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## **Information Sheet on Ramsar Wetlands**

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

- 1. Country: LATVIA 2. Date: September 1995 3. Ref. 3LV001
- 4. Name of wetland: Lake Engure and surroundings

## 5. Ramsar Criteria

- 1a The lake is particularly good representative example of a near-natural wetland- coastal lakes, remnants of Littorina Sea at the Baltic coast
- 1c The site is a particularly good representative example of a wetland which plays a substantial hydrological biological and ecological role in the natural functioning of a large coastal region
- 1d The lake is an example of a specific type of wetland, rare or unusual in the appropriate biogeographical region (see point 1a)
- 2a The territory supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plants and birds at breeding and appreciable numbers of molting waterfowl and cranes
- 2b The area is of special value for maintaining the genetic and ecological diversity of a region because of the quality and peculiarities of its flora and fauna
- 2c The area is of special value for one or more endemic plant or animal species or communities
- 3a The lake and coastal waters regularly support more than 20,000 of waterfowl
- The territory regularly supports substantial numbers of individuals from particular groups of waterfowl, indicative of wetland values, both productivity and diversity
- 6. **Wetland type:** Marine wetland: A

Coastal wetland: E, H, O,

- 7. Date of Ramsar designation 5th April, 1995
- 8. Geographical coordinates: 57 17 N 23 07 E
- 9. **Altitude**: Terrestrial part: mean 3.2 m above sea level; up to 10 m deep coastal waters
- 10. **Area:** Ca 18, 100 ha.
- 11. **General location:** Talsi and Tukums districts. Nearest towns Tukums and Talsi,; Western coast of the Gulf of Riga.
- 12. **Overview:** Permanent shallow coastal freshwater lake, fens, pine and mixed forests (often wet) and shallow sea waters. The territory is rich in birds (170 nesting) species), vascular plants (more than 800 species) with high number of threatened species among them Holds significant number of waterbirds during breeding season and migration

- 13. **Physical features**: Permanent freshwater lagoon-type lake with 7 islands which has originated 4000-5000 years ago as a remnant of Littorina Sea. In 1842 water level was lowered for about 1.5 m by digging channel to the sea. Bottom (dolomite covered with boulders, gravel and sand, organic silt of different depth 0.3-6 m) is nearly completely overgrown with Charophytes. About 40% of lakes area is covered with emergent vegetation. Average depth is ca 1m. The deepest place 2. 1 m. Area 41 sq. km. The volume has changed from 43 mill cubic m in 1906 to 16.8 mill. cubic m in 1975. Water level fluctuations do not exceed 1 m, no tidal variations. Catchment area 644 sq. km. Mild maritime climate: vegetation period begins in (about) April 15 and lasts 180-200 days, amount of precipitation 600-650 mm. The lake is normally frozen from late November to the beginning of April.
- 14. **Ecological features:** Shallow freshwater coastal lake rich in emergent vegetation (reed cocktails, bullrush, ca 40% total coverage), surrounded by sedge meadows (recently dramatically decreasing), fens, dry and wet pine forests. Site includes 20 km of sandy seacoast (recently partly covered with meadow vegetation) and 3 km wide belt of coastal waters along mostly not exceeding 6 m depth.
- 15. Land tenure/ ownership of
- (a) **site** State property.
- (b) **surrounding area**. Nearly all land between the lake and the Gulf of Riga belongs to the state; Coastal areas at the southern and western coast mostly belong to private persons.
- 16. **Conservation measures taken**: Regime of ornithological reserve was established in the lake itself in 1957, then slightly changed in 1977 and included permanent reserve (1080 ha, closed the whole ice-free period) and seasonal reserve (2186 closed from melting of ice till to the end of breeding season). In 1987 the buffer zone (ca 8300 ha) around the lake was established where building of recreational, industrial and agricultural complexes were prohibited.
  - During last 30 years significant management works have been carried out by Institute of Biology as a scientific experiments. Officially approved management plan does not exist, it is under preparation now.
- 17. **Conservation measures proposed but not yet implemented**: It was proposed in 1991 to reorganize the Engure Ornithological Reserve providing it with special staff (at least two guards and two management workers) and subordinate administratively to the Slitere State Nature Reserve Implementation of the Project meets financial difficulties.

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

- a) site Commercial fishing, angling, hunting, limited harvesting of reeds during winter due to lack of technical means
- **(b) surroundings/catchment** Forestry, extensive agriculture (mainly along the Northwest coast of the lake), different kinds of recreation (collection of wild berries, mushrooms, tourism, leisure), hunting. Fishing at sea.

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

- (a) **site**: Expansion of reedbeds instead of other kinds of emergent vegetation, growing together of separate reedbed tracts into huge monotypic stands without interspersions of open water. Decrease and disappearance of coastal meadows due to cessation of grazing and hay-making in these areas. Dramatical increase in number of the American Mink since mid 70s (the population is originated from escaped animals which is especially devastating for high density gull and duck nesting sites. Increase of illegal and legal fishing with nets and practically unlimited angling create much disturbance for birds. Lack of special staff (coordinators for land use planning, guards, and management workers.)
- (b) in the surroundings/catchment Land reprivatisation at the coastal areas to the West, South and North of the lake which is connected with a threat of cutting of valuable forest islands.
- 20. **Hydrological and physical values:** Not studied sufficiently. No significant floods use to take place in the area, evidently its role in sediment catching is quite effective.
- 21. **Social and Cultural Values** There are no durable data about recent fisheries production. In 1950-1958 official yearly catch in the lake fluctuated between 47 and 88 tons but the real catch is believed to be remarkably higher Yearly hunters bag in good years comprises 2000-3000 ducks and coot Forestry activities are limited due to prohibition of clear cuttings along the sea coast.
- 22. Noteworthy fauna About 170 nesting bird species, among them 2 threatened in the World (white-tailed eagle, Corncrake), 38 threatened in Europe: Slavonian Grebe, Great Bittern, Little Bittern, Black Stork, White Stork, Ferruginous Duck, Honey Buzzard, Marsh Harrier, Spotted Crake, Little Crake, Crane. Blacktailed Godwit, Ruff, Common Tern, Black Tern, Eagle owl, Night jar, Woodlark etc.). About 300 pairs of ducks (Mallard 1300, Pochard 1200, Tufted Duck 300, Shoveler, 60 etc.) Mute Swan (100), Greylage Goose (50), Coot (up to 1800), Great-crested Grebe (500), Rednecked Grebe (500) Black-headed Gull (34000 in 1986, now 13000) Important as a molting place for dubbing ducks, premigratory staging place for 800 Cranes.
- 23. **Noteworthy flora:** More than 800 vascular plant species have been found in the lake and surrounding areas included in these Ramsar boundaries, among them about 40 species are protected. As most remarkable following species can be mentioned: *Ophris insectifera, Potentilla anglica, Carex reichenbachii, Hydrocotyle vulgaris, Montia fontana, Ruppia maritima, Glaux maritima, Lannichellia monarchii, Liparis loeselii,, Najas marina, Ceratophyllum submersum.* Submerged plant communities with Najas marina, C. submersum, as well as brackish marshes on sea-shore and calcareous fens are of special interest.
- 24. Current Scientific research and facilities Stationary ornithological investigations since 1958 when Ornithological Field Station of the Institute of Biology was established. Main directions of investigations:

- 1) Population ecology of ducks (mainly Tufted Duck, Shoveler, Pochard) based on capture-recapture analysis of ringed birds (Ca 85000 ducklings have been ringed since 1958),
  - 2) population of Black-headed Gull,
  - 3) monitoring of waterbird populations
  - 4) habitat management experiments.
- 25. **Current conservation education**: Very limited up till now no visitor's center, booklets etc. Up to 20 tourist groups. (foreign birdwatchers and local schools) visiting Ornithological Field Station yearly where slide-show lectures and excursions along the coast are being organised.
- 26. **Current recreation and tourism** Sports fishery (alongside with commercial) and hunting. Increasing number of fishermen cause serious disturbance for breeding and moulting birds
- 27. **Management authority:** Up til now nobody is responsible for management of the wetland
- 28. **Jurisdiction:** Area is shared between four communities Engure, Mersrags, Kuli Zentene) and two administrative districts (Tukums and Talsi). As a nature protections territory it is under the supervision of the Ministry of Environmental Protection and Regional Development; as an area of active forestry and agriculture: supervised by the Ministry of Agriculture and its State Forest Service.

## 29. Bibliographical references:

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- 4. ViKsne, J., **Mednis A** is, **Blums,** P, Kazubiernis, 3.1989. Dynamics of numbers of breeding ducks, waders and Larids the lake Engure Ornithological Reserve in 1958-1982. Communications of Baltic Commission for Study of Bird Migration, 20. Tartu 36-45. (In Russian with English summary).
- 5. Viksne, J.1994. Putniem nozimigas vietas Latvija.1994. Birdlife International, Cambridge, 47 pp.
- 6 WWF Projekts 4568 Dahas aizsardzibas plans Latvijai, Riga, LU EC "Vide",1992; 160 lpp.

## 30 Name and address of compiler

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## 31 Map of site

see attached map

The scale is 1.54000. (???) Unfortunately this was the only map available