

Ramsar Information Sheet

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1. Date this sheet was completed: 01.06.1997

2. Country: Estonia

3. Name of wetland: Alam-Pedja Nature Reserve

4. Geographical co-ordinates: 58°28'N 26°13'E

5. Altitude: 32-47 m above sea level

6. Area: 26,000 ha

7. Overview

Large, mostly flat wilderness area: integral complex of five mires separated by unregulated rivers with flood plain meadows and surrounded by extensive forests (including swamp forest/carrs).

8. Wetland type: M O Tp Ts U W Xf Xp

9. Ramsar Criteria: 1a, 1c, 2a, 2b, 2c, 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 an 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

2c - it is of special value as the habitat of plants or animals at a critical stage of their biological cycle

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*.

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, Jõgeva and Viljani County; 30 km NW from Tartu (103,000 inhabitants).

14. Physical features:

Natural origin. Hydrology largely influenced by rivers (annual floods in spring). Mean annual temperature 4.5°C, precipitation about 560mm, snow cover during 110 days, rivers and lakes covered with ice from December till April.

15. Hydrological values:

The proposed area is the largest one left in Estonia without any or almost no human influence. From the hydrological point of view, it plays an important role in the recharge and discharge of groundwater, and maintenance of water quality; it is a buffer zone to the Emajõgi River and the town of Tartu.

16. Ecological features:

Mires are represented by bogs (Põltsamaa, Umbusi), fens (Karisto, Ulila), transition bogs, and their complexes (Laeva). Bogs are of continental type, with numerous bog-pools. Large areas are covered by permanently wet swamp forest (birch-dominating) without any drainage. River banks are covered with alluvial open flood-plain meadows (Suur-Emajõgi River) or with forests of great botanical value (Pedja River).

17. Noteworthy flora:

Swamp forests, carrs, flood plain and wooded meadows (with oak) and alluvial broad-leaved forests are of special botanical value. The species diversity in alluvial *Alnus glutinosa* - *Ulmus laevis* - *Ulmis glabra* forests is high; these forests -as relicts- have persisted in only two other places in Estonia.

18. Noteworthy fauna:

Fish: Flood plains and old river beds are very important as spawning sites for fish (incl. *Aspius aspius*, *Siluris glanis*, *Abramis brama*, *Esox lucius*).

Birds: In recent years (1981 - 1993) 191 bird species have been recorded, there of 157 breeders including *Ciconia nigra* (1-2 pairs), *Haliaeetus albicilla* (2 pairs), *Aquila chrysaetos* (2 pairs), *Aquila clanga* (2 pairs), *Aquila pomarina* (2-3 pairs), *Circus pygargus* (2-3 pairs), *Circus cyaneus* (2-4 pairs), *Tetrax urogallus* (50 - 60 males), *Gallinago media* (50 - 75 males), *Grus grus* (>20 pairs), *Lagopus lagopus*, *Larus minutus* (80 - 100 pairs), *Chlidonia niger* (150 - 200 pairs) etc. Flood plains are important stop-over sites for waterfowl: *Anas penelope*, *Anas crecca*, *Anas platyrhynchos*, *Anas acuta*, *Aythya ferina*, *Aythya fuligula*, *Bucephala clangula*, *Mergus albellus*, *Cygnus columbianus* (300-600).

Mammals: At least 41 mammal species have been recorded including *Canis lupus*, *Ursus arctos*, *Mustela lutreola*, *Lutra lutra*, *Lynx lynx*, *Castor fiber*, *Pteromys volans*, *Myotis dascyneme* (600 - 700 including a summer colony) and *Vespertilio murinus*.

19. Social and cultural values:

Important area for traditional berry-picking (*Oxycoccus palustris*, *Rubus chamaemorus*), small-scale hunting; fishing (mainly at Emajõgi). A half of the area was closed to people for 40 years. Alam Pedja has been a stationary research area of paludification successions (in the 1920s/1930s), and of geobotanical analyses in flood plain meadows (in the 1970s).

20. Land tenure/ownership of:

a) site: about 90% state-owned land. In the course of re-privatisation up to 10% is to be given back to legal private owners (mainly flood plain meadows).

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

21. Current land use/principal human activities:

a) site: 15-20 permanent inhabitants. Extensive forestry, fishery, picking, hunting; agriculture activities have almost ceased. Almost ½ of the area was possessed by the Soviet army (until 1991), of which a minor part was used as a bombing area, but the rest has almost no human influence.

b) Surroundings/catchment: forestry, peat excavation, agriculture.

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

a) site: former Soviet military training area. Presently intensification of forestry; drainage of unregulated river meadows; peat excavation, intensification of fishery.

b) Surroundings/catchment: Pollution from the peat excavation industry reaching flood plains and old river beds at the Emajõgi River; agricultural pollution coming by the rivers.

23. Conservation measures taken:

Some mineral bog "islands" (473 ha) in Laeva mire were taken under local (municipal) protection already in 1990. In 1994, the Alam-Pedja Nature Reserve was established (26,000 ha). The protection rules were approved by the Estonian Governmental Regulation No. 92 of 03 March 1995 (published in *Riigi Teataja* I, 1995, 30, 381).

24. Conservation measures proposed but not yet implemented:

According to Estonian Governmental Regulation No. 48 of 4 March 1997 the management plan has to be completed by 1999. The area is proposed IBA (in 1996); categories A1, A4, B2.

25. Current scientific and research facilities:

Stationary monitoring of birds of prey and owls.

26. Current conservation education:

No visitor centres. Informational booklet in preparation. There are good possibilities to organise boat trips by Emajõgi (starting from Tartu).

27. Current recreation and tourism:

Seasonally intensively visited by berry-pickers, to a lesser extent by anglers. Some former farm-houses being use as summer cottages.

28. Jurisdiction:

Laeva Commune, Tartu County, EE2463

Puhja Commune, Tartu County, EE2466

Rannu Commune, Tartu County, EE2454

Tähtvere Commune, Ilmatsalu County, EE2461

Puurmanni Commune, Jõgeva County, EE2382

Põltsamaa Commune, Kesk 3, Põltsamaa, Jõgeva County, EE2353

Kolga-Jaani Commune, Viljandi 6, Kolga-Jaani, Viljandi County, EE2880

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

29. Management authority:

Nature Conservation Co-operative "Kotkas", Riia 185a, EE2400 Tartu, Estonia

30. Bibliographical references:

Lõhmus, A. *et al.* 1994. Laeva-Palupõhja linnustikust. "Hirundo", suppl., 35 pp. (in Estonian with English summary).

Ristkok, J. 1969. Emajõe vanajõed. - Tartu Riikliku Ülikooli Toimetised, 231. Zooloogia-alaseid töid V, lk. 3 - 87.