

Information Sheet on Ramsar Wetlands (RIS) – 2006 version

Available for download from http://www.ramsar.org/ris/key_ris_index.htm.

Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes 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. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 7, 2nd edition, as amended by COP9 Resolution IX.1 Annex B). A 3rd edition of the Handbook, incorporating these amendments, is in preparation and will be available in 2006.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

1. Name and address of the compiler of this form:

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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

01/12/2007

3. Country:

Latvia

4. Name of the Ramsar site:

Lake Engure

5. Designation of new Ramsar site or update of existing site:

This RIS is for (tick one box only):

a) Designation of a new Ramsar site ; or

b) Updated information on an existing Ramsar site

6. For RIS updates only, changes to the site since its designation or earlier update:

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

If the site boundary has changed:

i) the boundary has been delineated more accurately ; or

ii) the boundary has been extended ; or

iii) the boundary has been restricted**

and/or

If the site area has changed:

i) the area has been measured more accurately ; or

- ii) the area has been extended ; or
- iii) the area has been reduced**

** Important note: If the boundary and/or area of the designated site is being restricted/reduced, the Contracting Party should have followed the procedures established by the Conference of the Parties in the Annex to COP9 Resolution IX.6 and provided a report in line with paragraph 28 of that Annex, prior to the submission of an updated RIS.

b) Describe briefly any major changes to the ecological character of the Ramsar site, including in the application of the Criteria, since the previous RIS for the site:

The ecological situation in the site has improved slightly since previous RIS – more than 80ha of shore and coastal meadows have been restored, they are maintained by continuous grazing by cattle and horses. Ramsar site borders are the same as borders of the nature park “Lake Engure Nature park” and they have been modified in April 2006, according to more precise measurements in nature done.

7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) a hard copy (required for inclusion of site in the Ramsar List): ;
- ii) an electronic format (e.g. a JPEG or ArcView image) ;
- iii) a GIS file providing geo-referenced site boundary vectors and attribute tables .

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

Territory of Ramsar site is the same as Lake Engure nature parks territory and borders are the same. The site lies on western coast of the Gulf of Riga.

There was mistake in the old data form indicating a wrong area. Now the border has been drawn and the site area has been calculated more accurately. Unfortunately we do not have a better map.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

57°17'N, 23°07'E

9. General location:

Include in which part of the country and which large administrative region(s) the site lies and the location of the nearest large town.

The site lies on western coast of the Gulf of Riga. It is located in Talsi and Tukums administrative districts. Nearest large towns are Talsi and Tukums (about 35 km).

Territory of Ramsar site is the same as parks territory and borders are the same.

10. Elevation: (in metres: average and/or maximum & minimum)

Site is located in average 3,2 metres above sea level.

11. Area: (in hectares)

19700 ha (including lake 4135 ha)

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Lake Engure Ramsar site is located on western coast of the Gulf of Riga. It includes shallow freshwater coastal lake rich in emergent vegetation, shallow waters of Gulf of Riga up to ten meters isobat, wet forests on the western shore of the lake. Area holds 186 nesting bird species and approximately 860 vascular plant species. During last 10 years numbers of nesting birds has declined due to natural changes in habitats caused by the lack of grazing and mowing and presence of invasive predator American Mink.

13. Ramsar Criteria:

Tick the box under 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). All Criteria which apply should be ticked.

1 • 2 • 3 • 4 • 5 • 6 • 7 8 • 9

14. Justification for the application of each Criterion listed in 13 above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Criterion 1. Lake Engure is a typical representative of coastal freshwater lakes - remnants of Littorina Sea, precursor of the Baltic. It is unique, because all other lakes of similar origin at the eastern coast of Baltic Sea have been drained completely or changed in larger extent (surrounded by dams, heavily polluted by sewage waters, lost open water area due to overgrowing).

Criterion 2. There are 3 bird species of global conservation concern recorded breeding at Engure Ramsar site, which are listed in Annex I of the Bird Directive, these are Corncrake, *Crex crex* – more than 20 pairs, White –tailed Eagle, *Haliaeetus albicilla* – 2 pairs and Ferruginous Duck, *Aythya nyroca* – breeds irregularly several pairs.

About 40 bird species listed in Bird Directive considered as threatened in Europe have been recorded nesting in Engure Ramsar site. There were ducks (865 pairs all species together), Mute Swan *Cygnus olor* (150), Black-headed Gull *Larus ridibundus* (4500), other gulls (470), Common Coot *Fulica atra* (500) and different grebe species (1000) or around 8350 breeding pairs of waterbirds or 16700 adult individuals breeding in 2000. Consequently at the end of breeding season Lake Engure supports at least 25000 waterbirds.

In the table below are shown some of the protected bird species.

| Species | Bird Directive | National protection status |
|-----------------------------|----------------|----------------------------|
| <i>Larus ridibundus</i> | - | + |
| <i>Tadorna tadorna</i> | | + |
| <i>Podiceps auritus</i> | + | + |
| <i>Botaurus stellaris</i> | + | + |
| <i>Grus grus</i> | + | + |
| <i>Haliaeetus albicilla</i> | + | + |
| <i>Lanius collurio</i> | + | + |
| <i>Larus minutes</i> | + | + |
| <i>Circus auruginosus</i> | + | + |
| <i>Porzana parva</i> | + | + |
| <i>Limosa limosa</i> | - | + |
| <i>Panurus biarmicus</i> | - | + |

| | | |
|-------------------|---|---|
| Tinga tetanus | - | + |
| Bubo bubo | + | + |
| Sterna albifrons | + | + |
| Chlidonias niger | + | + |
| Sterna hirundo | + | + |
| Pandion halieatus | + | + |
| Crex crex | + | + |

Criterion 3. Number of nesting bird species (186) and vascular plants (approx. 860) shows importance of Engure Ramsar site for maintaining the biological diversity of this region.

Criterion 4 Altogether, about 40 bird species considered as threatened in Europe have been recorded nesting in Engure Ramsar site. There were ducks (865 pairs all species together), Mute Swan *Cygnus olor* (150), Black-headed Gull *Larus ridibundus* (5400), other gulls (470), Common Coot *Fulica atra* (500) and different grebe species (1000) or around 8350 breeding pairs of waterbirds or 16700 adult individuals breeding in 2000. Consequently at the end of breeding season Lake Engure supports at least 28950 waterbirds.

During winter internationally important concentrations of Long-tailed Duck *Clangula hyemalis* and Velvet Scoter *Melanitta fusca*, as well as concentration of moulting Goldeneye *Bucephala clangula* in summer have been recorded along the western coast of the Gulf of Riga but this wintering and moulting area is wider than Engure Ramsar site.

Criterion 5. Although numbers of breeding waterfowl have dramatically declined during last 10 years at Lake Engure, it still fits criterion of 20000 birds. There were ducks (865 pairs all species together), Mute Swan *Cygnus olor* (150), Black-headed Gull *Larus ridibundus* (5400), other gulls (470), Coot *Fulica atra* (500) and different grebe species (1000) or around 8350 breeding pairs of waterbirds or 16700 adult individuals breeding in 2006. Using recent very low breeding success values (e.g. ca. 25% hatching success for ducks, 0.5 fledged young's per pair of Black-headed Gull *Larus ridibundus* it is possible to calculate number of fledged young's for groups mentioned above which constituted 10650 individuals. Number of non-breeding immature Mute Swan *Cygnus olor* and moulting ducks exceeding local breeders was at least 2200 individuals. Consequently at the end of breeding season Lake Engure supports at least 28950 waterbirds.

| Species | Number of breeding pairs |
|---------------------------|--------------------------|
| <i>Cygnus olor</i> | 150 |
| <i>Larus ridibundus</i> | 5400 |
| <i>Fulica atra</i> | 500 |
| <i>Sterna hirundo</i> | 400-500 |
| <i>Chlidonias niger</i> | 60-120 |
| <i>Botaurus stellaris</i> | 30-50 |
| <i>Podiceps auritus</i> | 10 |
| <i>Circus aereginosus</i> | 30 |
| <i>Porzana porzana</i> | 40-60 |
| <i>Porzana parva</i> | 20-30 |
| <i>Ficedula parva</i> | 50-80 |
| <i>Larus minutus</i> | 130 |
| <i>Egretta alba</i> | 20 |
| <i>Bubo bubo</i> | 2-3 |

Criterion 6. Breeding population of Red-necked Grebe *Podiceps grisegena* (600 pairs) exceeds 1% of biogeographical population of 1000 individuals.

Premigratory concentration of Crane *Grus grus* (ca. 800 individuals) exceeds 1% of 750 individuals of the flyway population.

Pochar *Aythya ferina* population that exceeded this level several years ago nowadays does not fit this criterion.

15. 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.*).

Boreal

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.

Council Directive 92/43/EEC

16. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

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.

Cambrian deposits are sandstone and aleurolite with greenish –grey and dark grey clay layers. These sediments lie at the depth of 1039-1138 m in a 99 m thick layer. Ordovician deposits are mostly organic debris, with a thickness of 177m, depth 861-1039. All layers represent the Silurian mostly by marl with dolomite or arnelite layers in specific locations at 489-861 m depth. The Devonian is represented with all three layers (grey, red and yellow sandstone, aleurolite, clay, dolomite marl, sandy dolomite) and its depth is 337-590 m. The thickness of Quarternary layer is 7-20 m on the Coastal Lowland. Deposits are moraine, eolian (fine sand) and organic (peat and sapropel). Soils in the territory are clay-sands, sandy gravel, light and mid-light loams. The soils are not productive, that explains the low intensity of land use in agriculture.

17. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).

Physical features of the catchment area do not differ much from features described in chapter 16. Drainage basin of the lake covers 644 km².

18. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

No information available.

19. 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*.

Marine/coastal: A • B • C • D • E • F • G • H • I • J • K • Zk(a)

Inland: L • M • N • O • P • Q • R • Sp • Ss • Tp • Ts • U • Va •
Vt • W • Xf • Xp • Y • Zg • Zk(b)

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

b) dominance: dominance: O/K, Xf, A, E, H, Xp, U

List the wetland types identified in a) above in order of their dominance (by area) in the Ramsar site, starting with the wetland type with the largest area.

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Lake Engure Nature park includes the largest ancient lagoon lake in Latvia (3500 ha). Up to 40% of the whole area of the lake is covered by reedbeds (*Phragmites australis*, *Typha angustifolia* and *Typha latifolia*). Rather large areas are covered by different *Chara* sp. stands. The lake is surrounded by pine forests on the eastern side and by mixed forests on the western side. Main habitats in the territory of lake Engure Ramsar site are:

- a Baltic Boreal coastal meadows;
- b Boreal Baltic sandy beaches with perennial vegetation;
- c Hard oligo-mesotrophic waters with bentic vegetation of *Chara* sp.;
- d Natural eutrophic lakes with Magnopotamion or Hydrocharition – type vegetation;
- e Transition mires and quaking bogs;
- f Calcareous fens with *Cladium mariscus* and species of *Caricion davallianae*;
- g Fennoscandian deciduous swamp woods;
- h Dunes;
- i Bog woodland.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RLS.*

More than 800 species of vascular plants are recorded in the area. There are 74 protected plant species found in the territory of lake Engure Ramsar site. All of them are in Latvian red Data Book. The most endangered ones are:

Water blinks – *Montia fontana*

Thistle Broomrape – *Orobanche pallidiflora*

Birdseye Primrose – *Primula farinosa*

Trailing Tormentill – *Potentilla anglica*
Sea Milkwort – *Glaux maritima*
Fly Orchid – *Orphys insectifera*
Marsh Pennywort – *Hydrocotyle vulgaris*
Sedge sp. – *Carex reichenbachii*

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 12. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds. Comparing with the data of the beginning of nineties, number of breeding pairs for many species has changed in 2000:

Cormorant, *Phalacrocorax carbo* - 20 pairs (increase)
Mute Swan, *Cygnus olor*– ca. 150 pairs (increase)
Shoveler, *Anas acuta*– 10-15 pairs (decline)
Garganey, *Anas querquedula*– 25 pairs (decline)
Mallard, *Anas platyrhynchos*– 500 pairs (decline)
Pochard, *Aythya ferina*–200 pairs (decline)
Coot, *Fulica atra*– 500 pairs (decline)
Black-headed Gull, *Larus ridibundus*– 5400 pairs (decline)
All waders (decline)
White-tailed eagle, *Haliaeetus albicilla*– 2 pairs (stable)

23. Social and cultural values:

a) Describe if the site has any general social and/or cultural values e.g., fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values:

Main social and cultural values in this territory are both inland and marine fisheries and forestry. About 65% of all population is employed in fisheries industry. Agriculture is developed mainly on the western part of the territory. Territory has high tourism and recreational potential.

b) Is the site considered of international importance for holding, in addition to relevant ecological values, examples of significant cultural values, whether material or non-material, linked to its origin, conservation and/or ecological functioning?

If Yes, tick the box and describe this importance under one or more of the following categories:

- i) sites which provide a model of wetland wise use, demonstrating the application of traditional knowledge and methods of management and use that maintain the ecological character of the wetland:
- ii) sites which have exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland:
- iii) sites where the ecological character of the wetland depends on the interaction with local communities or indigenous peoples:
- iv) sites where relevant non-material values such as sacred sites are present and their existence is strongly linked with the maintenance of the ecological character of the wetland:

24. Land tenure/ownership:

a) within the Ramsar site:

About 70% of all land in this territory is owned by the state, other 30% are owned by local communities or private owners.

b) in the surrounding area:

No information available

25. Current land (including water) use:

a) within the Ramsar site:

The Lake Engure and coastal waters of Gulf of Riga cover about 50 % of the territory. Forests from what 60% belongs to the state cover other 45% of the territory. 5% of all territory is abandoned agricultural land.

b) in the surroundings/catchment:

No information available

26. 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:

1. Appearance of two alien mammal predators –Raccoon dog and American Mink.
2. Decrease of areas covered by meadow vegetation due to lack of grazing and mowing, its replacement by reed and forest.
3. Growing together separate stands of emergent vegetation in huge continuous massifs dominated by common reed.
4. Recent use of gillnets on the lake instead of fish-baskets traditionally used on the lake till 1960s.
5. Lack of information and tourism infrastructure.

b) in the surrounding area:

Changes in fish processing and improvement of waste management since 1990 has essentially reduced the availability of food for the Black-headed Gull in fishing harbours and mink farms.

27. Conservation measures taken:

a) List national and/or international category and legal status of protected areas, including boundary relationships with the Ramsar site:

In particular, if the site is partly or wholly a World Heritage Site and/or a UNESCO Biosphere Reserve, please give the names of the site under these designations.

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?:

Lake Engure Nature Park has Nature Protection (Management) Plan elaborated by Latvian Fund of Nature 1999-2000.

d) Describe any other current management practices:

1. 1998 – Lake Engure Nature Park established
2. 1999-2000 – elaborated management plan
3. 2000-2001 – small scale management works for maintenance of habitats for waterfowl done.
4. 2001 – 2004 – LIFE-Nature project “Implementation of management plan for Lake Engure nature park”, dealing with restoration of coastal and shore meadows, maintenance of meadows, reed cutting in the lake, ensuring control and improving tourism infrastructure in the area.

Individual site protection rules set different management zones within the park and regulate the protection regime of these zones.

28. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

Current site management plan is implemented; new plan will be prepared in 2008. Tourism development plan (TDP) for the Lake Engure Nature Park was prepared in 2006, it prescribes actions for development of tourism sector and minimising the impact of tourism on species and habitats. The TDP is available in paper copy.

29. Current scientific research and facilities:

e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Mainly Laboratory of Ornithological Research, Institute of Biology, does the scientific research in territory. There is ornithological research centre in the Site what is used for both scientific and educational purposes.

Currently running scientific projects are:

1. Evaluation of anthropogenic influence on bird populations in wetland ecosystems and possibilities of its optimisation.
2. Predator-prey relationships depending on species composition of zoocenosis and population size in wetland ecosystems.
3. Complex monitoring of wetland ecosystems.
4. Comparative studies of duck breeding success on two Latvian Ramsar sites.
5. Population of Garganey and Shoveler in Baltic States and Belarus.

30. Current communications, education and public awareness (CEPA) activities related to or benefiting the site:

e.g. visitors' centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

Currently lake Engure Nature Park Fund is involved in education of children from local village schools. There are three bird watching towers available for tourists, one nature path “Orchid path”. The information signs have been set up in the area, informing visitors about nature values (birds and plants), rules and zones of the nature park. The newsletter is distributed to local inhabitants three times a year, including information about recent developments in nature conservation, news and plans.

New summer lecture house was constructed in 2003, it is located near the lake and can accommodate up to 30 participants.

31. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

There are three bird watching towers available for tourists, one nature path "Orchid path". The information signs have been set up in the area, informing visitors about nature values (birds and plants), rules and zones of the nature park. New summer lecture house was constructed in 2003, it is located near the lake and can accommodate up to 30 participants.

32. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.

Individual site protection rules were elaborated and approved by Cabinet of Ministers on 08.04.2004. These rules contribute to the overall protection of valuable species and habitats in the Nature Park. They set different management zones within the park and regulate the protection regime of these zones. According to regulations is established Lake Engure Nature Park Consultative Board. It is composed by heads of local municipalities, representatives for state institutions like The Ministry of Environment, State Forest Service, State Fishery Board, Ornithological Society, Local Fishermen Union, represents local interest groups. It is supervising the work of Lake Engure Nature Park Fund an NGO that has been established to manage the park. State owned forests are managed by State Stock Company "Latvian State 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.

33. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Lake Engure Nature Park Fund, Mersrags town, Ozolu str. 1-12
LV – 3265, Latvia
eedp@inbox.lv

34. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.

Management plan for Lake Engure Nature Park, Latvian Fund for Nature, Riga, 2000

Proceedings of the Latvian Academy of Science vol.54, Nr.5/6, Riga, 2000

Opermanis O. 1998. Wetlands and the Ramsar Convention in Latvia. Published by Latvian Ornithological society.

Viksne J., The Bird Lake Engure, Jāņa Sēta Publishers, Riga, 1997

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