



Ramsar Information Sheet

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 |

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

Compiler 1

| | |
|--------------------|--|
| Name | Helene Pettersson |
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Compiler 2

| | |
|--------------------|--|
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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' |

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 increased |
| (Update) The Site area has been calculated more accurately | <input 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 (likely) |
| (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 type="checkbox"/> |

(Update) Changes resulting from causes operating beyond the site's boundaries?

(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.

The boundary has been better delineated. This has resulted in that more open water, important breeding areas on land along the shore and more wet meadows adjacent to the lake have been included. It has also resulted in that some built up areas, arable land and dry forest as well as some small adjacent wetland (that don't have the conservation values that was the cause of the designation) have been excluded.

(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

The boundary follows the lake in a distance between 20 -100 metre up from the shores. Islands bigger than about 60 ha are excluded. The site also includes lake Lidhemssjön 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 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 | 10 Boreonemoral |
| Bailey's Ecoregions | 240 Marine Division |
| Other scheme (provide name below) | See textbox below |
| EU biogeographic regionalization | Boreal |
| Freshwater Ecoregions of the World (FEOW) | 406 Northern Baltic drainages |

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

Other ecosystem services provided

Other reasons

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

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

- Criterion 5 : >20,000 waterbirds





Overall waterbird numbers

Start year

Source of data:

- 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 |
|---|-------------|-------------------------------------|-------------------------------------|--------------------------|---|--------------------------|-----------------------------|---|
| <i>Dichelyma capillaceum</i>  | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | Swedish Red List 2015 (NT). | See textbox below the table and in section 3.1. |
| <i>Pedicularis sylvatica</i>  | | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | <input type="checkbox"/> | Swedish Red List 2015 (NT). | See textbox below the table and in section 3.1. |
| <i>Pilularia globulifera</i>  | | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | NT  | <input type="checkbox"/> | 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

| 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 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, staging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Alcedo atthis atthis</i>  | Kingfisher | <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"/> | | | | LC  | <input type="checkbox"/> | <input type="checkbox"/> | Swedish Red List 2015 (VU). | See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Anas clypeata</i>  | Northern Shoveler | <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, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Anas strepera</i>  | Gadwall | <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, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Anser anser</i>  | Greylag Goose | <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, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Anser fabalis</i>  | Bean Goose | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 15000 | | | LC  | <input type="checkbox"/> | <input type="checkbox"/> | Swedish Red List 2015 (NT). | Refuge during the winter season, staging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Ardea cinerea</i>  | Gray Heron; Grey Heron | <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"/> | | Foraging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Aythya ferina</i>  | Common Pochard | <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"/> | | | | VU  | <input type="checkbox"/> | <input type="checkbox"/> | Swedish Red List 2015 (VU). | Staging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Botaurus stellaris</i>  | Eurasian Bittern | <input type="checkbox"/> | <input 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"/> | Swedish Red List 2015 (NT). EC Birds Directive Annex I. | See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Bucephala clangula</i>  | Common Goldeneye | <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, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/AVES | <i>Chlidonias niger</i>  | Black Tern | <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"/> | 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 | 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 | | | | | | | | |
| CHORDATA/ AVES | <i>Chroicocephalus ridibundus</i>  | Black-headed Gull | <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, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Circus aeruginosus</i>  | Western Marsh 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"/> | | Foraging, breeding. See textbox below the table and in section 3.1. |
| 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"/> | 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 | <i>Gallinago gallinago</i>  | Common Snipe | <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"/> | | Foraging, staging. See textbox below the table and in section 3.1. |
| 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"/> | 40 | | | LC  | <input type="checkbox"/> | <input type="checkbox"/> | EC Birds Directive Annex I. | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Haliaeetus albicilla</i>  | White-tailed Eagle | <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 checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Swedish Red List 2015 (NT), EC Birds Directive Annex I. | Foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Mergus merganser</i>  | Common Merganser | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 20000 | 7 | | LC  | <input type="checkbox"/> | <input type="checkbox"/> | | 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 | <i>Mergus serrator</i>  | Red-breasted Merganser | <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"/> | | Staging, probably breeding. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Pandion haliaetus</i>  | Osprey, Western Osprey | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | 45 | | | LC  | <input type="checkbox"/> | <input type="checkbox"/> | EC Birds Directive Annex I. | Foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Podiceps cristatus</i>  | Great Crested Grebe | <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, foraging. See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Porzana porzana</i>  | Spotted Crane | <input checked="" 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"/> | Swedish Red List 2015 (VJ). | See textbox below the table and in section 3.1. |
| CHORDATA/ AVES | <i>Rallus aquaticus</i>  | Water Rail | <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 and in section 3.1. |
| CHORDATA/ AVES | <i>Sterna hirundo</i>  | Common Tern | <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, foraging. See textbox below the table and in section 3.1. |
| 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"/> | | | | LC  | <input type="checkbox"/> | <input type="checkbox"/> | | Breeding, staging, foraging. See textbox below the table and in section 3.1. |
| Fish, Mollusc and Crustacea | | | | | | | | | | | | | | | | | |
| CHORDATA/ ACTINOPTERYGII | <i>Anguilla anguilla</i>  | Eel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | CR  | <input type="checkbox"/> | <input type="checkbox"/> | Swedish Red List 2015 (CR). | See textbox below the table and in section 3.1. |
| CHORDATA/ ACTINOPTERYGII | <i>Gobio gobio</i>  | Gudgeon | <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 and in section 3.1. |
| MOLLUSCA/ BIVALVIA | <i>Unio crassus</i>  | Thick Shelled River Mussel | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | EN  | <input type="checkbox"/> | <input type="checkbox"/> | Swedish Red List 2015 (EN), EC Habitats Directive Annex II. | See textbox below the table and in section 3.1. |
| 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"/> | | | | NT  | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 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 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 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 name) | Local name | Ranking of extent (1: greatest - 4: least) | Area (ha) of wetland type | Justification of Criterion 1 |
|---|------------|--|---------------------------|------------------------------|
| Fresh water > Lakes and pools >> O: Permanent freshwater lakes | | 1 | 14000 | Representative |
| 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 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

| Scientific name | Common name | Impacts | Changes at RIS update |
|---------------------------|-------------|--------------------------|-----------------------|
| <i>Nymphoides peltata</i> | | 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°.

4.4.2 - 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 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

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

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

(ECD) Water turbidity and colour

4.4.6 - Water pH

Circumneutral (pH: 5.5-7.4)

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

Unknown

Please provide further information on pH (optional):

The water quality of the lake has been restored by adding lime in the upper river basin to prevent negative effects from acid rain.

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

Mesotrophic

(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:

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

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 |

Regulating Services

| Ecosystem service | Examples | Importance/Extent/Significance |
|--------------------------------------|--|--------------------------------|
| Erosion protection | Soil, sediment and nutrient retention | Low |
| Pollution control and detoxification | Water purification/waste 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:

Outside 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 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"/> |

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 agency or organization responsible for managing the site:

The Ramsar site in general is managed by the County Administrative Board. The in-situ management in the protected areas is taken care of the County Administrative Board. The in-situ management of the 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

Postal address:

Länsstyrelsen i Kronobergs län
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 | <input type="checkbox"/> | No change | <input checked="" type="checkbox"/> | 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 | <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 |
|---------------------------------------|---------------|------------------|--------------------------|-----------|-------------------------------------|----------|
| Annual and perennial non-timber crops | Medium impact | Medium impact | <input type="checkbox"/> | No change | <input checked="" type="checkbox"/> | 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 | <input type="checkbox"/> | No change | <input checked="" type="checkbox"/> | 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 | <input checked="" type="checkbox"/> | increase | <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 | Medium impact | Medium impact | <input checked="" type="checkbox"/> | No change | <input checked="" type="checkbox"/> | No change |
| Hunting and collecting terrestrial animals | Low impact | Low impact | <input checked="" type="checkbox"/> | No change | <input type="checkbox"/> | No change |

Human intrusions and disturbance

| 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 | <input checked="" type="checkbox"/> | No change | <input checked="" type="checkbox"/> | No change |

Natural system modifications

| Factors adversely affecting site | Actual threat | Potential threat | Within the site | Changes | In the surrounding area | Changes |
|----------------------------------|---------------|------------------|-------------------------------------|-----------|--------------------------|-----------|
| Dams and water management/use | Medium impact | Medium impact | <input checked="" type="checkbox"/> | No change | <input 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 | Medium impact | High impact | <input type="checkbox"/> | increase | <input checked="" type="checkbox"/> | No change |

Pollution

| 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 | <input type="checkbox"/> | No change | <input checked="" type="checkbox"/> | No change |
| Household sewage, urban waste water | High impact | High impact | <input type="checkbox"/> | No change | <input checked="" type="checkbox"/> | 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) | Sännahult | | 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/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/husebymaden/Pages/index.aspx | partly |
| Nature reserve (10) | Hunshult | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/hunshult/Pages/index.aspx | partly |
| Nature reserve (11) | Torne bokskog | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/torne-bokskog/Pages/default.aspx | partly |
| Nature reserve (12) | Grytö | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/gryto/Pages/index.aspx | partly |
| Nature reserve (13) | Lunnabacken | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/lunnabacken/Pages/index.aspx | partly |
| Nature reserve (2) | Bjurkärr | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/bjurkarr/Pages/index.aspx | partly |
| Nature reserve (3) | Långö | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/lango/Pages/index.aspx | partly |
| Nature reserve (4) | Toftåsa myr | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/toftasa-myr/Pages/index.aspx | partly |
| Nature reserve (5) | Västra Åsnens övärld | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/vastra-asnen-s-ovard/Pages/index.aspx | partly |
| Nature reserve (6) | Agnäs | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/agnas/Pages/index.aspx | partly |
| Nature reserve (7) | Utnäsuddens övärld | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/utnasuddens-ovard/Pages/index.aspx | partly |
| Nature reserve (8) | Hackekvarn | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/hackekvarn/Pages/default.aspx | partly |
| Nature reserve (9) | Ekefors | http://www.lansstyrelsen.se/kronoberg/Svdjur-och-natur/skyddad-natur/naturreservat/ekefors/Pages/default.aspx | partly |
| biotope protection areas | | | partly |
| bird sanctuary | | | partly |
| site of national importance for nature conservation | Åsnen | http://nypub.vic-metria.nu/handlingar/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/site/factsheet/lake-asnen-iba-sweden | 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 | 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 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

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

<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:



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

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 1989-06-12