

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 and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
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:

April 2011

3. Country:

Norway

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.

Hedmarksvidda Wetland System: Includes the sub-sites: Endelausmyrene, Harasjømyrene, Brumundsjøen and Lavsjømyrene-Målikjølen.

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:

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.

The boundaries are same as for the existing protected areas; Endelausmyrene Nature Reserve, Harasjømyrene Nature Reserve, Brumundsjøen Nature Reserve, and Lavsjømyrene-Målikjølen Nature Reserve.

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.

Harasjømyrene: 61°5' N, 11°3' E

Endelausmyrene: 61°5' N, 10°58' E

Brumundsjøen: 61°2' N, 11° 7' E

Lavsjømyrene-Målikjølen: 60°59' N, 11°12' E

Central Point Wetland System: 61°2' N, 11° 7' 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 is situated in Løten, Hamar, Ringsaker and Vang municipalities, Hedmark County. The principle city of the county, Hamar, is situated 20 km to the south (app. 27 000 inhabitants).

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

610 – 729 m.a.s.l.

11. Area: (in hectares)

Endelausmyrene: 505 ha,
 Harasjømyrene: 889.1 ha,
 Brumundsjøen: 620.4 ha,
 Lavsjømyrene-Målikjølen: 2528.9 ha

Total 4543.4 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 landscape is a complex of different types of mires and wetlands. There are flark fens, mixed mires, flat fens and sloping fens. In addition there are many small pools and ponds and some lakes. There is a mixture of open mires and dryer moraine and bedrock ridges with pine *Pinus sylvestris* woodland.

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).

(Capitalized letters shows the species`status on the Norwegian Red List)

Criterion 1

A large mire complex with pools, ponds and lakes, typical and representative for the continental upland part of south eastern Norway.

Criterion 2

The Wetland System supports threatened bird species such as Ruff *Philomachus pugnax* (VU), Common Tern *Sterna hirundo* (VU) and the Sky Lark *Alanda arvensis* (VU), a species that in this part of Norway ordinarily is found in agricultural landscapes at lower altitudes. Great Grey Shrike *Lanius excubitor* (NT) and the Osprey *Pandion haliaetus* (NT) can also be seen in Hedmarksvidda mire system.

Criterion 4

A great variety of wetland bird species are breeding within the area, some of them are regionally rare. The birdlife is typical for large mires and small open water bodies in upland areas in this part of Norway.

The following overview on the wetland avifauna is related to the Hedmarksvidda wetland system as a whole. That means that all the bird species mentioned not necessarily breed in each of the four sub sites. : Black-throated Diver *Gavia arctica* (NT), Northern Lapwing *Vanellus vanellus* (NT), Eurasian Curlew *Numenius arquata* (NT), Ruff *Philomachus pugnax* (VU), Great Snipe *Gallinago media* (NT), Black-headed gull *Larus ridibundus* (NT), Northern Pintail *Anas acuta* (NT) and Common Tern *Sterna hirundo* (VU).

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. Middle boreal vegetation zone, slightly oceanic section (Mb-O1).
2. Boreal

b) biogeographic regionalisation scheme (include reference citation):

1. Moen, A. 1998. *National Atlas of Norway: Vegetation*. Norwegian Mapping Authority, Hønefoss
2. Biogeographical Regions, European Environment Agency, 2005

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 made up of hard and nutrient-poor basement rocks.
Geomorphology and landscape	Mosaic of large, open mires and ridges of bedrock or moraine where woodland dominates. The moraines have variable thickness.
Substrate/soil type	Peat soils dominate in the large areas of mires.
Water depth/fluctuations	Large mires are important water reservoirs. They provide stability in water drainage in the watercourses.
Climate (Summary of main climatic features)	The climate is continental with moderate summer temperatures and cold winters. Annual precipitation is about 700-1000 mm

17. Physical features of the catchment area:

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

The site lies in two catchment areas. The northern part is draining northwards to the river Åsta which flows into Glomma, the longest river in Norway. The southern part is draining to the rivers Brumunda and Flagstadelva. These rivers end in Mjøsa, the biggest lake in Norway.

18. Hydrological values:

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

Large mires are important water reservoirs. They provide stability in water drainage in the watercourses 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 • Q • 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, O

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.

Characteristic for the area is the mosaic of large, open nutrient-poor mires and ridges of bedrock or moraine where pine woodland dominates. Birch *Betula pubescens* is also common, especially along watercourses and edges of mires. The birdlife includes a good representation of breeding wetland birds, though in relatively small numbers.

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.*

No botanical findings of special interest are known.

22. Noteworthy fauna:

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., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Both Black-throated Diver *Gavia arctica* (NT) and Red-throated Diver *Gavia stellata* (LC) are breeding bird species in this wetland system. A few pair of Common Crane *Grus grus* (LC) are regularly breeding in the area. Many wader bird species are breeding in this big mire system. The most common species are Common Snipe *Gallinago gallinago* (LC), Greenshank *Tringa nebularia* (LC), Wood Sandpiper *Tringa glareola* (LC), northern lapwing *Vanellus vanellus* (NT), European Golden Plover *Pluvialis apricaria* (LC), Eurasian Curlew *Numenius arquata* (NT), Whimbrel *Numenius phaeopus* (LC), Green Sandpiper *Tringa ochropus* (LC) and Common Sandpiper *Actitis hypoleucos* (NT). Red-necked Phalarope *Phalaropus lobatus* (LC), Ruff *Philomachus pugnax* (VU), Redshank *Tringa totanus* (LC) and Great Snipe *Gallinago media* (NT) are breeding some years but are less common.

The most common breeding duck species are Common Teal *Anas crecca* (LC), Mallard *Anas platyrhynchos* (LC), Eurasian Wigeon *Anas penelope* (LC), Tufted Duck *Aythya fuligula* (LC) and Common Goldeneye *Bucephala clangula* (LC). Goosander *Merganser merganser* (LC), Black Scoter *Melanitta nigra* (NT) and Northern Pintail *Anas acuta* (NT) are breeding sporadically. Black-headed gull *Larus ridibundus* (NT), Mew Gull *Larus canus* (NT) and Common Tern *Sterna hirundo* (VU) are regularly breeding species.

Yellow Wagtail *Motacilla flava* (LC), Meadow Pipit *Anthus pratensis* (LC) and Reed Bunting *Emberiza schoeniclus* (LC) breeds in the large open mires. Noteworthy is the occurrence of Sky Lark *Alauda arvensis* (VU), a species that in this part of Norway ordinarily is found in agricultural landscapes at lower altitudes.

Great Grey Shrike *Lanius excubitor* (NT) and the Osprey *Pandion haliaetus* (NT) can also be seen in Hedmarksvidda mire system.

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:

None

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:

Private

b) in the surrounding area:

Private

25. Current land (including water) use:

a) within the Ramsar site:

Hunting and sports fishing, berry picking. Some grazing (sheep).
Hunting and fishing is considered to be sustainable and don't have a negative effect on the biodiversity.

b) in the surroundings/catchment:

Above + forestry.

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:

None known.

b) in the surrounding area:

None known.

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.

Endelausmyrene and Brumundsjøen Nature Reserves were established December 18th 1981, while Harasjømyrene and Lavsjømyrene-Målikjølen Nature Reserves were established December 7th 2001.

The boundaries for the Ramsar site are the same as for the 4 sub sites.

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?:

No management plan exists, but the task has been given high priority in the management authority.

d) Describe any other current management practices:

Nature Reserve is the strongest form of nature conservation in Norway, and status is given by a Royal Resolution. All kinds of human activity in the conservation area are regulated by an official set of detailed regulations specific for the area.

28. Conservation measures proposed but not yet implemented:

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

The site is identified by the management authority as an area where it is necessary to get a management plan.

29. Current scientific research and facilities:

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

None known.

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.

None.

31. Current recreation and tourism:

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

None.

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 Hedmark, which is under the instruction of DN.

Address: County Governor of Hedmark, Statens Hus, Parkgata 36, Box 4034, 2306 Hamar. Phone: +47 62 55 10 00. E-mail: Postmottak@fmhe.no

34. Bibliographical references:

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

Bekken, J. 1983 *Ornitologiske registreringer i 12 myrområder i Sør-Hedmark*. Rapport til Fylkesmannen i Hedmark, Miljøvernavdelingen. 33 s.

Bekken, J. 2001 *Fugler og pattedyr i 18 våtmarksreservater i Hedmark*. Fylkesmannen i Hedmark, Miljøvernavdelingen. Rapport nr. 8/2001. 122 s.

Kålås, J.A., Viken, Å. og Bakken, T. (red.) 2006. *Norske Rødliste 2006 – 2006 Norwegian Red List*. Artsdatabanken, Norway

Moen, A. 1983. *Myrundersøkelser i Sør-Trøndelag og Hedmark i forbindelse med den norske myrreservatplanen*. K. norske Vidensk. Selsk. Mus. Rapp. Bot. Ser. 1983:4. 183 s.

Moen, A. 1998. *Nasjonalatlas for Norge; vegetasjon*. Statens kartverk, Hønefoss.

Skattum, E & Sonerud, G. 1975. *Myrområder på søndre delen av Hedmarksvidda*. Inventeringer i forbindelse med Miljøverndepartementets landsplan for verneverdige områder/forekomster. 35 s.

Please return to: **Ramsar Convention Secretariat, Rue Mauverney 28, CH-1196 Gland, Switzerland**
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