



Ramsar Information Sheet

Published on 31 March 2017

Update version, previously published on : 1 January 2008

Sweden Ånnsjön



Designation date	5 December 1974
Site number	26
Coordinates	63°16'25"N 12°32'32"E
Area	11 031,00 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 is located in the EU Alpine region. Ånnsjön is a large, very shallow, oligotrophic, freshwater lake, surrounded by extensive mires. There are inland deltas at the western and north-western shores of the lake, which are valuable from conservation and educational points of view. The deltas represent a rather rare feature in the county.

The mires around the lake are good examples of maritime influenced mire types. There is a mixture of bogs and fens. The flora is diverse. The vegetation in the bog consists of e.g. heather (*Calluna vulgaris*), dwarf birch (*Betula nana*) and *Sphagnum fuscum*. Structure elements like strings, tussocks, hollows and pools are found in the bog. In the fen, vegetation is dominated by sedge-species (*Carex* spp.). Some parts of the fen are rich, with species like slender sedge (*Carex lasiocarpa*) and purple moor-grass (*Molinia caerulea*). *Racomitrium lanuginosum* should be noted as a species which indicate the maritime influence on the mire vegetation. The fen is rich in brown mosses and sedge. Noteworthy moss species include *Paludella squarrosa*, *Tomenthypnum nitens* and *Cinclidium stygium* which all grow in rich fens. *Eriophorum latifolium* and *Carex dioica* are other species worth mentioning.

Ånnsjön is very important for breeding and migrating wetland birds. Black-throated diver (*Gavia arctica*), widgeon (*Anas penelope*), velvet scoter (*Melanitta fusca*), common scoter (*M. nigra*), long-tailed duck (*Clangula hyemalis*) arctic tern (*Sterna paradisaea*), greenshank (*Tringa glubularia*), wood sandpiper (*Tringa glareola*), golden plover (*Pluvialis apricaria*) and decreasing number of dunlin (*Calidris alpina*) are some noteworthy species. The site includes two bird sanctuaries where public access is restricted during parts of the year. The sanctuaries were established in 1976 but has since been expanded to include a total area of 2 309 ha.

Part of the site, 1 035 ha or 9 per cent, is included in a nature reserve.

In the peat of Klockamyren, there are two layers of pine trunks in the steep slope near the lake. These layers are approximately 4600 and 6100 years old, respectively, indicating that the area was forested at that time.

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
Institution/agency	Länsstyrelsen Jämtlands län
Postal address	SE-831 86 Östersund SWEDEN
E-mail	jamtland@lansstyrelsen.se
Phone	+46 10 225 30 00
Fax	+46 10 225 30 10

Compiler 2

Name	Jenny Lonnstad
Institution/agency	Naturvårdsverket (Swedish EPA)
Postal address	SE-106 48 Stockholm SWEDEN
E-mail	jenny.lonnstad@naturvardsverket.se
Phone	+46106981592

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

From year	2001
To year	2015

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Ännsjön
Unofficial name (optional)	Ännsjön (lake)

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 checked="" type="checkbox"/>
(Update) The boundary has been restricted	<input checked="" 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 checked="" type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input checked="" 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) Positive %	1
(Update) No information available	<input type="checkbox"/>
(Update) Changes resulting from causes operating within the existing boundaries?	<input checked="" 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)?

(Update) Changes consequent upon site boundary increase alone (e.g., the inclusion of different wetland types in the site)?

(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.

Hydrological restoration by plugging and filling ditches has been done in the peatlands close to the village Änn.

The new boundary has in general resulted in the small built-up areas and forests on dry ground have been excluded. Areas included are in general small peatlands, parts of rivers and more of the shore along the lake.

(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

Boundaries description

In the north the boundary follows, with small divergence, the railroad and road E14 between the villages Änn and Enafors. From Enafors to Bunnerviken the boundary follow another smaller road. The border in this part also follows the boundary for the Swedish Mire Protection Plan. From Bunnerviken to Ännsviken the boundary follows the shoreline of Ännsjön. In this part the shoreline also connecting to the boundary of Nature reserve and N2000 site Vålådalen south of Ännsjön. East of the lake includes the Ännsjöfloarna mires, which are also a part of Nature reserve and Natura 2000-site Vålådalen.

2.2.2 - General location

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

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 No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Udvardy's Biogeographical Provinces	03 West Eurasian Taiga
Bailey's Ecoregions	M240 Marine regime Mountains
WWF Terrestrial Ecoregions	Scandinavian-Russian Taiga
Other scheme (provide name below)	Scandinavian-Russian Taiga
Freshwater Ecoregions of the World (FEOW)	406 Northern Baltic drainages
EU biogeographic regionalization	Alpine region

Other biogeographic regionalisation scheme

Nordiska ministerrådet, 1984. Naturgeografisk indelning av Norden: Alpine zone 35i, southern mountain area. 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 site has some value for flood control.
Other ecosystem services provided	The area is used for hunting and fishing and picking cloudberry. The site provides livestock fodder for the reindeer husbandry by the local Sami population.
Other reasons	The site comprises the lake Ånnsjön and surrounding mires. The lake Ånnsjön is a large, shallow, oligotrophic, freshwater lake. There are inland deltas at the western and north western shores of the lake, which are valuable from conservation and educational points of view. The deltas represent a rather rare feature in the county. In the southwest, there are waterfalls and rapids called Handölsforsarna. The hydrology is to a large extent intact in the site. The mires around the lake are good examples of maritime influenced types and have a diverse flora. Ånnsjön is very important for breeding and migrating wetland birds. There are two bird sanctuaries in the delta areas, Enadeltat and Halsnäsdelat. Ånnsjön is a popular bird watching site and lot of bird watcher visit this site every year, especially during the spring and summer. In Handöl there is a bird station where birds are marked with rings for survey and monitoring.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification	The site supports populations of especially bird species important for maintaining the biological diversity of the EU Alpine region, primarily large numbers of ducks and waders. Several raptor species are regularly seen in the area. The great importance to birds is linked to the great variation of wetland types (mires, open water, deltas, and shallow waters along the shore line).
---------------	--

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

- Criterion 8 : Fish spawning grounds, etc.

Justification	The tributaries to the lake have spawning sites for species of the Salmonidae.
---------------	--

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 textbox below the table.
<i>Paludella squarrosa</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See textbox below the table.
<i>Racomitrium lanuginosum</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See textbox below the table.
<i>Scorpidium cossonii</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See textbox below the table.
<i>Tomentypnum nitens</i> 		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		See textbox below the table.

Criterion 3: Observation of the plant 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								
Birds																	
CHORDATA/AVES	 <i>Actitis hypoleucos</i>	Common Sandpiper	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Anas acuta</i>	Northern Pintail	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU).	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Anas crecca</i>	Eurasian Teal; Green-winged Teal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Anas penelope</i>	Eurasian Wigeon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Asio flammeus</i>	Short-eared Owl	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Aythya marila</i>	Greater Scaup	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU).	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Buteo lagopus</i>	Roughleg; Rough-legged Buzzard; Rough-legged Hawk	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	Breeding and searching food. 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"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Circus cyaneus</i>	Northern Harrier	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Cygnus cygnus</i>	Whooper Swan	<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"/>	<input type="checkbox"/>		Breeding and searching food. 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (VU).	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Gallinago gallinago</i>	Common Snipe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Gavia stellata</i>	Red-throated Diver; Red-throated Loon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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.	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Melanitta nigra</i>	Black Scoter	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Numenius arquata</i>	Eurasian Curlew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	Breeding and searching food. See textbox below the table.
CHORDATA/AVES	 <i>Numenius phaeopus</i>	Whimbrel	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	EC Birds Directive Annex I.	Breeding and searching food. 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	GITES 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 searching food. 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 searching food. See textbox below the table.
CHORDATA/ AVES	<i>Sterna paradisaea</i> 	Arctic Tern	<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 searching food. 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 searching food. 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 searching food. See textbox below the table.
CHORDATA/ AVES	<i>Tringa totanus</i> 	Common Redshank	<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 searching food. 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"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Breeding and searching food. See textbox below the table.
Fish, Mollusc and Crustacea																		
CHORDATA/ ACTINOPTERYGII	<i>Phoxinus phoxinus</i> 	Mnow	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		A lot of them living as adult in lake Ännsjön and during the courtship in the tributary to Ännsjön. See textbox below the table.
CHORDATA/ ACTINOPTERYGII	<i>Salmo trutta</i> 	Trout	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>		Living as adult in lake Ännsjön and during the courtship in the tributary to Ännsjön. See textbox below the table.
CHORDATA/ ACTINOPTERYGII	<i>Salvelinus alpinus</i> 	Arctic Char	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		Living as adult in lake Ännsjön and during the courtship in the tributary to Ännsjön. See textbox below the table.
Others																		
CHORDATA/ MAMMALIA	<i>Lutra lutra</i> 	European Otter	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input checked="" type="checkbox"/>	<input type="checkbox"/>	The Swedish Red List 2015 (NT).	See textbox below the table.

1) Percentage of the total biogeographic population at the site

Criterion 2, 3, 4 and 8: 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://www.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

Name of ecological community	Community qualifies under Criterion 2?	Description	Justification
EU7140 Transition mires and quaking bogs	<input type="checkbox"/>	Peat-forming habitat on oligotrophic to mesotrophic waters, including characteristics intermediate between soligenous and ombrogenous mire types. Swaying swards, floating carpets or quaking mires are also included. It includes many plant communities.	Listed in the EU Habitats Directive, Annex I. In 2013 the conservation status was favourable for the habitat in the Swedish part of the EU Alpine region.
EU3130 Oligo-mesotrophic standing waters	<input type="checkbox"/>	Aquatic to amphibious short perennial vegetation, oligotrophic to mesotrophic, of lake, pond and pool banks and water-land interfaces.	Listed in the EU Habitats Directive, Annex I. In 2013 the conservation status was favourable for the habitat in the Swedish part of the EU Alpine region.
EU3210 Fennoscandian natural rivers	<input checked="" type="checkbox"/>	Natural river systems containing nutrient-poor water. The water level shows great amplitude, up to 6 m during the year. The water-dynamics can vary and contain waterfalls, rapid streams, calm water, and small lakes adjacent to the river.	Listed in the EU Habitats Directive, Annex I. In 2013 the conservation status was unfavourable for the habitat in the Swedish part of the EU Alpine region.
EU3220 Alpine rivers	<input type="checkbox"/>	Open assemblages of herbaceous or suffrutescent pioneering plants, rich in alpine species, colonising gravel beds of streams with an alpine, summer-high, flow regime, formed in northern boreal mountains, hills and sometimes lowlands.	Listed in the EU Habitats Directive, Annex I. In 2013 the conservation status was favourable for the habitat in the Swedish part of the EU Alpine region.
EU7130 Blanket bogs	<input checked="" type="checkbox"/>	Extensive bog communities or landscapes on flat or sloping ground with poor surface drainage, in oceanic climates. Blanket bogs are mostly ombrotrophic. <i>Racomitrium lanuginosum</i> is a character species for the habitat in Sweden.	Listed in the EU Habitats Directive, Annex I. In 2013 the conservation status was favourable for the habitat in the Swedish part of the EU Alpine region. But the habitat is a rare one.
EU7310 Aapa mires	<input type="checkbox"/>	Mire complexes characterised by centres of minerotrophic fen vegetation. Included mire units: mixed mires, string-fens, flark-fens, unraised <i>Sphagnum fuscum</i> -bogs, unpatterned topogenous or soligenous lawn-, carpet or mud-bottom fens.	Listed in the EU Habitats Directive, Annex I. In 2013 the conservation status was favourable for the habitat in the Swedish part of the EU Alpine region.

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

4.1 - Ecological character

The site is located in the EU Alpine region. Ännsjön is a large, very shallow, oligotrophic, freshwater lake, surrounded by extensive mires. There are inland deltas at the western and north-western shores of the lake, which are valuable from conservation and educational points of view. The deltas represent a rather rare feature in the county. The mires around the lake are good examples of maritime influenced mire types. There is a mixture of bogs and fens. The flora is diverse. The vegetation in the bog consists of e.g. heather (*Calluna vulgaris*), dwarf birch (*Betula nana*) and *Sphagnum fuscum*. Structure elements like strings, tussocks, hollows and pools are found in the bog. In the fen, vegetation is dominated by sedge-species (*Carex* spp.). Some parts of the fen are rich, with species like slender sedge (*Carex lasiocarpa*) and purple moor-grass (*Molinia caerulea*). *Racomitrium lanuginosum* should be noted as a species which indicate the maritime influence on the mire vegetation. The fen is rich in brown mosses and sedge. Noteworthy moss species include *Paludella squarrosa*, *Tomenthypnum nitens* and *Cinclidium stygium* which all grow in rich fens. *Eriophorum latifolium* and *Carex dioica* are other species worth mentioning

Ännsjön is very important for breeding and migrating wetland birds. Black-throated diver (*Gavia arctica*), widgeon (*Anas penelope*), velvet scoter (*Melanitta fusca*), common scoter (*M. nigra*), long-tailed duck (*Clangula hyemalis*) arctic tern (*Sterna paradisaea*), greenshank (*Tringa glubularia*), wood sandpiper (*Tringa glareola*), golden plover (*Pluvialis apricaria*) and decreasing number of dunlin (*Calidris alpina*) are example of noteworthy species. The area is also important for wintering raptors.

In the peat of Klockamyren, there are two layers of pine trunks in the steep slope near the lake. These layers are approximately 4600 and 6100 years old, respectively, indicating that the area was forested at that time.

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 >> L: Permanent inland deltas		3	900	Rare
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks		4	110	Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		1	5800	Representative
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		4	100	Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		2	2500	Representative
Fresh water > Marshes on inorganic soils >> W: Shrub-dominated wetlands		4	100	Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		0		
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		0		

Other non-wetland habitat

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

4.3 - Biological components

4.3.1 - Plant species

<no data available>

4.3.2 - Animal species

Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
CHORDATA/ACTINOPTERYGII	<i>Salvelinus fontinalis</i>	Common brook trout;Coaster;Brookie;Brookie	Actually (major impacts)	No change
CHORDATA/ACTINOPTERYGII	<i>Salvelinus namaycush</i>	Lake charr	Actually (major impacts)	decrease

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 located in the upper part of the catchment area of the river Indalsälven. The Indalsälven finally enters the Baltic sea far from the site. The streams Enan, Handölan, Rekån and Järpån are tributaries to the lake Ånnsjön.

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 surface water	<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):

There is deposit of sediment in the lake in the delta areas.

4.4.6 - Water pH

Alkaline (pH>7.4)

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

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Unknown

4.4.8 - Dissolved or suspended nutrients in water

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:

The site is surrounded by mountainous areas to the south and the southwest. To the west, the north and the east are slopes with a mixture of peatlands and forests of less conservation value.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Low
Wetland non-food products	Livestock fodder	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Hazard reduction	Flood control, flood storage	Low

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Nature observation and nature-based tourism	High
Recreation and tourism	Picnics, outings, touring	Medium
Recreation and tourism	Recreational hunting and fishing	High
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium
Scientific and educational	Major scientific study site	Medium
Scientific and educational	Educational activities and opportunities	Medium

Other ecosystem service(s) not included above:

Food for human refers to picking berries and fungi. Livestock fodder refers to fodder for the reindeers.

Within the site: 2000

Outside the site: 2000

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 type="checkbox"/>

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

The Sami has right 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:

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

Postal address:

E-mail address:

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	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input type="checkbox"/>	No change

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	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	Low impact	Low impact	<input type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	High impact	High impact	<input checked="" type="checkbox"/>	No change	<input checked="" 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	Several sites see national legislation below.		partly

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
1. EU Natura 2000 SAC	Ånnsjön	http://www.lansstyrelsen.se/jamtland/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natur-2000/ÅnnsjonSE0720282bp4.pdf	partly
1. EU Natura 2000 SPA	Ånnsjön	http://www.lansstyrelsen.se/jamtland/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natur-2000/ÅnnsjonSE0720282bp4.pdf	partly
1. site of national importance for nature conservation	Ånnsjön	http://nvpub.vic-metria.nu/handlingar/rest/dokument/203954	partly
2. EU Natura 2000 SAC	Åreälven	http://www.lansstyrelsen.se/jamtland/SiteCollectionDocuments/sv/djur-och-natur/skyddad-natur/natur-2000/ÅreälvenSE0720286.pdf	partly
2. site of national importance for nature conservation	Åreälven-Mødstugan	http://nvpub.vic-metria.nu/handlingar/rest/dokument/203952	partly
3. site of national importance for nature conservation	Jämtlandsfjällen	http://nvpub.vic-metria.nu/handlingar/rest/dokument/203955	partly
Protected against building hydro-electric dams	Åreälven		partly
bird sanctuary	Ånnsjön	http://www.lansstyrelsen.se/Jamtland/Sv/djur-och-natur/skyddad-natur/fagelskyddsomraden/Pages/ansjon.aspx	partly
nature reserve	Välådalen	http://www.lansstyrelsen.se/jamtland/Sv/djur-och-natur/skyddad-natur/naturreservat/are/valadalen/Pages/index.asp	partly

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Lake Ånnsjön-Storlien	http://datazone.birdlife.org/site/factsheet/lake-ansjon-storlien-iba-sweden	

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

Other:

Most part of the Ramsar site is included in Natura 2000, mainly the lake and the mires in the west part of the site. The mires in the west part is also included in the Swedish Mire Protection Plan.

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:

Near the delta formation, close to the village Ånn, there are foot path and boards walks connecting a numbers of hides and towers for bird watching. In the west part of the site near Handöl, there is also foot path to bird towers.

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
Birds	Implemented

Handöl bird station, in the west part of the site, has activities in the field of monitoring of birds.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Lundqvist, J. Geological Survey of Sweden. 1969. Description to the map of the Quaternary deposits of the county of Jämtland.
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 i 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:



View from a bog part in Klockamyren in the west part of the site (P-O Nystrand, County administration board of Jämtland, 11-07-1991)



View from Klockamyren in the west part of the site (P-O Nystrand, County administration board of Jämtland, 11-07-1991)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1974-12-05