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.

FOR OFFICE USE ONLY. DD MM YY Designation date Site Reference Number

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

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2. Date this sheet was completed/updated:

January 2005

3. Country:

Finland

4. Name of the Ramsar site:

Oulanka National Park

5. Map of site included:

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

a) hard copy (required for inclusion of site in the Ramsar List): Yes.

b) digital (electronic) format (optional): Yes.

6. Geographical coordinates (latitude/longitude):

 $66\,^{o}27'$ N / $29\,^{o}20'$ E

7. General location:

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

The nearly unbroken area is situated in the provinces of Oulu and Lapland, in the municipalities of Kuusamo city and Salla, 46 km north of Kuusamo city centre. The area is restricted to Russia in the east. The municipalities (10 747 sq.km of land) have ca. 22 900 residents.

8. Elevation: (average and/or max. & min.)

385-140 m, mean 239 m.

9. Area: (in hectares)

29 390 ha

10. Overview:

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

Oulanka National Park is the largest protected area south of the polar circle and the most diverse area of habitat types in Finland. The area is a meeting point of southern, northern and eastern species and the fauna and flora includes an exceptional variety of rare and threatened species. The river habitats are unique from the standpoint of their biology, geology and landscapes.

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, 2, 4 & 8



12. Justification for the application of each Criterion listed in 11. 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) A unique example of natural wetland types (dominated by peatlands and rivers) in the EU Boreal region, including 4 priority natural wetland habitat types of the EU Habitats Directive Annex I (aapa mires, bog woodland, petrifying springs, Fennoscandian deciduous swamp woods).

2) Because of calcareous soil the flora includes more than 23 national threatened and rare vascular plant species. Especially the flora of rich fens and alluvial meadows of river banks is valuable and diverse. For hawk's-beard species *Crepis tectorum* subsp. *nigrescens* (CR in Finnish RL and A.II Habitats Dir.) and campion species *Silene furcata* subsp. *angustiflora* (CR and A.II Habitats Dir.) the National Park is nearly the only place of occurrence in Finland. Among the threatened species included in the Habitats Directive Annex II are beneath the both Orchids Calypso (*Calypso bulbosa*)

(VU) and Lady's-slipper (*Cypripedium calceolus*) (VU) the vascular plants sandwort species *Arenaria ciliata* L. subsp. *Pseudofrigida* and whitlow-grass species *Draba cinerea*.

Bryophytes include e.g. the only occurrence in Finland of both liverwort species Scapania massolongi (CR), and moss species Meesia longiseta (EN) and Encalypta mutica (VU), all three also listed in Annex II of the Habitats Directive. The Fungi species puff-ball species Bovista paludosa is national threatened (VU). In total this are more than 23 nationally threatened vascular plant species, >2 nationally threatened moss species, 1 nationally threatened liverwort species, 1 nationally threatened fungi species. (For more information on national threatened species see section 19) About 25 species of the EU Birds Directive Annex I breed in the area, including significant populations of Wood Sandpiper (Tringa glareola) with >600 pairs, Hazel Grouse (Bonasa bonasia) and Capercaillie (Tetrao urogallus) with >300 pairs, Ruff (*Philomachus pugnax*) with >200 pairs and both Red-necked Phalarope (*Phalaropus lobatus*) and Three-toed Woodpecker (*Picoides tridactylus*) with >100 pairs. Scarce species include e.g. Whooper Swan (Cygnus cygnus), Smew (Mergus albellus), Hen Harrier (Circus cyaneus), Osprey (Pandion haliaetus), Crane (Grus grus), Hawk Owl (Surnia ulula), Great Grey Owl (Strix nebulosa), Tengmalm's Owl (Aegolius *funereus*) and Red-breasted Flycatcher (*Ficedula parva*), including the both national threatened species (VU in Finnish Red List) Golden Eagle (Aquila chrysaetos) and Merlin (Falco columbarius). The waders of the National Park include about 1 500 pairs of 14 species.

Threatened mammals include Wolf (*Canis lupus*) (EN), Wolverine (*Gulo gulo*) (EN, globally VU), Brown Bear (*Ursus arctos*) and Lynx (*Lynx lynx*). Mammals of the EU Habitats Directive Annex II include the Otter (*Lutra lutra*).

Molluscs include *Vertigo genesii* (globally LT) and River Pearl Mussel (*Margaritifera margaritifera*) (VU, globally EN). The more than 16 threatened beetles of the Finnish Red List include e.g. *Pytho kolwensis* (EN) and *Boros schneideri* (VU) and butterflies include Violet Copper (*Lycaena helle*) (VU). Other invertebrates of the the EU Habitats Directive Annex II include e.g. beetles species *Dytiscus latissimus*, *Stephanopachys linearis* and *S. substriatus*. (Fauna see also section 20)

4) Altogether more than 40 000 pairs of about 100 bird species (not referring to waterbirds) breed in the Park. About 25 species of the EU Birds Directive Annex I breed in the area. (see justification criterion 2) Together with Paanajärvi National Park in Russia, Oulanka National Park forms an important spreading passage for eastern species. Spreading passage is exploited by e.g. Russian-originated individuals of mammals such as Wolf, Wolverine and Brown Bear.

8) The rivers Oulankajoki and Kitkajoki are habitat and spawning ground for e.g. Brown Trout, Grayling (*Thymallus thymallus*) and the rare Alpine Bullhead (*Cottus poecilopus*).

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:

Northern boreal forest vegetation zone.

b) biogeographic regionalisation scheme (include reference citation):

Etelä-Suomen ja Pohjanmaan metsien suojelun tarve-työryhmä. Puheenjohtaja: Ruuhijärvi, R., Sihteerit: Kuusinen, M., Raunio, A. and Eisto, K. 2000. Metsien suojelun tarve Etelä-Suomessa ja Pohjanmaalla. Etelä-Suomen ja Pohjanmaan metsien suojelun tarve-työryhmän mietintö. Suomen ympäristö 437. Ympäristöministeriö. Helsinki.

Working group on the need for forest protection in southern Finland and Ostrobothnia. Chairman Ruuhijärvi, R., Secretaries Kuusinen, M., Raunio, A. and Eisto, K. 2000. Forest protection in southern Finland and Ostrobothnia. The Finnish Environment 437. Ministry of the Environment.

14. 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.

Geology: Geochemically included in Greenstone area. Bedrock is composed mainly of intermediate and felsic metavolcanic rocks, quartzite, carbonate- and calc-silicate rocks and black schists.

Origins: Natural

Hydrology: Aapa mires dependent on ground or surface waters.

Soil type: Mainly glacigenic ground moraine and peat, also glacifluvial gravel and sand, bedrock terrain and hummocky moraine.

Water quality: General quality excellent in River Oulankajoki. Oligotrophic-mesotrophic. Mire waters dystrophic.

Depth of water: Up to 10–20 m in largest lakes. Water-level high in spring because of melting snow.

Climate: Duration of growing season ca. 130 days, mean annual temperature ca. –1 °C, mean annual rainfall ca. 550 mm. Ice- and snow-covered normally from late October to mid May. Northern boreal forest vegetation zone.

15. Physical features of the catchment area:

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

General geology and geomorphological features as well as soil types and climate are of same type than in the site.

16. Hydrological values:

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

Virgin aapa mires play an important role in maintenance of water quality and in flood control.

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*.

Marine/coastal:



Human-made: 4



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 Non-forested peatlands
- Xp Forested peatlands
- M Permanent rivers and streams
- O Permanent freshwater lakes
- Tp Permanent freshwater pools
- Ts Seasonal freshwater pools
- Xf Seasonally flooded forests
- W Shrub-dominated wetlands
- 4 Seasonally flooded agricultural land
- Y Freshwater springs

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

The site represents the Mire vegetation region of Main aapa mires of sloping type. The area includes ca. 15 000 ha of mires and ca. 1 200 ha of water. The National Park is characterized by deep canyons, formed by River Oulankajoki with its tributaries, mires and gently-featured coniferous and herb-rich forests. The Park is rich of small lakes and ponds and the length of rivers exceeds 50 km, including several imposing rapids and falls. Largest lakes are 50–120 ha in size. Extensive sandy areas and rich alluvial meadows occur in certain places along the rivers. The vegetation of Oulankajoki River Valley is luxuriant with southerly affinities. The abundance of small waters and calcareous rocks gives a special enhancement to the diversity of the Park. Over a third of the area is composed of mires. The mires of the southern part are mostly Spruce (*Picea abies*) or Pine (*Pinus sylvestris*) bogs and small sloping aapa

mires. The majority of blanket mires are fens. The northern parts are dominated by wide and well developed aapa mires. Forests (100–200 years of age) cover over a half of the Park.

19. Noteworthy flora:

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. *Do not include here taxonomic lists of species present - these may be supplied as supplementary information to the RIS.*

Because of calcareous soil the flora includes plenty of threatened (>23) and rare vascular plant species. Especially the flora of rich fens and alluvial meadows of river banks is valuable and diverse. For hawk's-beard species Crepis tectorum subsp. nigrescens (CR in Finnish Red List) and campion species Silene furcata subsp. angustiflora (CR) the National Park is nearly the only place of occurrence in Finland. Threatened species also include e.g. Kobresia simpliciuscula (CR), willow species Salix pyrolifolia (CR), willowherb species Epilobium laestadii (EN), Blue Honeysuckle (Lonicera caerulea) (EN), moonwort species Botrychium lanceolatum (VU), Calypso (Calypso bulbosa) (VU), Fibrous Tussock-sedge (Carex appropinquata) (VU), sedge species C. viridula var. bergrothii (VU), Lady's-slipper (Cypripedium calceolus) (VU), Narrow-leaved Marsh-orchid (Dactylorhiza traunsteineri) (VU), hay species Elymus fibrosus (VU), Fragrant Orchid (Gymnadenia conopsea) (VU), Marsh Saxifrage (Saxifraga hirsuculus) (VU) and Brown Bog-rush (Schoenus ferrugineus) (VU). Other vascular plants of the EU Habitats Directive Annex II include sandwort species Arenaria ciliata L. subsp. pseudofrigida and whitlow-grass species Draba cinerea. Bryophytes include e.g. the only occurrence in Finland of both liverwort species Scapania massolongi (CR), and moss species Meesia longiseta (EN) and Encalypta mutica (VU). Fungi include puff-ball species Bovista paludosa (VU).

20. 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*.

Threatened birds (VU in Finnish Red List) include several pairs of Golden Eagle (*Aquila chrysaetos*), Merlin (*Falco columbarius*) and Red-flanked Bluetail (*Tarsiger cyanurus*). Ca. 25 species of the EU Birds Directive Annex I breed in the area, including significant populations of Wood Sandpiper (*Tringa glareola*) with >600 pairs, Hazel Grouse (*Bonasa bonasia*) and Capercaillie (*Tetrao urogallus*) with >300 pairs, Ruff (*Philomachus pugnax*) with >200 pairs and both Red-necked Phalarope (*Phalaropus lobatus*) and Three-toed Woodpecker (*Picoides tridactylus*) with >100 pairs. Scarce species include e.g. Whooper Swan (*Cygnus cygnus*), Smew (*Mergus albellus*), Hen Harrier (*Circus cyaneus*), Osprey (*Pandion haliaetus*), Crane (*Grus grus*), Hawk Owl (*Surnia ulula*), Great Grey Owl (*Strix nebulosa*), Tengmalm's Owl (*Aegolius funereus*) and Red-breasted Flycatcher (*Ficedula parva*).

Finland's responsibility species include also >200 pairs of Siberian Jays (*Perisoreus infaustus*) and >20 pairs of both Bean Geese (*Anser fabalis*) and Pine Grosbeaks

(*Pinicola enucleator*). Northern and eastern specialites include e.g. >800 pairs of Rustic Buntings (*Emberiza rustica*), >300 pairs of Siberian Tits (*Parus cinctus*), >100 pairs of both Two-barred Crossbills (*Loxia leucoptera*) and Little Buntings (*Emberiza pusilla*) and >20 pairs of Waxwings (*Bombycilla garrulus*). The waders of the National Park include ca. 1 500 pairs of 14 species. Altogether >40 000 pairs of ca. 100 bird species breed in the Park.

Together with Paanajärvi National Park in Russia, Oulanka National Park forms an important spreading passage for eastern species. Threatened mammals include Wolf (*Canis lupus*) (EN) and Wolverine (*Gulo gulo*) (EN, globally VU). Species of the EU Habitats Directive Annex II also include Brown Bear (*Ursus arctos*), Lynx (*Lynx lynx*) and Otter (*Lutra lutra*).

The rivers Oulankajoki and Kitkajoki are important areas especially for Brown Trout (*Salmo trutta* m. *fario*). Molluscs include *Vertigo genesii* (EN) and River Pearl Mussel (*Margaritifera margaritifera*) (VU, globally EN). Threatened beetles (>16) include e.g. *Pytho kolwensis* (EN) and *Boros schneideri* (VU) and butterflies include Violet Copper (*Lycaena helle*) (VU). Other invertebrates of the The EU Habitats Directive Annex II include e.g. beetles species *Dytiscus latissimus*, *Stephanopachys linearis* and *S. substriatus*. The insect fauna of the Park is exceptionally rich and ca. 7 000 species have been found in the area.

21. Social and 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.

The rapids of River Oulankajoki form a nationally important landscape area. The site includes five nationally (10 ha), four provincially (29 ha) and eight locally (101 ha) important traditional rural biotopes. "Traditional rural biotope" is a synonym for a group of biotopes as semi-natural grassland, wooded pastures and grazed forests. (They are the most important areas for biodiversity in the agricultural landscape and also unreplaceable for the cultural heritage. They are classified as nationally, provincially or locally valuable. Most of these areas are very small. Most valuable areas are threatened because of e.g. overgrowing and enrichment caused by fertilization.)

Significant values also include tourism and outdoor recreation (150 000 visitors per year in the Park), environmental education, scientific research and reindeer husbandry.

22. Land tenure/ownership:

(a) within the Ramsar site:

State-owned for the major part (99 %).

(b) in the surrounding area:

Private-owned and state-owned.

23. Current land (including water) use:

(a) within the Ramsar site:

Reindeer husbandry is an important livelihood in the area. Some of the alluvial meadows of rivers have been mowed since the early 1960s to produce food for wintering reindeers. The mowing takes place in July. Hunting and fishing is permitted for local residents in certain areas. Also picking of mushrooms and berries is permitted.

(b) in the surroundings/catchment:

The area is restricted to Paanajärvi National Park (established in 1992) in Russia. Forestry is carried out in the surroundings on Finnish side.

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

Reindeers are changing the vegetation to some extent, by grazing (vegetation and lichen) and causing erosion. Fish farming operations such as stocking in the rivers of Oulankajoki and Kitkajoki have changed the abundance ratios of the original fish fauna. Hunting might have negative effects on the site.

25. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

The site is included in the Natura 2000 Network, designated both as SPA and SCI. Four separate areas are also included in the Finnish Mire Conservation Programme. Oulankajoki Valley is included in the Esker Conservation Programme. Oulanka National Park (27 214 ha) was established in 1956 and enlarged in 1982 and 1989. A master plan for the National Park was established in 1991. A management and land use plan was established in 2003. A management plan for the heritage landscapes of the Park was established in 1999. Three Restricted Areas (Lake Pesosjärvi, Korvasvaara and Juumanvuomat) have been established, in which local residents are still able to practice reindeer farming and hunting. Hunting is prohibited in the western and southern parts of the Park. The use of motor vehicles is prohibited outside the roads in general, with exceptions for local residents.

A part of alluvial river meadows have been managed since the 1980s and one mire meadow has been under management since 1979. Traditional rural biotopes are managed in eight areas (14 ha) in 1999–2002. The management of Brown Trout has been carried out since 1965 by removing fish upstream over Kiutaköngäs Falls. Fishing is prohibited at Lake Pesosjärvi and in certain other areas.

26. Conservation measures proposed but not yet implemented:

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

Conservation of the Natura 2000 site outside the already protected areas will be carried out under the Nature Conservation Act and Land Extraction Act.

27. Current scientific research and facilities:

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

The National Park is a constant subject of scientific study. The fauna and flora as well as geology of the area have been studied since the early 20th century. The volume of bird populations was estimated in 1994–95 by using line transect censuses. The Oulanka Biological Station of Oulu University is situated in the Park. The watershed area of Lake Pesosjärvi is important as a site of the ECE's international research network, the Integrated Monitoring. The effects of transboundary air pollution on ecosystems is being studied in this area.

28. Current conservation education:

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

Various educational themes are carried out in the Park, and it functions as an important education site for the Oulanka Biological Station of Oulu University.

29. Current recreation and tourism:

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

Oulanka Visitor Centre, a nature cabin, eight wilderness huts, 36 campfire sites, four nature trails (12 km) and a network of marked trails (85 km) plus 'Bear's Route' hiking trail (64 km in the Park) have been constructed in the National Park. Licenced recreation fishing is permitted at River Oulankajoki in June–September. The Park had ca. 165 000 visitors in 2003.

30. Jurisdiction:

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

a) Metsähallitus – Forest and Park Service, Natural Heritage Services, Ostrobothnia-Kainuu, **b**) Ministry of the Environment.

31. 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.

Metsähallitus – Forest and Park Service, Natural Heritage Services, Ostrobothnia-Kainuu, Torangintaival 2, FIN-93600 Kuusamo, Finland.

32. Bibliographical references:

scientific/technical references only. If biogeographic regionalisation scheme applied (see 13 above), list full reference citation for the scheme.

Bergström, I., K. Mäkelä and M. Starr (eds), 1995. Integrated Monitoring Programme in Finland: First National Report. Ministry of the Environment, Environment Policy Department, Helsinki.

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Söyrinki, N. & Saari, V. 1980. Die Flora im Nationalpark Oulanka, Nord-Finnland. Acta Botanica Fennica 114.

Vasari, Y. & Huttunen, A. 1984. The bedrock and quaternary botany of the Koillismaa region. Oulanka Reports 5.

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