

## Ramsar Information Sheet

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**1. Date this sheet was completed:** 01.06.1997

**2. Country:** Estonia

**3. Name of wetland:** **Emajõe Suursoo Mire and Piirissaar Island**  
*in Estonian: Emajõe Suursoo ja Piirissaar*

**4. Geographical co-ordinates:** 58°23N 27°18'E

**5. Altitude:** 30-35.8 (mostly 30.5 - 31.5) m above sea level  
Average level of Lake Peipsi 30.1 m (high waters 30.3-30.7 m)

**6. Area:** 32,600 ha

### 7. Overview

More or less large flat wilderness area - integral complex of different types of peatland, rivers and lakes, shallow waters of Lake Peipsi, coasts and island.

**8. Wetland type:** L M O U W Xf Xp

**9. Ramsar Criteria:** 1a, 1c, 2a, 2b, 3a, 3b, 3c, 4b

**10. Map of site included:** Yes

### 11. Name and address of compiler:

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### 12. Justification of criteria selected under point 9:

1a - it is a particularly good representative example of a natural or near-natural wetland, characteristic of the appropriate biogeographical region

1c - it is a particularly good representative example of a wetland which plays a substantial hydrological, biological or ecological role in the natural functioning of a major river basin

2a - it supports an appreciable assemblage of rare, vulnerable or endangered species or subspecies of plant or animal, or an appreciable number of individuals of any one or more of these species

2b - it 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

3a - it regularly supports 20,000 waterfowl

3b - it regularly supports substantial numbers of individuals from particular groups of waterfowl, indicative of wetland values, productivity or diversity

3c - it regularly supports > 1% of the individuals in a population of *Cygnus columbianus*, *Anser fabalis* and *Mergus albellus*.

4b - it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

### 13. General location:

Tartu County; 30 km east from Tartu (103,000 inhabitants).

### 14. Physical features:

Sand, varved clay and moraine gravel covered with peat deposition 0.5-6 m and more, average 2-5 m. Natural origin. Hydrology largely influenced by Lake Peipsi and river levels. In spring, most of the area is overflowed. Mean annual temperature 4.5°C, precipitation about 560mm, snow cover during 110 days, rivers and lakes covered with ice from December till April and May. In peatland, water originates from floods, groundwater and precipitation.

**15. Hydrological values:**

Extremely important for the hydrology of Lake Peipsi. Waters of Roves Emajõgi are purified largely in its own lower reaches and delta. Many small streams, canals and lakes supply additional water (partly groundwater) for L. Peipsi and diminish the extent of pollution also from surrounding agricultural areas.

**16. Ecological features:**

Fens and swamps (*Carex* spp., *Phragmites australis*, *Menyanthes trifoliata*, *Comarum palustre* etc.), swamp forests (*Betula* spp., *Alnus glutinosa*, *Salix* spp.), peat bogs (*Ledum palustre*, *Sphagnum* spp., *Pinus sylvestris*, etc.), mixed forests, reedbeds, shores, open waters, some agricultural areas.

**17. Noteworthy flora:**

Characteristic flora for different mire communities typical for the region. Rare species: *Iris siberica*, *Gentiana pneumonanthe*, *Subularia aquatica*; on the shore *Petasites spurius*, *Achillea cartilaginea*, *Leymus arenarius* etc.

**18. Noteworthy fauna:**

Fish: Important spawning areas for many fish species: *Perca fluviatilis*, *Coregonus albula*, *Abramis brama*, *Esox lucius*, *Rutilus rutilus*, *Alburnus alburnus*, *Lucioperca lucioperca*, *Scardinius erythrophthalmus*, *Leuciscus idus*, etc. Also endangered *Silurus glanis* and endemic *Coregonus lavaretus maraenoides*.

Amphibians: 7 species including endangered *Bufo viridis* and *Pelobates fuscus*.

Birds: (a) Important moulting and staging area for waterfowl as *Cygnus cygnus*, *Cygnus columbianus* (<800), *Anser fabalis* (>5000), *Mergus albellus* (>200), *Bucephala clangula*; (b) breeders: *Haliaeetus albicilla* (4-5 pairs), *Aquila chrysaetos* (1 pair), *Aquila pomarina* (1 pair), *Pandion haliaetus* (1 pair), *Lagopus lagopus*, *Gallinago media* (10 pairs), *Crex crex* (>10 pairs), *Tetrao tetrix* (>100 males), *Botaurus stellaris*, *Grus grus* (10 pairs), *Porzana porzana* (> 75 pairs), *Circus aeruginosus* (>20 pairs), *Sterna hirundo* (>50 pairs), *Chlidonias niger* (>500 pairs), *Larus minutus* (200 pairs), etc.

Mammals: *Canis lupus*, *Lutra lutra*, *Castor fiber*, *Alces alces*, etc.

**19. Social and cultural values:**

Lake Peipsi and many other rivers and lakes are important for fishing and boating trips. Mires are occasionally used for berry-picking (important also for recreation). The whole area is important for tourism and outdoor recreation (sport fishing, waterfowl hunting, boating). Potentially important area for bird-watching. In local villages traditional land use, fishery and architecture are preserved.

Piirissaar area is with mixed Estonian and Russian cultures.

**20. Land tenure/ownership of:**

a) site: Mainly state-owned land; many inhabited or formerly inhabited areas may be privatized in the near future.

b) surrounding area: State, provincial and private land.

**21. Current land use/principal human activities:**

a) site: About 150 residents. Fishing, farming (vegetable cultivation and cattle breeding); picking of berries (most important cranberry area in Estonia), hunting.

b) Surroundings/catchment: Agriculture and forestry, industry mainly in Tartu.

**22. Factors adversely affecting the site's ecological character, including changes in land use and development projects:**

a) site: No direct threats from regulated and traditional human activities. Building of summer cottages should be avoided. Intensive fishing in Emajõgi delta, especially during spring spawning, could be a threat.

b) Surroundings/catchment: Lake Peipsi is endangered from general eutrophication which has been especially rapid in the southern basin. A threat is posed by pollution of the river Emajõgi, coming mainly from Tartu, where waste-water is treated only partly (waste-water treatment plant under construction). Some pollution also comes from agricultural areas. Another polluter is the river Velikaya coming from Russia.

**23. Conservation measures taken:**

Emajõe Suursoo Mire Reserve, covering 18,425 ha, was established by the Government in 1981. Drainage, peat-digging, clear cutting of forest and use of fertilisers is banned. Piirissaar Zoological-Botanical Reserve (750 ha) was established in 1991 by the Council of Tartu County. Designated IBA in 1989, proposed categories in 1996: A1, A4, B1, B2.

**24. Conservation measures proposed but not yet implemented:**

The protection rules are in preparation. According to Estonian Governmental Regulation No. 48 of 4 March 1997 the management plan has to be completed by 2002.

**25. Current scientific and research facilities:**

Monitoring of swans and geese.

**26. Current conservation education:**

There are good possibilities for boating excursions and study trips.

**27. Current recreation and tourism:**

Rather intensive boating tourism. Some summer cottages, mainly former farm-houses. Seasonally intensively visited by berry-pickers.

**28. Jurisdiction:**

Peipsiääre Commune, Kolkja, Tartu County, EE2414

Vara Commune, Vara, Tartu County, EE2411

Luunja Commune, Tartu County, EE2420

Mäksa Commune, Melliste, Tartu County, EE2424

Võnnu Commune, Võnnu, Tartu County, EE2426

Meeksi Commune, Meeksi, Tartu County, EE2427

Piirissaare Commune, Tooni, Tartu County, EE2429

Ministry of Environment, Department of Nature Conservation, Tompuiestee 24, EE0100, Tallinn, Estonia

**29. Management authority:**

Nature Protection Department of Tartu County, Akadeemia 4, EE2400 Tartu, Estonia

**30. Bibliographical references:**

Valk, U. (ed.). 1988 Estonian Peatlands. Tallinn. pp. 241-246 (in Estonian with English summary).

Mäemets, A. (ed.). 1968 Estonian Lakes. Tallinn. 548 pp. (in Estonian with English summary).