

Ramsar Information Sheet

Published on 6 April 2017 Update version, previously published on : 1 January 2008

Sweden Åsnen



Designation date 12 June 1989
Site number 429
Coordinates 56°37'54"N 14°43'07"E
Area 17 866,00 ha

https://rsis.ramsar.org/ris/429 Created by RSIS V.1.6 on - 2 February 2018

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 Åsnen consists of a large, shallow and mesotrophic freshwater lake. The lake has many bays and islands. The northern part of the lake is surrounded by flat meadows and marshlands which are liable to flooding. The rest of the surroundings have a relatively high proportion of broad-leaved deciduous forest. Other parts have a stony shoreline, giving way to coniferous forest with old pines. There are several bogs scattered around the lake.

The mosaic and interaction of the limnic and terrestrial habitats is the key to the extraordinarily rich biodiversity at the site and its surroundings. The lake supports a rich variety of fish, including rare species. The site also supports a rich community of breeding birds and is an internationally important staging area for migratory Anatidae. Among breeding birds is Gavia arctica and Pandion haliaetus prominent species.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

| Name | Helene Pettersson | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| Institution/agency | Länsstyrelsen i Kronobergs län | | | | | | | |
| Postal address | Länsstyrelsen i Kronobergs län, 351 86 Växjö, Sweden | | | | | | | |
| E-mail | kronoberg@lansstyrelsen.se | | | | | | | |
| Phone | +46 010 223 70 00 | | | | | | | |
| Fax | +46 010 223 72 20 | | | | | | | |
| Compiler 2 | | | | | | | | |
| Name | Jenny Lonnstad | | | | | | | |
| Institution/agency | Naturvårdsverket (Swedish EPA) | | | | | | | |
| Postal address | Naturvårdsverket, 106 48 Stockholm, Sweden | | | | | | | |
| E-mail | jenny.lonnstad@naturvardsverket.se | | | | | | | |
| Phone | +46 10 698 15 92 | | | | | | | |
| Fax | +46 10 698 16 00 | | | | | | | |
| 2.1.2 - Period of collection of data and information used to compile the RIS From year 2006 To year 2015 | | | | | | | | |
| 2.1.3 - Name of the Ramsar Site | | | | | | | | |
| Official name (in English, French or Spanish) | Åsnen | | | | | | | |
| Unofficial name (optional) | originally designated as 'Lake Åsnen' | | | | | | | |
| Chomountaine (opponial) Originally accignated as Lake Achen | | | | | | | | |
| 2.1.4 - Changes to the houndaries an | d area of the Site since its designation or earlier undate | | | | | | | |
| _ | d area of the Site since its designation or earlier update | | | | | | | |
| (Update) A | Changes to Site boundary Yes No No No No No No No N | | | | | | | |
| (Update) A | Changes to Site boundary Yes No No No No No No No N | | | | | | | |
| (Update) A (Update) The boundary has been d | Changes to Site boundary Yes ^③ No [○] Ielineated more accurately ✓ | | | | | | | |
| (Update) A (Update) The boundary has been d (Update) The boundare) The boundare) | Changes to Site boundary Yes No O lelineated more accurately undary has been extended □ | | | | | | | |
| (Update) A (Update) The boundary has been d (Update) The boundare) The boundare) | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted e) B. Changes to Site area the area has increased | | | | | | | |
| (Update) A (Update) The boundary has been d (Update) The bou (Update) The bou (Update) The Site area has been d | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted undary has been restricted e) B. Changes to Site area the area has increased calculated more accurately letineated more accurately letineated more accurately | | | | | | | |
| (Update) A (Update) The boundary has been de (Update) The boundary The boundary The boundary The boundary The boundary The Site area has been de (Update) The Site has been de (Update) The Site area has increased because | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted e) B. Changes to Site area the area has increased calculated more accurately letineated more accurately letineated more accurately ee of a boundary extension | | | | | | | |
| (Update) A (Update) The boundary has been d (Update) The bou (Update) The bou (Update) The Site area has been d | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted e) B. Changes to Site area the area has increased calculated more accurately letineated more accurately letineated more accurately ee of a boundary extension | | | | | | | |
| (Update) A (Update) The boundary has been of (Update) The boundary The boundary The boundary The boundary The Site area has been of (Update) The Site area has been of (Update) The Site area has increased because (Update) The Site area has decreased because (Update) The Site area has decreased because (Update) The Site area has decreased because 2.1.5 - Changes to the ecological characteristics of the ecological characteristics of the decological characteristics of the ecological characteristics of the ecologic | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted letineated more accurately letineated more accuratel | | | | | | | |
| (Update) A (Update) The boundary has been d (Update) The boundary The boundary The boundary The boundary The boundary The Site area has been d (Update) The Site area has been d (Update) The Site has been d (Update) The Site area has increased because (Update) The Site area has decreased because | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted letineated more accurately letineated more accuratel | | | | | | | |
| (Update) A (Update) The boundary has been of (Update) The boundary The boundary The boundary The boundary The boundary The Site area has been of (Update) The Site area has been of (Update) The Site area has increased because (Update) The Site area has decreased because (Update) The Site ar | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted letineated more accurately letineated more accuratel | | | | | | | |
| (Update) A (Update) The boundary has been of (Update) The boundary The boundary The boundary The boundary The boundary The Site area has been of (Update) The Site area has been of (Update) The Site area has increased because (Update) The Site area has decreased because (Update) The Site ar | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted e) B. Changes to Site area the area has increased salculated more accurately letineated more accurately letineated more accurately eo f a boundary extension let of a boundary restriction area for a boundary restriction let of a boundary restriction | | | | | | | |
| (Update) A (Update) The boundary has been of (Update) The boundary The boundary The boundary The boundary The boundary The Site area has been of (Update) The Site area has been of (Update) The Site area has increased because (Update) The Site area has decreased because (Update) The Site area has increased because (Update) The Site area has decreased because (Update) The Site ar | Changes to Site boundary Yes No O letineated more accurately undary has been extended undary has been restricted e) B. Changes to Site area the area has increased salculated more accurately letineated more accurately letineated more accurately eo f a boundary extension let of a boundary restriction area for a boundary restriction let of a boundary restriction | | | | | | | |

| 1415 101 5110 110, 427, 745 | iteli, Streeti |
|---|---|
| (Update) Changes result | ing from causes operating beyond the site's boundaries? |
| | ent upon site boundary reduction alone (e.g., and types formerly included within the site)? |
| (Update) Changes conseque the inc | ent upon site boundary increase alone (e.g., dusion of different wetland types in the site)? |
| (Update) Please describe an | y changes to the ecological character of the Ramsar Site, including in the application of the Criteria, since the previous RIS for the site. |
| The boundary has bee | en better delineated. This has resulted in that more open water, important breeding areas on land along the shore and djacent to the lake have been included. It has also resulted in that some built up areas, arable land and dry forest as well nt wetland (that don't have the conservation values that was the cause of the designation) have been excluded. |
| (Update) Is the change in ec | vological character negative, human-induced value of the limit of acceptable change) Yes O |
| 2.2 - Site location | |
| 2.2.1 - Defining the Site | e boundaries |
| b) Digital map/image | |
| <1 file(s) uploaded> | |
| | Former maps 0 |
| Boundaries description | |
| | the lake in a distance between 20 -100 metre up from the shores. Islands bigger than about 60 ha are excluded. The site hemssjön about 1 km east of lake Åsnen and the river Aggaån that connects Lidhemssjön with Åsnen. |
| | |
| 2.2.2 - General location | |
| a) In which large administra | the site lie? Kronoberg |
| b) What is the nearest to | wn or population centre? Alvesta 25 km north, Tingsryd 20 km south-east, Växjö 25 km north |
| 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 adjacer | nt to another designated Ramsar Site on the territory of another Contracting Party? Yes O No |
| 2.2.4 - Area of the Site | |
| Official area, | in hectares (ha): 17866 |
| Area, in hectares (ha) as | s calculated from GIS boundaries 17879.82 |
| 2.2.5 - Biogeography | |
| Biogeographic regions | Diama ampulsia marian |
| Regionalisation scheme(s) Udvardy's Biogeographical Provinces | Biogeographic region 10 Boreonemoral |
| Bailey's Ecoregions | 240 Marine Division |
| Other scheme (provide name below) | See textbox below |
| Freshwater Ecoregions of the World (FEOW) | 406 Northern Baltic drainages |
| EU biogeographic regionalization | Boreal |
| | |

Other biogeographic regionalisation scheme

Nordiska Ministerrådet (NMR): Boreonemoral zon TEOWs and EEA 2002 DMEER: Sarmatic mixed forest

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 provides flood control and nutrient retention.

Other ecosystem services provided

The wet meadows provide livestock fodder. The peatlands store carbon.

The site Åsnen contains a rich and shifting composition of representative natural wetland types in the EU boreal region, including oligotrophic to mesotrophic standing waters, watercourses, wet meadows, transition mires, quaking bogs and alluvial forests.

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

Lake Asnen has a species-rich bird life with internationally important breeding populations. The lake is also an internationally important site for resting and wintering birds. Since the lake is shallow, there is a high turnover of nutrients and water, with good conditions for a high production of water-living organisms. The number of fish and water-living gastropods is considerably larger than in other lakes in the county. Lake Asnen hosts approx. 20 fish species. The outlet has been completely cut off by dams but the County Administrative Board has a plan to open up the natural stream in about 5 years. In the forests just outside the Ramsar site are many breeding birds in broad-leaved deciduous forest and in old pines. Due to its many old and thick trees and dead wood in the near surrounding, the site is one of the best areas for rare wood-living beetles in the province of Småland. Several of these species are connected to old beech forest and dead beech wood.

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

☑ Criterion 5 : >20.000 waterbirds

Overall waterbird numbers 35000

Start year 1990

Source of data: Estimation based upon available inventories and observations. See textbox 3.3 and section 6.1.1.

- ☑ Criterion 6 : >1% waterbird population
- 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 |
|-----------------------|-------------|-------------|-------------|-------------|---------------------|------------------|-----------------------------|---|
| Dichelyma capillaceum | | | ✓ | | | | Swedish Red List 2015 (NT). | See textbox below the table and in section 3.1. |
| Pedicularis sylvatica | | | Ø | | | | Swedish Red List 2015 (NT). | See textbox below the table and in section 3.1. |
| Pilularia globulifera | | V | | | NT ●\$ ●® | | Swedish Red List 2015 (VU). | See textbox below the table and in section 3.1. |

Criterion 2: For all species, their 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 Swedish database for observations http://www.artportalen.se/.

Pilularia globulifera has been found in a few places but the total distribution of Pilularia globulifera at the site is not known.

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

| 3.3 - AHIII II | al species wi | iose present | e rea | ales | to the ir | nema | ational impor | tance of | me | Site | | | |
|-------------------|-----------------------|---------------------------|--|---------------------|---|-------|---------------------|-----------------------|------------------|-------------------|----------------------|---|--|
| Phylum | Scientific name | Common name | Spec qualif und criter 2 4 | fies ler rion | Species contributes under criterion 3 5 7 8 | Size | Period of pop. Est. | % occurrence 1) | | CITES Appendix | CMS Appendix I | Other Status | Justification |
| Birds | | | | | | _ | | <u> </u> | | 1 | | | |
| CHORDATA/ AVES | Actitis hypoleucos | Common Sandpiper | | | 2 000 | | | | LC ●数 ●際 | | | | Breeding, staging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Alcedo atthis atthis | Kingfisher | 2 0 | | 2 000 | | | | LC | | | Swedish Red List 2015 (VU). | See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Anas clypeata | Northern Shoveler | | | 2 000 | | | | LC ●数 ●際 | | | | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Anas strepera | Gadwall | | | 2 000 | | | | LC | | | | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Anser anser | Greylag Goose | | | 2 000 | | | | LC ●部 | | | | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Anser fabalis | Bean Goose | | | | 15000 | | | LC ●部 | | | Swedish Red List 2015 (NT). | Refuge during the winter season, staging. See textbox below th table and in section 3.1. |
| CHORDATA/ AVES | Ardea cinerea | Gray Heron; Grey Heron | | | 2 000 | | | | LC | | | | Foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Aythya ferina | Common Pochard | V | | 200c | | | | VU ●\$‡ ●爾 | | | Swedish Red List 2015 (VU). | Staging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Botaurus stellaris | Eurasian Bittern | | | 2 000 | | | | LC Str | | | Swedish Red List 2015 (NT). EC Birds Directive Annex I. | See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Bucephala clangula | Common Goldeneye | | | 2 000 | | | | LC ●器 | | | | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Chlidonias niger | Black Tern | I | | 2 000 | | | | LC | | | Swedish Red List 2015 (VU). EC Habitats Directive Annex II. | Breeding, staging, foraging. See textbox below the table and in section 3.1. |

| Phylum | Scientific name | Common name | qu u cr | pecies ualifies under iterion 4 6 | COL | pecies ntributes under riterion 5 7 8 | Pop. Size | Period of pop. Est. | % occurrence 1) | IUCN Red List | CITES Appendix I | CMS Appendix I | Other Status | Justification |
|----------------------------|----------------------------|--------------------------------------|---------------|---|-----|---|--------------|---------------------|-----------------------|----------------------------------|---------------------|----------------------|---|--|
| CHORDATA/ AVES | Chroicocephalus ridibundus | Black-headed Gull | | 2 0 | | | | | | LC Sign | | | | Breeding, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Circus aeruginosus | Western Marsh Harrier | | 20 | | | | | | LC Str | | | | Foraging, breeding. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Circus cyaneus | Northern Harrier | | 2 🗆 | | | | | | LC Sign | | | Swedish Red List 2015 (NT). EC Birds Directive Annex I. | Foraging during migration. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Gallinago gallinago | Common Snipe | | 2 0 | | | | | | LC ●数 ●翻 | | | | Foraging, staging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Gavia arctica | Arctic Loon; Black- throated Loon | | 2 🗆 | | | 40 | | | LC OTH | | | EC Birds Directive Annex I. | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Haliaeetus albicilla | White-tailed Eagle | | 2 0 | | | | | | LC Str | ✓ | ✓ | Swedish Red List 2015 (NT). EC Birds Directive Annex I. | Foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Mergus merganser | Common Merganser | | 1 | | 2 00 | 20000 | | 7 | LC om | | | | Criterion 6: Of the North-west & Central Europe (win) population (total 266000). Criterion 4: Refuge during the winter season. See textbox below and in section 3.1. |
| CHORDATA/ AVES | Mergus serrator | Red-breasted Merganser | | 2 🗆 | | | | | | LC Sign | | | | Staging, probably breeding. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Pandion haliaetus | Osprey, Western Osprey | | 2 0 | | | 45 | | | LC | | | EC Birds Directive Annex I. | Foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Podiceps cristatus | Great Crested Grebe | | 2 0 | | | | | | LC Sign | | | | Breeding, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Porzana porzana | Spotted Crake | 2 | | | | | | | LC | | | Swedish Red List 2015 (VU). | See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Rallus aquaticus | Water Rail | | | | | | | | LC | | | | See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Sterna hirundo | Common Tern | | 2 0 | | | | | | LC | | | EC Birds Directive Annex I. | Breeding, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | Tringa totanus | Common Redshank | | 2 🗆 | | | | | | LC ●数 ●開 | | | | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| Fish, Mollusc | and Crustacea | | | | | | | | | | | | | |
| CHORDATA/ ACTINOPTERYGI | Anguilla anguilla I | Eel | V | | | | | | | CR ●部 | | | Swedish Red List 2015 (CR). | See textbox below the table and in section 3.1. |
| CHORDATA/ ACTINOPTERYGI | Gobio gobio | Gudgeon | | | | | | | | LC ©\$\$ | | | | See textbox below the table and in section 3.1. |
| MOLLUSCA/ BIVALVIA | Unio crassus | Thick Shelled River Mussel | V | | | | | | | EN ●# ●# | | | Swedish Red List 2015 (EN). EC Habitats Directive Annex II. | See textbox below the table and in section 3.1. |
| Others | | | | | | | | | | | | | | |
| CHORDATA/ MAMMALIA | Lutra lutra | European Otter | 2 | | | | | | | NT ST ST ST ST ST | ✓ | | Swedish Red List 2015 (NT). EC Habitats Directive Annex II. | See textbox below the table and in section 3.1. |

¹⁾ Percentage of the total biogeographic population at the site

Criterion 2, 3, 4, 5 and 6: For all species, their 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 Swedish database for observations http://www.artportalen.se/. Data about bivalvia: http://www.musselportalen.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 site Åsnen consists of a very large, shallow and mesotrophic lake, containing many bays and islands. The northern part of the lake is surrounded by flat meadows and marshlands which are liable to flooding. The rest of the surroundings have a relatively high proportion of broadleaved deciduous forest. Other parts have a stony shoreline, giving way to coniferous forest with old pines. There are several bogs scattered around the lake. The mosaic and interaction of the limnic and terrestrial habitats is the key to the extraordinarily rich biodiversity in the site and its surroundings. The lake supports a rich variety of fish, including several rare species. The area also supports a rich community of breeding and resting birds.

4.2 - What wetland type(s) are in the site?

Inland wetlands

| Wetland types (code and | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) | Justification of Criterion 1 |
|---|------------|--|-----------------|------------------------------|
| name) | | (//g/outdot ///d/ | of wetland type | |
| Fresh water > Flowing water >> Mt Permanent rivers/ streams/ creeks | | 0 | | Representative |
| Fresh water > Lakes and pools >> O: Permanent freshwater lakes | | 1 | 14000 | Representative |
| Fresh water > Marshes on inorganic soils >> Tp: Permanent freshwater marshes/ pools | | 0 | | |
| Fresh water > Marshes on peat soils >> U: Permanent Non- forested peatlands | | 3 | 500 | Representative |
| Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands | | 0 | 300 | Rare |
| Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands | | 2 | 500 | Representative |

Human-made wetlands

| Wetland types (code and name) | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|---|------------|--|------------------------------|------------------------------|
| 4: Seasonally flooded agricultural land | | 4 | 300 | Representative |

Other non-wetland habitat

| Other Hor-Pwetiand Habitat | | | | | | | |
|--|--------------------|--|--|--|--|--|--|
| Other non-wetland habitats within the site | Area (ha) if known | | | | | | |
| Deciduous forest | | | | | | | |
| Coniferous forest | | | | | | | |

4.3 - Biological components

4.3.1 - Plant species

Invasive alien plant species

| irivasive alieri piarit species | | | |
|---------------------------------|-------------|--------------------------|-----------------------|
| Scientific name | Common name | Impacts | Changes at RIS update |
| Nymphoides peltata | | Actually (minor impacts) | increase |

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 | Dfb: Humid continental (Humid with severe winter, no dry season, warm summer) |

Compared to the rest of the inland province, the surroundings of Lake Åsnen have a fairly mild climate. Average winter temperature (January) is minus 2 to minus 4 C°, while average summer temperature (July) is 15 to 17 C°.

| 4 | 4 0 | _ | 0.00 | 0.00 |
|-----|-------|--------------------------|--------|---------|
| 4.4 | 4.2 . | Geom | orbnic | setting |

| AND RESERVED AND ADDRESS OF A SECOND AND ADDRESS OF A SECOND PROPERTY OF | |
|--|-----|
| a) Mnimum elevation above sea level (in metres) | |
| , | 130 |
| motron | 100 |
| mettes) | |

a) Maximum elevation above sea level (in metres)

Entire river basin

Upper part of river basin \square

Middle part of river basin

Lower part of river basin \square

More than one river basin \Box

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 situated in the river Mörrumsån catchment area. A number of small and larger rivers enter the lake Åsnen. The outlet from the lake is the river Mörrumsån, which finally ends in the Baltic sea. The catchment area is large, 3146 km2.

4.4.3 - Soil

Mneral 🗹

Organic 🗹

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

No available information \Box

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)?

Please provide further information on the soil (optional)

The terrain is flat and the soil consists mostly of moraine. In the north a great part of the surrounding landscape consists of open fields and grasslands. South-west of the lake, the soils are mostly lean and washed-out. Wide stretches of rocks and boulders are common, both in the water and on land. Along the south-western shore, there is a steep esker.

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 surface water | 2 | No change |
| Water inputs from rainfall | | No change |

Water destination

| Presence? | | Changes at RIS update | |
|-------------------------|--|-----------------------|--|
| To downstream catchment | | No change | |

Stability of water regime

| Presence? | | Changes at RIS update | |
|-----------|-----------------------------|-----------------------|--|
| | Water levels largely stable | No change | |

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

The lake Åsnen is regulated with a dam by the outflow. The site also includes Lake Lidhemssjön, which is a shallow, eutrophic lake that has been artificially lowered.

4.4.5 - Sediment regime

Sediment regime unknown

| rds for Site no. 425, Ashen, Sweden | | |
|--|--|--|
| (ECD) Water turbidity and colour The water has been getting browner for about 20 years. | | |
| | | |
| I.6 - Water pH | | |
| Circumneutral (pH: 5.5-7.4) | | |
| (Update) Changes at RIS update No change ■ Increase □ Decrease □ Unknown □ | | |
| Unknown □ | | |
| ease provide further information on pH (optional): | | |
| he water quality of the lake has been restored by adding lime in the upper river basin to prevent negative effects from acid rain. | | |
| ł.7 - Water salinity | | |
| Fresh (<0.5 g/l) | | |
| (Update) Changes at RIS update No change ● Increase ○ Decrease ○ Unknown ○ | | |
| Unknown □ | | |
| | | |
| 8.8 - Dissolved or suspended nutrients in water | | |
| Mesotrophic ✓ | | |
| (Update) Changes at RIS update No change Increase Decrease Unknown O | | |
| Unknown □ | | |
| 9.9 - 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 \circ ii) significantly different \circ site itself: | | |
| Surrounding area has greater urbanisation or development ✓ | | |
| Surrounding area has higher human population density \Box | | |
| Surrounding area has more intensive agricultural use | | |
| Surrounding area has significantly different land cover or habitat types 🗹 | | |

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|---------------------------|------------------|--------------------------------|
| Wetland non-food products | Livestock fodder | Medium |

There is a larger proportion of conifer forests, arable land and built up areas outside the site.

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

Regulating Services

| | r togularing con noce | | |
|----------------------------|---|--------------------------------|--------|
| Ecosystem service Examples | | Importance/Extent/Significance | |
| | Erosion protection Soil, sediment and nutrient retention | | Low |
| | Pollution control and Water purification/waste detoxification treatment or dilution | | Medium |
| | Hazard reduction | Flood control, flood storage | Medium |

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 |
| Spiritual and inspirational | Cultural heritage (historical and archaeological) | Low |
| Scientific and educational | Educational activities and opportunities | Medium |

Other ecosystem service(s) not included above:

The first people in the area arrived along the waterways, just after the inland ice retreated. There are plenty of ancient monuments in the area. In the Middle Ages several churches were built, with Jäts old church being the only one remaining today. The road structure was developed from the Middle Ages and forward. The area host the longest and most elegant vaulted stone bridge in the county at Blidingsholm, where you can also see ancient eel fishing constructions. As the Danish border was situated south of Åsnen until 1645, there are medieval defensive constructions at the lake's outflow. Huseby castle holds among the oldest ironworks in the county. It was started in the 17th century, using ore from the lake and water power from the river Mörrumsån. The agricultural landscape has been shaped by continuous cultivation for a long period of time. As railways were constructed west, south and east of Åsnen 1874-1900, the district was considerably affected, e.g. by the emergence of smaller urban areas. In earlier times, the floating of timber as well as transports on the lake was considerable. The lake is classified as being of national interest for commercial fishing (strong populations of several commercial species, notably Pike (Esox lucius) and Perch (Perca fluviatilis). The introduced crayfish (Pacifastacus leniusculus) is also subject to fishing.

| , | , , |
|---|--|
| Within the site: | 50000 |
| Outside the site: | 50000 |
| Have studies or assessments been made of ecosystem services prov | f the economic valuation of Yes O No Unknown O wided by this Ramsar Site? |
| 4.5.2 - Social and cultural values | |
| i) the site provides a model of wetland wis application of traditional knowledge and met use that maintain the ecological | thods of management and |
| ii) the site has exceptional cultural trad civilizations that have influenced the ecological | |
| iii) the ecological character of the wetland with local communiti | depends on its interaction its interaction its indigenous peoples |
| iv) relevant non-material values such as sac their existence is strongly linked with the main | · _ |
| <no available="" data=""></no> | |

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

| | wners | |
|--|-------|--|
| | | |

| Category | Within the Ramsar Site | In the surrounding area |
|------------------|------------------------|-------------------------|
| National/Federal | → | |
| government | | |

Private ownership

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

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

The site is mainly privately owned. The reserves within the site, as well as some other areas, are state-owned (approximately 10 % of the site). The surrounding areas are mainly owned by private people.

5.1.2 - Management authority

Please list the local office / offices of any The Ramsar site in general is managed by the County Administrative Board. The in-situ management in agency or organization responsible for the protected areas is taken care of the County Administrative Board. The in-situ management of the managing the site: unprotected areas is taken care of by the land owners.

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

Kontaktperson för Ramsarområden, contact person for Ramsar sites

Länsstyrelsen i Kronobergs län Postal address: County Administrative Board 351 86 Växjö

E-mail address: kronoberg@lansstyrelsen.se

5.2 - Ecological character threats and responses (Management)

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

Human settlements (non agricultural)

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|----------------------------------|---------------|------------------|-----------------|-----------|-------------------------|----------|
| Housing and urban areas | Medium impact | Medium impact | | No change | > | increase |
| Water regulation | | | | | | |

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|--------------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Canalisation and river regulation | Medium impact | Medium impact | ✓ | No change | | No change |

Agriculture and aquaculture

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|---------------------------------------|---------------|------------------|-----------------|-----------|-------------------------|----------|
| Annual and perennial non-timber crops | Medium impact | Medium impact | | No change | ✓ | decrease |

Energy production and mining

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|----------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Renewable energy | Medium impact | Low impact | | No change | √ | No change |

Transportation and service corridors

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|----------------------------------|---------------|------------------|-----------------|----------|-------------------------|-----------|
| Unspecified | Medium impact | Medium impact | ✓ | increase | | 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 | Medium impact | Medium impact | ✓ | No change | \checkmark | No change |
| | Hunting and collecting terrestrial animals | Low impact | Low impact | ✓ | No change | | No change |

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|-------------------------------------|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| Recreational and tourism activities | Low impact | Medium impact | \checkmark | No change | ✓ | No change |
| Natural system modifications | | | | | | |
| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |

1

No change

Medium impact

No change

| Invasive and | other prob | lematic sp | ecies and | genes |
|--------------|------------|------------|-----------|-------|

Medium impact

Dams and water

management/use

| initadito ana orioi probic | macro and other problemate operate and gories | | | | | |
|---------------------------------------|---|------------------|-----------------|----------|-------------------------|-----------|
| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
| Invasive non-native/ alien species | Medium impact | High impact | | increase | ✓ | No change |

Pollution

| 1 diagon | | | | | | | |
|----------|--|---------------|------------------|-----------------|-----------|-------------------------|-----------|
| | Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
| | Agricultural and forestry effluents | High impact | High impact | | No change | ✓ | No change |
| | Household sewage, urban waste water | High impact | High impact | | No change | 2 | decrease |

Please describe any other threats (optional):

Forestry is partly restricted, particularly in the nature reserves, but may outside protected areas locally constitute a threat to the natural values of the site. During breeding time, intensive recreational activities, mainly canoeing may cause disturbance to breeding birds such as Ospreys and Black-throated diver. For that reason, special waterways for canoeing have been introduced and people renting canoes are being informed about the restrictions. There are from time to time problems with thieves collecting eggs from bird nests. Probably forestry and agriculture (through run-off of nutrients) from surrounding land areas may be a threat to the water quality and some conservation values. Locally, discontinued cattle grazing creates problem. In recent time, transparency in the water has been reduced; the water is more "Brown", resulting in negative effects on flora and fauna. The causes for this change have not been clarified by the researchers. A number of local and regional roads and an old railway embankment cross the site.

5.2.2 - Legal conservation status

Regional (international) legal designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|------------------|--------------------------------|------------------------|--------------------------|
| EU Natura 2000 | See national legislation below | | partly |

National legal designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|-----------------------------|-----------------------------------|------------------------|--------------------------|
| EU Natura 2000 SAC & SPA(1) | Husebymaden | | partly |
| EU Natura 2000 SAC & SPA(2) | Tärningsö | | partly |
| EU Natura 2000 SAC & SPA(3) | Agnäs | | partly |
| EU Natura 2000 SAC & SPA(4) | Västra Åsnen | | partly |
| EU Natura 2000 SAC & SPA(5) | Östra Åsnen | | partly |
| EU Natura 2000 SAC & SPA(6) | Långö | | partly |
| EU Natura 2000 SAC (1) | Strandäng vid Skatelövsfjorden | | partly |
| EU Natura 2000 SAC (2) | Torne | | partly |
| EU Natura 2000 SAC (3) | Lidhem | | partly |
| EU Natura 2000 SAC (4) | Tåget | | partly |
| EU Natura 2000 SAC (5) | Sånnahult | | partly |
| EU Natura 2000 SAC (6) | Lunnabacken | | partly |
| EU Natura 2000 SAC (7) | Hunshult | | partly |

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|---|----------------------|--|--------------------------|
| Nature reserve (1) | Husebymaden | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/husebymaden/ Pages/indexaspx | partly |
| Nature reserve (10) | Hunshult | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/hunshult/Pag es/index.aspx | partly |
| Nature reserve (11) | Torne bokskog | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/torne-boksko g/Pages/default.aspx | partly |
| Nature reserve (12) | Grytö | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/gryto/Pages/ index.aspx | partly |
| Nature reserve (13) | Lunnabacken | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/lunnabacken/ Pages/index.aspx | partly |
| Nature reserve (2) | Bjurkärr | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/bjurkarr/Pag es/index.aspx | partly |
| Nature reserve (3) | Långö | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/lango/Pages/ index.aspx | partly |
| Nature reserve (4) | Toftåsa myr | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/toftasa-myr/ Pages/index.aspx | partly |
| Nature reserve (5) | Västra Åsnens övärld | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/vastra-asnen s- ovarld/Pages/index.aspx | partly |
| Nature reserve (6) | Agnäs | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/agnas/Pages/ index.aspx | partly |
| Nature reserve (7) | Utnäsuddens övärld | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/utnasuddens- ovarld/Pages/index.aspx | partly |
| Nature reserve (8) | Hackekvarn | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/hackekvam/P ages/default.aspx | partly |
| Nature reserve (9) | Ekefors | http://www.lansstyrelsen.se/kron oberg/Sv/djur-och-natur/skyddad- natur/naturreservat/ekefors/Page s/default.aspx | partly |
| biotope protection areas | | | partly |
| bird sanctuary | | | partly |
| site of national importance for nature conservation | Åsnen | http://nvpub.vic-metria.nu/hand lingar/rest/dokument/202772 | partly |

Non-statutory designations

| Designation type | Name of area | Online information url | Overlap with Ramsar Site |
|---------------------|--------------|--|--------------------------|
| Important Bird Area | Lake Åsnen | http://datazone.birdlife.org/sit e/factsheet/lake-åsnen-iba-swed en | partly |

| 5.2.3 - IUCN protected areas categories (20 | eaories (200 | cated | areas | protected | Νr | JCN | 3 - | .2.3 | 5. |
|---|--------------|-------|-------|-----------|----|-----|-----|------|----|
|---|--------------|-------|-------|-----------|----|-----|-----|------|----|

| 1 | 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 |
| V | IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention |
| V | 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 | Proposed |

Other:

There are plans to make parts of the site a national park and preparations are on-going. The national park is planned to be inaugurated in 2017. It is about to contain 2200 hectares, about 1/7 of the whole site. It will contain lake areas, old broadleaved forests, mires and alluvial 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

processes with another Contracting Party?

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

<no data available>

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Länsstyrelsen i Kronobergs län; Lessmark, O. 2013. Åsnen – limnologiskt kunskapsunderlag för nationalparksbildande. ISSN 1103-8209, Meddelande nr 2013:02.

Länsstyrelsen i Kronobergs län, 2004. Åsnen i översiktsplanen – Planeringsunderlag 2004. ISSN 1103-8209, meddelande 2004:34.

Länsstyrelsen i Kronobergs län; Nilsson, S. G. 1980. Häckfågelfaunan i sjön Åsnen.

Länsstyrelsen i Kronobergs län; Kahlman, J., Karlsson-Rolander, J. 2009. Häckfågelfaunan i sjön Åsnen, Kronobergs län.

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

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

vi. other published literature

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



The west part of lake Åsnen, seen from south against north. (Länsstvrelsen i Kronobergs län, 06-09-2012)

6.1.4 - Designation letter and related data

Designation letter

Date of Designation 1989-06-12