



Ramsar Information Sheet

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Update version, previously published on : 1 January 2002

Sweden

Aloppekölen-Köpmankölen



Designation date	19 November 2001
Site number	1113
Coordinates	62°38'24"N 13°40'01"E
Area	20 079,00 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 wide mire landscape Alopökölen-Köpökölen is located in the pre-alpine area. The site is very large, about 20 000 hectares, with large wetland complexes, mostly peatlands, with northern bog, well developed string mixed mires, mixed mires, soligenous fens, string fens and wet forests. There are also a lot of lakes, pools, streams and springs in the site.

The dry parts of the northern peat bog and mixed mires are dominated by species from the heather family (Ericaceae) and cloudberry. In the lower wet parts dominate sedge and Sphagnum mosses. Some lower parts in the mixed mires have more rich vegetation where non-Sphagnum mosses are common. Large areas of the site consist of large open soligenous fens. Vast, wet sedge areas are typical for these fens.

A large number of springs contribute to the rich vegetation. Throughout the site run large and small streams. Lakes are also present. There are also a large number of solid ground islets.

The large wetland areas are important for a number of wetland birds.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Per-Olof Nystrand, (AA Jenny Lonnstad)
Institution/agency	Länsstyrelsen Jämtlands län, (AA Naturvårdsverket)
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2.1.2 - Period of collection of data and information used to compile the RIS

From year	<input type="text" value="2002"/>
To year	<input type="text" value="2016"/>

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	<input type="text" value="Alopökolen-Köpmanökolen"/>
Unofficial name (optional)	<input type="text" value="Alopökolen-Köpmanökolen (mountain ridges)"/>

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 checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has decreased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<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?	Yes (actual)
(Update) Are the changes	Positive <input checked="" type="radio"/> Negative <input type="radio"/> Positive & Negative <input type="radio"/>
(Update) No information available	<input checked="" type="checkbox"/>
(Update) Changes resulting from causes operating within the existing boundaries?	<input type="checkbox"/>
(Update) Changes resulting from causes operating beyond the site's boundaries?	<input type="checkbox"/>
(Update) Changes consequent upon site boundary reduction alone (e.g., the exclusion of some wetland types formerly included within the site)?	<input checked="" type="checkbox"/>
(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?	<input checked="" type="checkbox"/>

(Update) Please describe any changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site.

The site border has been better delineated and is more detailed now than earlier. The general idea of the new border has been to include parts of peatland that was left out earlier and to exclude areas with forest on dry ground of which most is affected by forestry.

(Update) Is the change in ecological character negative, human-induced AND a significant change (above the limit of acceptable change) Yes

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps

0

Boundaries description

The boundary in the eastern part of the Ramsar site is drawn to follow the boundary of the site Alopökölen-Köpmanölen in the Swedish Mire Protection Plan. In the central and northwest parts, the boundary follows the border between the large wetland complex and dry land.

2.2.2 - General location

a) In which large administrative region does the site lie?

Jämtland county

b) What is the nearest town or population centre?

Svenstavik, about 32 km NNE

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):

20079

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

19617.81

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
WWF Terrestrial Ecoregions	Scandinavian Russian taiga
Udvardy's Biogeographical Provinces	03 West Euroasian taiga
EU biogeographic regionalization	Alpine+boreal region
Other scheme (provide name below)	Scandinavian-Russian taiga
Other scheme (provide name below)	Region 33g Förfjällsregion med huvudsakligen nordlig boreal vegetation
Freshwater Ecoregions of the World (FEOW)	406 Northern Baltic drainages
Bailey's Ecoregions	130 Subarctic division

Other biogeographic regionalisation scheme

Nordiska ministerrådet 1984. Naturgeografisk indelning av Norden. Region 33g, Förfjällsregion med huvudsakligen nordlig boreal vegetation.
EEA, 2002. Digital Map of European Ecological Regions (DMEER). "Scandinavian-Russian taiga".

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: The hydrology is to a large extent intact. The diversity is high with a mixture of pools, lakes, springs, streams and other wetland types. The site is naturally drained to south-east through a large number of streams. The springs contribute to the rich vegetation.

Other ecosystem services provided: The area is used for hunting, fishing and picking cloudberry. The site provides livestock fodder for the reindeer husbandry by the local Sami population.

Other reasons: The site is a large and diverse wetland complex with a lot of different wetland types typical for the pre-alpine parts in the EU Alpine region and the EU Boreal region. There are good and representative examples of a number of wetland types, (eg string mixed mires, soligenous and topogenous fens, mixed mires, northern bog and wet forest). The site is included in the Swedish Mire Protection Plan.







- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification: The site supports biological diversity that are characteristic of wetlands, especially peatlands and wet forests, in the EU Alpine and Boreal region. The large amount of wet mires supports a rich bird fauna, especially a large numbers of waders and other water birds. The springs support a typical diversity for springs and spring fens.






































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













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

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Dactylorhiza incarnata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.
<i>Dactylorhiza maculata</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.
<i>Gymnadenia conopsea</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.
<i>Paludella squarrosa</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.
<i>Philonotis fontana</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.
<i>Scorpidium cossonii</i>	null	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.
<i>Tomentypnum nitens</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See text box below the table.

Observation of the species can be found in the wetland survey (VMI) for the county and at www.artportalen.se.

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

Phylum	Scientific name	Common 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								
Birds																		
CHORDATA/AVES	 <i>Actitis hypoleucos</i>	Common Sandpiper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Anas crecca</i>	Eurasian Teal; Green-winged Teal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Arthus pratensis</i>	Meadow Pipit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	See textbox below the table.
CHORDATA/AVES	 <i>Aquila chrysaetos</i>	Golden Eagle	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT). EC Birds Directive Annex I.	See textbox below the table.
CHORDATA/AVES	 <i>Asio flammeus</i>	Short-eared Owl	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	See textbox below the table.
CHORDATA/AVES	 <i>Calcarius lapponicus</i>	Lapland Longspur	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU).	See textbox below the table.
CHORDATA/AVES	 <i>Calidris alpina</i>	Dunlin	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and foraging. See textbox below the table.
CHORDATA/AVES	 <i>Emberiza schoeniclus</i>	Common Reed Bunting; Reed Bunting; Common Reed-Bunting	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU).	Breeding. See textbox below the table.
CHORDATA/AVES	 <i>Falco columbarius</i>	Merlin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	See textbox below the table.
CHORDATA/AVES	 <i>Falco tinnunculus</i>	Common Kestrel; Eurasian Kestrel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Gallinago gallinago</i>	Common Snipe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Gavia arctica</i>	Arctic Loon; Black-throated Loon	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	See textbox below the table.
CHORDATA/AVES	 <i>Grus grus</i>	Common Crane	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and foraging. See textbox below the table.
CHORDATA/AVES	 <i>Lagopus lagopus</i>	Willow Grouse; Willow Ptarmigan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Limicola falcinellus</i>	Broad-billed Sandpiper	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Motacilla flava</i>	Western Yellow Wagtail	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		See textbox below the table.
CHORDATA/AVES	 <i>Numenius arquata</i>	Eurasian Curlew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	Breeding and foraging. See textbox below the table.
CHORDATA/AVES	 <i>Numenius phaeopus</i>	Whimbrel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and foraging. See textbox below the table.
CHORDATA/AVES	 <i>Phalaropus lobatus</i>	Red-necked Phalarope	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and foraging. See textbox below the table.

Phylum	Scientific name	Common 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/ AVES	<i>Philomachus pugnax</i> 	Ruff	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU). EC Birds Directive Annex I.	Courtship, breeding and foraging. See textbox below the table.	
CHORDATA/ AVES	<i>Pluvialis apricaria</i> 	European Golden Plover; European Golden-Plover	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and foraging. See textbox below the table.	
CHORDATA/ AVES	<i>Tringa glareola</i> 	Wood Sandpiper	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and foraging. See textbox below the table.	
CHORDATA/ AVES	<i>Tringa nebularia</i> 	Common Greenshank	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and foraging. See textbox below the table.	
CHORDATA/ AVES	<i>Vanellus vanellus</i> 	Northern Lapwing	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			NT 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and foraging. See textbox below the table.	
Fish, Mollusc and Crustacea																		
CHORDATA/ ACTINOPTERYGII	<i>Salmo trutta</i> 	Trout	<input 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"/>		The river Alopän is important for migration and courtship for the species. See textbox below the table.	

1) Percentage of the total biogeographic population at the site

The species status in the Swedish Red List and general information for that classification as well as their distribution etc, can be found at <http://artfakta.artdatabanken.se/>. Observation of the species can be found in the wetland survey (VMI) for the county and at www.artportalen.se.

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

<no data available>

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

4.1 - Ecological character

The wide mire landscape Alopökölen-Köpökölen is located in the pre-alpine area. The site is very large, with huge wetland complexes, with northern bog, well developed string mixed mires, mixed mires, soligenous fens, string fens and wet forest. There are also a lot of lakes, pools, streams and springs at the site.

The dry parts of the northern peat bog and mixed mires are dominated by species from the heather family (Ericaceae) and cloudberry. In the lower wet parts dominate sedge and Sphagnum mosses. Some lower parts in the mixed mires have more rich vegetation where "non-Sphagnum" species of mosses are common. Large part of the site consists of large open soligenous fens. Vast, wet sedge fields are typical for these fens.

A large number of springs contribute to rich vegetation. Throughout the site run large and small streams. Lakes are also present. There are also a large number of "islets" (of dry land) in the mires.

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	100	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2	150	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3	60	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1	15000	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		3	50	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		0		
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		2	200	Representative
Fresh water > Flowing water >> Y: Permanent Freshwater springs; oases		4	4	Representative

Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Non forested dry ground	
Coniferous forest on dry ground	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Scorpidium revolvers</i>	null	

4.3.2 - Animal species

<no data available>

4.4 - Physical components

4.4.1 - Climate

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

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

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

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

The site is in the upper part of the catchment area of river Ljungan in East, and river Norr-Veman in south which is a tributary to the river Ljusnan, that finally has its outlet in the Gulf of Bothnia.

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

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 rainfall	<input type="checkbox"/>	No change
Water inputs from groundwater	<input type="checkbox"/>	No change

Water destination

Presence?	Changes at RIS update
To downstream catchment	No change

Stability of water regime

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

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

There is high water level in the streams during the snow melting.

4.4.5 - Sediment regime

Sediment regime unknown

Please provide further information on sediment (optional):

The sediment transport in the streams is limited.

4.4.6 - Water pH

Acid (pH<5.5)

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

Circumneutral (pH: 5.5-7.4)

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

Unknown

Please provide further information on pH (optional):

A programme for liming water courses at this site has been on-going since 1993-94. The programme keeps the water courses approximately at the same pH (with fluctuations depending on when the last liming took place and depending and time for low pH like during snow melting), avoiding an acidification that would make the ecosystem of the water course to collapse.

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

Oligotrophic

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

Unknown

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

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

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

In the east, north and the south, the surrounding area has more intense forestry. In the west, there are alpine areas.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

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
Hazard reduction	Flood control, flood storage	Low

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Low

Within the site:

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

4.5.2 - Social and cultural values

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

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

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

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

<no data available>

4.6 - Ecological processes

<no data available>

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

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

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

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Commercial (company)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Foundation/non-governmental organization/trust	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

The Sami have rights to have reindeer husbandry at the site and in its surroundings.

5.1.2 - Management authority

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

Länsstyrelsen Jämtlands län (County Administration Board of Jämtland)

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

Ramsar contact person, Nature conservation administrator

Postal address: S-831 86 Östersund, Sweden

E-mail address: jamtland@lansstyrelsen.se

5.2 - Ecological character threats and responses (Management)

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

Water regulation

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

Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Wood and pulp plantations		Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Energy production and mining

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

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	Henvålen-Aloppan SE0720200	http://www.lansstyrelsen.se/jamtland/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/nat-ura-2000/HenvålenAloppanSE0720200bp4.pdf	partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve 1	Henvålen	http://www.lansstyrelsen.se/jamtland/Sv/djur-och-natur/skyddad-natur/naturreservat/berg/henvalen/Pages/default.aspx	partly
Nature Reserve 2	Kilbäcksskiftet	http://www.lansstyrelsen.se/jamtland/Sv/djur-och-natur/skyddad-natur/naturreservat/harjedalen/kilbacksskiftet/Pages/index.aspx	partly

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	Partially implemented

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:

There are only foot paths and a snow mobile track available for the visitor.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Water quality	Implemented

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Johansson, R. County administration board of Jämtland. 1981. Compilation of sites with high nature values.
Swedish environmental protection agency. 1994. Mire Protection Plan of Sweden.
County administration board of Jämtland. 2000. Wetlands in Jämtland county (report 2002:2).
Swedish environmental protection agency. 2007. Mire Protection Plan of Sweden (report 5669).

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

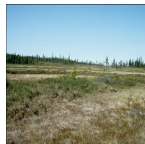
<1 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Large and wide sedge field in the south east part of the site (*P-O Nystrand, County administration board of Jämtland, 29-06-1992*)



Large areas with well-developed string mixed mires in the north west part of the site. (*P-O Nystrand, County administration board of Jämtland, 17-07-1992*)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation