

# Information Sheet on Ramsar Wetlands

Categories approved by Recommendation 4.7 of the Conference of the Contracting Parties.

NOTE: It is important that you read the accompanying *Explanatory Note and Guidelines* document before completing this form.

**1. Date this sheet was completed/updated:**

April 2002

FOR OFFICE USE ONLY.

DD	MM	YY

Designation date

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Site Reference Number

**2. Country:**

Sweden

**3. Name of wetland:**

Asköviken - Sörfjärden

**4. Geographical coordinates:**

59°28'N, 016°41'E

**5. Altitude:** (average and/or max. & min.) 0.7 - 30 m

**6. Area:** (in hectares) 12 200 ha

**7. Overview:** (general summary, in two or three sentences, of the wetland's principal characteristics)

The archipelago area of Mälaren including the Asköviken and Sörfjärden Bays constitutes a large and diverse site rich in habitats and species. Cultural and historical values are also high. The area is excellent for boat recreation and tourism.

**8. Wetland Type** (please circle the applicable codes for wetland types as listed in Annex I of the *Explanatory Note and Guidelines* document.)

**marine-coastal:** A . B . C . D . E . F . G . H . I . J . K

**inland:** L . M . N . Q . P . Q . R . Sp . Ss . Tp . Ts  
. U . Va . Vt . W . Xf . Xp . Y . Zg . Zk

**man-made:** 1 . 2 . 3 . 4 . 5 . 6 . 7 . 8 . 9

Please now rank these wetland types by listing them from the most to the least dominant: O, Tp, W, Xf

**9. Ramsar Criteria:** (please circle the applicable criteria; see point 12, next page.)

1 . 2 . 3 . 4 . 5 . 6 . 7 . 8

Please specify the most significant criterion applicable to the site: 1

**10. Map of site included?** Please tick *yes*  -or- *no*

(Please refer to the *Explanatory Note and Guidelines* document for information regarding desirable map traits).

**11. Name and address of the compiler of this form:**

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***Please provide additional information on each of the following categories by attaching extra pages (please limit extra pages to no more than 10):***

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**12. Justification of the criteria selected under point 9, on previous page.** (Please refer to Annex II in the *Explanatory Note and Guidelines* document).

1. A representative example of a near-natural wetland type (large freshwater lake and connecting marshes) in the EU Boreal region
  2. > 75 redlisted species, including 1 globally redlisted bird species, 1 globally redlisted beetle, 1 globally redlisted fish species, 1 globally redlisted mollusc, 15 nationally redlisted bird species, 15 nationally redlisted fungi species, and several nationally redlisted vascular plant, moss, lichen and insect species.
  3. Supports particular elements of biological diversity that are rare of the EU Boreal region
  5. >23 000 waterbirds, including >15 000 ducks, >3 000 gulls and > 5 000 geese
  7. Supports a significant proportion of several fish species including *Anguilla anguilla* and *Stizostedion lucioperca*, that are representative of wetland benefits.
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**13. General location:** (include the nearest large town and its administrative region)

The site consists of two bays in Lake Mälaren and the inland archipelago in between. It is situated in central-eastern Sweden, 15 km north-east of the town of Eskilstuna and 15 km south of the town of Västerås, in the Counties of Södermanland and Västmanland respectively. Municipalities: Västerås, Eskilstuna, Strängnäs.

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**14. Physical features:** (e.g. geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth water permanence; fluctuations in water level; tidal variations; catchment area; downstream area; climate)

Lake Mälaren, is part of the characteristic central Swedish 'fissure valley terrain', with clay rich flatlands and ancient sea bottom, rich in nutrients. The western and eastern surroundings are flat, while there is a large fault in the south. The northern part of the Ramsar site contains an archipelago holding 160 islands and isles. The southern bay (Sörfjärden) is shallow and rich in nutrients, and may even, due to its long and narrow connection to Lake Mälaren, be regarded as a separate lake. Ridge formations run through the area, and several of the islands are parts of the ridges. There are plenty of remains from the latest Ice Age; several different kinds of moraine formations, boulder-ridges, ancient shorelines and elements showing the direction in which the ice cover moved. Because of the special local climate, the area harbours several species favoured by mild temperatures - known as heat-depending relict species. Such species are the remains of a previous flora and fauna, more widespread in warmer periods.

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**15. Hydrological values:** (groundwater recharge, flood control, sediment trapping, shoreline stabilisation etc)

Lake Mälaren is used as a reservoir for drinking water and is moderately regulated.

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**16. Ecological features:** (main habitats and vegetation types)

The site displays a wide variety of vegetation types; broad-leaved forests, virgin forests, pastures, marsh fens, seashore meadows (some of which are flooded and waterlogged each year), species-rich groves and meadows, drier grazed meadows and different kinds of wet forest. There are also large areas with emergent water vegetation, mainly reed *Phragmites australis*, favoured by the regulation of the water level. There are a lot of vascular plants in the open water areas that are favoured by the eutrophic conditions, e.g. several *Potamogeton*-species. Vegetation is different on the 'ridge islands' compared to the rest of archipelago.

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**17. Noteworthy flora:** (indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc)

Rare plants at Asköviken include *Cuscuta eropaea*, *Hyoscamus niger* and *Orthotrichum pallens* (moss, nationally redlisted). 15 nationally redlisted fungi species are recorded in Ridön archipelago, including *Boletus impolitus* and *Urnula craterium*, as well as 5 nationally redlisted vascular plant species and 2 nationally redlisted lichens (*Parmelina tiliacea* and *Sphinctrina turbinata*).

**18. Noteworthy fauna:** (indicating, e.g., which species are unique, rare, endangered, abundant or biogeographically important; include count data, etc.)

The site contains several localities rich in birds, including several rare or threatened species. Around 100 species nest in the site. Among species included in the Swedish Red List, the following could be mentioned as breeding species: Garganey *Anas querquedula*, shoveler *Anas clypeata*, pochard *Aythya ferina*, white-tailed eagle *Haliaeetus albicilla* (globally redlisted), spotted crake *Porzana porzana*, black tern *Chlidonias niger* (20 pairs), yellow wagtail *Motacilla flava flava*, great reed warbler *Acrocephalus arundinaceus*, bearded tit *Panurus biarmicus* and penduline tit *Remiz pendulinus* (not regularly). Whooper swan *Cygnus cygnus*, marsh harrier *Circus aeruginosus* (>25 pairs), osprey *Pandion haliaetus* (> 20 pairs), crane *Grus grus*, common tern *Sterna hirundo*, and red-backed shrike *Lanius collurio* are all included in the EU Birds directive. Sörfjärden Bay is a stronghold for Bittern *Botaurus stellaris* (nationally redlisted, EU Birds directive species) – 20-25 males are regularly recorded.

Among regularly occurring passage migrants of large interest, the following species, all nationally redlisted should be mentioned: Bean goose *Anser fabalis* (600), pintail *Anas acuta*, smew *Mergus albellus*, hen harrier *Circus cyaneus*, and little ringed plover *Charadrius dubius*. Additional species recorded at Asköviken area includes barnacle goose *Branta leucopsis* (100), wood sandpiper *Tringa glareola* (400), ruff *Philomachus pugnax* (200), all EU Birds directive species, and spotted redshank *Tringa erythropus* (100).

The high level of nutrients, in the water within the site, favours fish fauna including the asp *Aspius aspius* (globally redlisted) and the spined loach *Cobitis taenia* (nationally redlisted, EU Habitats directive species).

The rare beetle *Mesosa curculionoides* (nationally redlisted) occurs in the Tidö area as well as the hermit beetle *Osmoderma eremita* (globally redlisted, included in EU Habitats directive). Other animals worth mentioning are smooth snake *Coronella austriaca* (nationally redlisted) and the molluscs *Vertigo angustior* (globally redlisted) and *Succinea oblonga* (nationally redlisted).

**19. Social and cultural values:** (e.g. fisheries production, forestry, religious importance, archaeological site etc.)

Human settlements in the area are known since the 11<sup>th</sup> century. There are ancient graves on many islands. In the 17<sup>th</sup> century, the king had a shipyard in the archipelago; this favoured the cultivation of oak, necessary for shipbuilding. Cultural and historical values are thus close connected to natural values. The whole site is of national interest for commercial fishing and target species are e.g. eel *Anguilla anguilla*, zander *Stizostedion lucioperca*, vandace *Coregonus albula* and the introduced crayfish *Pacifastacus leniusculus*.

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**20. Land tenure/ownership of:** (a) site (b) surrounding area

- (a) Protected areas are owned privately and by the state. Unprotected areas are mainly privately owned.  
(b) Mainly privately owned.
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**21. Current land use:** (a) site (b) surroundings/catchment

- (a) Grazing, cattle farms on two islands and in the surrounding mainland, limited but locally intensive forestry, fishing and hunting.  
(b) Agriculture, forestry, grazing, fishing and hunting.
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**22. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land use and development projects:** (a) at the site (b) around the site

- (a) Since many fauna elements depend on continuous grazing and/or mowing of shore meadows,

discontinuation of this practice would have detrimental effect. Other potential threats include large-scale removal of the emergent water vegetation in the north-western part of the site, and turning shore meadows into farmland, locally already practised. Eutrophication may also pose a problem particularly in the southern bay.

- (b) The site is part of Lake Mälaren, which is an important fairway for commercial shipping. An accident, including oil spill or release of toxic substances, will no doubt have significant adverse impact on many shore habitats.
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**23. Conservation measures taken:** (national category and legal status of protected areas - including any boundary changes which have been made: management practices; whether an officially approved management plan exists and whether it has been implemented)

There are four nature reserves within the site;

Asköviken Nature Reserve - 452 ha. Protected since 1985. Owned privately. Management plan under revision.

Tidö Nature Reserve - 423 ha. Protected since 1991. Owned privately. Management plan under revision.

Ridö-Sundbyholmsarkipelagen Nature Reserve - 5700 ha. Protected since 1984. Owned mainly by the state. Management plan under revision.

Söderfjärden Nature Reserve - 210 ha. Protected since 1968. A management plan is planned during the autumn of 2001.

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**24. Conservation measures proposed but not yet implemented:** (e.g. management plan in preparation; officially proposed as a protected area etc.)

Lindön, in Söderfjärden, is owned by the Swedish Environment Protection Agency for the purpose of establishing a nature reserve.

Regulations of bird hunting are proposed within the nature reserves Asköviken and Tidö.

For management plans see under 23.

Following objects are situated within the Ramsar area and are proposed to the Natura 2000 network;

County of Västmanland

Askö-Tidö SE0250095 (pSCI, SPA)

Ridöarkipelagen SE0250008 (pSCI, SPA)

County of Södermanland

Lindön SE0220363 (pSCI, SPA)

Ridö-Sundbyholmsarkipelagen södra SE0220077 (pSCI, SPA)

Sörfjärden-Strand SE0220087 (pSCI, SPA)

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**25. Current scientific research and facilities:** (e.g. details of current projects; existence of field station etc.)

There are bird watching towers within the site and by the southern bay, Sörfjärden, there is a bird station. The Sörfjärden area is well studied, and populations of bittern *Botaurus stellaris* and marsh harrier *Circus aeruginosus* have been surveyed continuously since the 1940's. Other parts of the site are also well studied concerning the bird fauna, especially the Asköviken area. Territory mapping of birds have been carried out in 1982 and 1985-9 and an extensive program based on point counts has been carried out in 1992-2000. Ducks and other waterbirds have been counted in the springs of 1981-2000. The black tern *Chlidonias niger* has been studied specially 1996-99 and by means of artificial nest platforms the productivity has increased. There are bird-ringing stations at Sörfjärden and Asköviken. Nationally and internationally important studies of several species, including great reed warbler *Acrocephalus arundinaceus* and bearded tit *Panurus biarmicus*, have been carried out there. The populations of cormorant *Phalacrocorax carbo sinensis* and grey heron *Ardea cinerea* are surveyed each year. There are also numerous of occasional studies e.g. a total survey of breeding common terns *Sterna hirundo* in 1982-88. Ringers at Asköviken have made several contributions to the international ringing project Constant Effort Sites Scheme.

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**26. Current conservation education:** (e.g. visitors centre, hides, information booklet, facilities for school visits etc.)

There are information pamphlets about the nature reserves. Near Asköviken, the northern part of the site, facilities for outdoor education was established in 1998. One public hide is present in Tidö Nature Reserve. At Asköviken guidance for the public is organised at several occasions every spring and autumn.

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**27. Current recreation and tourism:** (state if wetland is used for recreation/tourism; indicate type and frequency/intensity)

Several parts of the site contain a beautiful cultural and historical landscape, which is very attractive for recreation and tourism. There are popular hiking areas with trails, as well as places suitable for bathing. For leisure boating, the conditions are perfect in many areas, and boat clubs have erected permanent constructions on some islands. The area is also suitable for canoeing and in wintertime ice-skating. The scenic beauty could be enjoyed from many outlooks. Sport fishing is free.

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**28. Jurisdiction:** (territorial e.g. state/region and functional e.g. Dept of Agriculture/Dept. of Environment etc.)

County Administrative Boards of Västmanland and Södermanland

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**29. Management authority:** (name and address of local body directly responsible for managing the wetland)

County Administrative Board of Västmanland

S-721 86 Västerås

Sweden

County Administrative Board of Södermanland

S-611 86 Nyköping

Sweden

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**30. Bibliographical references:** (scientific/technical only)

Björnbom, S. 1983. Beskrivning till jordartskartan Strängnäs NV. – Sveriges geologiska undersökning, ser. Ae nr 60.

Holmgren, V. 1982. Naturinventering Sörfjärden. Länsstyrelsen i Södermanland informerar 1982: 1.

Ljungberg, B. & Rudstam, L. 1980. Södermanlands sjöar ur ornitologisk synpunkt. Länsstyrelsen i Södermanland informerar. 1980: 7.

Länsstyrelsen i Södermanlands län. 1991. Program för bevarande av natur- och kulturmiljövärden i odlingslandskapet. Nyköping.

Naturvårdsverket. 1996. Nationell bevarandeplan för odlingslandskapet. Stockholm.

Pettersson, Th. 1998. Ringmärkningen vid Asköviken 1994-98. Slutrapport. [Not published. A summary of most bird ringing activities, including the international Acro-project (*Acrocephalus* warblers), the national CES project, and other studies of e.g. Bearded Tit. In Swedish.]

Pettersson, Th. 1999. Rastande simfåglar m.m. i Asköviken. Årsrapport 1999. [Not published. Includes a summary of results 1981-99 from daily counts of resting and breeding ducks, geese, swans, grebes, Coot, waders and others in spring. In Swedish.]

Pettersson, Th. 1999. Punkttaxering av fåglar vid Asköviken. Årsrapport 1999. [Not to be published. Includes a summary of results from point counts 1992-99, all species, an extensive study with some 600 points censused each year. In Swedish.] VMI, Länsstyrelsen i Södermanlands län.

Rydberg, H. & Vik, P. 1992. Ängs- och hagmarker i Södermanlands län. Länsstyrelsen i Södermanlands län 1992. Nyköping.

Rydberg, H. 1997. Översiktlig inventering av öns botaniska värden med huvudsaklig inriktning på kärlväxtfloran.

Länsstyrelsen. Opubl. rapport.

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**Annex 1**

**Additional noteworthy fauna:**

Migrating species like Merlin *Falco columbarius*, golden plover *Pluvialis apricaria*, ruff *Philomachus pugnax*, wood sandpiper *Tringa glareola* and bluethroat *Luscinia svecica* are all included in EU Birds directive.

The insect fauna is interesting, and contains several species living in wood, as well as several butterfly species. Many are relicts from warmer periods, and some of them are believed to have their northernmost

outpost in the world here. Lindön has a very interesting invertebrate fauna connected to the large trees, especially the limes, with a lot of nationally red-listed species.

Around 30 species of mammals have been observed in the area.

**Additional noteworthy flora:**

Shore meadows and broad-leaved forest support a rich and interesting flora, e.g. southern species and even some marine relicts. The wetlands and the broad-leaved forest are the main reasons for a rich birdlife. It is possible that the dominance of deciduous trees has been continuous since the postglacial warmth period. The Tidö area in the western part of the site contains an interesting insect fauna, linked to the old, broad-leaved forest. Deciduous forest on the islands is characterised by broad-leaved species such as oak *Quercus robur*, elm *Ulmus glabra*, lime *Tilia cordata*, maple *Acer platanoides*, ash *Fraxinus excelsior* and hazel *Corylus avellana*. Parts of this forest are old and gradually turning into semi-natural forest. Lindön in Söderfjärden is well-known for the great amount of very large and partly hollow limes. The most well-known plant species of the island group (Ridö area) is mistletoe *Viscum album*. Here, the mistletoe has its northernmost occurrence in Europe, as well as its richest occurrence in Scandinavia.