RIS for Site no. 1957, Hopen, Norway



Ramsar Information Sheet

Published on 23 June 2023

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Designation date 12 November 2010 Site number 1957 Coordinates 76°34'50"N 25°11'43"E Area 318 567,00 ha

https://rsis.ramsar.org/ris/1957 Created by RSIS V.1.6 on - 23 June 2023

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

Hopen island can be found 100 km southeast of Edgeøya. The island is 38 km long and on average 1,5 km wide (2,5 km at the widest and 500 m at its narrowest), giving it a shape like a backbone. The total area of Hopen constitute 3 186 km2, where 46 km2 are land masses and 3 140 km2 constitute marine areas. Apart from a few scattered strandflats, there is a narrow beach that surrounds the entire island, from which the landscape majestically rises. At the top there are steep cliffs with horizontal shelves, ideal for breeding seabirds. Iversenfjellet is the larges mountain (371 m). Hopen meterological station is the only settlement with a year round staff of 4 people. The station is located at the southern tip of the island. Generally the site is characterized by a short period for vegetational growth, with less than 50 days between spring and autumn. The rich production in the sea is the basis for most of the bird- and mammal life, but also for plants and invertebrates, both directly and indirectly.

Hopen has a rich bird diversity with many cliff-breeding seabirds. Most of the cliffs are situated in the south of the island, however, the largest bird cliff is located in the north. Northern fulmar, black guillemot, little auk, Atlantic puffin, Brünnich's guillemot and glaucous gull are species found here. Other bird species are Arctic skua, great skua and purple sandpiper. Common eider also occur, but in low numbers.

Hopen is an important area for maintenance of the seabird populations in the southeastern parts of Svalbard. Hopen was protected as a nature reserve in 2003 and is an Important Bird Area (IBA) location. The northernmost point of the island makes for an important swimming route for the Brünnich's guillemot. Additionally, the island is a natural resting area for migrating birds. The shallow waters surrounding Hopen are important areas for walrus during winter season and the southern tip of the island host important resting spots.

Hopen is an important migration-, denning- and feeding area for polar bears. However, the number of polar bear dens varies, and according to annual registrations carried out at Hopen's meteorological station since 1976, data indicate that Hopen is loosing its function as a denning area. Seals, an important source of nutrition for the polar bears, are abundant on the drift ice around the island.

2 - Data & location

2.1 - Formal data

2.1.1 - Name and address of the compiler of this RIS

Responsible compiler

Institution/agency Norwegian Environment Agency

Postal address Post box 5672 Torgarden, N-7485 Trondheim, Norway

National Ramsar Administrative Authority

	Postboks 5672 Sluppen
Postal address	Trondheim
	Norway

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

From year	1996
To year	2014

2.1.3 - Name of the Ramsar Site

Official name (in English, French or	Hopen
Spanish)	

2.1.4 - Changes to the boundaries and area of the Site since its designation or earlier update

(opuse) A. Changes to Site boundary Yes O No	
^(Update) B. Changes to Site area No change to area	
^(Update) For secretariat only: This update is an extension	

2.1.5 - Changes to the ecological character of the Site

⁹ Not evaluated	^{Jpdate)} 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

In the middle of the island there is a small area that is not included in the Ramsarsite. Here we find Hopen meterological station. The boundaries are the same as for the existing Hopen Nature Reserve. Apart from a small area around the meteorological station the whole island is protected as a nature reserve.

2.2.2 - General location

a) In which large administrative region does	Svalbard
uie site iie :	
b) What is the nearest town or population centre?	Longyearbyen (population approx 2 100)

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 $\textcircled{\sc opt}$

b) Is the site adjacent to another designated Ramsar Site on the territory of another Contracting Party? Yes O $_{\rm No}$ (

2.2.4 - Area of the Site

Official area, in hectares (ha):	318567

Area, in hectares (ha) as calculated from GIS boundaries 318281.48

2.2.5 - Biogeography

Biogeographic regions		
Regionalisation scheme(s)	Biogeographic region	
Other scheme (provide name below)	1. Arctic polar desert zone.	
EU biogeographic regionalization	2. Arctic	

Other biogeographic regionalisation scheme

1. The zonal division assigned is based on the distribution of thermophilius vascular plant species. Vascular plants, which are abundant on Svalbard are divided into five groups based on their temperature requirements. The distributions of these groups of species have been surveyed in 163 areas (In: Elvebakk, A. (1997): Tundra diversity and ecological characteristics of Svalbard. In: Wiegolaski, F.E. (ed.): Polar and alpine tundra. Ecosystems of the world 3: 347-359. Elsevier.

2. 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

Other reasons	Hopen is a representative arctic island with a rich avian community, particularly among cliff nesting species, and an important area for maintenance of the seabird populations in the southeastern parts of
	Svalbard.

Criterion 2 : Rare species and threatened ecological communities

Optional text box to provide further	The island host bird species of national and international concern, such the Atlantic puffin (Fratercula	
information	arctica) and the black-legged kittiwake (Rissa tridactyla) (IUCN; VU).	

Criterion 3 : Biological diversity

Hopen is an important area for maintenance of the seabird populations in the southeastern parts of Svalbard. The northernmost point of the island makes for an important swimming route for the Brünnich's guillemot (Uria lomvia) and the island functions as a natural resting area for migrating birds. The island is also important for marine mammals such as polar bears, and the shallow waters surrounding Hopen are also important for walrus (Odobenus rosmarus).

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

	The northernmost point of the island makes for an important swimming route for the Brünnich's guillemot.
	The island is also a natural resting area for migrating birds. Additionally, Hopen is an important migration-
Optional text box to provide further	, denning- and feeding area for polar bears (Ursus maritimus). The shallow waters surrounding Hopen are
Information	important areas for walrus during winter season and the southern tip of the island host important resting
	spots.

☑ Criterion 5 : >20,000 waterbirds

Overall waterbird numbers	877000
Start year	1988
End year	2012
Source of data:	http://www.birdlife.no/prosjekter/rapporter/2015_05_NOF.pdf and https://www.sysselmannen.no/globalassets/sysselmannen-dokument/miljovern/forvaltningsplaner/forvaltn ingsplan_for_hopen_naturreservat.pdf
Optional text box to provide further information	Hopen supports the East Atlantic black-legged kittiwake population breeding on the island in addition to populations of Northern fulmars, black guillemots, little auks, Atlantic puffins and glaucous gulls. *The managment plan for Hopen (2007) claims that no bird population estimates have been undertaken during the last 20 years. Therefore several numbers are based on a count performed in 1988. However, a newer report from 2015 (Important bird and biodiversity areas in Norway) lists new population estimates for certain species with numbers from 2012. 1988 is therefore chosen as start year and 2012 as end year, even though there has not been ongoing population monitoring in the years between.

☑ Criterion 6 : >1% waterbird population

Optional text box to provide further information Infor

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

<no data available>

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

Phylum	Scientific name	Species qualifies under criterion 2 4 6	Spe contr under of 9 3 5	cies ibute riter 7	es rion 8	Period of pop. Est.	% occurrence 1)	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification
Others												
CHORDATA / MAMMALIA	Odobenus rosmarus							VU			Svalbard Red List: Considered as VU	Criterion 4: Southern part of the island (Koefoedodden) there is a traditional resting place for walrus.
CHORDATA / MAMMALIA	Ursus maritimus	◩◪▢						VU			Svalbard Red List: Considered as VU	Criterion 4: According to annual registrations carried out at Hopen's meteorological station since 1976, there have normally been between 150-300 polar bear visits each winter in the period of 1983– 2001.
Birds												
CHORDATA / AVES	Alle alle				10000	1998		LC				Population estimate based on numbers from 1988 (5000 breeding pairs). Criterion 4: The site is especially important for cliff nesting birds such as this species.
CHORDATA / AVES	Calidris maritima							LC				Criterion 4: The site is important for breeding waders such as this species.
CHORDATA / AVES	Cepphus grylle				480	2012		LC				Population estimate based on numbers from 2012. Criterion 4: The site is especially important for cliff nesting birds such as this species.
CHORDATA / AVES	Fratercula arctica							VU				Criterion 4: The site is especially important for cliff nesting birds such as this species.
CHORDATA / AVES	Fulmarus glacialis				10000	1988		LC				Population estimate based on numbers from 1988 (5000 breeding pairs). Criterion 4: The site is especially important for cliff nesting birds such as this species.
CHORDATA / AVES	Larus hyperboreus				2000	1988		LC			Svalbard Red List: Considered as NT	Population estimate based on numbers from 1988 (1000 breeding pairs). Criterion 4: The site is especially important for cliff nesting birds such as this species. Biogeographic region: Svalbard & N Russia (bre)
CHORDATA / AVES	Rissa tridactyla	ZZZ			130000	2012	2	VU			Svalbard Red List: Considered as NT	Population estimate based on numbers from 2012. Criterion 4: The site is especially important for cliff nesting birds such as this species. Criterion 6: Biogeographic region: East Atlantic (br)
CHORDATA / AVES	Somateria mollissima							NT				Criterion 4: The site is important for birds such as this species. Common eiders occur, but in low numbers.
CHORDATA / AVES	Stercorarius parasiticus							LC				Criterion 4: The site is important birds such as this species.
CHORDATA / AVES	Stercorarius skua							LC				Criterion 4: The site is important for birds such as this species.
CHORDATA / AVES	Uria Iomvia				725000	2012		LC			Svalbard Red List: Considered as NT	Population estimate based on numbers from 2012. Criterion 4: The site is especially important for cliff nesting birds such as this species.

1) Percentage of the total biogeographic population at the site

Additional information (Polar bear): According to annual registrations carried out at Hopen's meteorological station since 1976, data indicate that Hopen is loosing its function as a denning area for polar bears. Seals, an important source of nutrition for the polar bears, are also abundant in the drift ice around the island.

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

- Situated in the Arctic and characterized by:
- Island with several bird cliffs. Rock or sand/gravel dominated shores.
- Sparse grass vegetation.
- The island is usually icebound during winter
- Earlier Hopen was a very important denning site for Polar Bear, but because of the ice condition in recent years the situation has changed.

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

Manne of coastar weitands					
Wetland types (code and name)	Local name	Ranking of extent (1: greatest - 4: least)	Area (ha) of wetland type	Justification of Criterion 1	
A: Permanent shallow marine waters		2		Representative	
D: Rocky marine shores		1		Representative	

4.3 - Biological components

4.3.1 - Plant species

Other noteworthy plant species					
Phylum	Scientific name	Position in range / endemism / other			
TRACHEOPHYTA/MAGNOLIOPSIDA	Draba micropetala	Svalbard Red List: Considered as NT			

Optional text box to provide further information

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

4.3.2 - Animal species

<no data available>

4.4 - Physical components

4.4.1 - Climate

Climatic region	Subregion
E: Polar climate with extremely cold winters and summers	ET: Tundra (Polar tundra, no true summer)

The climate is characterised by low temperatures and low precipitation. The warmest month is August, with a middle temperature of 2,3°C. March is the coldest month with an average of -11,3°C. The average temperature in July is 1,9°C. Annual average temperature is -6,4°C. Only in July, August and September are average temperatures above 0°C (1,9 – 2,3 and 0,7°C). Annual precipitation is 476 mm.

Hopen is free for ice from July to October. The island is characterized by fog and precipitation.

4.4.2 - Geomorphic setting

	a) Minimum elevation above sea level (in metres)
371	a) Maximum elevation above sea level (in metres)
Entire river basin	
Upper part of river basin 🗖	
Middle part of river basin \square	
Lower part of river basin 🛛	
More than one river basin \square	
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.

The Norwegian Sea

4.4.3 - Soil

Mineral 🗹

(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 conditions (e.g., increased salinity or acidification)?

Please provide further information on the soil (optional)

Because of a harsh climate with large erosion effects from wind, waves and sea ice most of the surface is covered by rocks. The most heavily vegetated area are located under bird cliffs, where guano provides nutrients (in particular nitrogen) that enhances plant growth. The island has continuous permafrost where only the upper parts melt during the summer.

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water	
present	

Source of water that maintains character of the site

Presence?	Predominant water source	Changes at RIS update	
Water inputs from precipitation	×	No change	
Marine water		No change	

Water destination

Presence?	Changes at RIS update	
Marine	No change	

Stability of water regime

Presence?	Changes at RIS update
Water levels fluctuating (including tidal)	No change

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

There are no rivers or lakes at Hopen, only smaller creeks.	All freshwater come from snow melt and rain. In the winter all freshwater is frozen.
4.4.5 - Sediment regime	
Sediment regime unknown 🗹	1
4.4.6 - Water pH	
Unknown 🗹	1
4.4.7 - Water salinity	
Euhaline/Eusaline (30-40 g/l) 🗹	1
^(Update) Changes at RIS update No	o change
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) site itself:	broadly similar O ii) significantly different 🖲
Surrounding area has greater urbanisation or development	1
Surrounding area has higher human population density 🗖	1
Surrounding area has more intensive agricultural use	1
Surrounding area has significantly different land cover or habitat types \square]

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Recreation and tourism	Picnics, outings, touring	Medium
Spiritual and inspirational	Cultural heritage (historical and archaeological)	Medium
Scientific and educational	Important knowledge systems, importance for research (scientific reference area or site)	Medium

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Nutrient cycling	Storage, recycling, processing and acquisition of nutrients	Medium

Other ecosystem service(s) not included above:

Bird cliffs are considered to be important in the nutrient flow between the ocean and land.

Trappers have used the island in the 19th century and there are several huts, traps and other cultural values showing their activities. Five trapper huts are protected as cultural heritage sites.

From 1994 there has been intensive research on polar bears. There is also a meteorological station at the island.

Hopen is rarely visited by tourists (60 tourists from coastal expedition cruise boats landed on Hopen in 2009), however recreational activities among the station crew (Meteorological station) commonly include both hiking and use of recreational cabins.

Have studies or assessments been made of the economic valuation of ecosystem services provided by this Ramsar Site?

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

(ECD) Nutrient cycling The bird cliffs are considered to be important in the nutrient flow between ocean and land.

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	V

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

Within the Ramsar site: State owned	
In the surrounding area: State owned	

5.1.2 - Management authority

Please list the local office / offices of any agency or organization responsible for	Governor of Svalbard
managing the site:	
Postal address:	Pb 633, 9171 Longyearbyen, Norway
E-mail address:	postmottak@sysselmannen.no

5.2 - Ecological character threats and responses (Management)

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

Energy production and min	ning					
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Oil and gas drilling					×	

Natural system modifications

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified/others			×			

Pollution						
Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Industrial and military effluents	Medium impact	Medium impact		No change	Ø	No change

Climate change and severe weather

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Unspecified	High impact	High impact	×	No change	×	No change

Please describe any other threats (optional):

Within the Ramsar site:

Climate change and its effects in the Arctic may be the most serious environmental issue threatening the Arctic environment.

In the surrounding area:

Oil spill from ships and oil/gas development projects in this part of the Arctic is a possible threat.

5.2.2 - Legal conservation status

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

Non-statutory designations			
Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	Hopen		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 G 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? Yes

Has a management effectiveness assessment been undertaken for the site? Yes $O\,\text{No}\,\textcircled{\text{S}}$

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:

No such activities have been conducted, mainly because of the remoteness of the area and difficult access.

5.2.6 - Planning for restoration

Is there a site-specific restoration plan? Please select a value

5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal species (please specify)	Implemented

From 1994 there has been intensive research on polar bears. There is also a meterological station on the island.

6 - Additional material

6.1 - Additional reports and documents

6.1.1 - Bibliographical references

Bakken, V. & Mehlum, F. 1988. AKUP - Sluttrapport Sjøfuglundersøkelser nord for 74N/Bjørnøya. Norsk Polarinstitutt. Rapportserie nr. 44.

Elvebakk, A. 1989: Biogeographical zones of Svalbard and Jan Mayen based on the distribution patterns of thermophilous vascular plants. Upubl. manuskript, Universitetet i Tromsø.

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

Sysselmannen 2007, Forvaltningsplan Hopen naturreservat 2007-2011. Sysselmannen på Svalbard.

Norwegian Polar institute: http://npweb.npolar.no/

Heggøy, O., Øien, I, J., Aarvak, T. 2015. Important Bird and Biodiversity Areas (IBAer) i Norge. Norsk ornitologisk forening. Rapport 5-2015.

Hopen meterologiske stasjon http://hopenmeteo.no/?page id=2

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)

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

6.1.3 - Photograph(s) of the Site

Please provide at least one photograph of the site:







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Johan Hjortfjellet, view south (Pa Lutna Svsselmannen, 21 09-2017



Thorkelsenskaret, view south (Paul Lutnæs/Sysselmannen, 21-09-2017)



Kvasstoppen towards Askeheimodden (Pau Lutnæs/Svsseli nen. 21-09-2017)

6.1.4 - Designation letter and related data

Designation letter

Date of Designation 2010-11-12