



Ramsar Information Sheet

Published on 9 March 2018

Update version, previously published on : 1 January 2012

Norway

Hynna



Designation date	6 August 2002
Site number	1191
Coordinates	61°14'31"N 09°53'39"E
Area	6 442,00 ha

Color codes

Fields back-shaded in light blue relate to data and information required only for RIS updates.

Note that some fields concerning aspects of Part 3, the Ecological Character Description of the RIS (tinted in purple), are not expected to be completed as part of a standard RIS, but are included for completeness so as to provide the requested consistency between the RIS and the format of a 'full' Ecological Character Description, as adopted in Resolution X.15 (2008). If a Contracting Party does have information available that is relevant to these fields (for example from a national format Ecological Character Description) it may, if it wishes to, include information in these additional fields.

1 - Summary

Summary

The site is situated in the south-east of Norway in Oppland County. It consists of 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. 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. Hynna is an important area for breeding waterbirds, in particular ducks and waders. Several regionally and nationally rare and red-listed species breed here. The Site is important for local climate regulation and carbon storage. It also acts as a water reservoir during periods of drought and reduces the effects of flooding during periods of high precipitation.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Compiler 1

Name	Ellen Haakonsen Karr
Institution/agency	Norwegian Environment Agency
Postal address	P.O. Box 5672 Torgarden, N-7485 Trondheim, Norway
E-mail	post@miljodir.no
Phone	+47 73 58 05 00

2.1.2 - Period of collection of data and information used to compile the RIS

From year	1978
To year	2017

2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Hynna
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2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(Update) A. Changes to Site boundary Yes No

(Update) B. Changes to Site area No change to area

2.1.5 - Changes to the ecological character of the Site

(Update) 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS? No

2.2 - Site location

2.2.1 - Defining the Site boundaries

b) Digital map/image

<1 file(s) uploaded>

Former maps	0
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Boundaries description

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.

2.2.2 - General location

a) In which large administrative region does the site lie?	Oppland
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b) What is the nearest town or population centre?	Lillehammer
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2.2.3 - For wetlands on national boundaries only

a) Does the wetland extend onto the territory of one or more other countries? Yes No

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes No

2.2.4 - Area of the Site

Official area, in hectares (ha):	6442
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Area, in hectares (ha) as calculated from
GIS boundaries

6435.66

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	2. Northern boreal vegetation zone, transitional section (Nb-OC)
EU biogeographic regionalization	1. Alpine

Other biogeographic regionalisation scheme

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)

3 - Why is the Site important?

3.1 - Ramsar Criteria and their justification

- Criterion 1: Representative, rare or unique natural or near-natural wetland types

Other ecosystem services provided Extensive mire areas like this are important carbon storage areas.

Other reasons 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 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification The Ramsar site has a high variety of 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.



















- Criterion 4 : Support during critical life cycle stage or in adverse conditions

3.2 - Plant species whose presence relates to the international importance of the site

Scientific name	Common name	Criterion 2	Criterion 3	Criterion 4	IUCN Red List	CITES Appendix I	Other status	Justification
<i>Aplodon wormskjoldii</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	
<i>Botrychium multifidum</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	
<i>Dracocephalum ruyschiana</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	
<i>Evernia divaricata</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	
<i>Ramalina thrausta</i> 	Angel's hair bushlichen	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	
<i>Skeletocutis stellae</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	
<i>Urtica urens</i> 		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	National Red List: Considered as VU	

Species listed under Criterion 2 which are not yet included in the Catalogue of Life:
 Pilophorus cereolus, National Red List: Considered as VU
 Red list categories are given according to the National Red List 2015.

3.3 - Animal species whose presence relates to the international importance of the site

Phylum	Scientific name	Common name	Species qualifies under criterion			Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
			2	4	6	9	3	5	7								
Birds																	
CHORDATA / AVES	 <i>Anas crecca</i>	Green-winged Teal; Eurasian Teal	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>		Criterion 4: Important breeding site for this species.
CHORDATA / AVES	 <i>Chroicocephalus ridibundus</i>	Black-headed Gull	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					<input type="checkbox"/>	<input type="checkbox"/>	National Red List: Considered as VU	Criterion 4: Breeding site for this species. In decline, here as in the rest of Norway.
CHORDATA / AVES	 <i>Circus cyaneus</i>	Northern Harrier	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1			LC 	<input type="checkbox"/>	<input type="checkbox"/>	National Red List: Considered as EN	(0-1 pair) This nationally threatened species breeds in the site. Criterion 3 & 4: This species nests in the site.
CHORDATA / AVES	 <i>Gallinago media</i>	Great Snipe	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, Bern Convention National Red List: Considered as NT	Criterion 3 & 4: Of special interest is the occurrence of this breeding species. In 2015, 53 males were registered displaying at lek.
CHORDATA / AVES	 <i>Gavia arctica</i>	Arctic Loon; Black-throated Loon	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4			LC 	<input type="checkbox"/>	<input type="checkbox"/>		(2-5 pairs) Criterion 3 & 4: This species breeds in the area.
CHORDATA / AVES	 <i>Grus grus</i>	Common Crane	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	2			LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, Bern Convention	(1-2 pairs) Criterion 3 & 4: This species breeds in the area.
CHORDATA / AVES	 <i>Limicola falcinellus</i>	Broad-billed Sandpiper	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1			LC 	<input type="checkbox"/>	<input type="checkbox"/>	Annex II, Bern Convention	(1-2 pairs in 1978 and 1 pair in 2003) Criterion 3 & 4: This species breeds in the area.
CHORDATA / AVES	 <i>Numenius arquata</i>	Eurasian Curlew	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	National Red List: Considered as VU	Criterion 4: 5-6 pairs in 1984. Regularly observed in the area, breeding in small numbers.
CHORDATA / AVES	 <i>Philomachus pugnax</i>	Ruff	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC 	<input type="checkbox"/>	<input type="checkbox"/>	National Red List: Considered as EN	Criterion 2: This nationally threatened species breeds in the site. Criterion 3 & 4: This species nests in the area.
CHORDATA / AVES	 <i>Vanellus vanellus</i>	Northern Lapwing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT 	<input type="checkbox"/>	<input type="checkbox"/>	National Red List: Considered as EN	Criterion 4: Regularly observed in the area, and is most likely breeding here.

1) Percentage of the total biogeographic population at the site

Red list categories are given according to the National Red List 2015.

3.4 - Ecological communities whose presence relates to the international importance of the site

<no data available>

4 - What is the Site like? (Ecological character description)

4.1 - Ecological character

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 moose *Alces alces*.

4.2 - What wetland type(s) are in the site?

Inland wetlands

Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1
Fresh water > Flowing water >> M: Permanent rivers/ streams/ creeks				
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2		
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		3		Representative
Fresh water > Marshes on peat soils >> U: Permanent Non-forested peatlands		1		Representative
Fresh water > Marshes on inorganic soils >> Xf: Freshwater, tree-dominated wetlands		4		

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Campanula barbata</i>		This rare species (Status NT nationally) is found in the area
<i>Carex adelostoma</i>		The most interesting flora elements are the occurrences of rich mire species such as this species.
<i>Carex heleonastes</i>		Relatively rare species nationally, characteristic for the area.
<i>Carex livida</i>		The most interesting flora elements are the occurrences of rich mire species such as this species.
<i>Dactylorhiza incarnata</i>		The most interesting flora elements are the occurrences of rich mire species such as this species.
<i>Dactylorhiza viridis</i>		The most interesting flora elements are the occurrences of rich mire species such as this species.
<i>Sphagnum subfulvum</i>		The most interesting flora elements are the occurrences of rich mire species such as this species.
<i>Subularia aquatica</i>		

4.3.2 - Animal species

Other noteworthy animal species

Phylum	Scientific name	Common name	Pop. size	Period of pop. est.	%occurrence	Position in range /endemism/other
CHORDATA/AVES	<i>Aythya fuligula</i>	Tufted Duck	5			4-6 pairs in 1984
CHORDATA/AVES	<i>Numenius phaeopus</i>	Whimbrel	9			and 8-9 pairs in 1984
CHORDATA/AVES	<i>Tringa totanus</i>	Common Redshank	9			8-9 pairs in 1984

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
D: Moist Mid-Latitude climate with cold winters	Dfc: Subarctic (Severe winter, no dry season, cool summer)

The climate is continental with relatively little precipitation (700-1000 mm p.a.) and relatively warm, yet short, summers and cold winters.

4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres)

a) Maximum elevation above sea level (in metres)

Entire river basin

Upper part of river basin

Middle part of river basin

Lower part of river basin

More than one river basin

Not in river basin

Coastal

4.4.3 - Soil

Organic

(Update) Changes at RIS update No change Increase Decrease Unknown

No available information

Are soil types subject to change as a result of changing hydrological conditions (e.g., increased salinity or acidification)? Yes No

Please provide further information on the soil (optional)

Peaty soils dominate in the vast areas of mires, whereas there are mineral soils along the moraine ridges with upland birch woodland.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Stability of water regime

Presence?	Changes at RIS update
Water levels largely stable	No change

Please add any comments on the water regime and its determinants (if relevant). Use this box to explain sites with complex hydrology.

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.

4.4.5 - Sediment regime

Sediment regime unknown

4.4.6 - Water pH

Unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l)

(Update) Changes at RIS update No change Increase Decrease Unknown

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Unknown

4.4.9 - Features of the surrounding area which may affect the Site

Please describe whether, and if so how, the landscape and ecological characteristics in the area surrounding the Ramsar Site differ from the i) broadly similar ii) significantly different site itself:

Surrounding area has greater urbanisation or development

Surrounding area has higher human population density

Surrounding area has more intensive agricultural use

Surrounding area has significantly different land cover or habitat types

Please describe other ways in which the surrounding area is different:

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.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Provisioning Services

Ecosystem service	Examples	Importance/Extent/Significance
Fresh water	Drinking water for humans and/or livestock	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Climate regulation	Local climate regulation/buffering of change	Medium
Hazard reduction	Flood control, flood storage	Medium

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Picnics, outings, touring	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	Medium

Other ecosystem service(s) not included above:

Hunting for both small and large game occurs, as well as fishing in the Hynna river and the large waters in the area. 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. Fishing is the most important recreational activity in the area. Sports hunting also occur in the area on legally approved species.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes No Unknown

4.5.2 - Social and cultural values

i) the site provides 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) the site has exceptional cultural traditions or records of former civilizations that have influenced the ecological character of the wetland

iii) the ecological character of the wetland depends on its interaction with local communities or indigenous peoples

iv) 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

<no data available>

4.6 - Ecological processes

<no data available>

5 - How is the Site managed? (Conservation and management)

5.1 - Land tenure and responsibilities (Managers)

5.1.1 - Land tenure/ownership

Public ownership

Category	Within the Ramsar Site	In the surrounding area
National/Federal government	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Provide further information on the land tenure / ownership regime (optional):

within the Ramsar site: Private and state
in the surrounding area: Private and state

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for managing the site:

County Governor of Oppland

Postal address:

Serviceboks, N-2626 Lillehammer, Norway

E-mail address:

postmottak@fmop.no

5.2 - Ecological character threats and responses (Management)

5.2.1 - Factors (actual or likely) adversely affecting the Site's ecological character

Please describe any other threats (optional):

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.

5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve	Hynna		whole

5.2.3 - IUCN protected areas categories (2008)

Ia Strict Nature Reserve

Ib Wilderness Area: protected area managed mainly for wilderness protection

II National Park: protected area managed mainly for ecosystem protection and recreation

III Natural Monument: protected area managed mainly for conservation of specific natural features

IV Habitat/Species Management Area: protected area managed mainly for conservation through management intervention

V Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation and recreation

VI Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural ecosystems

5.2.4 - Key conservation measures

Legal protection

Measures	Status
Legal protection	Implemented

5.2.5 - Management planning

Is there a site-specific management plan for the site? No

Has a management effectiveness assessment been undertaken for the site? Yes No

If the site is a formal transboundary site as indicated in section Data and location > Site location, are there shared management planning processes with another Contracting Party? Yes No

Please indicate if a Ramsar centre, other educational or visitor facility, or an educational or visitor programme is associated with the site:

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

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? No need identified

5.2.7 - Monitoring implemented or proposed

<no data available>

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Botany:

Torbergson, 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 Ropptjern, Gausdal kommune. Våtmarksund. i Oppland 1978. Rapport. 15 s. (In Norwegian – on birdlife between Hornsjøen and Øvre Ropptjern).

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).

6.1.2 - Additional reports and documents

i. taxonomic lists of plant and animal species occurring in the site (see section 4.3)

<no file available>

ii. a detailed Ecological Character Description (ECD) (in a national format)

<no file available>

iii. a description of the site in a national or regional wetland inventory

<no file available>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

<no file available>

vi. other published literature

<3 file(s) uploaded>

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:



Birch forest and mire at Hynna (Bjørn Harald Larsen, Miljøfaglig Utredning, 01-08-2015)



Large mire area at Hynna (Bjørn Harald Larsen, Miljøfaglig Utredning, 01-08-2015)



Mire and stream at Hynna (Bjørn Harald Larsen, Miljøfaglig Utredning, 01-08-2015)



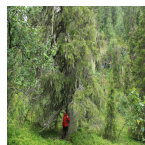
Mire area, the lake Nedre Reinsjøen in the background (Bjørn Harald Larsen, Miljøfaglig Utredning, 01-08-2015)



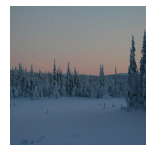
Early marsh-orchid at the mires. (Geir Håntont, 19-07-2015)



Open mire area east of the lake Vesle Reinsjøen. (Geir Håntont, 19-07-2015)



Mature spruce forest (here With healthy populations of the lichen Alectoria sarmentosa) are also found in the area. (Geir Håntont, 11-08-2015)



Hynna in the winter. (Kjølv Falklev, Norwegian Environment Agency, 10-12-2015)



Mire and lake area with cottongrass. (Thor Østbye, 06-07-2017)

6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation