia longiseta	V	2				National Red List - EN	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Ranunculus Iapponicus	V					EU Habitats Directive - Annex II, IV	
TRACHEOPHYTA/ MAGNOLIOPSIDA	Saxifraga hirculus	2	2		LC		National Red List - VU	

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

Phylum	Scientific name		Species contributes under criterio 3 5 7 8	n Size	Period of pop. Est.	% occurrence 1) IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others	Others									
CHORDATA/ MAMMALIA]		LC			National Red List - EN; EU Habitats Directive - Annex II	
CHORDATA/ MAMMALIA	Lutra lutra)		NT	\checkmark		Habitats Directive - Annex II, IV	
Birds										
CHORDATA/ AVES	Aegolius funereus]		LC			EU Birds Directive - Annex I	
	Asio flammeus]		LC			EU Birds Directive - Annex I	
CHORDATA/ AVES)		LC			National Red List - EN; EU Birds Directive - Annex I	
	Circus cyaneus)		LC			National Red List - VU; EU Birds Directive - Annex I	
	Cygnus cygnus]		LC			EU Birds Directive - Annex I	
CHORDATA/ AVES)		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	
	tridactylus]		LC			EU Birds Directive - Annex I	
	Pluvialis apricaria)		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

RIS for Site no. 12, Koitelainen Mires, Finland

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
Fennoscandian natural rivers	✓		Habitats Directive - Annex I
Water courses of plain to montane levels with Ranunculion fluitantis and Callitricho- Batrachion vegetation	Ø		Habitats Directive - Annex I
Hard oligo-mesotrophic waters with benthic vegetation of Chara spp.	Ø		Habitats Directive - Annex I
Aapa mires	2		Habitats Directive - Annex I
Akaline fens	2		Habitats Directive - Annex I
Transition mires and quaking bogs	2		Habitats Directive - Annex I
Active raised 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 >20 000 ha of mires and >1 000 ha of water. Koitelainen is an extensive and mire-rich watershed area between the rivers Luiro and Kitinen. Extremely wet flark fens and minerotrophic birch-rich aapa mires are typical of the area. Rivulets and brooks comprise nearly 100 km. Herb- and grass-rich Spruce (Picea abies) mires and growths of willows (Salix spp.) occur along the brooks. All forest types of the Northern Finland are represented on the slopes of Koitelainen Fjeld. The forests are dominated by Spruce and they are mostly >200 years old and in natural state.

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	102	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		3	313	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non- forested peatlands		1	21364	Representative
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	11052	Representative
Fresh water > Flowing water >> Y: Permanent Freshwater springs; oases		4	11	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Western taiga	15900
Nordic subalpine forests with Betula pubescens ssp. czerepanovii	170

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 dimate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

4.4.2 - Geomorphic setting

- \ N. Kariman and a safety and a same and a safety and dis-	
a) Minimum elevation above sea level (in metres)	210
metres)	219

a) Maximum elevation above sea level (in metres)

Entire river basin

Upper part of river basin

Unknown

What is the Site like?, S4 - Page 2

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

Mesotrophic in rivers	. Mire waters and ponds	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	a surrounding the Ramsar Site	e differ from the i) broadly similar (site itself:
Surrounding a	area has greater urbanisation o	or development \square
Surroundir	ng area has higher human pop	oulation density
Surround	ding area has more intensive a	agricultural use 🗆
Surrounding area has si	gnificantly different land cover of	or habitat types 🗹
Please describe other way	s in which the surrounding are	ea is different:
-		y commercial forest manage
4.5 - Ecosystem s	services	
o Ecosystems	COI VICOG	
4.5.1 - Ecosystem ser	vices/benefits	
Provisioning Services		
Ecosystem service Wetland non-food products	Examples	Importance/Extent/Significance
vvetiand non-tood products	Livestock fodder	Medium
Regulating Services		
Ecosystem service	Examples Regulation of greenhouse	Importance/Extent/Significance
Climate regulation	Regulation of greenhouse gases, temperature,	Medium
	precipitation and other dimactic processes	
Hazard reduction	Flood control, flood storage	Medium
Cultural Services		
Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Low
	Important knowledge	
Scientific and educational	systems, importance for research (scientific	Low
	reference area or site)	
Supporting Services		
Ecosystem service	Examples	Importance/Extent/Significance
	Supports a variety of all life forms including plants,	
Biodiversity	animals and microorganizms, the genes	High
biodiversity	they contain, and the	ПIGII
	ecosystems of which they form a part	
Soil formation	Accumulation of organic	Medium
Nutrient cycling	matter Carbon	Medium
inutrient cycling	storage/sequestration	ivedium
Other ecosystem service(s	a) not included above.	
	•	and scientific research.
	Within the site: 100s	
	Outside the site: 100s	
Have studies or assessm	ents been made of the econor stem services provided by this	mic valuation of Yes O No O Unk
ecosy	ystern services provided by this	Nambai olië!
4.5.2 - Social and cultu	ural values	
		and the time of the e
	nodel of wetland wise use, den knowledge and methods of ma	
* *	aintain the ecological character	•
ii) the site has exce	eptional cultural traditions or rec	cords of former
	enced the ecological character	
	acter of the wetland depends or	
W	vith local communities or indige	enous 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

ı uu	lic owners	IIID

Category	Within the Ramsar Site	In the surrounding area
National/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):

The site is o	n public	state-owned	land ((100%)	١

5.1.2 - Management authority

agency or organization responsible for	Metsähallitus Parks and Wildlife Finland
managing the site: 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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Low impact	Low impact	/	No change	2	No change

Energy production and mining

	affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Min	ing and quarrying	Low impact	Low impact		No change	✓	increase

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			✓			

Please describe any other threats (optional):

Reindeer husbandry is an important livelihood in the area.

Kevitsa Mine is located next to Koitelainen Protected Area.

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	Koitelainen SAC/SPA	http://natura2000.eea.europa.eu/ Natura2000/SDF.aspx?site=Fl13017 16	whole

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Old Growth Forests Protected Area	Koitelaisen laajennus		whole
Protected area	Koitelainen		whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Pomokaira-Koitelaiskaira	http://datazone.birdlife.org/sit e/factsheet/pomokaira-koitelaisk aira- 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 of 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

=-3 F		
	Measures	Status
	Legal protection	Implemented

Other

The site is included in the Natura 2000 Network, designated both as SPA and SCI. Three smaller areas are also included in the Programme for the Protection of Old-Growth Forests.

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 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 eastern part of the 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

The breeding bird fauna was studied in the 1960s and 1976–77 and the volume of bird populations was estimated in 1994 by using line transect censuses. The vegetation was studied in 1994. The area is a classic research site of aapa mire vegetation. The geology was studied in the 1990s.

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.

Jokimäki, J & Hamari S. 2007. Kevitsan kaivoshankkeen Natura-arviointi. Lapin vesitutkimus Oy. http://www.ymparisto.fi/download/noname/%7B1FF23D1E-FBF6-421B-8F76-081496254DD1%7D/42650

Ka Ipio, S. & Latvalehto, P. 1994. Raportti Viiankiaavan soidensuojelualueesta ja Koitelaiskairan ehdotetun luonnonpuiston eteläpäästä: kasvillisuudesta, biotooppikuvaukset. Manuscript. Metsähallitus.

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.

Outila, T. 1996. Keivitsan kaivoshanke – kaavoitusjärjestelmät ja luonnonsuojelu. Suomen ympäristö 42.

Ruokanen, H. 1995. Koitelainen–Kevitsa alueen ympäristön tila: Kirjallisuusselvitys. Ympäristöministeriö, alueidenkäytön osasto, selvitys 11.

Salo, O et. al. 2006. Kevitsan kaivoshankkeen ympäristövaikutusten arviointiselostus. Scandinavian Minerals Ltd. http://www.ymparisto.fi/download/noname/%7BE4522330-DE9B-4865-8C39-985ED593A741%7D/42654

Ti ainen, 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)

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

iv. relevant Article 3.2 reports

v. site management plan

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 vast open aapa mire

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1974-05-28