Information Sheet on Ramsar Wetlands (RIS) – 2006-2008 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 and guidelines 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.

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

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DD MM YY

Designation date | Site Reference Number

2. Date this sheet was completed/updated:
15 February 2008

3. Country:
Estonia

4. Name of the Ramsar site:
The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.
Sookuninga Nature Reserve

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 ☑;
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:

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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.

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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.
58°00' N 24°45' E

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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 is located on the Estonian-Latvian border in Pärnu County, 50 km southwest of Pärnu and 20 km south of Kilingi Nõmme, the centre of Saarde Municipality. Sookuninga Ramsar site has borders on the south with Northern Bogs (Ziemelu Purvi) Ramsar site (No 1385) in Latvia and on the west with Nigula Ramsar site (No 910) in Estonia. All three sites form one ecological and hydrological integrity – the North-Livonian Transboundary Wetland Complex with a total area of 17,575 ha.

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

40-60 m

11. Area: (in hectares)
5,869 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.

The active raised bog habitat type covers 25% (1,484 ha) of the territory of Sookuninga Nature Reserve. The reserve includes six different raised bog massifs and three of them (Tõrga/Kodaja, Sandre, Rongu) are divided by the border between Estonia and Latvia. The relatively small (100-200 ha) Ruunasoo, Rakste and Sookuninga bogs are fully located on the Estonian side of the border. The largest (Tõrga/Kodaja, Rongu) are open raised bogs with numerous pools and hollow complexes. The occurrence of typical plant communities and typical species for raised bog mosaics is high. The habitat type, bog woodlands covers 17% (ca 1,000 ha) of the area and at least 20% of them are today influenced by direct drainage. Forest habitat types cover 53% (3,108 ha), 10% of the area is covered by agricultural land (cereal crop fields and grasslands) and 34% (2,020 ha) by mires (according to Estonian Base Map 1:10 000).

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).

1 – the site is a good representative of a natural raised bog complex characteristic of the Boreal Biogeographical region.. Wetland habitats occur in Sookuninga Nature Reserve and listed in Annex I Habitat Directive are active raised bogs (*7110), transition mires and quaking bogs (7140), bog woodland (*91D0), Fennoscandian deciduous swamp woods (*9080), northern boreal alluvial meadows (6450), rivers and streams (3260). The wetland complex plays a substantial hydrological, biological and ecological role in the region and it is identified both as an IBA and Natura 2000 site, as well as an International level Core area in the Pan European Ecological Network.

2 – the site supports an appreciable assemblage of rare, vulnerable and endangered species of birds and plants, some of them occurring in great numbers or densities. It supports bird species of EU conservation interest, listed on Annex I of Council directive 79/409/EEC: *Ciconia nigra* Black Stork (1-2 p), *Aquila chrysaetos* Golden Eagle (1-2 p), *Aquila pomarina* Lesser-Spotted Eagle, *Aquila clanga* Great-Spotted Eagle (0-1 p) , *Pernis apivorus* Honey Buzzard, *Tetrao tetrix* Black Grouse (20-30 males), *Tetrao urogallus* Capercaillie (40-50 males), *Bonasa bonasia* Hazel Hen (20-40 p), *Grus grus* Crane, *Crex crex* Corncrake (30-40 p), *Pluvialis apricaria* Golden P lover(30-50 p), *Tringa glareola* Wood Sandpiper (10-20 p), *Glaucidium passerinum* Pygmy Owl, *Strix uralensis* Ural Owl, *Caprimulgus europaeus* Nightjar (60-80 p), *Dendrocopos leucotos* White-backed Woodpecker (10 p), *Picoides tridactylus* Tree-toed Woodpecker (3-5 p), *Picus canus* Grey-headed (3-7 p) Woodpecker, *Ficedula parva* Red-breasted Flycatcher, *Lanius collurio* Red-backed Shrike. The site supports populations of large mammals including *Canis lupus* Wolf, *Lynx lynx* Lynx , *Ursus arctos* Brown Bear and *Alces alces* Elk. Some of the above mentioned species are also listed in the Red Data Book of Estonia. Highly endangered and strongly protected (I protection category) are Black Stork, Golden Eagle, Lesser-Spotted Eagle, Great-Spotted Eagle and *Lagopus lagopus* Willow Grouse.

3 – the site support particular elements of biological diversity that are rare or particularly characteristic of the Boreal biogeographic region such as untouched naturally open raised bogs and peatland forests, which

contain a significant proportion of species (e.g. *Sphagnum* mosses) adapted to special environmental conditions of oligotrophic peatland environment.

4 – the site supports animal species at a critical stage in their life cycles, being a refuge for animals with large habitat requirements such as breeding sites for Wolf and Lynx as well hibernation sites for Brown Bear. The mires are important as a breeding area for waders and as a roosting area for Geese, Swans and Cranes staging in North-Livonia Wetland Complex during migration periods. The area is an important breeding and wintering site for several rare and vulnerable sedentary bird species like, Golden Eagle, Goshawk, Capercaillie, Owls (Ural Owl, Pygmy Owl) and Woodpeckers (White-backed, Tree-toed, Grey-headed).

5 – the site regularly supports substantial numbers of waterbirds (>20 000). Up to 30,000 – 40,000 geese (*Anser fabalis* & *A. albifrons),* at least 600-700 Cranes and some hundreds of Whooper and Tundra Swans (*Cygnus cygnus* and *C. columbianus*) use the whole of the transboundary bogs complex as a staging post and feed in surrounding agricultural land during autumn migration.

6. – the site regularly supports from 1 (6,000 individuals) to 3 % of the Central & SW Europe wintering population of Tundra Bean Goose (*Anser fabalis rossicus*) and and up to 2 % (1% corresponds to 10,000 individuals) of the wintering NW Europe wintering population of Greater White-fronted Goose (*A. albifrons albifrons)* (count data 1997-2007).

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:

Boreal Biogeographic region according to the EEA.
Temperate and sub-polar broadleaf forests and woodlands belonging to the Boreonemoral province. The location of the Sookuninga Nature Reserve within the temperate climatic zone, in the transitional area between the boreal coniferous forest zone in the north and the nemoral broadleaved forest zone in the south contributes to natural diversity with features of both taiga and broadleaved forest.

b) biogeographic regionalisation scheme (include reference citation):

According to the mire regionalisation scheme, the given wetland complex belongs to the Baltic Coastal Mire Province (Boch & Mazing, 1979) with characteristic dominance of open raised bogs with pool-hummock systems and vegetation characterised by presence of *Sphagnum magellanicum, S. fuscum, S. rubellum* associated with *Calluna vulgaris, Betula nana, Rubus chamaemorus, Andromeda polifolia, Oxycoccus palustris, Empetrum nigrum. Rhynchospora alba* and *Carex limosa* in bog hollows.

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.
During the last glaciations, the territory was under the influence of two glacier lobes. The greater one moved along the depression of Baltic Sea, another, smaller - by Riga Gulf depression.
The Quaternary deposits consist mainly of basal tills (light or heavy loam with admixture of gravel and greater stones).The thickness of deposits within the plain part of mire complex varies between 10 and 30 meters.
Erosion prevailed within the territory during all Pleistocene glaciations. The almost flat glacial plain landforms are mainly not covered by meltwater sediments. Erosional landforms are well developed due to relatively soft and well erodable bedrock (terrigene formations of Middle and Upper Devonian).
The main feature of the plain is very gentle, almost isometric or slightly elongated shallow depressions, occupied by peat bogs. Depressions were created during last glaciations by glacial erosion – by heavy

subglacial currents that flowed under very high hydrostatic pressure as well as by direct erosion action of moving glaciers.
The territory lies in a region of very stable tectonics –landforms made by movement of the Earth's crust are absent and almost all elevations and depressions of the land are of glacial origin.
Prequaternary bedrock of the territory is built-up by terrigenous Middle Devonian Aruküla and Burtnieku formations. It consists of interlaying soft fine-grained sandstones, siltstones and clay with rare and uncommon interlayer and lenses of dolomite concretions.
Bog histosols with a peat layer exceeding 30 cm cover 60% and fen histosols (fen peat) cover 7% of the Sookuninga Nature Reserve. The peatlands are situated along the Estonian-Latvian border and form a 19-20 km long 'mire zone belt'. The development of the mires, mainly bogs, is a result of terrestrialisation of the previous Ice Lake bed. The maximum depth of the peat layer reaches up to 7 metres in Rongu bog.

17. Physical features of the catchment area:
Describe the surface area, general geology and geomorphological features, general soil types, and climate (including climate type).
Landforms of glacial erosion determine the form of the landscape within the catchment area. Overall the landscape has a flat mosaic type pattern with orientation of elementary landscapes along the glacier movement. The difference of altitude within the wetland complex is 10 meters (50 -60 m above the sea level).
Soils are formed on glacial and melt water deposits on the sands deposited by Baltic Ice Lake, the Litorina and the Baltic Sea.
Land use within the wetland complex is characterized by forest cutting activities next to the outer borders of the protected area. Extensive and decreasing agricultural activities take place outside the protected area.
The climate in the region is a transition from maritime to continental. The Baltic Sea has the strongest impact on the climate. The yearly average temperature is up from +5 to +6 degree. The average precipitation is 700 - 750 mm (mainly from April to October) and evaporation 420 mm per year. The wind comes mainly from south-east, in warm seasons the west or north-west winds are more dominant. The duration of snow cover has changed during in recent times considerably, 30 years ago the average was about 100 days, now it's almost 30 days less.

18. Hydrological values:
Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.
The mire complex is located on the watershed of the rivers Reiu (Estonia) and Salaca (Latvia) and plays an important role in the recharge and discharge of groundwater as well maintenance of water quality in southwest Estonia and northwest Latvia.

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:
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.

U, Xp, Xf, Tp, W, 9, M

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.

Typical open raised bogs with hummock and hollow complexes as well with numerous pools are the most typical wetland type. Open peatlands covers 25% (1,484 ha) of the territory of Sookuninga Nature Reserve. Bog woodlands cover 17% (ca 1,000 ha) of the area. Forests around the bogs comprise a variety of different types, dominated by mixed forests.

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 RIS.*

The plant communities of the mires are typical for West-Estonian bogs (Baltic Coast Bog Province). Bog vegetation is characterised by presence of *Sphagnum magellanicum, S. fuscum, S. rubellum* on hummocks associated with *Calluna vulgaris, Betula nana, Rubus chamaemorus*, *Andromeda polifolia, Oxycoccus palustris, and Empetrum nigrum. Rhynchospora alba* and *Carex limosa* communities are found in bog hollows. Forests around the bogs comprise a variety of different types, dominated by peatland forests. The habitat type, bog woodlands covers 17% (ca 1,000 ha) of the area and at least 20% of them are today influenced by direct drainage. Mixed forests are the most widespread land cover type in region. Deciduous (including broad-leaved) forests grow on rich soils and coniferous forestson poor soils. Most of forests are intensively managed and improved by drainage. There can be found nowadays relatively small wet alder swamp forest patches, which were very typical for the region before extensive forest drainage in 1960-70's. Although forest occupies more than 50 % of the reserve area the forest habitat types (except bog woodlands) meeting criteria of Habitats Directive are not widespread and are rather fragmented. One larger meadow complex is located between the bogs on an island of mineral land.

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.*

Biogeographically the project area is an extension of NE-SW directed belt of natural landscapes called Intermediate Estonia. Species typical for natural landscapes are relatively common in the region. Compared with other parts of Estonia there are more species with southern (hemiboreal) distribution and compared with Latvia more northern (boreal) species can be found in North Livonia. The landscape consists of a mosaic of wetlands, forests and agricultural land with low human settlement densities offering good habitats for large mammals including top carnivores like Brown Bear, Grey Wolf and Lynx. Dense networks of watercourses are favourable habitats for aquatic mammals (Beavers, Otters, Polecat). In forests the Pine Martin is very abundant, but in some old-growth forest fragments the rare Flying Squirrel can still be found.

The area is an important breeding site for several rare and vulnerable bird species typical for old-growth forests like Black Stork, Goshawk, Capercaillie, Owls (Ural Owl, Pygmy Owl), Woodpeckers (White-Backed, Tree-toed, Gray-headed) and Read-Breasted Flycatcher. Large raptors such as Golden Eagle and Spotted Eagles are good indicators of the status of semi-open landscapes. Species belonging to Arctic (Black-throated Diver, Willow Grouse, Golden Plover, Wood Sandpiper, Whimbrel) find breeding places in the large bogs. White Storks and Corncrakes are numerous in landscapes with meadows. Agricultural crop fields are important staging places for migratory water birds (Tundra and Whooper Swans, Bean and Withe-fronted Geese, and Cranes).

Small permanent and temporary water bodies are favourite spawning sites for Common Toad and frogs (Grass Frog, Moor Frog, Pool Frog).

The area is also rich in different invertebrate species including notable butterflies and moths as well dragonflies.

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:
Mires and peatland forests are important areas for traditional berry-picking (*Vaccinum uliginosum*, *Oxycoccus palustris* and *Rubus chamaemorus*) and small-scale hunting (allowed only for the purpose regulating numbers of game animals).
The Sookuninga mires have a significant cultural historical importance. There are remains (objects?) from ancient times, war routes, small scale battle grounds, burials are found in the mires and its close edges.
From later periods there are lots of farms (large old "vaku" farms - special right farms in the period of slavery) and also smaller farms from later period (border-guarding farms and farms distributed to Estonian independence war heroes), next to farms there are also closely involved traditional management objects like peat milling areas, berry picking and small scale hunting areas and also winter-routes to easier connections over bog.
As a periphery border-area there are also great amount of war and resistance objects like hides, battle grounds and execution places.
As well as several cultural-historical objects in and around the wetlands there is significant non-material cultural heritage about wetlands. The area is known for its "evil" legends that involve spirits, devils, ghosts and witches with the mires. Also the contacts of different cultures (Estonians, Latvians and Livonians) are visible in the area (place names etc).

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:

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24. Land tenure/ownership:
a) within the Ramsar site:

About 76% of the reserve area is owned by State (5,420 ha), the rest (449 ha) is private.
(b) in the surrounding area:
Surrounding areas are owned mainly by private owners, part of surrounding forest and mire areas is owned by State.

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25. Current land (including water) use:
(a) within the Ramsar site:
Due to the remote location the area is sparsely inhabited, the main uses are tied to forestry, picking of berries and mushrooms, small-scale hunting - all at comparatively low intensities.
(b) in the surroundings/catchment:

Forest cutting intensity in the surroundings of the nature reserve has increased as well hunting pressure on the border of the nature reserve. A typical feature for the borderland is low intensity and continually decreasing agriculture influencing especially the management of wet semi-natural meadows (pastures for cattle, hay making). Seasonal berry and mushroom picking are traditional land-use activity for the peatlands.

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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:

Direct influence of existing drainage ditches, overgrowing of mires with trees (climate change, surrounding drainage, atmospheric pollution), uncontrolled tourism, disturbance, trampling and trash disposal, lack of appropriate management and restoration of different habitats (meadows, mire edges, drained peatland forests), interrupted ecological integrity of mire (destruction of mire edge habitats) and wet forest landscape (drainage, fragmentations, plantations).

(b) in the surrounding area:

Intensive forest drainage took place in the margins of the mire complex in 1960-70's. Nowadays the influence of deep forest ditches is evident in peatland forest stands. Intensive forest cutting in forests around protected areas is recognized as important threat both to ecosystem integrity as well as possible implications for hydrological processes.

Migrating Geese and Cranes, as well as waders breeding in nutrient poor bog habitat and large herbivores mammals are dependent upon agricultural land outside the wetlands for feeding. Many agricultural lands outside the wetland complex have become overgrown with bushes as a consequence of the continuing agricultural recession. This has directly impacted the availability of food for staging migratory birds.

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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.

Already in 1970 Rongu and Kodaja bogs forming principal part of Ramsar site were included in the list of valuable wetlands of Estonia. The site was also identified as an Important Bird Area by BirdLife International as early as 1989. In 1991 Kodaja, Rongu and Ruunasoo bogs (total 3,061ha) were protected as Local Mire Reserves by a decision of Pärnu County Council. In 1996-1998 the project *"Protection of High Biodiversity through Latvian-Estonian Cross-border Protected Area"*, was initiated by Estonian and Latvian Funds for Nature and financially supported by REC. The project increased public awareness, improved cross-border communication and promoted the functional entity of the cross border wetland. As result of this project a Sookuninga Nature Reserve (3847 ha) was established in 1999. Since 1 May 2004, Sookuninga nature reserve has been designated as Natura 2000 areas: a pSCI and as part of larger SPA (Põhja-Liivima) forming 31 % of its size. During 2004-2005, the new protection rules for Sookuninga has been compiled taking into account Natura 2000 requirements and after adoption by Estonian Government in 19 January 2006 the size of Sookuninga nature reserve is 5,869 ha and the same area is designated according to Government Regulation as Ramsar site.

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?:

A Management Plan for Sookuninga Nature Reserve is in preparation, in addition a joint master plan for conservation of the transboundary wetland complex and its surrounding is developed in frame of transboundary project "*Integrated Wetland and Forest Management in the Transborder area of North Livonia*", financed by PIN-MATRA fund (The Netherlands).

d) Describe any other current management practices:

28. Conservation measures proposed but not yet implemented:
e.g. management plan in preparation; official proposal as a legally protected area, etc.

29. Current scientific research and facilities:
e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.
There is a field station (Nigula Centre) with office, research facilities and accommodation for up to 20 visitors only at distance some hundred of meters from the Ruunasoo Bog in Nigula Nature Reserve. The small Ruunasoo bog (160 ha) is valuable as a well studied and relatively simple model system for the investigation of mire massif development in relation with paleohydrology and paleoecology.

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.
There are three nature trails established during 2004-2005 including 2 observation towers, 2 observation hides, 2 camping sites and 2 huts for overnight in Sookuninga Nature Reserve. An information booklet about Sookuninga Nature Reserve is under preparation. Also a demonstration site for mire edge restoration was established in 2005. A continuous nature education programme for local children Bog.Life is conducted in the area.

31. Current recreation and tourism:
State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.
There are three nature trail in Sookuninga Nature Reserve: Ruunasoo Bog Trail with observation tower, Rongu Bog Trail with observation tower and Matsi Beaver Trail with 2 hides. Traditionally visitors use mostly the nature trail (6.8 km long) in neighbour Nigula Nature Reserve (3,000-5,000 visitors per year). Sookuninga nature reserve is well known by wildlife tourists and nature photographers. Recommendations for future tourism development have been worked out for wider region called North-Livonia. Sookuninga mires will be not opened for massive tourism.

32. Jurisdiction:
Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept of Agriculture/Dept. of Environment, etc.
Territorial: Pärnu County, Saarde Parish.
Functional: Pärnu-Viljandi Region of the State Nature Conservation Centre/Ministry of Environment, Pärnu Environmental Department /Ministry of Environment, State Forest Management Centre/Ministry Environment

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.
Pärnu-Viljandi Region of the State Nature Conservation Centre (SNCC)
Director of Pärnu-Viljandi Region of SNCC: Mr. Enn Vilbaste

34. Bibliographical references:
Scientific/technical references only. If biogeographic regionalisation scheme applied (see 15 above), list full reference citation for the scheme.
Ilomets, M., Lode, E. 2006. Plant cover and hydrology of drained margin of a bog – proposals for restoratin. – In: 5th European Conference on Ecological Restoration Land use changes in Europe as a challange for restoration, 21-25 august 2006. Greifswald, Saksamaa, lk. 101.

Ilomets, M., Truus, L., Lode, E., Pajula, R., Sepp, K. 2006. Piirdekraavituse mõju rabanõlva taimkattele. – Eesti XX Ökoloogiakonverents 27-28. aprill 2006. Tartu, 44-50.

Kalamees, A. (ed.) 2000. Important Bird Areas in Estonia. – Eesti Loodusfoto, Tartu, 114 pp.

Karofeld, E. 1998. The dynamics of the formation and development of hollows in raised bogs in Estonia . – The Holocene 8: 715-722.

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