

Information Sheet on Ramsar Wetlands (RIS) – 2009-2012 version

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Categories approved by Recommendation 4.7 (1990), as amended by Resolution VIII.13 of the 8th Conference of the Contracting Parties (2002) and Resolutions IX.1 Annex B, IX.6, IX.21 and IX.22 of the 9th Conference of the Contracting Parties (2005).

Notes for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Further information and guidance in support of Ramsar site designations are provided in the *Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance* (Ramsar Wise Use Handbook 14, 3rd edition). A 4th edition of the Handbook is in preparation and will be available in 2009.
3. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers should provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of all maps.

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

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Tungasletta 2, 7485 Trondheim.
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Designation date

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Site Reference Number

2. Date this sheet was completed/updated:

April 2011

3. Country:

Norway

4. Name of the Ramsar site:

The precise name of the designated site in one of the three official languages (English, French or Spanish) of the Convention. Alternative names, including in local language(s), should be given in parentheses after the precise name.

Nordenskiöldkysten

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

This RIS is for (tick one box only):

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

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

a) Site boundary and area

The Ramsar site boundary and site area are unchanged:

or

If the site boundary has changed:

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

and/or

If the site area has changed:

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

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

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

7. Map of site:

Refer to Annex III of the *Explanatory Note and Guidelines*, for detailed guidance on provision of suitable maps, including digital maps.

a) A map of the site, with clearly delineated boundaries, is included as:

- i) a **hard copy** (required for inclusion of site in the Ramsar List): ;
- ii) an **electronic format** (e.g. a JPEG or ArcView image) ;
- iii) a **GIS file providing geo-referenced site boundary vectors and attribute tables** .

b) Describe briefly the type of boundary delineation applied:

e.g. the boundary is the same as an existing protected area (nature reserve, national park, etc.), or follows a catchment boundary, or follows a geopolitical boundary such as a local government jurisdiction, follows physical boundaries such as roads, follows the shoreline of a waterbody, etc.

The Ramsar site consists of the western parts of Nordenskiöld land national park.

8. Geographical coordinates (latitude/longitude, in degrees and minutes):

Provide the coordinates of the approximate centre of the site and/or the limits of the site. If the site is composed of more than one separate area, provide coordinates for each of these areas.

77°51' N 13° 50' E

9. General location:

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

Nordenkiöldkysten is located in the western parts of Svalbard, on the central westcoast of Spitsbergen (the largest island in the Archipelago) within Nordenskiöldland national park. The nearest town is Longyearbyen, which is approx 60 km to the north-east. Longyearbyen has approximately 2100 inhabitants.

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

0 – 714 meter

11. Area: (in hectares)

31750 ha (20 000 ha land)

12. General overview of the site:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Nordenkiöldkysten is a large, flat area, some parts of which are richly vegetated; the region has many freshwater pools. In the south-eastern parts of this coastal plain we find Ingeborgfjellet, a mountain that has steep cliffs that contain important seabird breeding colonies. Both Nordenkiöldkysten and Ingeborgfjellet are listed as important bird areas (IBA). Ingeborgfjellet as site number SJ009 and Nordenkiöldkysten as site number SJ008. The rich production of the sea is of great importance for much of the bird- and mammal life, but also for plants and invertebrates. The growth period for terrestrial vegetation is very short; there are usually less than 50 days between spring and autumn frost.

13. Ramsar Criteria:

Tick the box under each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11). All Criteria which apply should be ticked.

1	•	2	•	3	•	4	•	5	•	6	•	7	•	8	•	9
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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

Nordenkiöldkysten is a typical flat coastal plain, located between the sea and a steeply sloping mountain. From the mountain several creek runs to the sea. Among these creeks we find small ponds and lakes with a rich associated birdlife. There is also a bird cliff at Ingeborgfjellet, which is the breeding site of several species.

Criterion 2

The area contains breeding population of Red Knot –*Calidris canutus* (EN), Grey Phalarope *Phalaropus fulicarius* (NT). Sanderling *Calidris alba* (VU) can also be observed in the area. Further, mammal species classified as vulnerable visit the site such as Polar Bears, Harbour seals and Walrus *Odobenus rosmarus*.

Criterion 3

The bird cliffs in this region are important for maintaining the biological diversity of seabirds in the western parts of Svalbard. The flat area between the mountains and the sea is a traditional breeding site for geese (especially the Barnacle Goose). During moulting period the coast is important for King Eider *Somateria spectabilis*, Common Eider *Somateria mollissima borealis* and Long-tailed Duck *Clangula hyemalis*.

Criterion 4

The wetland areas support different bird species during the breeding season. It is also important during spring migration and also, though to a somewhat lesser extent, during the autumn migration. During spring up to 400 Brant geese *Branta bernicla* (NT) and 2-3000 barnacle geese *Branta leucopsis* can occur in the region.

Criterion 5

During the breeding season approximately 55.000 Little Auk *Alle alle*, 21.600 Brunnich's guillemot *Uria lomvia* and 4600 pairs of kittiwake *Rissa tridactyla* nest at Ingeborgfjellet. In the flat parts of Nordenkiöldkysten there are about 400 breeding Barnacle Goose *Branta leucopsis* and 300 Common Eider *Somateria mollissima borealis* in addition to other water-birds and waders.

Criterion 6

The site supports more than 1% of the Svalbard population of *Branta leucopsis* (400 breeding individuals) (Waterbird Population Estimates. 4th Edition. Wetlands International)

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. Northern arctic tundra zone (Elvebakk 1989)
2. Arctic

b) biogeographic regionalisation scheme (include reference citation):

1. Zonal division based on the distribution of thermophilous vascular plant species. Vascular plants, which are abundant on Svalbard, are divided into five groups based on their temperature requirements. The distributions of these various groups of species has been surveyed in 163 areas (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

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	Consists of Precambrian basement rocks and overlying sedimentary rocks of carbonaceous from the Jurassic ages. The bedrock has undergone several mountain building episodes in the geologic past and has been transformed into metamorphic rocks that are generally massive and hard. In the southern parts of Nordenskiöldkysten there is a major coastal plain, Lågneshøya, within the basement area.
Geomorphology	A large flat area in front of steep mountains. From the mountains hundreds of creeks run to the sea in the summer, in the winter everything is frozen.
Substrate / soil type	The area is covered with a varying, but mostly very thin layer of marine deposits with beach terraces and beach ridges. Patches are bare rock at the surface and form plateaus in the country and capes and low mountain cliffs along the coast (Reiniusøyane, Cape Martin, Lågneshøya to Diabaspynten). The central coastal cliff sections consist of marine beach ridges composed of sand, gravel and small stones.
Water depth / fluctuations	During spring and early summer the soil is nearly saturated with water as permafrost impedes drainage, preventing the water from percolating downwards. The lakes are small and shallow. The rivers are short-lived summer phenomena. At the coasts the thickness of permafrost is 10-40 m. The variation between high and low tides measured at Ny-Ålesund (north along the coast) is 137 cm on average.
Climate	The climate is characterised by low temperatures and low precipitation. Average temperature in July is 4,8 °C. Annual average temperature is -5,1°. Annual precipitation is 480mm

17. Physical features of the catchment area:

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

Continuous permafrost and periglacial and permafrost-related terrain features are widespread in areas not covered by glaciers. At the coast the thickness of the permafrost is 10-40 m. Various forms of patterned

ground, such as stone circles and stripes are widespread and well developed. Fluvial activity is important, especially during the spring melt. River systems transport large amounts of sediments from glaciers to the sea. When the riverbeds dry up during the autumn, wind erosion of fresh, fine-grained sediments leads to deposition of eolian sediments (loess) downwind from the rivers.

The climate of Svalbard is Arctic, with a mean annual air temperature of about $-5,4^{\circ}\text{C}$ at sea level (Hornsund) and as low as -15°C in the high mountains. Precipitation measured at sea level is low, only about 400 mm w.e. Usually April-May is dry and the period August-October tends to be humid. Snow is the dominant type of precipitation. The border-zone between cold Arctic air from the Polar Basin and mild maritime air from the oceans to the south occurs around Svalbard. Meteorologically, this border zone at times is very active with cyclones generating unstable, often stormy weather. There may be very windy periods during winter, and fog banks are common during the summertime in the coastal areas. April-May is often calm and sunny.

18. Hydrological values:

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

Natural erosion processes occur on sandy shores and hard rock shoreline due to a very harsh climate with wind, waves and sea ice. The site plays an important role by storing carbon and methane.

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.

Vt, D, N, J

20. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site, and the ecosystem services of the site and the benefits derived from them.

Situated in the arctic and characterised by:

- No or only sparse vegetation around ponds and some other places.
- Drift ice occurs in winter and spring
- Important staging area for marine adapted bird species, geese and waders. Used as breeding, moulting, feeding and resting area.
- Important whole year round for mammals like Svalbard reindeer and Arctic Fox and the area is also visited by Polar Bears, Harbour seals and Walrus *Odobenus rosmarus* in small numbers.

21. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14, Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare,

endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Noteworthy flora is connected to lime demanding vegetation types.

Some noteworthy species are Purplish Braya (*Braya glabella ssp purpurascens*) (VU), Alpine rock-cress (*Arabis alpine*) (NT), and Ross' Sandwort (*Minuartia rossii*) (NT).

22. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in 14. Justification for the application of the Criteria) indicating, e.g., which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Mammals:

The site has a stable population of reindeer, polar fox and is regularly visited by Polar Bear.

Birds:

See 14.

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:

There is traditional trapping activity in the area, and a trapping station is situated on Akxeløya, southeast of the site. The trapping activities include harvesting of eider down, reindeer hunting and trapping of arctic fox. There is also a satellite station on Kapp Schollin, east of the site

Cultural value: There has been an extensive use of this area for Russian wintering (trappers) in the 18th century, Norwegian wintering (trappers) in the 20th and 21st centuries and mining in the 20th century. There are remains of several huts, hut sites, mines, hunting traps, graves and crosses in the area. All of these are protected cultural heritage sites.

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:

State owned

b) in the surrounding area:
State owned

25. Current land (including water) use:

a) within the Ramsar site:

A local trapper has parts of his trapline within the site. He is collecting eider down, hunting reindeer and trapping arctic foxes.

b) in the surroundings/catchment:

See above. The hosts at Isfjord Radio are also given permission to trap arctic foxes in an area north of the site.

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:

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

b) in the surrounding area:

Climate changes, increasing tourism, oil spill from ships and oil/gas development projects in this part of the Arctic is a possible threat.

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.

Nordenskiöldkysten and Ingeborgfjellet are parts of Nordenskiöld Land national park. Both sites are also listed as important bird areas (IBA)

b) If appropriate, list the IUCN (1994) protected areas category/ies which apply to the site (tick the box or boxes as appropriate):

Ia ; Ib ; II ; III ; IV ; V ; VI

c) Does an officially approved management plan exist; and is it being implemented?:

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

d) Describe any other current management practices:

None

28. Conservation measures proposed but not yet implemented:

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

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

29. Current scientific research and facilities:

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

There have been several research projects on the site, largely focussed on goose populations. Monitoring of seabirds were done in Ingeborgfjellet until 2002.

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.

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

31. Current recreation and tourism:

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

10 km north of the site we find Isfjord Radio where it is possible to rent a room, especially during the spring some tourists visit the place. Due to the long distance from Longyearbyen the numbers of tourists are low, approximately 1300 overnight stays during the winter season and 750 overnight stays during summer season. Ingeborgfjellet/Vårsolbukta is used as a landing site by coastal expedition cruises in summer time. Small groups of guests led by guides land by zodiacs on the shore and do short walks in the area to study geology, vegetation, animal- and birdlife. The total number of people on shore is approximately 725 during the summer. (All figures from 2009). There is also a cabin in Vårsolbukta, which is used for recreational trips by locals during summer and winter. The frequency of use is low due to the distance from Longyearbyen. In addition, the area between Isfjord Radio and Vårsolbukta is frequently used for snowmobiling during the winter. Residents, scientists and visitors are allowed to use snowmobiles in this national park.

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.

This site is managed by the Governor of Svalbard which is under the instruction of DN.

Address: Governor of Svalbard, Pb 633, 9171 Longyearbyen, Norway

Email: postmottak@syssemmannen.no

Phone +47 79 02 43 00

34. Bibliographical references:

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

Bergstrøm R., 1998, Goose monitoring – vårsolbukta, Spitsbergen mai30 – June 6. 1998

Birdlife International, Birdlife IBA Factsheet, SJ009 Ingeborgfjellet. Birdlife International 2009.
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Elvebakk, A. 1989: *Biogeographical zones of Svalbard and Jan Mayen based on the distribution patterns of thermophilous vascular plants*. Unpubl. manuskript, Universitetet i Tromsø.

Henriksen, J. & Dallmann, W. 2007. Isfjordens geologi og landskap. Norsk Polarinstittutt Cruisehåndbok for Svalbard. <http://cruise-handbook.npolar.no/no/index.html>

Hübner C.E. 2006. The importance of pre-breeding areas for the arctic Barnacle Goose *Branta leucopsis*. *Ardea* 94(3): 701–713.

Jouke P., Drent R.H., 2003 Goose census of Nordenkiöldkysten, West –Spitsbergen, Svalbard, summer 2003.

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

Norsk Polarinstitut 2000, Notat, Landskapsbeskrivelse for området Bellsund – Braganzavågen. Notat Norsk polarinstitut.

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