

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

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | | |
|--|--|--|--|--|--|--|--|

Site Reference Number

2. Country:

Sweden

3. Name of wetland:

(Lake) Tysjöarna

4. Geographical coordinates:

63°14'N, 014°36'E

5. Altitude: (average and/or max. & min.)

323 - 360 m

6. Area: (in hectares)

410 ha

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

The site has high natural values connected to the rich flora and fauna of the lime fens and wetland forests. The wetland types in the site are typical for this region.

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, U, Xp

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: 2

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:

Isabell Olevall, Swedish Environmental Protection Agency, S-106 48 Stockholm, Sweden
Eva Nohlgren, County Administrative Board of Gävleborg, S- 801 70 Gävle, Sweden
Torsten Larsson, Swedish EPA, S-106 48 Stockholm, Sweden

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 rare example of a near-natural wetland type (permanent freshwater lakes) in the EU Boreal region
 2. 1 globally redlisted bird species, >10 nationally redlisted species, including 4 plant species and 5 bird species
 3. Supports particular elements of biological diversity that are rare in the EU Boreal region
-

13. General location: (include the nearest large town and its administrative region)

The site is a mixture of fens and forests, also holding open waters, not far from the eastern shore of Lake Storsjön. It is situated approximately 7 km north of the city of Östersund, in the County of Jämtland, north western Sweden. Municipalities: Krokoms, Östersund.

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 site consists of two lakes surrounded by a diverse area of mires, wetland forests, coniferous forests, mixed forests and meadows. The lakes are the largest lake-marl lakes in the province of Jämtland. The water level of the lakes has been lowered, which has resulted in large areas of exposed lake-marl around the waters.

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

--

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

There is a mixture of spring fens, calcareous fens, lime wetlands, calcareous tufa and wetland forests. The flora along the shoreline is extremely lime dependent. The vegetation on the fields of lake-marl has a certain alpine feel. Lime springs and areas with calcareous tufa display the very special moss flora that is strongly connected to these habitats.

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

The site is botanically rich and therefore highly valued. Among species found in the area are *Carex lepidocarpa*, *C. jemtlandica* and *Juncus triglumis*. The first observation in Sweden of the rare moss *Bryum wrightii* (nationally redlisted) was made here in 1992. Today, only five additional localities are known. Other nationally redlisted species include *Cypripedium calceolus* (also EU habitats directive species), *Taraxacum crocodes* and *Epipogium aphyllum*.

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

Because of the large variation in habitats along the shoreline, Lake Tysjöarna is one of the most species-rich localities for resting and nesting waders and ducks. 135 bird species have been observed, of which 24 are waders. About 70 species regularly nest in the site. Most of Scandinavia's northernmost bird species have been seen by the lakes, including four species of birds of prey, four species of owl, six out of seven species of woodpecker in Sweden and a large number of passerine birds. Species worth mentioning include the red-throated diver *Gavia stellata* (nationally redlisted, EU directive species), slawonian grebe *Podiceps auritus* (nationally redlisted, EU directive species) great snipe *Gallinago media* (globally redlisted, EU Birds directive species), ruff *Philomachus pugnax* (EU directive species), Tengmalm's owl *Aegolius funereus* (EU directive species), three-toed woodpecker *Picoides tridactylus* (nationally redlisted, EU Birds directive species), red-throated pipit *Anthus cervinus* (nationally redlisted). There are few other inland sites in the northern half of Sweden, which can compete with Lake Tysjöarna when it

comes to numbers and species richness.

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

None known

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

(a) The land is privately owned.

(b) The land is privately owned.

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

(a) None

(b) Agriculture, farming and forestry

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) Some forest areas within the site have been clear-cut, and some have been burnt. A railway runs through the site, as well as power lines. Construction within the site is scarce, and there are a few ditches in the north-western part of the site. Potential factors are drainage, excavation of peat, clear-felling of trees, forest plantations and road constructions.

(b) None known

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)

The lakes, constituting a large part of the area, are protected as a Bird sanctuary. The site is included in the National Mire Protection Plan.

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

The largest part of the area, has been proposed to the Natura 2000 network as the pSCI site Tysjöarna; Östra SE0720311. Another part (SE0720362) is also included in the network as pSCI and SPA and covers 300 ha.

The Natura 2000 sites will be protected as a Nature Reserve.

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

None

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

There is one windshield in the site. Building of a footbridge and bird hides is going on.

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

Due to the richness in birds, it is a well-known target for mainly ornithologists. The close proximity to the town of Östersund makes the site easily accessible to tourists.

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

County Administrative Board of Jämtland

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

County Administrative Board of Jämtland

S-831 86 Östersund

Sweden

30. Bibliographical references: (scientific/technical only)

Swedish environmental protection agency. 1994. Mire Protection Plan of Sweden.

Johansson, R. 1981. County administration of Jämtland. Compilation of areas with high nature values.

Please return to: **Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 GLAND, Switzerland**
Telephone: +41 22 999 0170 • Fax: +41 22 999 0169 • e-mail: ramsar@hq.iucn.org