Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

- 1. The RIS should be completed in accordance with the attached Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands. Compilers are strongly advised to read this guidance before filling in the RIS.
- 2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Bureau. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:	FOR OFFICE USE ONLY.	
4, Riga, LV-1010, Latvia. Tel: +371 7034894, Fax: + 371 7830291, e-mail: inga@lanet.lv.	Designation date	Site Reference Number
2. Date this sheet was completed: 1 December 2003		
3. Country: LATVIA		
4. Name of the Ramsar site:		
Pape Wetland Complex		
5. Map of site included: Refer to Annex III of the <i>Explanatory Note and Guidelines</i> , for detailed guidance or	n provision of suitable	e maps.
a) hard copy (required for inclusion of site in the Ramsar List): Y	ES	
b) digital (electronic) format (optional): yes ✓ -or- no □		
6. Geographical coordinates (latitude/longitude): 56°10'12" N	20°54'37" E	
7. General location: Liepaja district, Nica and Rucava municipalities.		
8. Elevation: Lake -0.1 -0.3 m above sea level in summer, -0.6 -0.9 m above sea level in winter		
9. Area: 51 725 ha		
10. Overview:		

The Lake Pape area is unique in the diversity of ecosystems concentrated in relatively small territory, including coastal lagoon, oligo-mesotrophic waters, natural eutrophic lakes, coastal dunes and raised bogs. Area is considered an internationally significant breeding, migrating and wintering site for birds and is included in the list of Important Bird Areas in Europe. The narrow strip of land between Lake Pape and sea is a major "bottleneck" for migratory birds as well as thousands of bats.

11. Ramsar Criteria:

Circle or underline each Criterion applied to the designation of the Ramsar site. See Annex II of the Explanatory Notes and Guidelines for the Criteria and guidelines for their application (adopted by Resolution VII.11).

 $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8$

12. Justification for the application of each Criterion listed in 11. above:

Criterion 1. Lake Pape is a typical representative of coastal freshwater lakes - remnants of Littorina Sea, precursor of the Baltic. It is unique, as are all the other lakes of similar origin on the eastern coast of the Baltic. This wetland plays a substantial hydrological, biological and ecological role in the region, identified both as IBA and potential Natura 2000 site.

Criterion 2. Site supports several species, listed in Habitats Directive Annex II – *Myotis dasycneme, Castor fiber, Rhodeus sericeus, Salmo salar, Lutra lutra, Lynx lynx* and *Lampetra fluviatilis*. It also supports 75 bird species listed in Birds Directive Annex I (6 of them priority species). Site holds 6 habitats of EU importance, listed in Habitats Directive Annex I, 5 of them priority.

Criterion 4. Site supports thousands of roosting *Anser fabalis* and *Anser albifrons* in autumn. At least 4000 individuals were registered in 1999. Large numbers of *Cygnus cygnus* (200 to 500) are gathering in area during spring migrations. Cranes *Grus grus* are gathering here during spring migrations – 300 to 500 individuals registered.

Criterion 6

Site supports 500 – 5000 Anser fabalis during migration period.

13. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Area is belonging to the Boreo-nemoral vegetation zone, i.e. North European mixed forest region (*Udvardy*, 1975.).

b) biogeographic regionalisation scheme (include reference citation):

Area is belonging to the Boreo-nemoral vegetation zone (*Udvardy, 1975*.). The original boreo-nemoral vegetation comprises a mixture of coniferous and deciduous trees, although conifers have probably always predominated. This zone is wide in Baltic states and together with Sweden and western Russia contains a comparatively large proportion of Europe's boreo-nemoral regions.

14. Physical features of the site:

The territory stands on the East-European Platform that crystalline base is at a depth of 1000 - 1200 m. The sediment deposits contain Cambrian, Ordovician, Silurian, Devonian and Quaternary systems.

In most of the area soils are not productive, that explains the low intensity of land use in agriculture. Central part is more productive and was intensively used during Soviet times.

15. Physical features of the catchment area:

The territory stands on the East-European Platform that crystalline base is at a depth of 1000 - 1200 m. The sediment deposits contain Cambrian, Ordovician, Silurian, Devonian and Quarternary systems.

16. Hydrological values:

Hydrological system of Pape lake has been changed continuously since first dam was built in 1830. Due to these changes, lake water changed to more pristine than saline. Meadows and wet forests were poldered to develop intensive forestry and agriculture. Nida bog was drained for peat extracting. Thus, hydrological regulation functions of natural have largely decreased and are in need for restoration. Old inflows of Ligupe and Paurupe rivers should be restored to increase water exchange in the lake. By restoration of sluices it could be possible to increase the ecological effect of those.

17. Wetland Types

a) presence:

Circle or underline the applicable codes for the wetland types of the Ramsar "Classification System for Wetland Type" present in the Ramsar site. Descriptions of each wetland type code are provided in Annex I of the Explanatory Notes & Guidelines.

Human-made: $1 \cdot 2 \cdot 3 \cdot 4 \cdot 5 \cdot 6 \cdot 7 \cdot 8 \cdot 9 \cdot Zk(c)$

b) dominance: A, K, Xf, W, O, Tp, M, Ts, U, E, 9.

18. General ecological features:

Lake Pape hosts one of the largest *Cladium mariscus* localities in Latvia. The lake is important staging place for many migratory birds and it is very rich waterfowl breeding area. It is one of the best sites for breeding of *Botaurus stellaris* in Latvia. The lake is important feeding place for many bat species. Nida bog is important mainly for different mire habitats (e.g. 7110, 7140). As it has been influenced by drainage and peat extraction, the largest part of the mire is not in excellent conservation status any more. It is important for conservation of breeding and staging bog birds, one of the few breeding sites for *Numenius phaeopus* in Latvia.

Following habitat types are represented in the site (EU classification):

- Calcareous fens with Cladium mariscus and species of the Caricion davallianae
- Hard oligo-mesotrophic waters with benthic vegetation of *Chara spp*.
- Coastal lagoon
- Fixed coastal dunes with herbaceous vegetation (grey dunes)
- Active raised bogs
- Boreal Baltic coastal meadows
- Sandbanks which are slightly covered by sea water all the time
- Wooded dunes of the Atlantic, Continental and Boreal region

19. Noteworthy flora:

Several rare, endangered and typical species are registered in the site:

Great Fen-sedge Cladium mariscus (Lake Pape)

Early Marsh-orchid Dactylorhiza incarnata (Nida bog)

Coral-root orchid Corallorhiza trifida (Nida bog)

Marsh Helleborine Epipactis palustris (Nida bog)

Baltic Ivy Hedera helix (Kalniski nature reserve)

Baby's Breath Gypsophila paniculata (coastal area)

Sea Pea Lathyrus maritimus (coastal area)

Sand Sedge Carex arenaria (coastal area)

Marram Ammophila arenaria (coastal area)

20. Noteworthy fauna:

Important site for Myotis dasycneme, Rhodeus sericeus, Salmo salar, Lutra lutra, Lynx lynx, Lampetra fluviatilis.

Breeding species, listed in Birds Directive Annex I include: *Pluvialis apricaria* (3-4 p), *Tringa glareola* (4 p), *Ficedula parva* (1-10 p), *Botaurus stellaris* (25-35 p), *Ixobrychus minutus* (0-1 p), *Circus aeruginosus* (20-30 p), *Circus pygargus* (2-5 p), *Porzana parva* (10-50 p), *Porzana porzana* (15-20 p), *Grus grus* (8-10 p), *Sterna hirundo* (1-3 p), *Acrocephalus paludicola* (0-5 p), *Crex crex* (10-30 p), *Haliaeetus albicilla* (1 p), *Lanius collurio* (50-100 p), *Lullula arborea* (5-20 p), *Aquila pomarina* (1-2 p) and *Ciconia nigra*.

Migrating dunes – rare on the Baltic coast – provide breeding habitat for such birds as *Charadrius hiaticula* and *Sterna albifrons*.

Several small rivers provide spawning grounds for Rhodeus sericeus, Lampetra fluviatilis and other fish

21. Social and cultural values:

Before World War II, most economic activities in the area were connected with fishing and there were more than 100 households. During soviet times fishing was prohibited due to proximity to the border. Because of the consequent loss of jobs, young people left the area, leaving an aging population. The population is almost 100 people nowadays. Most live in Pape (50), Koni or Nida (28). The average age of inhabitants is older than 56 years.

Main social and cultural values in this territory are both inland and marine fisheries and forestry. Local municipalities begin to get involved in nature tourism activities. Because of the nearby sea beach small recreational facilities were established in Pape and Nida – two boat docks, the open air museum.

22. Land tenure/ownership:

About 60 % of the lands both in Ramsar site and in surrounding areas are privately owned. 35% are owned by State and 5% are municipality lands.

23. Current land (including water) use:

(a) within the Ramsar site:

Raised mires are seasonally used for berry picking. Lake is used for fishing and reed cutting. Surrounding areas are used for extensive grazing by Konik horses.

(b) in the surroundings/catchment:

Forest cutting are the main segment of activities, followed by low pressure and continually decreasing agriculture (pastures for cattle, hay making), as well for seasonal berry and mushroom picking.

24. Factors (past, present or potential) adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

- (a) within the Ramsar site:
 - Eutrophication of the lake
 - Lack of grassland management
 - Overgrowing of Lake Pape by reeds and merging of reed beds
 - Loss of wetland and meadow habitats
 - Unregulated visitor/tourist use of the area for recreational purposes
 - Lack of capacity of municipalities and government institutions to enforce nature regime rules and laws.
- (b) in the surrounding area:
 - Intensive forest cutting

25. Conservation measures taken:

Site is protected by national legislation (nature park "Pape Lake").

Management plan for Lake Pape was prepared by WWF Latvia in 1997, it will be updated in 2004.

Regular cutting of reed is carried out in Lake Pape, meadows are partly grazed by Konik horses.

26. Conservation measures proposed but not yet implemented:

Site is proposed as Natura 2000 site.

Project proposal to LIFE-Nature fund "Lake Pape – conservation, preservation and evolution" was elaborated in 2002, it received funding in 2003. Several activities will be performed by the project, namely:

- Inventory and mapping of habitats, flora and fauna
- Elaboration of management plan for Lake Pape
- Development of public education and information programme
- Feasibility studies of maintaining calcareous meadows
- Establishment of administration of site
- Purchase or lease of land for preservation
- Restoration of water exchange between sea and lake
- Restoration of natural wetland and Nida bog
- Purchase of large herbivores for grazing coastal meadows and calcareous fens
- Dredging bottom of lake to increase open water space
- Management of Heck cattle
- Reed cutting in Lake Pape

- Establishing and ensuring control mechanism to prevent violations of the nature protection regime
- Improving tourism infrastructure

27. Current scientific research and facilities:

The following State Monitoring Programmes are carried out within the Wetland complex:

- Monitoring hydrological factors
- Monitoring of marine habitats and species
- Monitoring of coastal habitats and species
- Monitoring of Latvian Ramsar sites
- Monitoring of bogs and mires
- Monitoring of migrating birds
- Monitoring of geological processes

28. Current conservation education:

The Nature Centre was established in 2002. It is multi-functional and provides educational information (permanent exposition and booklets), offers various commercial packages (B&B, bird watching, fishing, hiking, biking, horse attendance) and serves as an example of successful and environmentally friendly business activity promoting nature conservation and sustainable rural development.

29. Current recreation and tourism:

The Nature Centre was established in 2002. It is multi-functional and provides educational information (permanent exposition and booklets), offers various commercial packages (B&B, bird watching, fishing, hiking, biking, horse attendance) and serves as an example of successful and environmentally friendly business activity promoting nature conservation and sustainable rural development.

Because of good nature conditions and proximity to Lithuania, there is high interest in the beach and coastal area in Pape and Nida from Lithuanian side. In soviet times Lithuanian enterprises built more than 40 summer houses (350 beds). Approximately 15 000 visitors come to Pape and Nida per season, 20% of them are long term staying tourists from Lithuania.

30. Jurisdiction:

State owned forests are managed by State Stock Company "Latvian forests", private owners are responsible for management of their properties. Control over use and protection regime is ensured by Regional Environmental Board and State Environmental inspectorate, management and use of forests is supervised by State Forest Service.

31. Management authority:

Nature Conservation Board, Eksporta iela 5, Riga LV-1010, Tel: +371 7509545, e-mail: dap@dap.gov.lv

32. Bibliographical references:

Bernes, C. (1994). Biological diversity in Sweden. Swedish Environmental Protection Agency.

Dissing H., Aramina I., Strade S., Seglins V. (1996). Management plan for Lake Pape Project Area. WWF Denmark.

Pakalne M., Salmina L., Bambe B., Petrins A. (1995) Inventory of most valuable peatlands in Latvia. Report to Ramsar Bureau.

Opermanis O. (1998). Wetlands and the Ramsar Convention in Latvia. Published by Latvian Ornithological Society.