

# **Ramsar Information Sheet**

Published on 7 November 2017 Update version, previously published on : 1 January 2011

# Norway Atnsjømyrene



Designation date Site number

12 November 2010 1955 Coordinates 61°54'44"N 10°04'06"E Area 533,00 ha

https://rsis.ramsar.org/ris/1955 Created by RSIS V.1.6 on - 18 May 2020

# 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

Atnsjømyrene is a mire-complex upstream of Atnsjøen lake, in which flat fens dominate. Characteristic for the site is nutrient-poor vegetation. Willow- and birch forests are common vegetation types along the watercourses and mire edges. Additionally, there are small pools and ponds, which constitute important areas for the fish fauna. The mixture of different wetland types makes Atnsjømyrene a valuable breeding- and staging area for waterfowl, especially ducks and waders, with a total of 96 breeding bird species registered in this area. Tufted duck and common goldeneye are the most numerous duck species, while common sandpiper and common greenshank are the most numerous waders.

The bedrock in the area was created about 600 million years ago, by compressed sand. High water levels during spring result in large parts of the ground to be submerged. As a consequence of this, the mires are supplied with nutrients. The mires also act as important water reservoirs and offer flood protection during periods of snow melt and heavy precipitation.

The mires are important for research and education, with strong botanical and ornitological interests focused on the area. Some plant species of the National Red List (NRL) can be found, such as Botrychium lanceolatum (NRL: VU) and Epipogium aphyllum (NRL: VU).

The site also experiences tourist and recreational activities such as hunting, sport fishing, hiking, canoeing and berry picking. The surrounding area hosts several cabins and farms.

# 2 - Data & location

- 2.1 Formal data
- 2.1.1 Name and address of the compiler of this RIS

## Compiler 1

Name	Pernille Kvernland
Institution/agency	Norwegian Environment Agency
Postal address	Post box 5672 Torgarden, N-7485 Trondheim, Norway
E-mail	post@miljodir.no
Phone	+47 73580500

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

From year	1982
To year	2016

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish) Atnsjømyrene

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 O No (

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

## 2.1.5 - Changes to the ecological character of the Site

(<sup>Update)</sup> 6b i. Has the ecological character of the Ramsar Site (including applicable Criteria) changed since the previous RIS?

## 2.2 - Site location

## 2.2.1 - Defining the Site boundaries

#### b) Digital map/image

<1 file(s) uploaded>

Former maps 0

#### Boundaries description

The boundaries are the same as for the Atnsjømyrene Nature Reserve

## 2.2.2 - General location

a) In which large administrative region does	Hedmark County and Oppland County
the site he?	
b) What is the nearest town or population centre?	Lillehammer & Hamar (approx population ~ 30 000 in each city)

#### 2.2.3 - For wetlands on national boundaries only

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

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party?

#### 2.2.4 - Area of the Site

Official area, in hectares (ha): 533

Area, in hectares (ha) as calculated from	532.63
GIS boundaries	552.55

### 2.2.5 - Biogeography

Biogeographic regions	
Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	1. Northern boreal vegetation zone.
EU biogeographic regionalization	2. Boreal

Other biogeographic regionalisation scheme

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

## 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

A large mire-complex with pools, ponds and edge vegetation, typical and representative for the continental part of southern Norway. The number of plant species is relatively low, due to the poor nutrient conditions, but is characteristic of the biogeographic region.

#### Criterion 2 : Rare species and threatened ecological communities

Criterion 3 : Biological diversity

A great variety of wetland bird species are breeding within the area, some of them being regionally rare. The birdlife is typical for large mires and small open water bodies in this part of Norway. The site also contains vegetation registered on the National Red List, making this wetland system important for maintaining the biological diversity 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
Botrychium Ianceolatum	triangle moonwort	V	V				National red list: VU	
Epipogium aphyllum	ghost orchid	V	V				National red list: VU	
Eriophorum brachyantherum	cottongrass	×	×				National red list: VU	

Capitalized letters shows the species' status on the National Red List 2015	

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

Phylum	Scientific name	Common name	Speciesqualifiesundercriterion2469	Species contributes under criterion 3 5 7 8	Pop. Size	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Birds												
CHORDATA / AVES	Actitis hypoleucos 📲 🖳 🔌	Common Sandpiper										Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Anas crecca 📲 🛄 🔌	Eurasian Teal; Green-winged Teal						LC Strip				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Anas penelope 📲 🛄 🔌	Eurasian Wigeon										Criterion 4: This species is breeding in the area.

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contribute under criterion 3 5 7	<ul> <li>Pop. Size</li> <li>Period of pop.</li> </ul>	% Est. occurrenc 1)	e Red / List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA / AVES	Anas platyrhynchos	Mallard					LC Str				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Anthus pratensis	Meadow Pipit					NT Straight Straight				Criterion 4: This species breeds on the large open mires.
CHORDATA / AVES	Aythya fuligula	Tufted Duck									Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Aythya marila 🌄 🛀 🌖	Greater Scaup	Ø Ø 🗆 🗆				LC Strip			National Red List: Considered as VU	Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Bucephala clangula References Para Para Para Para Para Para Para Par	Common Goldeneye					LC ●\$				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Chroicocephalus ridibundus	Black-headed Gull					LC Str			National Red List: Considered as VU	Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Emberiza schoeniclus	Reed Bunting; Common Reed Bunting; Common Reed-Bunting					LC Star			National Red List: Considered as NT	Criterion 4: This species breeds on the large open mires.
CHORDATA / AVES	Fringilla montifringilla	Brambling					LC Strainer Strainer				Criterion 4: This species breeds on the large open mires.
CHORDATA / AVES	Gallinago gallinago	Common Snipe					LC Str				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Grus grus	Common Crane									Criterion 4: Some few pairs of Common Crane Grus grus are breeding regularly in Atnsjømyrene Nature Reserve.
CHORDATA / AVES	Limosa limosa 🕌 🚉 🤌	Black-tailed Godwit	ØOOC							National Red List: Considered as EN	
CHORDATA / AVES	Melanitta fusca 🕌 💁 💫	White-winged Scoter; Velvet Scoter	ØOOC							National Red List: Considered as VU	
CHORDATA / AVES	Mergus merganser	Common Merganser					LC Str				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Motacilla flava	Western Yellow Wagtail					LC Str				Criterion 4: This species breeds on the large open mires.
CHORDATA / AVES	Phalaropus Iobatus	Red-necked Phalarope					LC Str				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Phylloscopus trochilus	Willow Warbler					LC Star				Criterion 4: This species breeds on the large open mires.
CHORDATA / AVES	Podiceps auritus	Horned Grebe	VVOC				VU ••* ••\$			National Red List: Considered as VU	Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Tringa glareola 📲 🔍 🄌	Wood Sandpiper					LC Str				Criterion 4: This species is breeding in the area.

Phylum	Scientific name	Common name	Species qualifies under criterion 2 4 6 9	Species contributes under criterion 3 5 7 8	Pop Size	). Period of pop. Est.	% occurrence 1)	IUCN Red / List	CITES Appendix I	CMS Appendix I	Other Status	Justification
CHORDATA / AVES	Tringa nebularia	Common Greenshank										Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Tringa totanus	Common Redshank			כ			LC Star				Criterion 4: This species is breeding in the area.
CHORDATA / AVES	Vanellus vanellus	Northern Lapwing	ØØOO		כ						National Red List: Considered as EN	Criterion 4: This species is breeding in the area.
Others												
CHORDATA / MAMMALIA	Canis Iupus	Gray Wolf	eooo		כ				×		National Red List: Considered as CR	

1) Percentage of the total biogeographic population at the site

Capitalized letters shows the species' status on the National Red List 2015.

Additional information (criterion 4): A total of 22-39 pairs of ducks and 14-54 pairs of waders breed yearly (Sonerud 1982) depending on water level, and weather conditions.

## 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

Characteristic for this area is the large open mires with nutrient-poor vegetation. Willow- and birch-woodland are common vegetation types found along the watercourses and mire edges. The mixture of open mires, pools, ponds, rivers and lakes make the site a valuable breeding area for wetland birds, especially ducks and waders.

## 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		4		
Fresh water > Lakes and pools >> Tp: Permanent freshwater marshes/ pools		2		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				
Fresh water > Marshes on peat soils >> Xp: Permanent Forested peatlands		3		Representative

## 4.3 - Biological components

#### 4.3.1 - Plant species

#### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
Chaetodermella luna		National red list: NT
Cypripedium calceolus		National red list: NT

#### Invasive alien plant species

Scientific name	Common name	Impacts	Changes at RIS update
Alchemilla mollis		Potentially	No change
Potentilla intermedia		Potentially	No change

#### Optional text box to provide further information

Capitalized letters shows the species' status on the National Red List 2015.

#### 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
CHORDATAMAMMALIA	Lepus timidus	Mountain Hare				National Red List: NT
CHORDATA/AVES	Melanitta nigra	Black Scoter				National Red List: NT
CHORDATAAVES	Pandion haliaetus	Western Osprey;Osprey				National Red List: NT

#### Invasive alien animal species

Phylum	Scientific name	Common name	Impacts	Changes at RIS update
CHORDATAMAMMALIA	Neovison vison	American Mink	Potentially	No change

#### Optional text box to provide further information

Capitalized letters shows the species' status on the National Red List 2015.

#### 4.4 - Physical components

4.4.1 - Climate

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

The climate is continental with moderate summer temperatures and cold winters. Lowest precipitation is experienced during winter and early spring, with the heaviest precipitation during summer. Yearly annual precipitation of 500 mm. July is the warmest month, with an average temperature of 11,2°C, while January is the coldest, with an average of -9,9°C (Yearly difference of 21,1°C).

#### 4.4.2 - Geomorphic setting

a) Minimum elevation above sea level (in metres) 700
a) Maximum elevation above sea level (in metres) 700
Entire river basin 🗆
Upper part of river basin
Mddle part of river basin 🗹
Lower part of river basin
More than one river basin $\Box$
Not in river basin
Coastal

Please name the river basin or basins. If the site lies in a sub-basin, please also name the larger river basin. For a coastal/marine site, please name the sea or ocean. Atna river is a central nature element in the site. The river begins in the high mountains of Rondane and flows into Glomma, the longest river in Norway.

4.4.3 - Soil

Organic 🗹

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

No available information

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

Please provide further information on the soil (optional)

Peat soils dominate in the large areas of mires.

The bed rock in the surrounding area was created about 600 million year ago, by compressed sand.

#### 4.4.4 - Water regime

Changes at RIS update		
s character of the site		
Predominant water source	Changes at RIS update	
	No change	
Changes at RIS update		
No change		
Changes at RIS update		
No change		
on the water regime and its de	atorminanta (ifralavant)   laa	this hav to availain aited with complay hydrology
on the water regime and its de	elerminanis (ir relevant). Ose	this box to explain sites with complex hydrology
rtant water reservoirs. T	hey provide stability in	water drainage in the watercourses.
uffer capacity (sensitive	to potential acidification	n).
e		
Sediment reg	gime unknown 🗹	
	Changes at RIS update s character of the site Predominant water source Changes at RIS update No change Changes at RIS update No change on the water regime and its de rtant water reservoirs. T uffer capacity (sensitive e Sediment regime	Changes at RIS update s character of the site Predominant water source Changes at RIS update No change Changes at RIS update No change Changes at RIS update No change Changes at RIS update Sediment regime unknown Change unknown

4.4.7 - Water salinity

Fresh (<0.5 g/l) 🗹

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

Unknown 🗖

#### Oligotrophic 🗹

(Update) Changes at RIS update No change Increase O Decrease O Unknown O
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 O ii) significantly different I site itself:
Surrounding area has greater urbanisation or development
Surrounding area has higher human population density $\square$
Surrounding area has more intensive agricultural use
Surrounding area has significantly different land cover or habitat types $\Box$
Please describe other ways in which the surrounding area is different:
Forestry

## 4.5 - Ecosystem services

#### 4.5.1 - Ecosystem services/benefits

Provisioning Services		
Ecosystem service	Examples	Importance/Extent/Significance
Food for humans	Sustenance for humans (e.g., fish, molluscs, grains)	Medium
Fresh water	Drinking water for humans and/or livestock	Medium
Wetland non-food products	Livestock fodder	Medium

Regulating Services

Ecosystem service	Examples	Importance/Extent/Significance
Hazard reduction	Flood control, flood storage	High

#### Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Recreational hunting and fishing	Medium
Recreation and tourism	Water sports and activities	Low

Supporting Services		
Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Carbon storage/sequestration	Low

#### Other ecosystem service(s) not included above

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.

Hunting and sports fishing, canoeing, berry picking. Some grazing (sheep).

The surrounding area host several cabins and farms.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site? Yes O No O 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 D use that maintain the ecological character of the wetland

ii) the site has exceptional cultural traditions or records of former  $\hfill cultural traditions that have influenced the ecological character of the wetland$ 

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		V

#### Private ownership

Category	Within the Ramsar Site	In the surrounding area
Other types of private/individual owner(s)	×	×.

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

## Within the Ramsar site: Private

## In the surrounding area: Private/state owned

## 5.1.2 - Management authority

Please list the local office / offices of any	County Governor of Hedmark
agency or organization responsible for	
managing the site:	
Postal address:	Statens Hus, Parkgata 36, Box 4034, 2306 Hamar

E-mail address: postmottak@fmhe.no

## 5.2 - Ecological character threats and responses (Management)

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

#### Human settlements (non agricultural)

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Tourism and recreation areas	Low impact	Low impact	×	No change	V	No change

#### Agriculture and aquaculture

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Livestock farming and ranching	Low impact	Low impact	V	No change	×	No change

#### Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Roads and railroads	Low impact	Low impact	1	No change	я.	No change

#### Human intrusions and disturbance

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Recreational and tourism activities	Low impact	Low impact	×	No change	×	No change

#### Invasive and other problematic species and genes

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Invasive non-native/ alien species	unknown impact	unknown impact	×	No change		No change

### 5.2.2 - Legal conservation status

National legal designations			
Designation type	Name of area	Online information url	Overlap with Ramsar Site
Nature Reserve	Atnsjømyrene		whole

la Strict Nature Reserve

- Ib Wilderness Area: protected area managed mainly for wilderness protection
  - Il 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
- VProtected 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	

#### Human Activities

Measures	Status
Regulation/management of recreational activities	Implemented

#### Other:

Nature Reserve is the strongest form of nature conservation in Norway. Human activity here is regulated by an official set of detailed regulations specific for the area.

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

#### 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 O No ()

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

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

None

#### 5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Yes, there is a plan

#### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal species (please specify)	Implemented

Atnasjøen was in 1986 chosen as a reference inland watercourse, where scientists monitor longterm variations and changes occurring in natural processes and ecosystems that are almost untouched by technical alterations. In Atnasjøen they monitor the biodiversity that can be found in this body of freshwater. The monitoring is performed by Norwegian Institute for Nature Research (NINA) and Norwegian Institute for Water Research (NIVA).

# 6 - Additional material

## 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Kålås, J.A., Viken, Å. og Bakken, T. (red.) 2006. Norsk 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.

Sonerud, G. 1982. Fugl og pattedyr i Atnas nedbørfelt. Kontaktutv. Vassdragsreg. Univ. Oslo, Rapp. 43. 115 s.

Lokaliteter i Norsk geoturisme 2 - Hedmark/Oppland med øvre Glomma. Severdige lokaliteter verdt å vite mer om. Kjell Nordseth. 2016.

Naturbase.no

Norges vassdrags- og energidirektorat - https://www.nve.no/

Elvedeltadatabasen - http://elvedelta.miljodirektoratet.no/index.htm

Bekken, J. 2013. Fugler i 20 våtmarksreservater i Hedmark 2000-2012. Fylkesmannen i Hedmark, miljøvernavdelingen. Rapport nr. 2/2013. 123 s.

Sandlund, O.T. (red.), Bongard, T., Brettum, P., Finstad, A.G., Fjellheim, A., Halvorsen, G.A., Halvorsen, G., Hesthagen, T., Hindar, A., Papinska, K., Saksgård, R., Schartau, A.K., Schneider, S., Skancke, L.B., Skjelbred, B. & Walseng, B. 2010. Nettverk for biologisk mangfold i ferskvann – samlerapport 2010. Atna- og Vikedalsvassdragene - NINA Rapport 598. 146 s

#### 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

iv. relevant Article 3.2 reports

v. site management plan

**vi. other published literature** <1 file(s) uploaded>

### 6.1.3 - Photograph(s) of the Site

#### Please provide at least one photograph of the site





Atnsjømyrene (Suzanne Wien/Fylkesmannen i Hedmark, 01-09-2016 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation 2010-11-12