Designation date: 06/08/02 **Ramsar Site no. 1189**

Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 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.

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1. Name and address of the compiler of this form:
Miljøfaglig Utredning AS commissioned by Norwegian Directorate for Nature Management (DN), Tungasletta 2, 7485 Trondheim
Tlf +47 73580500
Fax: +47 73580501
E-mail: postmottak@dirnat.no

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DD MM YY
Designation date | Site Reference Number

2. Date this sheet was completed/updated:
August 2012

3. Country:
Norway

4. Name of the Ramsar site:
Fokstumyra
(International No. 1189, National No. 27)

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

i) 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 Fokstumyra Ramsar site is stable

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7. Map of site included:
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.

The Ramsar Site had been equal with the old border of the Fokstumyra Nature Reserve (785 ha). The reserve was expanded in 2002 (increased to 1030 ha) and 2004 (increased to 1799 ha). Consequently also the Ramsar Site has been extended and is now identical with the new boundaries of the reserve.

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8. Geographical coordinates (latitude/longitude):
62° 08'N 09° 15'E

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

Fokstumyra is situated in the Dovrefjell area of Dovre municipality in the county of Oppland, in south-eastern Norway. The nearest towns are Lillehammer (130 km south) and Oppdal (50 km north).

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10. Elevation: (average and/or max. & min.)
940-960 m.a.s.l.

11. Area: (in hectares)
1799 ha

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12. General overview of the site:
Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Fokstumyra is Norway's oldest protected site and received protection as early as in 1930 due to its rich birdlife. This is a Council of Europe biogenetic reserve. Fokstumyra is a vast mire area in the Dovrefjell montains, on the boundary between southern and central Norway. The area is composed of large open mires, a number of smaller pools, streams and rivers. On the ridges the vegetation is mainly of open upland birch woodland.

A total of 168 bird species have been recorded at Fokstumyra, an impressive number for a wetland site in the uplands. The area is mainly important as a breeding site for wetland birds such as divers, ducks, Common Crane *Grus grus,* waders and birds of prey associated with wetlands such as Hen Harrier *Circus cyaneus* and Short-eared Owl *Asio flammeus*. The area is important as a staging site in spring and early summer for birds waiting for breeding sites higher up in the mountains to become free of snow and ice. There are also considerable movements of birds through the valley in autumn.

13. 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 • 3 • 4 • 5 • 6 • 7 • 8

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. A particularly representative example of an alpine wetland system in north-west Europe, with large wet mires on flat ground and drier mires on sloping ground, divided by morraine ridges with open upland birch woodland, and with some shallow and relatively nutrient-rich pools.

Criterion 2. Hen Harrier *Circus cyaneus* (VU) breed regularly in small numbers, Fokstumyra is probably the most important breeding site for Hen Harrier in Norway. Other breeders are Ruff *Philomachus pugnax (VU)* and maybe Greater Scoup *Aythya marila* (VU). Other visitors are Skylark *Alauda arvensis* (VU) and Marsh Harrier *Circus aeruginosus* (VU), Probably they also breed inside the Ramsarsite. There is also some red listed plant species in the Ramsarsite. We find *Botrychium simplex* (EN), *Dicranum anugustum* (VU) and *Carex heleonastes* (VU). The red-listed beetle *Stephanopachys substriatus* (CR) is also recorded from Fokstua. Red list categories are given according to National Red-List from 2010. See also point 21 and point 22.

Criterion 3. Fokstumyra has large populations of ducks, waders and raptors that are characteristic of large wetland areas in the lower mountainous regions of southern Norway (see also point 22). In addition, typical lowland species such as Northern Shoveler *Anas clypeata* and Garganey *Anas querquedula* have bred in the area, and other lowland species are seen sporadically such as Common Pochard *Aythya ferina*,
Several regionally rare plants grow in the reserve, such as *Botrychium boreale*, *Gentianella tenella* and *Primula scandinavica* (NT).The rich mires have a number of demanding orchid species.

Criterion 4. The area is mainly important as a breeding site for wetland birds and birds of prey associated with wetlands such as Hen Harrier *Circus cyaneus* and Short-eared Owl *Asio flammeus* (see also point 22). The area is important as a staging site in spring and early summer for birds waiting for breeding sites higher up in the mountains to become free of snow and ice. This apply the following spescies: Greater Scoup *Aythya marila* (VU), Long Tailed Duck *Clangula hyemalis*, Velvet Scoter *Melanitta fusca* (NT), Common Scoter *Melanitta nigra (NT)*. (Status is given according to National Red-List from 2010). There are also considerable movements of birds through the valley in autumn.

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:
1. Alpine

2. Northern boreal zone, slightly continental section (Nb-C1).

b) biogeographic regionalisation scheme (include reference citation):

1. Biogeographical regions of Europe, European Environment Agency, 2005
2. Zonal division showing the variation in vegetation from south to north and from the lowlands to the mountains, and sectional graduation showing the variation between the coast and inland (In: Moen, A. 1998. Nasjonalatlas for Norge; vegetasjon. Statens kartverk, Hønefoss).

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.

Geology	The bedrock is mainly composed of Trondhjemite – an acidic rock mainly of granite. Cambrosilurian rocks with phyllite and mica schist dominate around the mires. These rocks are easily eroded and create nutrient-rich conditions which are noticeable in parts of the reserve.
Substrate/soil type	Peaty soils dominate in the vast areas of mires, whereas there are mineral soils along the morraine ridges with upland birch woodland.
Water quality	No data on water quality is available.
Water depth /fluctuations	Much of the mires are under water during spring floods in late May/early June, and the pools are then larger than normal. There are also a number of temporary pools in spring. Water conditions are relatively stable in summer.
Climate	The climate is continental with very little precipitation (around 400 mm p.a.), cool and short summers and extremely cold winters.

17. 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).

Fokstumyra is situated between the watercourses of the two valley systems of Gudbrandsdalen in the county of Oppland and Folldalen in Hedmark. Most of the mires drain into Folla, although in the far west of the reserve the water runs into the river Gulbrandsdalslågen. The catchment area is 124 km^2 and consists of mountains north and south of Fokstumyra. The highest point is Falketind at 1684 m a.s.l. The area is grazed by sheep. The climate is more or less as that for the reserve, although locally with higher precipitation and even lower temperatures in winter.

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

Large mires such as this are important water reservoirs. They provide stability in water drainage in the watercourse by acting as reservoirs in drought periods and as flood barriers during snow melt and periods of heavy precipitation.

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, O, Xf, Tp, M,

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

Fokstumyra is characterised by large, flat continuous areas of mires with low birch-covered hills and partly birch-covered moss and heather moors, with smaller boggy woods, rivers, streams, pools and willow scrub *Salix spp.* The vegetation of the entire Ramsar site has been mapped, and the map shows 17 different vegetation types, where flat mire expanses of rich mire and mires with intermediary vegetation dominate. There are broad belts of vegetation dominated by *Carex rostrata* and *Equisetum fluvialtile* in many of the pools. During spring floods the lower parts of the mires are under water. Open birch *Betula pubescens spp. czerepanovii* woodland grows on the morraine ridges. Here there are mats of various species of lichen in the genera *Alectoria, Cetraria, Cladonia* and *Stereocaulon.* Paleobotanical studies have shown that pines grew for a period of about 3000 years, for around 8000 years past.

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21. 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.*

There are older records of five red-listed mosses from the Fokstua area. Fokstumyra is given as the location for two of these species - *Bryum longisetum* (NT) and *Meesia longiseta* (VU). The more general name "Fokstuen" is given for three other species - *Hygrohypnum norvegicum* (VU), and *Tortula leucostoma (DD).* In addition several regionally rare plants grow in the reserve, such as *Botrychium boreale*, *Gentianella tenella* and *Primula scandinavica* (NT). The rich mires have a number of demanding orchid species.

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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:
There is a high density of breeding waterbirds at Fokstumyra, with 22 regularly breeding species. The latest survey of breeding birds is from 2005, when the following counts were made of the more interesting species (regionally rare or unusual species, threatened species or species with large populations): Black-throated Diver *Gavia arctica* (2 pairs), Eurasian Wigeon *Anas penelope* (17-18 pairs), Common Teal *Anas crecca* (at least 23 pairs), Tufted Duck *Aythya fuligula* (17-25 pairs), Red-breasted Merganser *Mergus serrator* (3-6 pairs), Hen Harrier *Circus cyaneus* (3 pairs), Common Crane *Grus grus* (1 pair), Golden Glover *Pluvialis apricaria* (10 pairs), Northern Lapwing *Vanellus vanellus* (7 pairs), Ruff *Philomachus*

pugnax (VU) (2-3 pairs), Great Snipe *Gallinago media* (4-5 pairs), Common Redshank *Tringa totanus* (25-32 pairs), Greenshank *Tringa nebularia* (10 pairs), Wood Sandpiper *Tringa glareola* (34 pairs), Red-necked Phalarope *Phalaropus lobatus* (20-24 pairs) and Short-eared Owl *Asio flammeus* (2 pairs). Fokstumyra is probably the most important breeding site for Hen Harrier in Norway and one of the most important sites in the southern part of the country for Ruff and for Short-eared Owl. The globally near threatened Great Snipe has shown a positive upward trend in the reserve.
In the 1800's and early 1900's the area was known as an important breeding site for Broad-billed Sandpiper *Limicola falcinellus* (NT). The globally endangered Lesser White-fronted Goose *Anser erythropus* (CR) bred in 1962 and 1963. There is also uncertain if Greater Scaup *Aythya marila* (VU) is still breeding in the site. Other threatened species that may have bred in the area include Northern Shoveler *Anas clypeata* (NT), Common Scoter *Melanitta nigra (NT)* and Velvet Scoter *Melanitta fusca (NT).* Bean Goose *Anser fabalis* (VU) was recorded in the breeding season on the 1920's and 1930's.

Invertebrates:
The red-listed beetle *Stephanopachys substriatus* (CR) is found within the reserve at Fokstua station.

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:

Fokstumyra is Norway's oldest, and perhaps also best known, protected areas, and an important part of the country's conservation history. Fokstugu farm has for centuries been used as a transport station for travellers over the Dovrefjell mountains, and many of the pioneering zoologists and botanists stayed there during fieldwork. The railway station building at Fokstua, which lies within the reserve boundary, was protected as a listed historical building in 1999. There are 5 huts within the reserve that were traditionally used during harvesting of lichens for use as animal fodder.

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: Both private and state (railway company and common ground).

(b) in the surrounding area: Mainly common ground.

25. Current land (including water) use:

(a) within the Ramsar site:
The main use of the area is from visitors following the path through the area to look at birds.

(b) in the surroundings/catchment:
Only one family is resident within the catchment area, these reside at Fokstugu farm. The farm is used for overnight accommodation, and is traditionally run as a sheep farm. There are meadows and grazed land beside the farm. There is also some sheep grazing in the outby areas, and there are large flocks of Wild Reindeer *Rangifer tarandus.*

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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:
The building of the Dovrebanen railway line across Fokstumyra in 1916-1917 resulted in draining of the nearby mires, and the threatened species Broad-billed Sandpiper *Limicola falcinellus* and Great Snipe *Gallinago media* disappeared from the area after construction, and other species declined in numbers. The many visitors to the area disturb breeding birds close to the footpath and the observation tower, and any increase in visitor numbers or additional visitor facilities may be negative for the area. Any additional visitor facilities would need to be carried out carefully so as not to disturb breeding birds.

(b) in the surrounding area:
None are known.

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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.

Established as Norway's first large protected area on 9th November 1923, and received status as a nature reserve in 1969. The reserve was extended in 2002 and 2004. Consequently also the Ramsar Site has been extended and is now identical with the new boundaries of the reserve. The area is surrounded by Fokstugu Landscape Protected Area.

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?:
YES - approved 2005 – being implemented

d) Describe any other current management practices:

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

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29. Current scientific research and facilities:
e.g., details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Studies of breeding birds at Fokstumyra have been carried out since the mid-1980's. Intensive ringing has been carried out during the previous two autumn migration periods near Fokstua station on the reserve boundary.

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.

Fokstugu farm is used as a visitor centre for the reserve, and a bird observation tower has been erected in the southern part of the reserve. A 7.5 km circuit walk through the southern part of the reserve starts at Fokstua station and passes the observation tower. An information brochure has been prepared in three languages (Norwegian/English/German).

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

The reserve is visited by a good number of naturalist and birdwatchers from both Norway and abroad, and the only way to access the area is along the boardwalk around the reserve during summer. Annually, around 2000 visitors are known to begin the walk from Fokstua station. In recent years canoe trips and elk safaris have been arranged within the reserve, outside the periods of no access.

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

Norwegian Directorate for Nature Management (DN), Tungasletta 2, 7485 Trondheim
Ph +47 73580500
Fax +47 73580501
Email: postmottak@dirnat.no

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.

The site is managed by the County Governor of Oppland, which is under the instruction of DN. Address: County Governor of Oppland, Servicebox, N-2626 Lillehammer, Norway. Phone +47 61266000. E-mail: postmottak@fmop.no

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

Kålås, J.A., Viken, Å., Henriksen, S. and Skjelseth, S. (eds.). 2010. The 2010 Norwegian Red-list for Species. Norwegian Biodiversity Information centre, Norway.

Botanical and management plans:
Fiksdahl, B. & Hoff, K. 2005. Forvaltningsplan for Fokstumyra. Fylkesmannen i Oppland, miljøvernavd. Rapport 03/05: 1-39 + vedlegg. (In Norwegian – management plan for Fokstumyra).
Østbye, T. 1987. Fokstumyra naturreservat. Vegetasjon og fugl. Resultater fra feltarbeidet 1986 og sammenstilling av eldre observasjonsmateriale. Fylkesmannen i Oppland, mva. Rapp. nr. 9/87: 1-80. (In Norwegian – a summary of bird and plant observations at Fokstumyra up to 1986).

Birds:
Barth, E. K. 1954. Fokstumyras ornitologiske historie. Fauna och flora 49: 36-61. (In Norwegian – on Fokstumyras ornithological history).
Barth, E. K. 1964. Supplement til Fokstumyras fuglefauna. Sterna 6: 49-74. (In Norwegian – a supplement to the birdlife of Fokstumyra).
Kværne, M. 1968. Fokstumyras fuglefauna 1964-1967. Sterna 8: 49-64. (In Norwegian – on Birds at Fokstumyra 1964-1967).

Løvenskiold, H. L. 1982. Fokstumyren. S. 152-156 i: Suul, J. (red.) Norsk Ornitologisk Historie. Norsk Ornitologisk Forening 1957-1982. Norsk Ornitologisk Forening. Trondheim. 168 s. (In Norwegian – on the ornithological history of Fokstumyra).
Østbye, T. 1996. Fokstumyra - vår mest klassiske fuglelokalitet. Vår Fuglefauna 19: 157-160. (In Norwegian – on the birds of Fokstumyra).
Østbye, T. 2005. Fokstumyra naturreservat. Fugleregistreringer 2005. SNO Rapport x-2005. (In Norwegian – on bird observations at Fokstumyra in 2005).

Geology:

Sørbel, L., Carlson, A. B., Kristiansen, K. J. & Sollid, J. L. 1988. Kvartærgeologisk verneverdige områder i Oppland fylke. DN-rapport nr 4-1988: 1-97. (In Norwegian – on geologically important areas in Oppland).

Please return to: **Ramsar Convention Bureau, Rue Mauverney 28, CH-1196 Gland, Switzerland**
Telephone**: +41 22 999 0170** • Fax: **+41 22 999 0169** • e-mail: **ramsar@ramsar.org**