



# Information Sheet on Ramsar Wetlands

As approved by Rec.C.4.7 of the Conference of the Contracting Parties, Montreux, Switzerland - July 1990

NOTE: Please read the accompanying guidelines before attempting to complete this form. An example of a completed data sheet is also included.

Completed sheets should be returned to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

1. Country: SLOVENIA

2. Date: 09.02.93

3. Ref: 3SI001 office use only

4. Name and address of compiler:

Jana Vidic  
State Institute for Conservation  
of Natural and Cultural Heritage  
Plečnikov trg 2  
61 000 Ljubljana, SLOVENIA

5. Name of wetland: Sečoveljske soline (Sečovlje Saltpans)

6. Date of Ramsar designation:

7. Geographical coordinates: 45° 28' 57''N 13° 36' 38''W

8. General location: (e.g. administrative region and nearest large town)

In the north-eastern part of Adriatic, near Sečovlje, approx. 12 km south of Koper

9. Area: (in hectares)

650 ha

10. Wetland type: (see attached classification, also approved by Montreux Rec.C.4.7)

5 Q M

11. Altitude: (average and/or maximum & minimum)

0 - 5 m

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

Abandoned and some still operational saltpans in the mouth of the Dragonja river; habitat of some halophytes, wintering site, migration site and breeding site of marine and marsh birds.

13. 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)

Initially, the Dragonja River had a wide bed that ran along the junction of flysch layers and limestone layers. It entered the sea in a small delta. Saltpans were very early arranged on its alluvial deposits (sources date back to the 13th century). Part of saltpans at the mouth of the river has been abandoned since the beginning of the century. This is where brackish marsh evolved. Fontanigge is part of saltpans where salt production was abandoned after 1945. Some basins are there shallowly flooded with sea water whereas some of them are being overgrown with halophyte vegetation. Lera, which comprises less than half of the area under consideration, forms that part of saltpans which are still utilized. Water level in saltpans is maintained artificially by dams towards the sea. Submediterranean climate with January temperature of 0° C and mean annual temperature about 14° C. Average rainfall is between 800 and 1050 mm.

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

At the mouth of the Dragonja, where salt production has been abandoned for the longest period of time, the former brackish marsh evolved again with the following plant communities: *Salicornietum herbaceae*, *Phragmitetum communis subsp. halophilum*, *Limonietum* in all forms, *Juncetum maritimi* and *Scirpetum maritimi*. In the area in which salt production was abandoned after 1945, the following plant communities are to be found: *Limonietum venetum* in all forms, *Salicornietum herbaceae* and *Staticeto-Artemisietum caerulescentis*. In saltpans that are still in operation, that is, in the vicinity of basins for salt accumulation, the following plant communities are to be found: *Salicornietum*, *Limonietum venetum* var. with the species *Juncus maritimus*. The canal of Sv. Jernej is covered by reeds. A special feature of the area are the communities *Spartinetum strictae* and *Atriplicetum tatarici* (Kaližarič 1990).

## 15. Land tenure /ownership of:

### (a) site

The owner of most saltpans is the state enterprise HP Droga Portorož, whereas some smaller plots are owned by the community of Piran, by the state firms Mercator DO Nanos and PE Gradbeni Material, and by some private owners.

### (b) surrounding area

Numerous private areas

## 16. 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)

In 1989 the whole area was designated a landscape park, in which there are small natural reserves: Ob Rudniku, Stojbe, Curto-Pichetto and Stare Soline. In the whole area of the landscape park, hunting, major construction works, changes in land use and other human interference are prohibited. In reserves any human interference that might affect the living conditions of fauna and flora is prohibited.

Most of the area is managed by the state firm Droga Portorož. There is no body responsible for the management of the whole protected area and there is no supervisory control.

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

## 18. Current land use: principal human activities in:

### (a) site

- nature protection
- salt production
- tourism and outdoor recreation

### (b) surroundings/catchment

- sports flying
- minor agricultural activity

## 19. Disturbances/threats, including changes in land use and major development projects:

(factors which may have a negative impact on the ecological character of the wetland)

### (a) at the site

A few years ago attempts were made to drain some parts of the area and a number of draining ditches were built. Prior to its protection, the area was used as hunting ground. It has been suggested that fish farms be set up here. The maintenance of dams is not supervised.

### (b) in the surroundings/catchment

Plans for building a dam on the Dragonja River approx. 10 km up the stream to irrigate agricultural land.

Sports flying makes noise, which disturbs birds living in the area. The airfield represents also a potential cause of pollution. There are aspirations to the enlargement of the airfield and to the construction of saltworks.



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

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

In the northern part called Lera salt pans are operational. In the abandoned part of salt pans called Fontanigge, one of the salt pans cottages has been restored to represent, along with salt pans and the wind pump, a museum in nature. The whole area is important for conservation education, outdoor recreation and scientific research.

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

In Sečovlje salt pans and their vicinity 207 (215) birds species have been determined, of which 109 are non-breeding species. The status of 9 species is questionable, 89 species breed either regularly or occasionally in the area. The following species winter in large number in the area: *Fulica atra*, *Larus cachinnans*, *Larus ridibundus*, *Tringa totanus*, *Vanellus vanellus*, *Anas penelope*, *Anas crecca*, *Tachybaptus ruficollis*, *Aythya ferina*, *Podiceps cristatus*, *Mergus serrator*, *Gavia arctica*, *Phalacrocorax carbo*. In smaller numbers the following species winter here: *Podiceps griseigena*, *P. nigricollis*, *Gavia stellata*, *Aythya fuligula*, *Gallinago gallinago*. During their passage, species of the following genera stop over in great numbers: *Tringa* sp. and *Calidris* sp., *Philomachus pugnax* and *Limosa limosa*. In smaller numbers the following species stop over: *Ixobrychus minutus*, *Ardea purpurea* and *Ardeola ralloides*. Breeders in the area are, for example, the following: *Sterna hirundo* (approx. 50 breeding pairs), *Sterna albifrons* (2 breeding pairs), *Larus cachinnans* (approx. 45 breeding pairs), *Charadrius alexandrinus* (approx. 25 breeding pairs), *Actitis hypoleucos*, *Ixobrychus minutus*, *Himantopus himantopus* (2 breeding pairs) (Skornik et al., 1990). The area is living space of some species of Heteroptera, Crustacea and Aranea that are rare to Slovenia.

23. Noteworthy flora: (e.g. unique, rare, endangered, or biogeographically important species/communities etc.)

Halophytes are rare in Slovenia. Fourteen plant species have been determined in the area and included in the Red List of pteridophytes and spermatophytes of Slovenia as follows: *Artemisia caerulescens*, *Arthrocnemum fruticosum*, *Aster tripolium*, *Halimione portulacoides*, *Inula crithmoides*, *Limonium angustifolium*, *Puccinellia fasciculata*, *P. palustris*, *Ruppia maritima*, *Salicornia herbacea*, *Salsola soda*, *Spergularia marina*, *S. media*, *Suaeda maritima* (Wraber & Skoberne 1989).

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

Members of the Biological Association Ixobrychus and members of the Slovene Association for Watching and Examination of Birds constantly watch and record birds in the area under consideration. Studies on salt pans are included in several international projects: MEDMARAVISA, Breeding of the Colonial Waterbirds in Mediterranean Area, The WSG Kentish Plover Project.

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

Occasional visits. Visitors are occasionally guided round the area by members of the Biological Association Ixobrychus and by members of the Slovene Association for Watching and Examination of Birds, by the employees of the S. Mašera Maritime Museum and of the Institute for the Conservation of Natural and Cultural Heritage of Slovenia.

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

Salt pans are visited by nature lovers or lovers of the museum in nature, bathers and hikers. There are not organized guided tours here and thus no data as to the number of visitors.

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

At present salt pans are for the most part managed by the owner Droga Portorož. There is no body responsible for the management of the whole area and there is no supervisory control.

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

Territorial conservation jurisdiction: Občina Piran, 66 330 Piran  
Functional conservation jurisdiction: Medobčinski zavod za varstvo naravne in kulturne dediščine Piran, Trg bratstva 1, 66330 Piran

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

- Kaligarič, M., 1990: Botanična podlaga za naravovarstveno vrednotenje slovenske Istre; Varstvo narave: 16: 17-44, Zavod RS za VNKD, Ljubljana  
Skornik, I. & T. Makovec & M. Miklavc, 1990: Favnistični pregled ptic slovenske obale; Varstvo narave 16: 49-99, Zavod RS za VNKD, Ljubljana  
Wraber, T. & Skoberne, P., 1989: Rdeči seznam ogroženih praprotnic in semenk SR Slovenije; Varstvo narave 14-15, Zavod RS za VNKD, Ljubljana  
Več avtorjev, 1985: Tematska številka Proteus, št. 3, Prirodoslovno društvo, Ljubljana

**30. Reasons for inclusion:** (state which Ramsar criteria - as adopted by Rec.C.4.15 of the Montreux Conference - are applicable)

- 1 (d)
- 2 (a) (c)
- 3 (b)

**31. Map of site** (please enclose the most detailed and up-to-date map available - preferably at least 1:25,000 or 1:50,000)

Please return to: T.A. Jones, Ramsar Database, IWRB, Slimbridge, Gloucester GL2 7BX, England

Telephone: 44 - (0)453 890634

Telefax: 44 - (0)453 890827

Telex: 43 71 45 WWF-G