

Canadian Wildlife Service
Arctic Ecology Map Series
Critical Wildlife areas

Descriptive report

Jones Sound

-115-

JONES SOUND
(Sheet #2020)

The Jones Sound sheet encompasses approximately 106,000 square miles of land and marine area in the High Arctic. A major part of Ellesmere Island, eastern Axel Heiberg and most of Coburg Island as well as a section of Greenland are included on this map sheet.

Five distinct topographical regions occur on the section of Ellesmere Island included on this map sheet. On the east coast, extending south of Makinson Inlet to Glacier Strait and north of the inlet to Hayes Fiord is the Precambrian highland. This mountainous region is mostly ice-covered although the ice cap is pierced by the peaks of many mountains.

The north coast of Jones Sound extending approximately half way to Baumann Fiord constitutes the southern plateau. This area is considerably dissected with a hilly, uneven profile. North of the plateau is a general slope downward toward Baumann Fiord. The resulting lowland area includes the Bjerne Peninsula.

The remainder of Ellesmere Island, except for the Fosheim Peninsula, is included in the region known as the central mountains. This rugged country is ice-capped in the northern extent of its range. The Fosheim Peninsula is a well vegetated low rolling region. The topography of the contiguous area of Axel Heiberg Island is very similar to that of the Fosheim Peninsula.

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Coburg Island is very mountainous and is almost entirely covered by an ice cap.

The chief terrestrial wildlife in the areas included on this map sheet are Muskoxen and Peary Caribou. Muskoxen are present in large numbers on the Fosheim Peninsula and Axel Heiberg Island. These areas are also used extensively by breeding and molting Greater Snow Geese. Muskoxen and Peary Caribou are also common on the southern plateau and in the lowlands adjacent to Baumann Fiord.

Polar Bear, Arctic Fox, Arctic Wolf, and Arctic Hare also occur in most of the above mentioned areas.

Sea mammals including Walrus, Ringed Seals, Bearded Seals, Harp Seals, Beluga Whales, and Narwhal are very abundant in Jones Sound during the summer. Ringed Seals are year-round residents of this area as well as the entire east coast of Ellesmere Island.

Coburg Island is important for a large Thick-Billed Murre colony and the marine area in its vicinity is used as a wintering area for several species of sea mammals since strong currents maintain open water there.

The only Eskimo settlement on this map sheet is Grise Fiord. Approximately 80 people in 14 families reside here. Evidence of a previous settlement exists along the first fiord west of Baad Fiord in the form of the prehistoric Thule Eskimo winter

houses. An historical site of interest on Harbour Fiord is the winter harbour for the Fram, 1898-99.

Following is the descriptive text for units mapped on this sheet.

UNIT NUMBER

DESCRIPTION

- 1
Thousands of Walrus are found along this coast (Mansfield).

This area is also excellent Ringed and Bearded Seal range (Mansfield, Kelsall).

Harbour Seals have been observed as far north as Buchanan Bay (Mansfield).

Harp Seals from the Gulf of St. Lawrence migrate into this region during summer (Mansfield, 1967).

Huge concentrations of Narwhal from Murchison Sound and Whale Sound in Greenland (approximately 3000 animals) migrate up Smith Sound to summer in Kane Basin (Bruemmer).

Beluga Whales are common in this area, especially in Kane Basin (Kerr).
- 2
Walrus, Bearded Seals, Narwhals, and Beluga Whales migrate into Jones Sound in summer and back out to the "North water" in Baffin Bay in late fall. Harp Seals may use this route to enter and leave Jones Sound (Riewe, Bruemmer).
- 3
Coburg Island harbours a major Thick-Billed Murre colony numbering an estimated 20,000 birds (Tuck, 1970).

The large open water area around part of the Island due to the upwelling of warm currents allows greater than normal utilization by seabirds and the birds may winter on the Island (MacDonald).

Common Eiders are common on the rocky areas of the Island (MacDonald).

Walrus numbering in the hundreds haul out on Coburg Island (Riewe).

Polar Bears hunt at the open water edge along Coburg Island (Riewe).

UNIT NUMBER

DESCRIPTION

- 4 Thousands of gulls, primarily Glaucous Gulls nest on the cliffs of Cone and Smith Islands (Riewe).
- 5 Hundreds of Walrus haul out along the base of Jakeman Glacier (Riewe). Harington notes that the hundreds of Walrus hauling out here are largely females and that the males go farther west into Jones Sound. Eskimos harvest Walrus here when access is not hindered by pack ice (Harington).
- 6 An Arctic Fox den is located here (Riewe).
- 7 A Gull colony consisting primarily of Glaucous Gulls numbering over 100 is found here (Riewe).
- 8 This map unit encompasses the breeding territory of a pair of either Peregrine Falcons or Gryfalcons (Riewe).
- 9 Approximately 200 Glaucous and Thayer's Gulls breed in colonies on each side of Grise Fiord (MacDonald, Riewe).
- 10 Jones Sound is a favored area for sea mammals and Polar Bear.
- The third greatest concentration of Walrus occurs here (after the Southampton and Foxe Basin regions) and are found scattered along the coast of Ellesmere Island during the summer (Mansfield). According to Riewe, Walrus move into Jones Sound in August and September and move back out in October. They winter in the open water area of Baffin Bay known as the "North water". Bruemmer states that in the vicinity of King Edward VII Point and Glacier Strait, currents are sufficient to maintain open water with the result that some Walrus winter in the area.
- Because of the good supply of prey species, Polar Bears are common in Jones Sound along the open water edge and especially at the entrance to Jones Sound where water remains open all year (Riewe, Jonkel).

UNIT NUMBER

DESCRIPTION

Ringed Seals numbering in the tens of thousands remain in Jones Sound all year. They winter in leads and are hunted there by the Eskimos from Grise Fiord. Ringed Seals form the mainstay of the people here and they take 500-1000 of the seals each year (Riewe).

Bearded Seals enter Jones Sound in July with the first appearance of large cracks in the ice. They leave in October to winter in the open water areas of Baffin Bay and in the vicinity of Coburg Island. The population of Bearded Seals in Jones Sound is estimated at between 1000-2000. Approximately 20-40 of these seals are harvested each year by the natives of Grise Fiord. Since the hide is used for boot bottoms and lashes, the Bearded Seal is almost a necessity of life. The Grise Fiord Eskimos sell Bearded Seal hides to Eskimos who do not get this species in their area (Riewe).

Herds of hundreds of Harp Seals which have migrated from the Gulf of St. Lawrence enter Jones Sound in August and September with the breakup of the ice and move out again in October. Depending on the ice conditions, the number of Harp Seals spending the summer in Jones Sound varies from 1000-10,000. The Eskimos of Grise Fiord harvest 25-75 of the animals annually (Riewe).

Narwhal migrate into Jones Sound in herds of 20-50 animals during August and September and move out in October to winter in the "North water". An estimated 1000-2000 Narwhal spend the summer in Jones Sound. Approximately 50 of the animals were taken by the Eskimos of Grise Fiord in 1969 (Riewe).

Hundreds of Beluga Whales move into Jones Sound during August and September and move out in October. As many as 118 Belugas have been taken in one year by the Eskimos of Grise Fiord. The size of the harvest depends upon the effect of current ice conditions upon accessibility to the animals (Riewe).

UNIT NUMBER	DESCRIPTION
11	This is a hauling out location for Walrus (Riewe).
12	<p>The coastal lowlands of Jones Sound constitute Muskoxen range and the animals have been observed in the area by Freeman, Bruemmer, Riewe, and Kerr.</p> <p>The population of Muskoxen on southwestern Ellesmere Island which would include most of this map unit as well as the Bjerne Peninsula and the area south of Baumann Fiord has been estimated at 295 animals (Freeman, 1971). Freeman estimated the population of Muskoxen on the southeastern portion of Ellesmere Island (primarily the area south of Makinson Inlet) to be 175 animals.</p>
13	<p>An Arctic Fox den is located here (Kerr).</p> <p>A small unnamed lake a short distance north of this area is fished for Arctic Char during spring and fall by residents of Grise Fiord (Riewe, Freeman).</p>
14	<p>Approximately 50 Walrus have been observed hauled out at this location (Kerr).</p> <p>Prehistoric Thule Eskimo winter houses are found adjacent to the northern extent of this map unit (Freeman).</p>
15	<p>Greater Snow Geese breed in this area in the hundreds. The lowlands here are a traditional breeding area. Twenty-seven Brant were banded in this area with two band returns coming from Ireland (Heyland).</p>
16	<p>This unit delineates an area on which the coastline is used by Polar Bears for denning (Jonkel, Macpherson). Polar Bears migrate up and down the west coast of the Bjerne Peninsula following the open water leads and hunting seals in the area (Harrington).</p>

UNIT NUMBER

DESCRIPTION

The Bjorne Peninsula is inhabited by Peary Caribou (Jonkel, Riewe, Nassichuk) numbering in the hundreds (Jonkel). Snow accumulates in the valleys reaching depths up to 60" and would therefore not be used by Caribou during the winter. Eskimos from Grise Fiord hunt Caribou in this area and have taken up to 40 animals from the area in some years (Riewe).

Muskoxen also occur in the area in good numbers (Inglis, Jonkel).

- 17 A large Seabird colony of undetermined species occurs along approximately one-half mile of cliffs here. The population of birds is estimated at well over 10,000 (Riewe).
- 18 The Sor valley is probably the richest valley in the area and constitutes an important range for tens of Muskoxen and Peary Caribou. Arctic Hare occur in sufficient numbers to be observed in herds and they are hunted by the Eskimos of Grise Fiord. Wolves and Foxes are also commonly seen here (Riewe).
- 19 These coastal areas are used as winter range by Muskoxen numbering approximately 25 animals (Riewe). Greater Snow Geese breed and molt in this area (Heyland).
- 20 This area constitutes a winter range for small numbers of Peary Caribou (Riewe).
- 21 A small unnamed lake with Arctic Char is fished during spring and fall by Grise Fiord residents (Freeman, Riewe).
- 22 Approximately 15 Muskoxen use this area for winter range (Riewe).

UNIT NUMBER

DESCRIPTION

- 23 Eskimos from Grise Fiord travel overland to fish Arctic Char in this area during the spring. It is probably the best Char area available to them (Bruemmer).
Polar Bears are found along Makinson Inlet (Riewe).
- 24 Approximately 150 Greater Snow Geese breed and molt in this area (Heyland).
- 25 Peary Caribou utilize this area probably as year-round range. They number in the tens (Inglis, Nassichuk).
Groups of Muskoxen make use of the area as well (Inglis, Nassichuk, Kelsall).
Greater Snow Geese and Arctic Hare have been observed here (Inglis).
- 26 This area is important for Muskoxen and Greater Snow Geese (Muir, Heyland). Approximately 500 Greater Snow Geese breed and molt in the area (Heyland).
- 27 Stor Island is used as range by Muskoxen numbering in the tens (Kelsall).
- 28 This unit delineates an area which is similar to the Fosheim Peninsula and the Schei Peninsula with respect to its importance to Muskoxen and Greater Snow Geese (Muir, Harington, Heyland, Jonkel).
Greater Snow Geese occur in the area in the hundreds (Heyland).
Some Peary Caribou utilize the area (Muir, Jonkel).
Arctic Hare, though not as abundant as on the Fosheim Peninsula, occur in large numbers (Harington).

UNIT NUMBER

DESCRIPTION

- 29 A breeding colony of Glaucous Gulls occurs here at Buchanan Lake (Muir).
- A fairly rich avifauna was reported from this area by Macpherson (1963) and included Rock Ptarmigan, Knots, Baird's Sandpipers, and Parasitic Jaegers in addition to Glaucous Gulls.
- Greater Snow Geese have been observed in the area as well (Nassichuk).
- 30 The Schei Peninsula contains excellent range for Muskoxen (Muir, Inglis, Jonkel).
- Large numbers of Greater Snow Geese breed here (Heyland, Inglis). In a recent summer, 480 Geese were counted on the entire Peninsula (Heyland).
- 31 Eureka Sound is a pupping area for hundreds of Ringed Seals and is frequented by Polar Bears (Jonkel).
- 32 The Fosheim Peninsula contains excellent range for Muskoxen (Muir, Inglis, Jonkel, Kelsall, Harington). The entire Fosheim Peninsula supports a population of approximately 1000 Muskoxen (Jonkel).
- Large numbers of breeding Greater Snow Geese occur in this area (Heyland, Harington, Jonkel, Muir, Inglis, Curtis, Kelsall) with the total population numbering at least 1000 birds (Heyland).
- Arctic Hares are abundant on the Peninsula (Muir, Jonkel, Inglis, Curtis, Kelsall, Harington) and have been seen in herds of up to several hundred animals (Curtis, Jonkel). The population of Arctic Hares on the Fosheim Peninsula is estimated at several thousand (Inglis).
- Some Wolves, Peary Caribou, and Arctic Fox are also present (Jonkel).

UNIT NUMBER

DESCRIPTION

- 33 This area contains important range for Muskoxen and ponds in the area are used by breeding pairs of Greater Snow Geese (Muir, Inglis, Heyland).
A band of Peary Caribou was observed in the river valley in the southern part of this area (Nassichuk).
- 34 The valley of this braided stream constitutes important Muskoxen range (Muir).
- 35 Lowlands at the head of Canon Fiord are used as range by Muskoxen (Muir).
- 36 This map unit delineates the breeding territory of a pair of Gyrfalcons (Muir).

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