

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:

February 2002

FOR OFFICE USE ONLY.

DD	MM	YY

Designation date

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Site Reference Number

2. Country:

Sweden

3. Name of wetland:

(Lake) Västra Roxen

4. Geographical coordinates:

58°29'N, 015°35'E

5. Altitude: (average and/or max. & min.) 33.6 - 65 m

6. Area: (in hectares) 4 170 ha

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

The site is built up by (part of) a lake and connecting rivers and has natural and cultural environments of extraordinary importance. There are few similar inland areas in Sweden. The flora and fauna is very rich and contain several rare species and a high number of wetland birds. Fish are abundant.

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, Ts, 4, M, L

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):

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 near-natural wetland type (freshwater lake and connecting rivers) in the EU Boreal region
 2. Supports 2 globally redlisted bird species, >35 nationally redlisted species, including birds (17 species), lichens (5), fish (3) and vascular plants (3)
 5. >20 000 waterbirds, including *Mergus merganser* (5 000-10 000), 5 000 cormorants, 5 000 ducks, 5 000 gulls, 1 000 coots, 1 000 waders
 6. Supports 4% (5 000-10 000) of the north-west/central European population of *Mergus merganser*
 8. Spawning grounds and nursery on which fish stocks depend. Classified as nationally important for commercial fishing
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13. General location: (include the nearest large town and its administrative region)

The site consists of the western part of Lake Roxen, situated 7 km north of the city of Linköping, in the County of Östergötland, central eastern Sweden. Municipality: Linköping.

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)

The landscape surrounding the site is flat. Within Kungsbro Nature Reserve, in the north-western corner of the site, there is a fault. North of the fault, the bedrock is primary rock (gneiss-granitic granodiorite), while the bedrock south of the fault is under-Cambrian sandstone. In the southernmost parts of the nature reserve there is shale. North of River Motala Ström earth deposits are glacial, and south of the river they are postglacial. Svartåmynningen Nature reserve is situated at the mouth of River Svartån. The land in the reserve is a supra-aquatic delta and is built up by mainly sandy material deposited by the river. The area also includes the lower parts of three main rivers: Svartån, Motala Ström and Stångån.

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

Sediment trapping takes place in the delta.

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

The site consists mainly of freshwater and adjacent shore meadows, pastures and marsh-meadows, large parts of which are well managed by grazing and/or haymaking. The shallow waters of Lake Roxen are highly productive. There are oak groves with quite large and old oaks.

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

The flora is to a large extent formed by and dependent upon haymaking and grazing. It contains several rare plants such as *Viola persicifolia*, *Rumex maritimus* and *Galium trifidum*. Some vascular plant species are nationally redlisted: *Scolochloa festucacea* (one of very few sites in Sweden), *Cardamine parviflora* and *Carex hartmanii*. Other nationally redlisted plant species are the lichens *Ramalina baltica*, *Buellia violaceofusca*, *Schismatomma pericleum*, *Gyalecta ulmi* and *Cliostomum corrugatum*, requiring old oaks and dead wood, and the fungus *Pachykytospora tuberculosa*. The moss *Physcomitrella patens* (also nationally redlisted) has been found.

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

The extensive meadows and reedbeds in the site are very rich in nesting and migratory birds. More than 260 bird species has been observed within the two nature reserves. A large number of breeding birds included in the national redlist can be found in the site, e.g. the bittern *Botaurus stellaris* (also EU Birds

directive species), shoveler *Anas clypeata*, gadwall *Anas strepera*, garganey *Anas querquedula*, black tern *Chlidonias niger* (EU Birds directive species), little ringed plover *Charadrius dubius*, black-tailed godwit *Limosa limosa*, short-eared owl *Asio flammeus* (EU Birds directive species), yellow wagtail *Motacilla flava flava*, corncrake *Crex crex* (globally redlisted, EU Birds directive species), spotted crane *Porzana porzana* (EU Birds directive species), pintail *Anas acuta*, curlew *Numenius arquata*, bearded tit *Panurus biarmicus*, great reed warbler *Acrocephalus arundinaceus*, penduline tit *Remiz pendulinus* and lesser spotted woodpecker *Dendrocopos minor*. Other breeding birds in the EU Birds directive includes the ruff *Philomachus pugnax* and marsh harrier *Circus aeruginosus*.

In wintertime the hen harrier *Circus cyaneus* (nationally redlisted, EU Birds directive) and white-tailed eagle *Haliaeetus albicilla* (globally redlisted, EU Birds directive) occur. 5 000-10 000 goosanders *Mergus merganser* gathers each autumn for feeding in the western part of Lake Roxen. On the wet meadows the nationally red-listed beetle *Claenus nigricornis* has been found.

The presence of the large oaks favours a rich insect fauna. The rare insects *Spilomyia manicata* (nationally red-listed) and *Lycaena hippothoe* have been found within the area. The fish fauna includes nationally red-listed species such as the spined loach *Cobites taenia* (also EU habitats directive species), asp *Aspius aspius* (globally redlisted, EU habitats directive species) and chub *Leuciscus cephalus*. The otter *Lutra lutra* (nationally redlisted, EU Habitats directive species) occurs in the rivers.

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

The site contains several Bronze Age graves and remains. The present open landscape created by haymaking and grazing has probably existed from the Stone Age.

The area is classified as being of national interest for commercial fishing (*Esox lucius*, *Stizostedion lucioperca*, *Perca fluviatilis*, *Anguilla anguilla*).

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

(a) Protected areas are owned privately and by state. The rest of the site is privately owned.

(b) The surrounding area is mainly privately owned.

21. Current land use: (a) site (b) surroundings/catchment

(a) Grazing, agriculture and fishing

(b) Agriculture

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) Grazing and haymaking are very important for the site's rich flora and fauna. If it would stop several species will undoubtedly be lost. Haymaking and grazing ceased temporarily during the 1950's - 1980's, which had a negative impact on the flora and birdlife. Today, the area is properly managed again. The modernisation of agriculture, with cessation of traditional management of pastureland may pose a problem in the future.

(b) The nearness of the adjacent city may in the long run be a problem.

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 two nature reserves within the site;

Svartåmyningen Nature Reserve - 325 ha. Protected since 1975. Owned privately.

Kungsbro Nature Reserve - 100 ha. Protected since 1996. Owned by the state.

Management plans exist for both nature reserves.

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

Parts of the Ramsar area are proposed to the EU Natura 2000 network as both pSCI and SPA sites:

SE0230125 Svartåmynningen (325 ha)

SE0230124 Kungsbro (100 ha)

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

There are three bird-watching towers within the site and a fourth is planned. The local ornithological society and the County Administrative Board conduct censuses of the bird fauna.

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

There is outdoor information displayed in the nature reserves and an information pamphlet is available.

There is also information on Internet on the homepage: <http://www.e.lst.se>

The County Administration provides several guided tours in the area.

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

Because of the high natural and cultural values and its relative closeness to the city of Linköping, the site is frequently visited.

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

County Administrative Board of Östergötland

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

County Administrative Board of Östergötland

Östgötagatan 3

S-581 86 Linköping

Sweden

30. Bibliographical references: (scientific/technical only)

Hjelm, O., Molin, M., Nilsson, D., Nilsson, P. & Wester, J. 1996. Inventering av häckande fåglar på Västra Roxens strandängar 1996. Vingspegeln 15: 118-137 (in Swedish).

Tranesjö, J. 1980. Svartåmynningens naturreservat. Ornitologisk delinventering. Länsstyrelsen i Östergötlands län (in Swedish).

Tranesjö, J. 1992. Inventering av häckande fåglar inom Svartåmynningens naturreservat 1992.

Länsstyrelsen/Skogsvårdsstyrelsen i Östergötlands län (in Swedish).

(All three references deals with bird censuses)

Please return to: **Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 GLAND, Switzerland**

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