

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.

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

Miljøfaglig Utredning AS commissioned by Norwegian
Directorate for Nature Management, Tungasletta 2, 7485
Trondheim
Tlf +47 73580500
Fax: +47 73580501
E-mail: postmottak@dirnat.no

FOR OFFICE USE ONLY.

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:

Hynna
(International No. 1191, National No. 29)

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

This RIS is for (tick one box only):

- a) Designation of a new Ramsar site ; or
b) Updated information on an existing Ramsar site

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

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

If the site boundary has changed:

- i) the boundary has been delineated more accurately ; or
- ii) the boundary has been extended ; or
- iii) the boundary has been restricted**

and/or

If the site area has changed:

- i) the area has been measured more accurately ; or
- ii) the area has been extended ; or
- iii) the area has been reduced**

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

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

The ecological character has not changed.

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 Ramsar site border is the same as the border of Hynna Nature Reserve which was extended on 11.3.2011. The Ramsar Site was consequently also extended and the boundaries of the nature reserve and the Ramsar site are the same.

8. Geographical coordinates (latitude/longitude):

61° 13'N 9° 55'E

9. General location:

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

Hynna is situated in Gausdal Vestfjell, about 35 km north-west of Lillehammer in Gausdal municipality in the county of Oppland, in south-east Norway.

10. Elevation: (average and/or max. & min.)
823-867 m.a.s.l.

11. Area: (in hectares)
6442 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.

A large mire complex with a number of large and smaller pools, as well as solid ground with open upland birch woodland and Norway spruce *Picea abies*. The mire complex is characterised by a variation between wet string-mire and dryer mires on shallow slopes. Hynna is an important area for breeding waterbirds, in particular ducks and waders. Several regionally and nationally rare and red-listed species breed.

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. Hynna is a representative mire area for upland parts of southern Norway. The mires have large areas with little or no minerotrophic influence due to the flat structure. Likewise there are large areas with well-developed string-mire (shifting dry and wet strings), an important mire type for the biogeographical region.
- Criterion 2. Several nationally threatened species breed in the area. This includes Ruff *Philomachus pugnax* (VU), Hen Harrier *Circus cyaneus* (VU). Other red listed species include: *Evernia divaricata* (VU), *Dracocephalum ruyschiana* (VU), *Pilophorus cereolus* (VU) *Aplodon wormskioldii* (VU), *Campanula barbata* (VU), *Ramalina thrausta* (VU), *Urtica urens* (VU), *Botrychium multifidum* (VU). Red list categories are given according to the national red list 2010.
- Criterion 3. The Ramsar site has a breeding wetland bird fauna which is representative for large and varied mire complexes in the lower mountainous part of southern Norway. Several of the species are rare or uncommon in the region. For which species, please see pt 22.
- Criterion 4. Hynna is an important area for breeding waterbirds, in particular ducks and waders. See pt. 22 for more details.

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 vegetation zone, transitional section (Nb-OC).

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 area is geologically interesting because of the Rogen moraines and drumlins which are characteristic of the landscape.
Geomorphology	Typical string-mires, with a variation between wet and dry sections and dry land.
Substrate/soil type	Peaty soils dominate in the vast areas of mires, whereas there are mineral soils along the moraine ridges with upland birch woodland.
Water depth /fluctuations	The waters in the area are mainly shallow mire pools with a high humus content. Hornsjøen is regulated for production of electricity with a regulation height of 4 m.
Climate	The climate is continental with relatively little precipitation (700-1000 mm p.a.) and relatively warm, yet short, summers and 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).

The catchment area is mainly low alpine areas with large areas of mires. There are large areas of upland birch woodland and coniferous woodland in the lower parts.

18. Hydrological values:

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

As with other large areas of mires, Hynna functions as a water reservoir during periods of drought and reduces the effects of flooding during periods of high precipitation. The large mires also contribute in carbon storage.

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, Tp, Xf, 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.

The vast mires are situated in the northern boreal vegetation zone in a lower mountainous area and are characterised by a variation between wet string-mires and dryer mires on shallow slopes, divided by ridges of solid ground with coniferous and upland birch woodlands. The wet flat mires are formed as terraces in the terrain, dammed up by more solid strings. The mires are mainly intermediary, and minerotrophic

vegetation is mainly found in the southern part – which also has areas of rich mires with amongst others *Dactylorhiza incarnata*. These mire areas are considered of local to regional conservation value in connection with a conservation plan for mires in Oppland. Also the sloping mires in the north-east are somewhat richer, with some species requiring calcerous conditions. The ombrotrophic vegetation is dominated by *Betula nana*, *Empetrum* spp. and *Sphagnum fuscum*. Aquatic vegetation grows in slow-flowing rivers and streams and along pond edges. The dominant woodland type is berry-rich woodland and small-fern woodland with Norway spruce *Picea abies* and birch *Betula pubescens* spp. *czerepanovii* as the main tree species.

The invertebrate fauna is poorly known. Trout *Salmo trutta* is found in streams and pools, and the area has a good population of elk *Alces alces*.

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.*

The most interesting flora elements are the occurrences of rich mire species such as *Coeloglossum viride*, *Dactylorhiza incarnata*, *Carex buxbaumii* spp. *mutica*, *C. livida* and *Sphagnum subfulvum*. See also point 14 criterion two.

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.*

Hynna is a breeding site for several regionally uncommon and threatened bird species. Of special interest is the occurrence of Great Snipe *Gallinago media* (NT-national and IUCN red list). At the end of the 1970's up to 20 birds were recorded displaying at a lek, whereas in 1984 only 6-8 individuals were recorded. Other rare or unusual or threatened species which nest include Black-throated Diver *Gavia arctica* (2-5 pairs), Hen Harrier *Circus cyaneus* (0-1 pair), Common Crane *Grus grus* (1-2 pairs), Ruff *Philamachus pugnax* and Broad-billed Sandpiper *Limicola falcinellus* (1-2 pairs in 1978 and 1 pair in 2003). As for common species, the following observations were made in 1984: 4-6 pairs of Common Teal *Anas crecca*, 4-6 pairs of Tufted Duck *Aythya fuligula*, 5-10 pairs of Northern Lapwing *Vanellus vanellus*, 5-6 pairs of Eurasian Curlew *Numenius arquata*, 7 pairs of Whimbrel *Numenius phaeopus* and 8-9 pairs of Common Redshank *Tringa totanus*. The Ramsar site has been expanded and the numbers of birds is expected to be higher than mentioned over, but good data is missing.

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:

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 and state
- (b) in the surrounding area: Private and state

25. Current land (including water) use:

- (a) within the Ramsar site:
Hunting for both small and large game occurs, as well as fishing in the Hynna river and the large waters in the area.
- (b) in the surroundings/catchment:
The Hynna watercourse is regulated for production of hydroelectricity. Hunting and fishing are important recreational activities in the catchment area, as is to some extent walking and berry-picking.

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 development of the Hynna watercourse for production of hydroelectricity does not appear to have had a negative effect on the birdlife in the Hynna area. Hornsjøen and Øvre Ropptjern are regulated, but this does not seem to have affected the water table in the neighbouring areas of mire to any extent.
- (b) in the surrounding area:

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.

Designated as a nature reserve on 12th October 1990, and extended 11.3.2011. The Ramsar site is extended and the border for the nature reserve and the Ramsar site is now the same.

- 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

- 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.

No management plan exists.

29. Current scientific research and facilities:

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

None are 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.

The County Governor's Office in Oppland has prepared a brochure about protected wetlands in the county, and this includes a section about Hynna.

31. Current recreation and tourism:

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

Fishing is the most important recreational activity in the area. Sports hunting also occur in the area on legally approved species.

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, Serviceboks, 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.

Botany:

Torbergsen, E.-M. 1979. Myrundersøkelser i Oppland i forbindelse med den norske myrreservatplanen. K. Norske Vidensk. Selsk. Mus. Trondheim, Rapp. Bot. Ser. 1979-3: 1-68. (In Norwegian – on research on mires in connection with a national plan for mire reserves).

Birds:

Opheim, J. 1978. Fuglelivet på myrene mellom Hornsjøen og Øvre Ropp tjern, Gausdal kommune. Våtmarksund. i Oppland 1978. Rapport. 15 s. (In Norwegian – on birdlife between Hornsjøen and Øvre Ropp tjern).
Opheim, J. 1984. Fugleobservasjoner i Roppa-området, Gausdal kommune. Fugler i Oppland 1984-12: 1-32. (In Norwegian – on bird observations in the Roppa area).

Geology / geomorphology:

Wolden, K. & Neeb, P. R. 1993. Geologi i arealplanlegging og ressursforvaltning, Gausdal kommune, Oppland fylke. NGU-rapport 09/93. (In Norwegian – on area planning and management of resources).

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