



# Ramsar Information Sheet

Published on 1 January 2002

Update version, previously published on : 1 January 2002

## Denmark

### Kilen



Designation date	27 January 1988
Site number	391
Coordinates	81°09'07"N 13°18'17"W
Area	49 500,00 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

This site is a wedge of polar desert surrounded by the glaciers of the Inland Ice and to the east by the North Water Polynya. It is the most important breeding and moulting site for the Light-bellied Brent Goose (*Branta bernicla hrota*) in Greenland.

## 2 - Data & location

### 2.1 - Formal data

#### 2.1.1 - Name and address of the compiler of this RIS

##### Compiler 1

Name	David Boertmann
Institution/agency	Aarhus University, Institute for Bioscience
Postal address	Frederiksborgvej 399 DK-4000 Roskilde Denmark
E-mail	dmb@bios.au.dk
Phone	+45 25580687

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

From year	1985
To year	2009

#### 2.1.3 - Name of the Ramsar Site

Official name (in English, French or Spanish)	Kilen
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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 <input checked="" type="radio"/> No <input type="radio"/>
(Update) The boundary has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The boundary has been extended	<input type="checkbox"/>
(Update) The boundary has been restricted	<input type="checkbox"/>
(Update) B. Changes to Site area	the area has decreased
(Update) The Site area has been calculated more accurately	<input checked="" type="checkbox"/>
(Update) The Site has been delineated more accurately	<input checked="" type="checkbox"/>
(Update) The Site area has increased because of a boundary extension	<input type="checkbox"/>
(Update) The Site area has decreased because of a boundary restriction	<input type="checkbox"/>

#### 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
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## 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 boundaries on the land side are the edges of the Inland Ice. The marine part is bordered to the east by 12° 29' W longitude and to the south by 80° 59' N latitude.  
NB the base map here is not precise and do not fit the boundaries of the site.

### 2.2.2 - General location

a) In which large administrative region does the site lie?	Northeast Greenland National Park
b) What is the nearest town or population centre?	Ittoqqortoormiit 1200 km to the south, Qaanaaq 1100 km to the west, Station Nord (military outpost) 53 km to the westnorthwest

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):

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

2.2.5 - Biogeography

Biogeographic regions

Regionalisation scheme(s)	Biogeographic region
Other scheme (provide name below)	High Arctic, oceanic and continental (Bay 1997a)
Other scheme (provide name below)	Polar desert (Bay 1997b)
WWF Terrestrial Ecoregions	Kalallit Nunaat high Arctic tundra

Other biogeographic regionalisation scheme

High Arctic, oceanic and continental (Bay 1997a),  
Polar desert (Bay 1997b).

### 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

An outstanding example of the unique high arctic desert and its wetlands and a coasts bordering the important North East Water Polynya.

- Criterion 2 : Rare species and threatened ecological communities

- Criterion 3 : Biological diversity

Justification

The area has, compared to adjacent areas, a relatively high biodiversity, due to the open waters of the polynya.

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

- Criterion 6 : >1% waterbird population

#### 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	Common name	Species qualifies under criterion				Species contributes under criterion				Pop. Size	Period of pop. Est.	% occurrence <sup>1)</sup>	IUCN Red List	CITES Appendix I	CMS Appendix I	Other Status	Justification	
			2	4	6	9	3	5	7	8									
<b>Birds</b>																			
CHORDATA / AVES	<i>Branta bernicla hrota</i>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	500	2008	6.6		<input type="checkbox"/>	<input type="checkbox"/>	NT on national red list	high numbers of breeding and moulting birds Svalbard, Denmark and UK
CHORDATA / AVES	<i>Pagophila eburnea</i>	Ivory Gull	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>	VU on national red list	breeding colony
CHORDATA / AVES	<i>Somateria mollissima</i>	Common eider East Greenland population	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				NT	<input type="checkbox"/>	<input type="checkbox"/>		breeding and spring concentrations
CHORDATA / AVES	<i>Somateria spectabilis</i>	King Eider	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>		spring concentrations
CHORDATA / AVES	<i>Sterna paradisaea</i>	Arctic Tern	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	NT on national red list	breeding
CHORDATA / AVES	<i>Xema sabini</i>	Sabine's Gull	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input type="checkbox"/>	<input type="checkbox"/>	NT on national red list	breeding
<b>Others</b>																			
CHORDATA / MAMMALIA	<i>Balaena mysticetus</i>	bowhead whale; Bowhead	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				LC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CR on national red list	
CHORDATA / MAMMALIA	<i>Odobenus rosmarus</i>	Walrus	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>	NT on national red list	
CHORDATA / MAMMALIA	<i>Ursus maritimus</i>	Polar Bear	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				VU	<input type="checkbox"/>	<input type="checkbox"/>		

1) Percentage of the total biogeographic population at the site

### 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

Sedimentary rocks from Cretaceous dominate the geology.

Except for the southeast side, glaciers surround the area. The southeast coast borders the North East Water Polynya with low sedimentary beaches and mudflats are exposed at low tide. The area gradually rises towards the northwest, where an altitude of 420 m is reached. Two large melt water rivers run along the sides of the area and there are some shallow lakes and ponds in the area. The marine part is shallow.

The snow cover in winter is extensive and the snow disappears late, on the plains in early July, and there is continuous permafrost in the area.

Most of the land is almost barren gravel plains, with very little vegetation. Even at lakes and rivers vegetation is scarce. The shallow coasts are important for eiders and walrus.

However, compared to nearby areas, the fauna of this Ramsar-site is rich. This is due to the polynya (North East Water), which keeps the coasts free of ice as early as May when benthic feeding seabirds and marine mammals have access to the seabed.

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

#### Marine or coastal wetlands

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		1		Representative
E: Sand, shingle or pebble shores		2		Rare
G: Intertidal mud, sand or salt flats		3		Rare

#### 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		2		Representative
Fresh water > Lakes and pools >> O: Permanent freshwater lakes		2		Representative
Fresh water > Marshes on inorganic or peat soils >> Vt: Tundra wetlands		3		Representative

#### Other non-wetland habitat

Other non-wetland habitats within the site	Area (ha) if known
Gravel flats	
low mountains	

### 4.3 - Biological components

#### 4.3.1 - Plant species

##### Other noteworthy plant species

Scientific name	Common name	Position in range / endemism / other
<i>Ranunculus sabinei</i>		

Optional text box to provide further information

The vegetation is very scarce and dominated by *Saxifraga oppositifolium*, *Papaver radicum* and in moist places also *Cerastium regelii* and *Alopecurus alpinus*.

#### 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>Anser brachyrhynchus</i>	Pink-footed Goose				may moult within site
CHORDATA/AVES	<i>Calidris alba</i>	Sanderling				breeding
CHORDATA/AVES	<i>Chen caerulescens</i>	snow goose				occasional breeder
CHORDATA/AVES	<i>Stercorarius skua</i>	Great skua				may breed in site
CHORDATA/MAMMALIA	<i>Vulpes lagopus</i>	Arctic Fox				very rare

### 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 site is within the high Arctic zone

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

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.

North East Water Polynya, Greenland Sea

4.4.3 - Soil

Mineral

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

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

4.4.4 - Water regime

Water permanence

Presence?	Changes at RIS update
Usually permanent water present	

Water destination

Presence?	Changes at RIS update
Marine	No change

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

Main water source is the melting of the surrounding glaciers. The precipitation in the site is limited.

4.4.5 - Sediment regime

Significant erosion of sediments occurs on the site

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

Significant accretion or deposition of sediments occurs on the site

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

Significant transportation of sediments occurs on or through the site

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

Sediment regime is highly variable, either seasonally or inter-annually

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

Sediment regime unknown

4.4.6 - Water pH

Acid (pH<5.5)

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

Circumneutral (pH: 5.5-7.4)

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

Alkaline (pH>7.4)

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

Unknown



4.4.7 - Water salinity

Fresh (<0.5 g/l)

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

Microhaline (brackish)/Microsaline (0.5-30 g/l)

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

Euhaline/Eusaline (30-40 g/l)

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

Hyperhaline/Hypersaline (>40 g/l)

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

Unknown

4.4.8 - Dissolved or suspended nutrients in water

Eutrophic

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

Mesotrophic

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

Oligotrophic

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

Dystrophic

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

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:

Surrounding areas are covered by glacier ice.

4.5 - Ecosystem services

4.5.1 - Ecosystem services/benefits

Cultural Services

Ecosystem service	Examples	Importance/Extent/Significance
Scientific and educational	Major scientific study site	Low

Supporting Services

Ecosystem service	Examples	Importance/Extent/Significance
Biodiversity	Supports a variety of all life forms including plants, animals and microorganisms, the genes they contain, and the ecosystems of which they form a part	High

Other ecosystem service(s) not included above:

There are probably archaeological sites within the area (cf. Greenland National Museum).

Within the site:

Outside the site:

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

## RIS for Site no. 391, Kilen , Denmark

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
Public land (unspecified)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

#### 5.1.2 - Management authority

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

Pingortitamut Avatangiisinullu Naalakkersuisoqarfik  
 Departementet for Natur og Miljø  
 Ministry of Nature and Environment

Provide the name and title of the person or people with responsibility for the wetland:

Karen Motzfeldt, Head of Department for Nature, Climate and Research

Postal address:

Pingortitamut Avatangiisinullu Naalakkersuisoqarfik  
 Departementet for Natur og Miljø  
 Ministry of Nature and Environment  
 Postboks 1015  
 3900 Nuuk

E-mail address:

pan@nanoq.gl

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

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

Transportation and service corridors

Factors adversely affecting site	Actual threat	Potential threat	Within the site	Changes	In the surrounding area	Changes
Aircraft flight paths	Low impact	Low impact	<input checked="" type="checkbox"/>	No change	<input checked="" type="checkbox"/>	No change

#### 5.2.2 - Legal conservation status

National legal designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Area important to wildlife (Anon. 2000)		<a href="https://www.govmin.gl/images/stories/minerals/rules_for_fieldwork.pdf">https://www.govmin.gl/images/stories/minerals/rules_for_fieldwork.pdf</a>	whole
National Park	Northeast Greenland National Park	<a href="http://lovgivning.gl/lov?rid={1FC9C99F-1BE0-494A-A663-4CA19ABEAF62}">http://lovgivning.gl/lov?rid={1FC9C99F-1BE0-494A-A663-4CA19ABEAF62}</a>	whole
Ramsar site	Kilen	<a href="http://lovgivning.gl/lov?rid={15CBC689-E3AD-470D-B32A-947A250D7062}">http://lovgivning.gl/lov?rid={15CBC689-E3AD-470D-B32A-947A250D7062}</a>	whole

Non-statutory designations

Designation type	Name of area	Online information url	Overlap with Ramsar Site
Important Bird Area	GL055 Kilen	<a href="http://datazone.birdlife.org/site/factsheet/51">http://datazone.birdlife.org/site/factsheet/51</a>	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

Other:

Low level flying over site is regulated.  
Regulation of traffic at seabird breeding colonies: <http://lovgivning.gi/lov?rid={56675241-A0B5-4D4E-89F9-C34D78417539}>

### 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

### 5.2.6 - Planning for restoration

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

### 5.2.7 - Monitoring implemented or proposed

Monitoring	Status
Animal community	Proposed

Monitoring proposed by Egevang & Boertmann 2001.

## 6 - Additional material

### 6.1 - Additional reports and documents

#### 6.1.1 - Bibliographical references

Anonymous 2000. Rules for fieldwork and reporting regarding mineral resources (excluding hydrocarbons) in Greenland. – Government of Greenland, Bureau of Minerals and Petroleum.

Bay, C. 1997a. Floristical and ecological characterization of the polar desert zone of Greenland. – Journal of vegetation Science 8: 685-696.

Bay, C. 1997b. Floristic division and vegetation zonation of Greenland in relevance to a circumpolar arctic vegetation map: 27-31. In: Proceedings of the second circumpolar arctic vegetation mapping workshop, Arendal, Norway, 19.-24. May 1996. Walker, S. & A.C. Lillie, eds.). – Occasional Paper No. 52, 1997. Institute of Arctic and Alpine Research, University of Colorado.

Boertmann, D. & Nielsen, R.D. 2010. Geese, seabirds and mammals in North and Northeast Greenland. Aerial surveys in summer 2009. – NERI Technical Report No. 773. 66 pp. <http://www2.dmu.dk/Pub/FR773.pdf>

Boertmann, D., Olsen, K. & Nielsen, R.D. 2009. Seabirds and marine mammals in Northeast Greenland. Aerial surveys in spring and summer 2008. – NERI Technical report no.721. <http://www2.dmu.dk/Pub/FR721.pdf>

Born, E.W., Boertmann, D.M., Heide-Jørgensen, M.P., Dietz, R., Witting, L., Kyhn, L., Riget, F.F., Laidre, K. & Ugarte, F. 2009. Abundance of Atlantic Walrus (*Odobenus rosmarus rosmarus*) in East Greenland. – NAMMCO SCIENTIFIC COMMITTEE WORKING GROUP ON WALRUS SC/17/MWG/07.

Egevang, C. & Boertmann, D. 2001. The Greenland Ramsar Sites, a status report. – National Environmental Research Institute (NERI), Technical Report No. 346, 96 pp.

Greenland Red List 2007. (Boertmann, D., 2008). Rødliste 2007 over planter og dyr i Grønland. – Danmarks Miljøundersøgelser, Grønlands Hjemmestyre.

#### 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

<1 file(s) uploaded>

iv. relevant Article 3.2 reports

<no file available>

v. site management plan

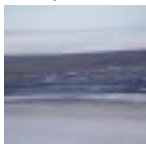
<no file available>

vi. other published literature

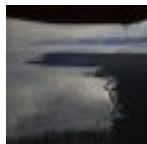
<no file available>

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

Please provide at least one photograph of the site:



Interior parts seen towards north, with glacier ice on both sides. ( David Boertmann, 26-07-2009 )



The coast of Kilen. ( David Boertmann, 19-08-2009 )



Interior part close to the inland ice. ( David Boertmann, 19-08-2009 )



Interior part of the site. ( David Boertmann, 29-07-2008 )



The northwestern part of the area. ( David Boertmann, 18-08-2009 )

#### 6.1.4 - Designation letter and related data

Designation letter

<1 file(s) uploaded>

Date of Designation