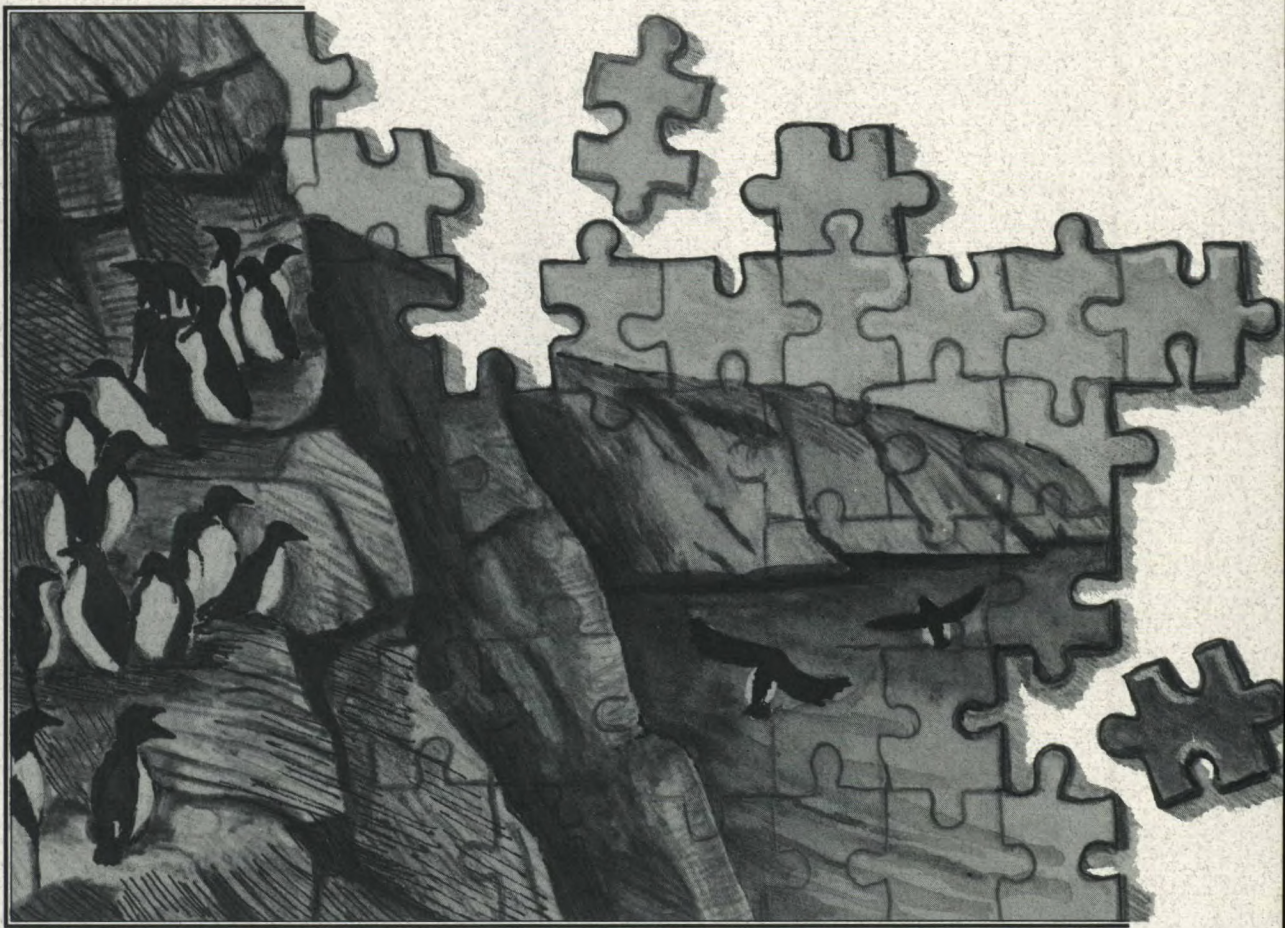


# *Habitat Conservation Strategy and Plan for the Northwest Territories*

*1993-2003*



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**CANADIAN WILDLIFE SERVICE**  
*Western and Northern Region*  
*Yellowknife, NWT*

*December 1993*

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**CANADIAN WILDLIFE SERVICE  
Western and Northern Region  
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## INTRODUCTION

The Canadian Wildlife Service (CWS), as the lead federal wildlife agency, plays an active role in habitat conservation for migratory birds in the Northwest Territories (NWT). In recent years, new developments (e.g. land claim settlements, cooperative management of wildlife and habitat) in the NWT and new initiatives by the Government of Canada (e.g. the Green Plan) have had considerable impact on CWS northern programs and activities. The CWS has re-evaluated its NWT Habitat Program in the context of these developments.

This document sets out a strategy and plan which will guide CWS efforts in protecting migratory bird habitats in the NWT over the next 10 years. It is intended as a planning tool for CWS staff and an information document for other agencies and government departments with an interest in northern habitat issues.

The plan addresses current priorities for protection within a 10 year planning horizon and sets target dates for various initiatives. Experience has shown that many factors affecting the establishment of new wildlife conservation areas in the NWT are beyond the control of CWS. Progress is sometimes slow, the rate of advancement for one conservation area proposal is often different than for another, and the final outcome of proposals are generally unpredictable. These factors make it difficult to set out, with any degree of certainty, a specific time frame for establishing conservation areas. Therefore, target dates in this document should be treated as guidelines rather than definitive project endpoints.

Consultation with interested parties is an integral component of CWS programs. If you have comments or questions concerning this strategy and plan, or any aspect of CWS activities in the NWT, please contact:

Chief  
Northern Conservation Branch  
Western and Northern Region  
Canadian Wildlife Service  
P. O. Box 637  
Yellowknife, NWT  
X1A 2N5



## THE ROLE OF CWS

The CWS is responsible for the conservation and management of migratory bird populations throughout Canada, pursuant to the *Migratory Birds Convention Act*. Under this Act, the CWS administers the Migratory Bird Regulations, which regulate hunting and possession of migratory birds, and the Migratory Bird Sanctuary Regulations, which provide for establishment and management of Migratory Bird Sanctuaries. Sanctuaries are created to provide long-term protection for migratory bird populations and their habitats.

Pursuant to the *Canada Wildlife Act*, the CWS is also responsible for the conservation and protection of endangered wildlife species throughout Canada. In accordance with this Act, National Wildlife Areas are established for the purposes of wildlife research, conservation or interpretation.

The CWS, in cooperation with provinces and territories, fulfills Canada's obligations under the Convention on the Conservation of Wetlands of International Importance (RAMSAR). Canada became a signatory to the Convention in 1981 and has a responsibility to identify wetlands that are internationally important and to ensure that they are afforded adequate protection.

Coordination of Canada's participation in the international Biodiversity Convention also lies with CWS. Our biologists are active in the Western Hemispheric Shorebird Reserve Network, which seeks to protect critical shorebird breeding, staging and wintering habitat throughout the Americas. CWS is the lead Canadian

agency in several other pan-American cooperative bird conservation programs.

A wide range of other activities are undertaken, including scientific study and monitoring of wildlife populations and habitats, environmental assessment and public education.

## A DIVERSITY OF MIGRATORY BIRDS

The NWT, covering approximately one-third of Canada (over 3.3 million square kilometres), has a diverse assemblage of boreal, subarctic, arctic, cordilleran, freshwater and marine environments. They provide nesting and feeding habitats for approximately 225 bird species - over half of the total number of species that nest in Canada. About 15% of this total nest exclusively in the NWT (e.g. arctic-nesting geese, many shorebirds and several seabird species) or have very restricted breeding ranges elsewhere in Canada. Thus, their future well-being is directly affected by conservation efforts in the NWT. In addition, most of these species are international migrants that face threats due to habitat loss on their migration routes or wintering grounds. It is crucial that the integrity of these species' northern breeding areas remain intact.

Nesting populations in the NWT are healthy, and threats to the quality and quantity of wildlife habitats are low and site-specific with a few notable exceptions (e.g. the proposed Great Replenishment and Northern Development Canal project in James Bay). Compared to southern

Canada, where habitat loss or alteration associated with agriculture, forestry and urbanization is approaching critical levels, wildlife habitats in the NWT are relatively undisturbed by human activities.

The impacts of northern-based, land-use activities are generally localized, but northern Canada is increasingly affected by environmental impacts originating from other jurisdictions (Wildlife Habitat Canada 1991)<sup>1</sup>. The long-term effects of ozone depletion, climatic change and other global changes on northern wildlife habitats are largely unknown and difficult to predict, but it would be imprudent to assume that there will be no negative impacts.

Despite the relatively pristine northern environment, some species are at risk. The Committee on the Status of Endangered Wildlife in Canada (1990) lists the following bird species occurring in the NWT as being endangered or vulnerable:

Endangered: Eskimo Curlew  
Whooping Crane  
Peregrine Falcon  
(subspecies *anatum*)  
Harlequin Duck  
(eastern population)

Vulnerable: Caspian Tern  
Great Gray Owl  
Ivory Gull  
Ross's Gull  
Trumpeter Swan  
Peregrine Falcon  
(subspecies *tundrius*)

## EXTERNAL INITIATIVES

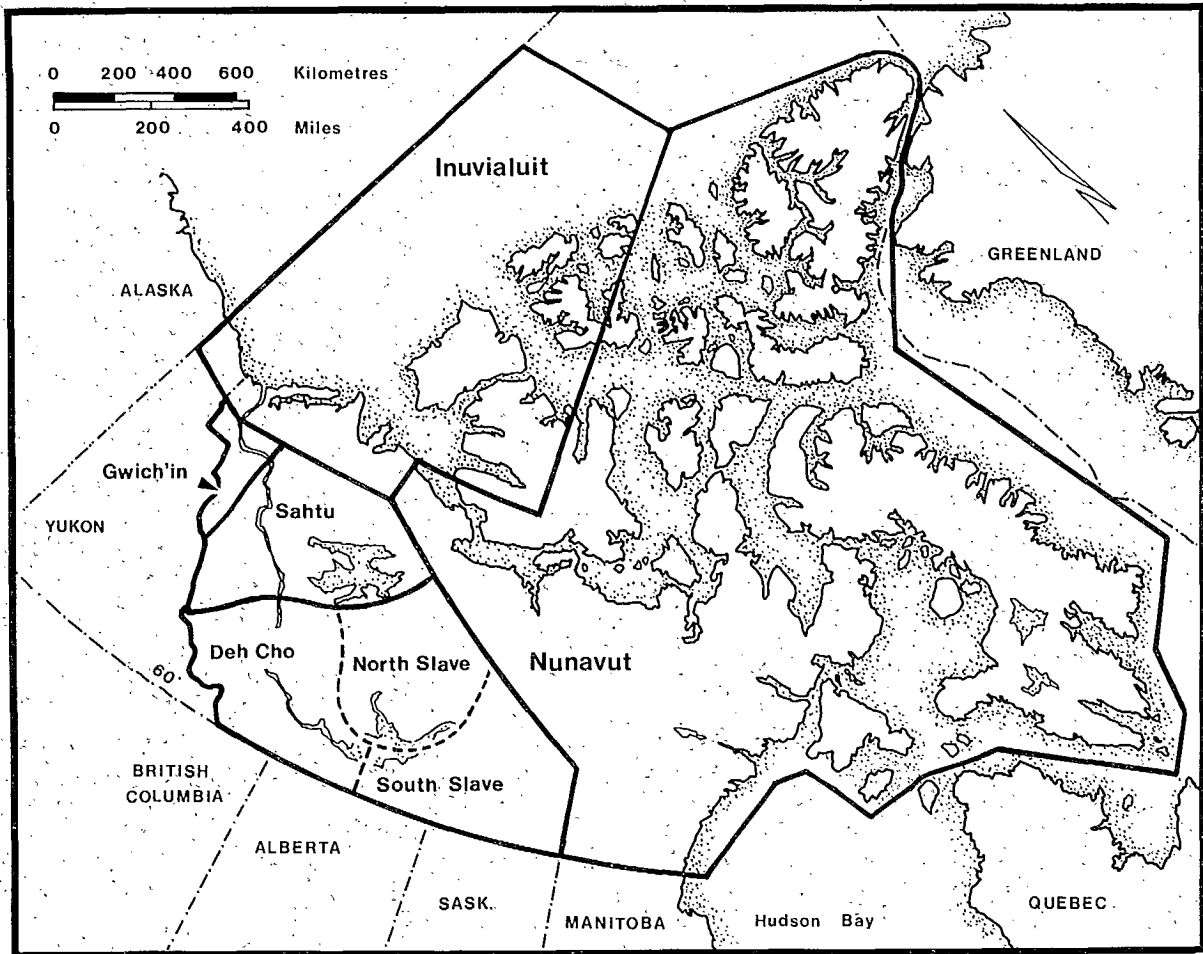
In addition to ongoing roles and responsibilities, the CWS northern habitat program is influenced by issues and initiatives arising from outside the Service.

### Land Claims

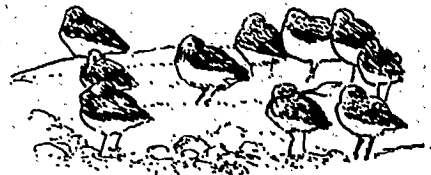
Virtually all of the NWT is subject to comprehensive land claims by aboriginal peoples (Figure 1). The settlement of these claims is having a fundamental impact on the way that wildlife management agencies conduct their business.

Cooperative management (with land claim beneficiaries, through wildlife management boards) of northern conservation areas has become the norm. A number of habitat conservation initiatives stem from the settlement of land claims. In particular, the Nunavut Final Agreement recognizes nine key habitat sites in the eastern NWT where CWS wishes to establish conservation areas. These sites will be protected through the process outlined in the Nunavut Final Agreement. The Agreement also stipulates that management plans must be completed for all existing and new conservation areas. Land use plans will be completed for the Sahtu and Nunavut settlement areas under the provisions of their respective final agreements.





**FIGURE 1. Land Claim Areas in the NWT.**



## **Green Plan**

The Green Plan was released in 1990. It is a six-year federal initiative intended to deal with the priority environmental issues affecting Canada. The federal government is committed to the target of setting aside 12 percent of Canada's total territory as protected space. A National Wildlife Habitat Network of protected areas will be established as one step toward the "12 percent" goal.

## **Northern Mineral Policy**

Access to land for exploration and development is a primary concern of the mining industry. The Northern Mineral Policy which was released in December 1986 states that "the federal government will review the boundaries of the [NWT] bird sanctuaries [north of 60° N] to ensure that the lands they contain are necessary to achieve the conservation objectives for which they were established." The review, which was completed in 1990, recommended a boundary contraction for Queen Maud Gulf Bird Sanctuary and the delisting of Cape Dorset Bird Sanctuary. It also recommended that other Bird Sanctuaries (Dewey-Soper, East Bay, Harry Gibbons, Kendall Island, and McConnell River) undergo boundary extensions. However, these recommendations were subject to the completion of the appropriate field studies. A number of follow-up projects are presently under way.

## **THE CWS STRATEGY**

The vast majority of the NWT landscape is administered by the federal Department of Indian and Northern Affairs (DIAND) whereas marine areas fall under the jurisdiction of the federal departments of Fisheries and Oceans; Transport; DIAND; Energy, Mines and Resources; and Environment. The CWS strategy for protecting migratory bird habitats involves two elements. We cooperate with other agencies in the maintenance of the northern land- and seascape and we identify and protect Key Migratory Bird Habitat Sites.

## **Landscape Maintenance**

CWS has a responsibility to monitor migratory bird and endangered species habitat in all parts of NWT, not just in Key Migratory Bird Habitat Sites. Development activities are subject to a number of review and regulatory measures to ensure that they are undertaken in an environmentally acceptable manner.

### **Land Use Permits**

All land use activities involving more than 100 person-days of work require a Land Use Permit from DIAND. CWS reviews all applications to ensure that proposed activities do not have a significant impact on migratory birds or their habitats.

### **Public Reviews**

Larger-scale developments (e.g. mines) are subject to a detailed review by the Regional Environmental Review Committee (RERC). The RERC is a multi-agency committee which advises DIAND

on the potential environmental impacts of various developments. CWS reviews the proposed developments in terms of their impacts on migratory birds and endangered species. The RERC may recommend that certain projects be subjected to a public environmental review.

Under the Environmental Assessment and Review Process (EARP), a public environmental review of a proposed development is undertaken when there are potential serious environmental impacts or when there is significant public concern. Social effects that are directly related to the environmental effects are also taken into account. As each land claim agreement also has specific provisions for public environmental reviews, these processes may be used instead of an EARP public review.

## Key Habitat Sites

### Identification

CWS identifies and evaluates potential Key Habitat Sites as part of its ongoing habitat activities. Any site that supports at least one percent of the national population of one or more migratory bird species or subspecies for all or part of the year is considered to be a Key Habitat Site. Eighty key terrestrial and freshwater habitat sites are recognized in the NWT (Alexander *et al* 1991)<sup>2</sup>. Sites for shorebirds are underrepresented and marine habitats have not been considered due to lack of data on the distribution and abundance of birds in coastal and offshore waters. The identification of Key Habitat Sites is an ongoing process - the list is updated periodically as new information

is gathered and as existing sites are re-evaluated. Twenty-two of the 80 Key Habitat Sites currently receive recognition or protection as a Migratory Bird Sanctuary, National Wildlife Area, Wetland of International Importance, or National Park.

### Protection

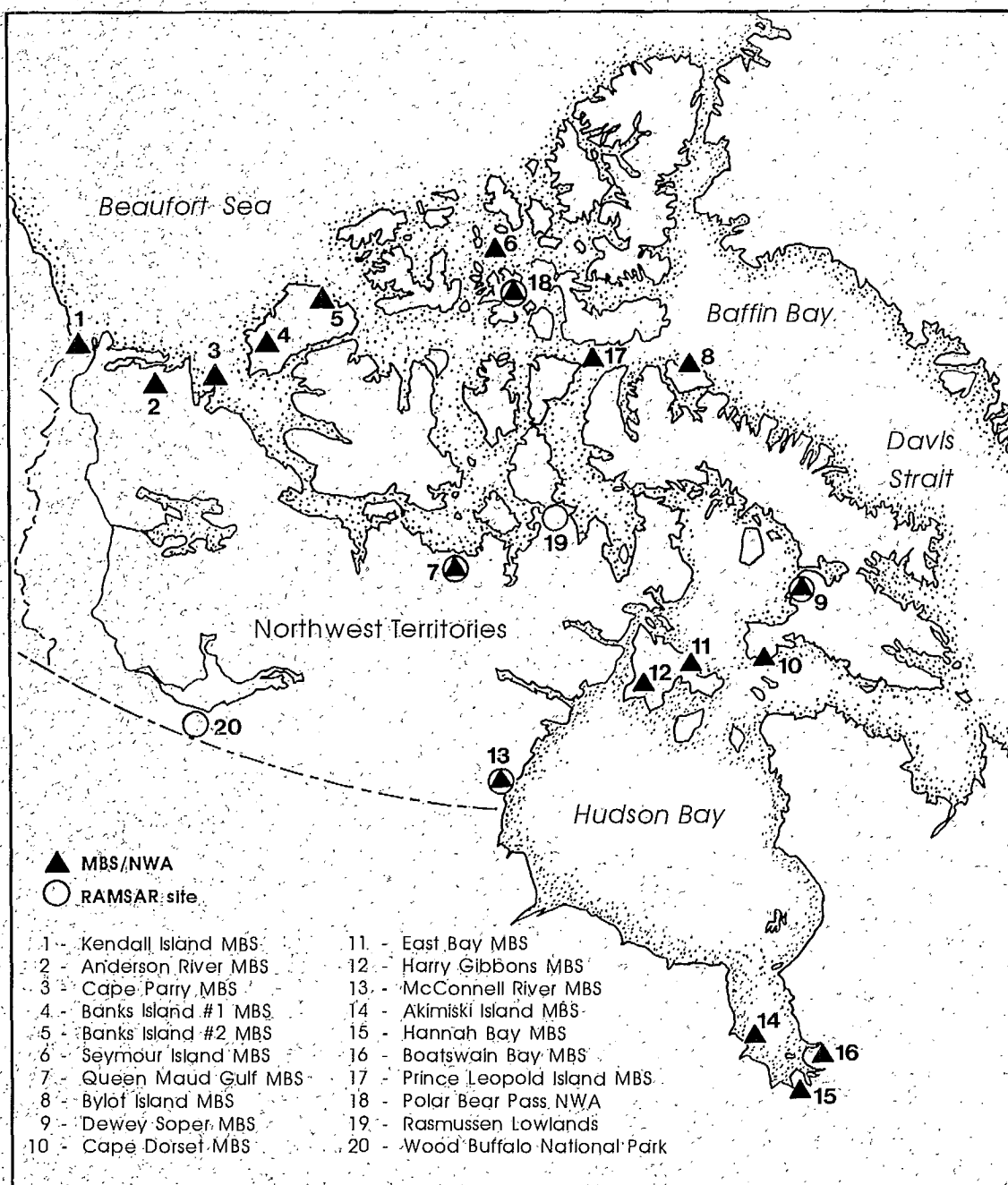
Seventeen Migratory Bird Sanctuaries and one National Wildlife Area encompassing approximately 115,000 square kilometres (Table 1, Figure 2) have been established in the NWT. Part of Hannah Bay Bird Sanctuary overlaps with the province of Ontario and part of Boatswain Bay Bird Sanctuary falls within the province of Quebec.

The newest conservation area, Prince Leopold Island Bird Sanctuary, was established in 1992. Currently, there are six Wetlands of International Importance in the NWT (Table 1, Figure 2). Five of these wetlands overlap with existing protected areas. The Rasmussen Lowlands is the only site that does not have legislated protection.

### Management

CWS considers the protection of migratory birds and their habitats as the primary use, but not the sole use, of its conservation areas. Other land uses within these areas are acceptable provided that there is no significant impact on migratory birds or their habitats. Activities within conservation areas require a permit from CWS which outlines the conditions under which the activity may be conducted.





**FIGURE 2. Location of Migratory Bird Sanctuaries, National Wildlife Areas, and Ramsar Sites in the NWT.**

CWS management goals and policies are detailed in a management plan for each conservation area. To date, management plans have been completed for the five bird sanctuaries within the Inuvialuit Settlement Region and for Polar Bear Pass National Wildlife Area. Information on other conservation areas may be obtained by contacting CWS at the address indicated above.

## THE CWS PLAN

### Landscape Maintenance

#### Monitoring and Assessment

CWS will continue to cooperate with other agencies in the assessment and monitoring of developments across NWT. CWS will endeavour to ensure that there are no significant impacts on migratory birds, endangered species, or their habitats.

### Key Habitat Sites

#### Identification

CWS will continue to evaluate and identify Key Habitat Sites across the NWT. Particular emphasis will be placed on habitats for shorebirds and seabirds. The next edition of *Key Migratory Bird Habitat Sites in NWT* will be published in 1996.

#### Protection

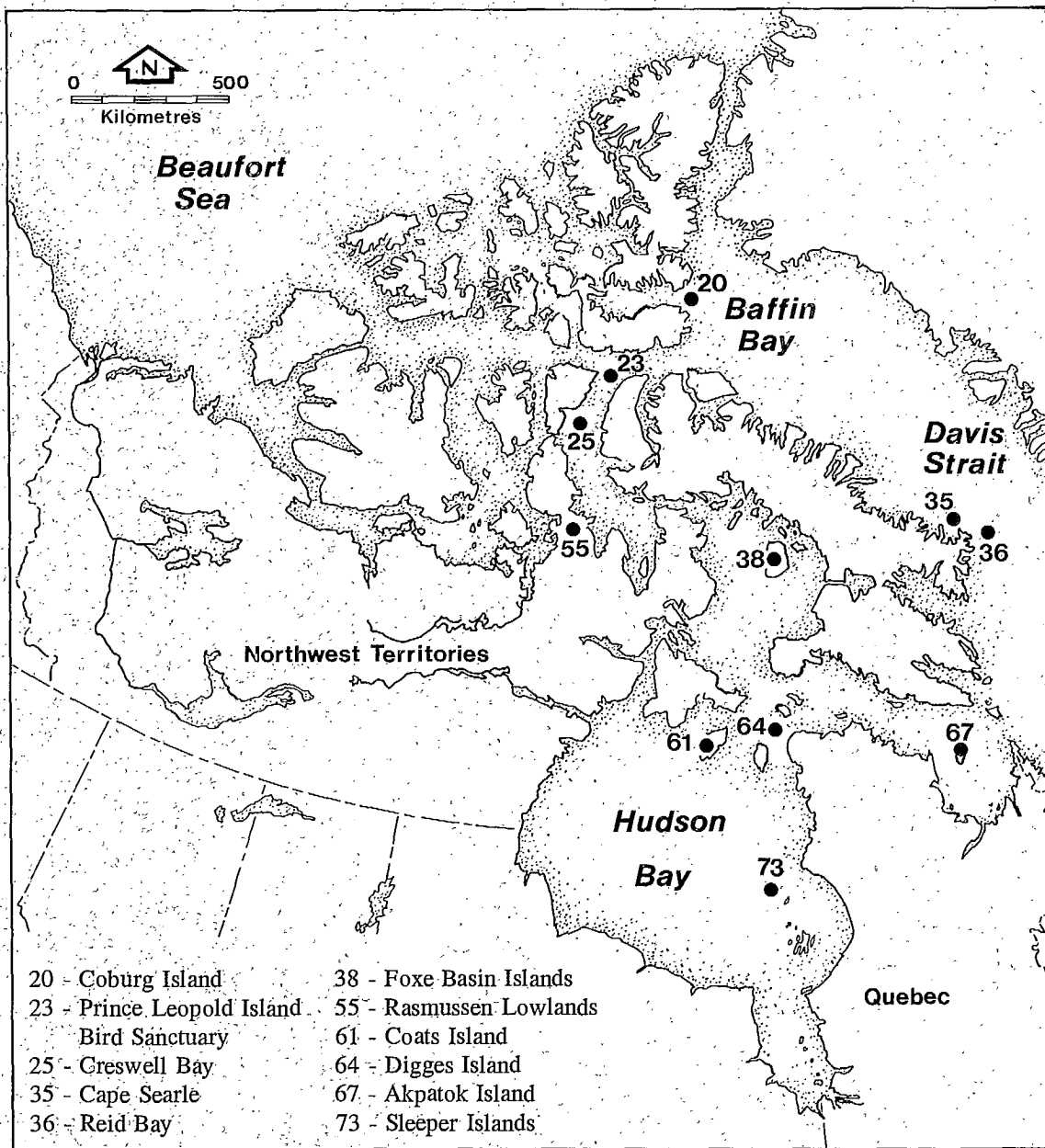
In response to the Nunavut Final Agreement and the National Habitat Network initiative, CWS is increasing its efforts to establish conservation areas in the NWT. Candidate sites for designation

were evaluated against the following criteria:

- Does the site support more than 5% of the Canadian population of a particular migratory bird species?
- Does the site support a significant (>1% of the Canadian population) concentration of more than one migratory bird species?
- Are other important wildlife populations present at the site?
- Is the site identified in the Nunavut Final Agreement?
- Are there indications of community support for a conservation area at the site?

Eleven sites have been identified for designation (Figure 3). Progress toward their establishment is summarized in Figure 4 and site-specific details are provided in Appendix 1. Prince Leopold Island Migratory Bird Sanctuary has been established but still requires a management plan. A twelfth site, Isabella Bay, has been nominated for National Wildlife Area status by the community of Clyde River. Isabella Bay contains critical habitat for the endangered eastern arctic population of the Bowhead Whale.

It is CWS' policy to fully consult and involve local communities before creating a new protected area. **A conservation area will not be established without support of the local community(ies).** All new CWS conservation areas will be co-managed by CWS and the local



**FIGURE 3. Priority sites for designation as CWS protected areas in the NWT.**<sup>1</sup>

<sup>1</sup> Adapted from Alexander, S.A., R.S. Ferguson and K.J. McCormick, 1991. Key Migratory Bird Terrestrial Habitat Sites in the Northwest Territories. Occasional Paper No.71, Canadian Wildlife Service. Ottawa. 182 p.

community. The completion dates in Figure 4 are guidelines only. Progress toward designation will proceed at a rate that regional interests are comfortable with.

Habitat studies will be undertaken at Rasmussen Lowlands, Creswell Bay and on the Foxe Basin Islands, to further evaluate the sites and to determine appropriate boundaries.

#### Management

CWS will continue to develop management plans for existing and new conservation areas. Management plans for existing conservation areas within Nunavut will be completed by 1998 and plans for new conservation areas will be completed within five years of their establishment. A schedule for completing the management plans is presented in Table 2.

Sanctuary boundary reviews and supporting field studies will be undertaken as recommended by the Conservation Advisory Committee on the Northern Mineral Policy (1990)<sup>3</sup>. Adjustments to Sanctuary boundaries will be made where required. Community consultations regarding boundary changes will be undertaken in concert with management plan consultations.



1. Wildlife Habitat Canada. 1991. The Status of Wildlife Habitat in Canada. 102 p.
2. Alexander, S.A., R.S. Ferguson, and K.J. McCormick. 1991. Key Migratory Bird Terrestrial Habitat Sites in the Northwest Territories. Occasional Paper 71. Canadian Wildlife Service, Ottawa. 182 p.
3. Conservation Advisory Committee on the Northern Mineral Policy. 1990. Report on Migratory Bird Sanctuaries. Department of Indian and Northern Affairs, Ottawa. 16 p.

**TABLE 1. Migratory Bird Sanctuaries, National Wildlife Areas and RAMSAR Sites in the NWT.**

Site No. (Fig. 2)	Name, Year of Establishment	Type of Area <sup>1</sup>	Size (km <sup>2</sup> )	Protected Features <sup>2</sup>	Habitat Types Protected
1.	Kendall Island 1961	MBS	606	staging area for Lesser Snow Geese (1-10%), Greater White-fronted Geese, Brant (9-18%), Tundra Swans (1-2%), shorebirds	delta, estuary, tidal flats, marshes, tundra, wetlands
2.	Anderson River Delta 1961	MBS	1 083	nesting Lesser Snow Geese (1%), Black Brant (6%); staging shorebirds; moulting Greater White-fronted Geese, dabbling ducks	diverse vegetation; delta, estuary, flood plain, tidal flats, wetland, tundra, open spruce forest
3.	Cape Parry 1961	MBS	3	only western arctic colony of Thick-billed Murres	limestone cliff, adjacent polynya
4.	Banks Island No.1 1961	MBS	20 500	breeding Lesser Snow Geese (11%), King Eiders (5-10%), Black Brant, Sandhill Cranes, Tundra Swans, Glaucous and Sabine's Gulls, Red Phalaropes; staging King Eiders; Polar Bear maternity dens	tidal flats, sedge lowlands, polynyas
5.	Banks Island No.2 1961	MBS	142	moulting Black Brant (12%), Lesser Snow Geese; Muskox	river valley, coastal lowland, polynya
6.	Seymour Island 1975	MBS	8	Ivory Gull colony (12%)	reef-like island; raised beaches, ponds, pack ice
7.	Queen Maud Gulf 1961	MBS RAMSAR	62 782	breeding Ross' Geese (99%), Lesser Snow Geese (15%), Tundra Swans, Canada Geese, King Eiders, Oldsquaws, Pintails, shorebirds; moulting Canada Geese (2%); Caribou calving grounds; Muskox	lowlands with rock outcrops, beach ridges, drumlins, sedge meadows, abundant wetlands
8.	Bylot Island 1965	MBS	10 878	Thick-billed Murre (11%) and Black-legged Kittiwake (12%) colonies; breeding Greater Snow Geese (13%); Polar Bear maternity dens and summer retreat; Beluga, Narwhal, Ringed and Harp seals along coast	lowlands, cliffs, polynyas, mountains, glaciers
9.	Dewey Soper 1957	MBS RAMSAR	8 160	breeding Lesser Snow Geese (25%), Sabine Gulls (8%), Atlantic Brant (1%), shorebirds; Caribou migration route	sedge lowlands, tidal flats, wetlands
10.	Cape Dorset 1958	MBS	259	breeding Common Eiders, Black Guillemots (> 1%)	rocky coastal islands, lowland ponds
11.	East Bay 1959	MBS	1 166	breeding Lesser Snow Geese (<2%), Common Eider ssp. <i>borealis</i> (4-6%); summer grounds for Beluga	sedge lowlands, tidal flats, raised beaches, coastal waters

**TABLE 1. Continued.**

Site No. (Fig. 2)	Name, Year of Establishment	Type of Area <sup>1</sup>	Size (km <sup>2</sup> )	Protected Features <sup>2</sup>	Habitat Types Protected
12.	Harry Gibbons 1959	MBS	1 490	breeding Lesser Snow Geese (10%), Atlantic Brant, Canada Geese, Tundra Swans	sedge lowlands, tidal flats, rivers, ponds
13.	McConnell River 1960	MBS RAMSAR	330	breeding Lesser Snow Geese (24%), Canada Geese, Sandhill Cranes; moulting and staging Lesser Snow Geese; Caribou wintering grounds	sedge lowlands, tidal flats, lakes, wetlands
14.	Akimiski Island 1941	MBS	3 367	breeding Caspian Terns (1%), Lesser Snow Geese; staging Lesser Snow Geese (14%), shorebirds, Atlantic Brant, Black Ducks; Polar Bear maternity dens	tidal flats, eel-grass beds, muskeg, spruce forest
15.	Hannah Bay <sup>3</sup> 1939	MBS	295	staging Lesser Snow Geese, Canada Geese, shorebirds, Atlantic Brant	tidal flats, coastal marsh, muskeg, spruce forest
16.	Boatswain Bay <sup>4</sup> 1941	MBS	179	staging and moulting Canada Geese (1%), Lesser Snow Geese, Atlantic Brant (1%), Black Ducks (1%), Scoters, scaup, Northern Pintails, shorebirds; breeding Black Ducks	tidal flats, coastal marsh, spruce-forest
17.	Prince Leopold Island 1992	MBS	229	Thick-billed Murre (6%), Northern Fulmar (17%), Black-legged Kittiwake (16%), Black Guillemot (5%) colonies	limestone cliffs, gravel beaches
18.	Polar Bear Pass 1985	NWA RAMSAR	262 400	breeding Red Phalaropes, Brant, King Eiders, Greater Snow Geese, Thayer's Gulls, Jaegers, Sanderlings; Polar Bear migration route; walrus haulout; Peary Caribou	extensive wetland ecosystem
19.	Wood Buffalo National Park 1922	RAMSAR NP	32 000	staging waterfowl; Whooping Crane breeding grounds	freshwater delta; wet grasslands, shallow lakes and streams
20.	Rasmussen Lowlands	RAMSAR	5 728	breeding Tundra Swans (4%), Greater White-fronted Geese (10%), Sabine's Gulls (2-5%), shorebirds, Horned Larks, Snow Buntings, King Eiders (all > 1%), Peregrine Falcon	large flat wetland; sedge grass lowlands, scrub tundra

<sup>1</sup> MBS - Migratory Bird Sanctuary, NWA - National Wildlife Area, RAMSAR - Wetland of International Importance, NP - National Park.

<sup>2</sup> percentage of Canadian population of a species or subspecies. Population estimates listed in this chart are approximate, and subject to substantial fluctuations over short periods of time.

<sup>3</sup> shared jurisdiction with Ontario.

<sup>4</sup> shared jurisdiction with Quebec.

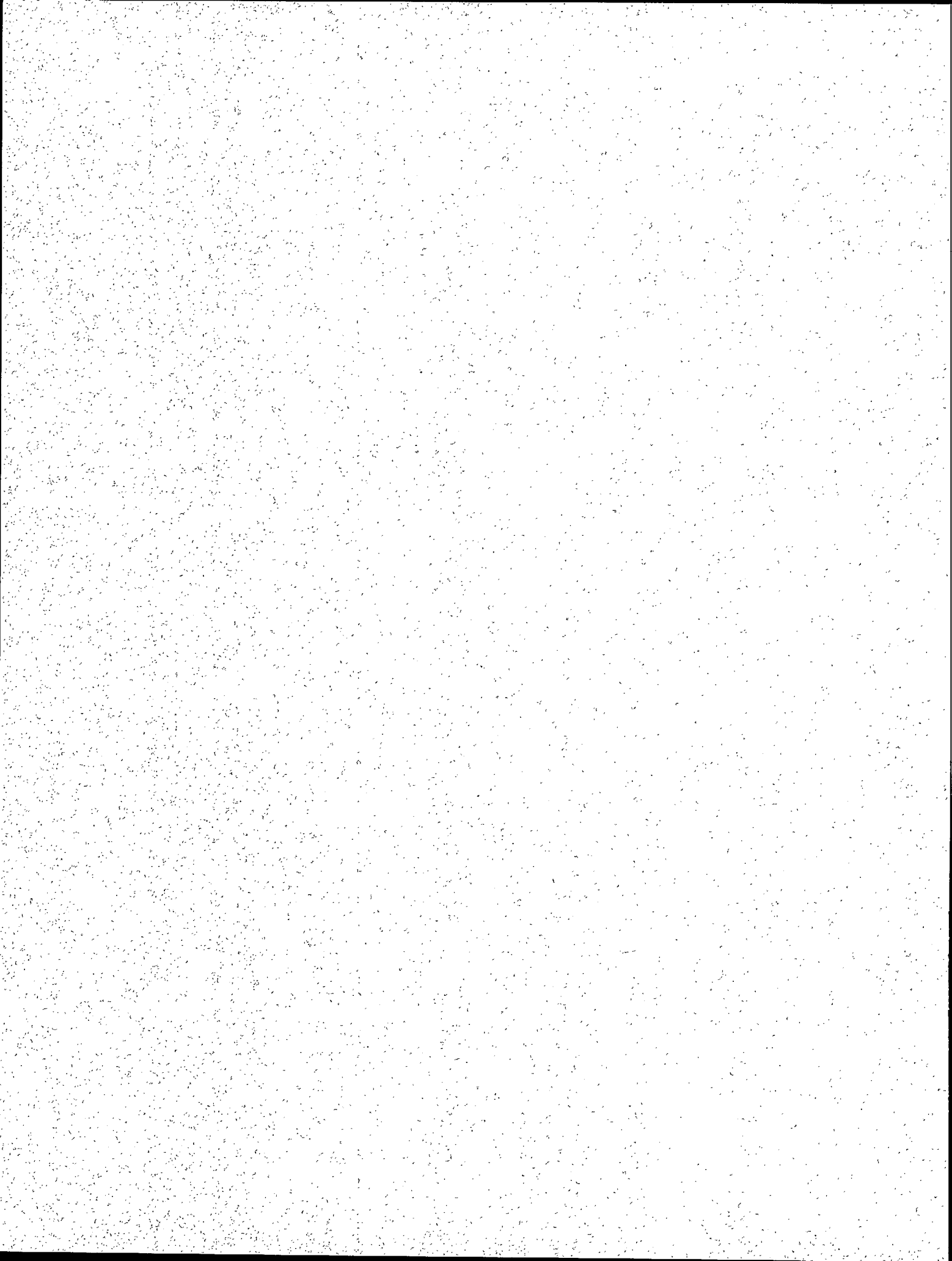


**TABLE 2. Schedule for Completion of Management Plans and Boundary Changes.**

<b>PROTECTED AREA</b>	<b>RECOMMENDED BOUNDARY CHANGES</b>	<b>BOUNDARY CHANGE</b>	<b>MANAGEMENT PLAN</b>
Polar Bear Pass	none	n/a	1990
Kendall Island	expansion	1994	1992
Cape Parry	none	n/a	1992
Banks No. 1	none	n/a	1992
Banks No. 2	none	n/a	1992
Anderson River	none	n/a	1992
Prince Leopold Island	none	n/a	1993
Cape Dorset	delist	1995	n/a
Dewey Soper	expansion	1995	1995
Harry Gibbons	expansion	1995	1995
McConnell River	expansion	1995	1995
Queen Maud Gulf	reduction	1997	1997
Seymour Island	none	n/a	1998
Bylot Island <sup>1</sup>	none	n/a	1998
Akimiski Island	none	n/a	2003
Hannah Bay	none	n/a	2003
Boatswain Bay	none	n/a	2003

<sup>1</sup> will be done in concert with North Baffin National Park management planning.





## APPENDIX 1. Priority Migratory Bird Habitat Sites in NWT.

Information in this appendix is adapted from Alexander, S.A., R. S. Ferguson and K. J. McCormick, 1991. *Key Migratory Bird Terrestrial Habitat Sites in the Northwest Territories*. Occasional Paper No. 71, Canadian Wildlife Service. Ottawa. 182 p.

Site numbers correspond to numbers in the above report and the locations shown in Figure 3.

Symbols used in the maps are as follows:

•••	breeding colonies
- - - -	Sanctuary boundaries
- - - -	extent of Key Habitat Sites
////	high densities of birds



## COBURG ISLAND (20)

**Location:** 75° 50' N 79° 25' W. **Size:** 6 km<sup>2</sup>

### Description

Coburg Island is situated in eastern Jones Sound, midway between Devon and Ellesmere islands. It is characterized by very rugged terrain of Precambrian granitic gneiss (Douglas and MacLean 1963), with an ice cap pierced by peaks rising over 800 m above sea level. The coastline is heavily glaciated, and there are many prominent cliffs, especially toward the south end.

There are 150- to 300-m cliffs near Cambridge Point at the southern tip of the island. Princess Charlotte Monument, a cone-shaped islet with precipitous cliffs, is located 1 km off southeast Coburg Island.

An area of open water persists in the vicinity of Coburg Island during the winter. It joins the North Water polynya in late spring (Stirling and Cleator 1981).

An archaeological site occurs north of Cape Spencer on the southwest coast.

### Biological value

Approximately 30 000 pairs of Black-legged Kittiwakes, representing 16% of the Canadian population and almost one-third of the Northwest Territories population, nest along 6 km of cliffs at Cambridge Point. This is the largest colony of this species in the Northwest Territories (Nettleship 1980).

The cliffs also support 11% (160 000 pairs) of Canada's Thick-billed Murres. This is the third largest colony of this species in the Northwest Territories (Nettleship 1980).

Approximately 3 000 pairs of Northern Fulmars breed on Princess Charlotte Monument. Black Guillemots and Glaucous Gulls also nest in the area (Nettleship 1980). Bays at the south end of Coburg Island are an important stopover area for large numbers of King Eiders migrating from Greenland to eastern Lancaster Sound in May and early June (McLaren and McLaren 1982). Smaller numbers of Oldsquaw are also present.

The seabirds arrive at their breeding grounds in late April, and feed in open leads and polynyas. The young and adults leave the colony by early October.

White whales, narwhals, and bowhead whales feed in the North Water polynya; ringed, bearded, and harp seals are abundant in the area (Stirling and Cleator 1981). Walrus occur in the polynya and haul out along the shores of southern Coburg Island. Polar bears hunt along the floe edges and concentrate in the vicinity of Coburg Island (Killiaan et al. 1978).

### Sensitivities

Seabirds are sensitive to disturbance at their breeding cliffs and to pollution of their foraging areas.

### Potential conflicts

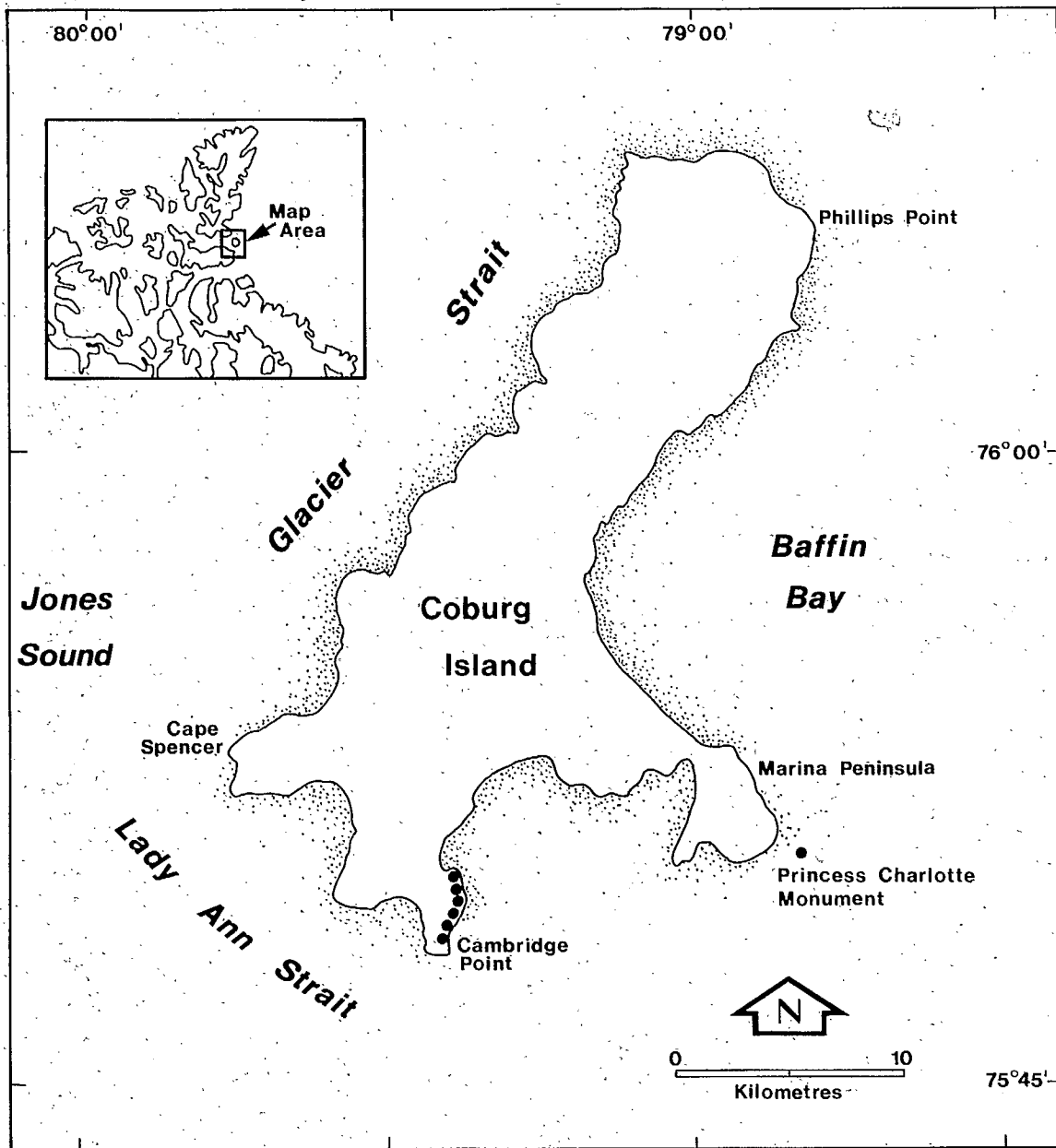
Hydrocarbon exploration has been proposed for western Baffin Bay (Anon. 1982). If conducted, exploratory drilling could subject feeding areas to disturbance and pollution.

### Status of Key Habitat Site

International Biological Programme (IBP) Site.

### References

- Anonymous. 1982. The Lancaster Sound region: 1980-2000. Green Paper, Dep. Indian Affairs North. Dev., Ottawa. 102 pp.
- Douglas, R.J.W.; MacLean, B. 1963. Geology - Yukon Territory and Northwest Territories: Map 30, Geol. Surv. Can., Ottawa.
- Killiaan, H.P.L.; Stirling, I.; Jonkel, C.J. 1978. Polar Bears in the area of Jones Sound and Norwegian Bay. Prog. Note No. 88, Can. Wildl. Serv., Edmonton. 21 pp.
- McLaren, P.L.; McLaren, M.A. 1982. Waterfowl populations in eastern Lancaster Sound and western Baffin Bay. Arctic 35:149-157.
- Nettleship, D.N. 1980. A guide to the major seabird colonies of eastern Canada; identity, distribution, and abundance. Unpubl. rep., Can. Wildl. Serv., Ottawa. 133 pp.
- Stirling, I.; Cleator, H. (eds.). 1981. Polynyas in the Canadian Arctic. Occas. Pap. No. 45, Can. Wildl. Serv., Ottawa. 70 pp.



**COBURG ISLAND**

## PRINCE LEOPOLD ISLAND (23)

**Location** 70° 02' N, 90° 00' W **Size:** 32 km<sup>2</sup>

### Description

Prince Leopold Island is situated in western Lancaster Sound at the junction of Prince Regent Inlet and Barrow Strait. The island lies approximately 13 km north of Cape Clarence, Somerset Island.

The island is bounded on all sides by vertical cliffs of Silurian sandstone and limestone, ranging from 245 to 265 m in height. The bases of the north and south cliffs are covered by scree slopes. Gravel spits extend approximately 1 km outward from the base of the northeast and southeast corners of the island. The Palaeozoic rock tends to fracture into flat slabs, resulting in numerous small ledges upon which seabirds nest (Gaston and Nettleship 1981). Access from the beach to the top of the island is possible at only a few places where the plateau is broken by stream-cut gullies.

The sparse vegetation is characterized by mosses, lichens, grasses, and a few dwarf shrubs (Woo and Zoltai 1977).

Several Inuit archaeological sites are located on the east side of the island's south gravel spit.

### Biological Value

Prince Leopold Island supports a major seabird community that includes 62 000 pairs of Northern Fulmars, 29 000 pairs of Black-legged Kittiwakes, 86 000 pairs of Thick-billed Murres, and 4 000 pairs of Black Guillemots (Gaston and Nettleship 1981). These numbers represent approximately 17%, 16%, 6% and 5% of the national populations of these species, respectively.

The site is generally occupied by the seabirds from early May to the end of September. Thick-billed Murres nest on the east and northeast cliffs, whereas Northern Fulmars are located on all cliffs except a section of the north side. Black-legged Kittiwakes are most numerous on the north cliff. Black Guillemots nest on the west side of the island in scree rock crevices. In addition, 200 pairs of Glaucous Gulls are dispersed along the west, south and east cliffs, and Thayer's Gulls and Ivory Gulls are seen irregularly throughout the summer (Nettleship 1976).

Although weasels and lemmings are the only resident land mammals, the island may be visited infrequently by Peary caribou and Arctic fox during the winter and spring breakup period. The waters around the island attract marine mammals, including white whales, narwhal, walrus, polar bears, ringed seals, and bearded seals.

### Sensitivities

Seabirds are sensitive to disturbance and to the pollution of offshore waters.

### Potential conflicts

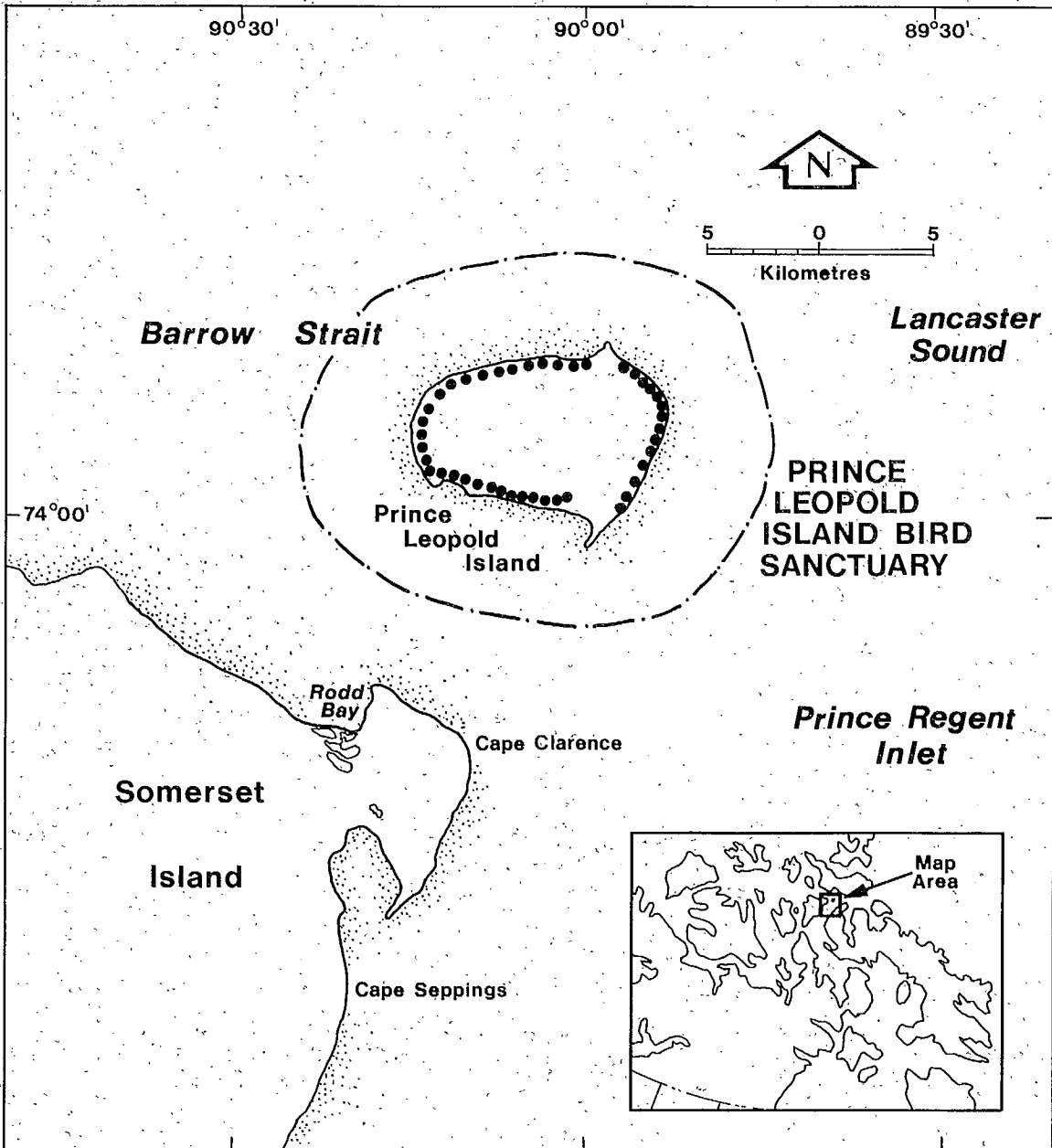
Lancaster Sound, Barrow Strait, and Prince Regent Inlet have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Anon 1982). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

### Status of Key Habitat Site

Migratory Bird Sanctuary; IBP Site.

### References

- Anonymous, 1982. The Lancaster Sound region: 1980-2000. Green Paper, Dep. Indian Affairs North. Dev., Ottawa. 102 pp.
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**PRINCE LEOPOLD ISLAND**

## CRESWELL BAY (25)

**Location:** 72°45'N, 93°40'W    **Size:** 2178 km<sup>2</sup>

### Description

Creswell Bay opens into Prince Regent Inlet midway along the east side of Somerset Island. Lowlands extend around the bay and Stanwell-Fletcher Lake. Extensive tidal flats occur on the bay's north shore; the south shore is low limestone hills and ridges. The lake's western shore is bounded by cliffs. The Union River drains Stanwell-Fletcher Lake through a low, rocky area. There are well-vegetated thermokarst areas along the Creswell River and north of the lake.

A lead develops offshore along the entire eastern coast of Somerset Island in January and in spring, and a transverse lead occurs across Prince Regent Inlet south of Creswell Bay (Stirling and Cleator 1981).

Relics of two Dorset settlements and five Thule sites have been found in the Creswell Bay area.

### Biological Value

Nearly 20 000 birds, mostly shorebirds, nested in this area in 1975. The thermokarst area along the Creswell River is the largest and most important area for nesting birds. In 1974, 2 700 Greater Snow Geese (1% of the Canadian population) moulted in the area. 250 pairs nested and 1 000 adults moulted there in 1975 (Alliston et al. 1976). In 1977, nearly 1 800 adult geese and 25 young were noted (Patterson and Alliston 1978). The geese arrive in early June and depart by the end of August.

In 1975, the nesting shorebird population was estimated at nearly 15 400 birds. The most abundant species were the White-rumped Sandpiper (5 750 birds), Red Phalarope (3 550), Black-bellied Plover (1 890), and Sanderling (1 820). Lesser Golden Plovers, Ruddy Turnstones, and Baird's Sandpipers were also common. In later summer, staging and local shorebirds feed in large numbers in the mud flats along the north shore of Creswell Bay (Alliston et al. 1976). On 21 August 1975, more than 12 000 shorebirds were in this area. There is no measure of turnover, so the total number of birds may be considerably higher.

More than 7 000 eiders staged along the coast in 1975. The thermokarst area was used by 450 to

700 pairs of nesting Oldsquaws; later in the summer, over 4 800 birds moulted in Creswell Bay. Northern Fulmars and Black-legged Kittiwakes forage in Creswell Bay. Peregrine Falcons have also been seen in the area (Alliston et al. 1976).

White whales calve in Creswell Bay, and small numbers of narwhals and bowhead whales are present during the summer. Creswell Bay is a summer retreat and a possible denning area for polar bears.

### Sensitivities

The thermokarst lowlands are susceptible to terrain disturbance through the disruption of natural drainage patterns and the melting of permafrost. Nesting and moulting birds are sensitive to disturbance. Shorebirds, sea ducks, and seabirds are sensitive to pollution in Creswell Bay.

### Potential Conflicts

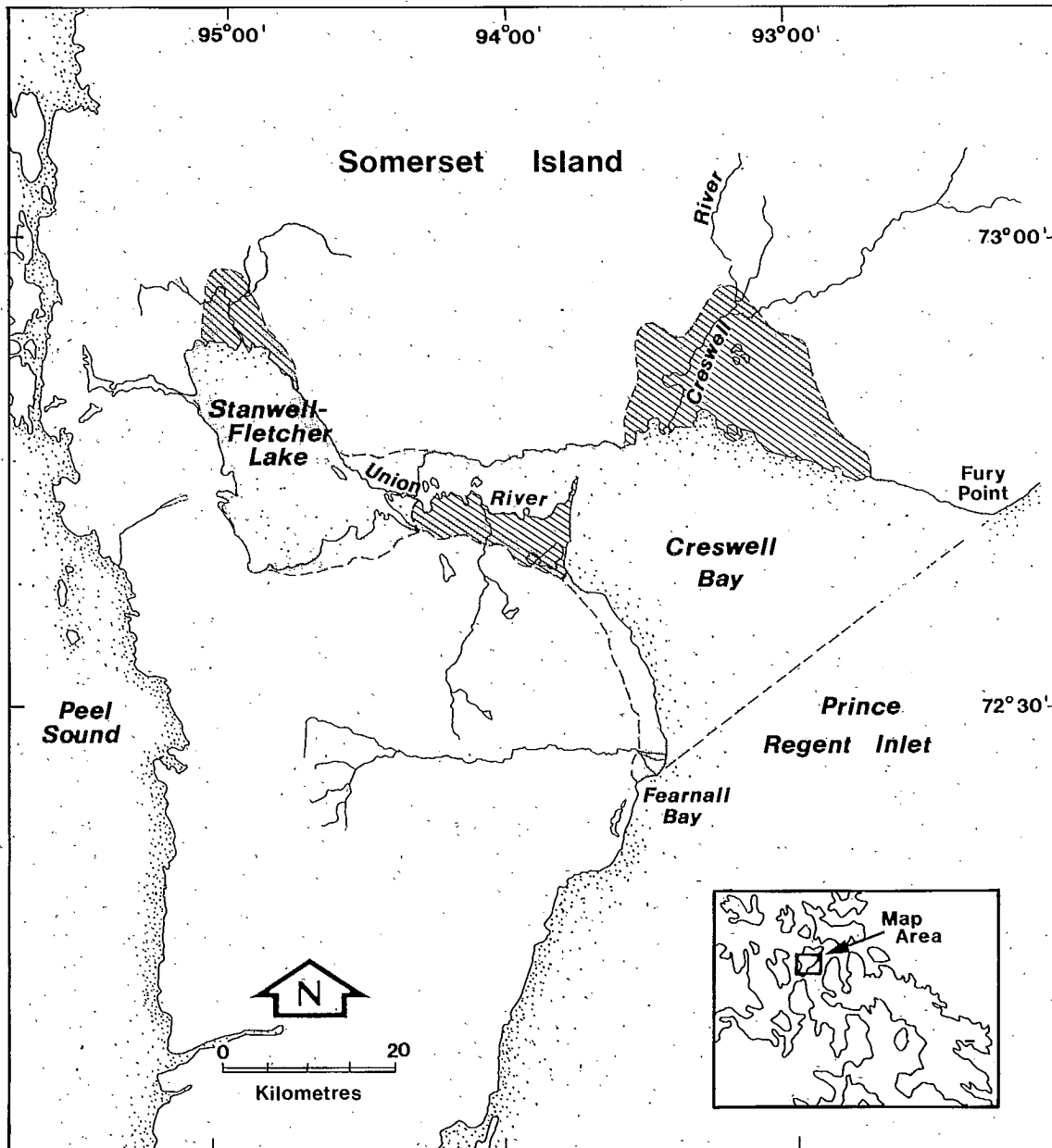
Lancaster Sound, Barrow Strait, and Prince Regent Inlet have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Anon. 1982). An increase in air or marine traffic could subject feeding and nesting areas to disturbance and pollution. Mineral exploration has occurred in this area.

### Status of Key Habitat Site

IBP Site.

### References

- Alliston, W.G.; Bradstreet, M.S.W.; McLaren, M.A.; Davis, R.A.; Richardson, W.J. 1976. Numbers and distributions of birds in the central District of Franklin, NWT. June-August, 1975. Unpubl. rep., LGL Ltd., for Polar Gas Project, Toronto. 2 vols. 583 pp.
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**CRESWELL BAY**



## CAPE SEARLE (35)

**Location:** 67° 14' N, 62° 28' W      **Size:** 2 km<sup>2</sup>

### Description

Cape Searle is located on the northeastern tip of Qaqauiit Island in Merchants Bay, eastern Baffin Island. Much of the Cumberland Peninsula is composed of Precambrian metamorphic rock of the Davis Highlands (Bostock 1964). However, Qaqauiit Island consists of a Tertiary-type basalt flow, and Cape Searle itself is composed of cross-bedded agglomerates and tuffaceous material (Kidd 1953). Cape Searle consists of two huge towers that rise 430 m above the sea. Although the cliffs are rugged, with numerous crevasses and jagged pinnacles, the flatter summits are covered in luxuriant vegetation.

### Biological Value

The largest Northern Fulmar colony in Canada occupies the two rock towers of Cape Searle. The colony is in the order of 100 000 pairs (Nettleship 1980), which represents approximately 27% of the Canadian population. This estimate is based on only one survey (1973) and requires updating. Nonetheless, it clearly indicates the importance of Cape Searle to Northern Fulmars.

The fulmars nest on the cliffs at all heights, but the density is greatest near the top. The grassy summits are also covered with nesting fulmars. The birds, which arrive about mid-April and leave by early October, forage within an 80-km radius of the site (Wynne-Edwards 1952).

Glaucous Gulls and Black Guillemots also nest in the area in small numbers (Nettleship 1980). Harp seals and walrusés frequent the area. Polar bears are occasionally seen in the area and use the seaward tips of peninsulas for maternity dens (Stirling et al. 1980).

### Sensitivities

Nesting fulmars are sensitive to disturbance and to pollution of their feeding areas.

### Potential Conflicts

Lancaster Sound and vicinity and western Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon

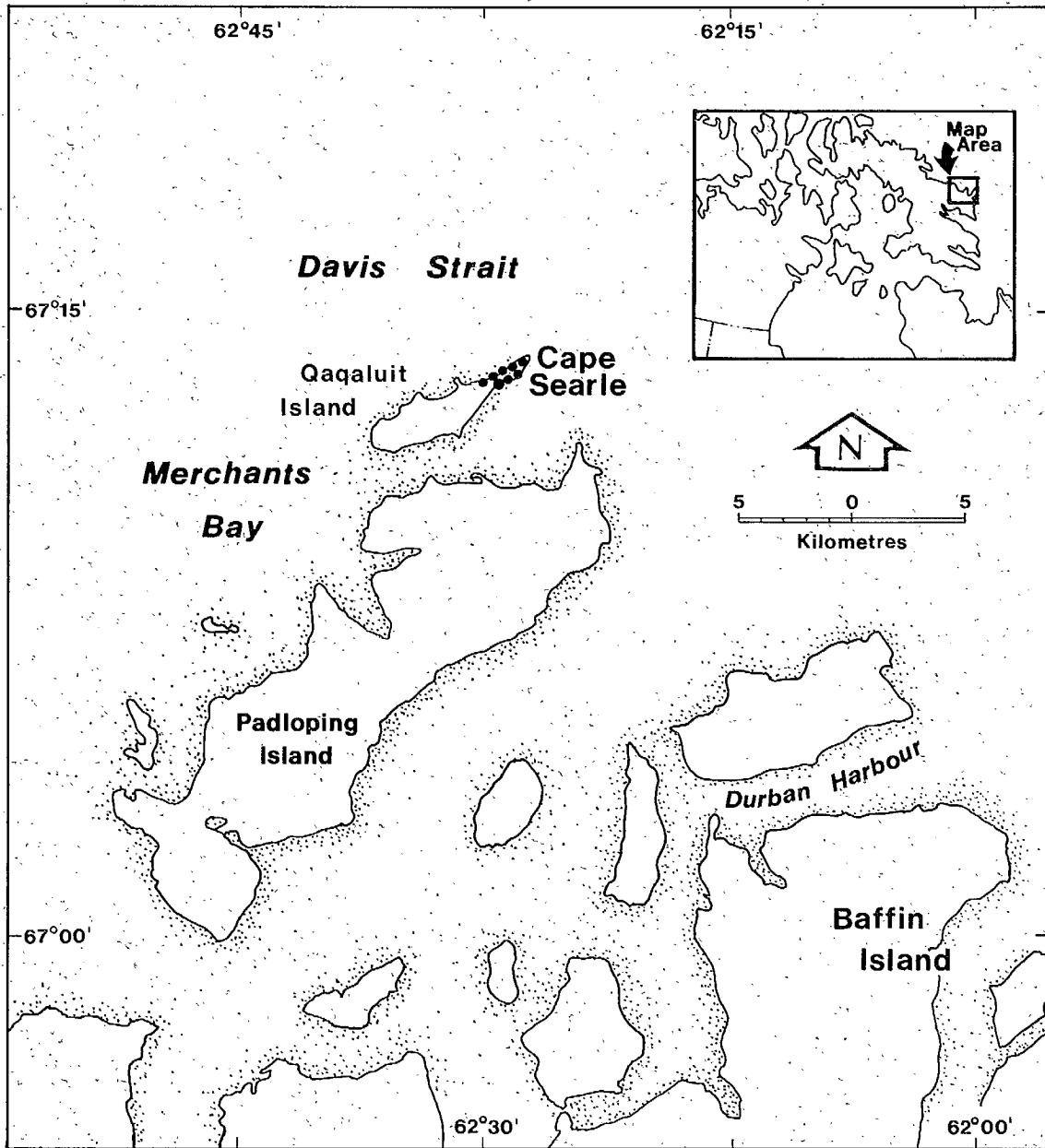
exploration and development (Anon. 1978, 1979, 1982). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

### Status of Key Habitat Site

IBP Site.

### References

- Anonymous. 1978.** Environmental impact statement for exploratory drilling in Davis Strait region. Unpubl. rep., Imperial Oil Ltd., Aquitaine Co. Canada Ltd., Canada Cities Service Ltd. 31 pp.
- Anonymous. 1979.** Initial environmental assessment. Proposed Baffin Bay exploratory drilling program. Unpubl. rep., Petro-Canada Ltd., Calgary. 414 pp.
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**CAPE SEARLE**

## REID BAY (36)

**Location:** 66° 56' N, 61° 46' W      **Size:** 5 km<sup>2</sup>

### Description

The south shore of Reid Bay is part of a broad promontory that extends about 11 km southward to a large unnamed fiord, 37 km north of Cape Dyer. An indentation on the east coast of the promontory divides it into two steep headlands, with inland elevations reaching almost 915 m above sea level. The south headland is made up of a complex series of steep rock pinnacles and ridges bordered by a high talus slope and beach. Offshore, there are numerous rocks and islets. The area is bounded by a series of steep promontories that extend south to Cape Dyer.

### Biological Value

The two northern cliff faces south of Reid Bay support concentrations of Thick-billed Murres, comprising somewhere in the neighbourhood of 133,000 breeding pairs (Gaston 1985). This represents approximately 10% of the Canadian population. Murres are present from mid-May to early September.

About 10,000 breeding pairs of Northern Fulmars (approximately 3% of the Canadian population) occupy the three southern colonies in the area (Nettleship 1980). Fulmars are present at the site from early May until mid-September.

The estimates for both murres and fulmars are based on only one survey (1973) and require updating.

A few Black Guillemots and Glaucous Gulls also nest in the area (Nettleship and Smith 1975).

### Sensitivities

Seabirds are sensitive to disturbance and the pollution of offshore waters. Murres are particularly vulnerable in the late summer, when they undertake a flightless migration through Davis Strait to their wintering areas.

### Potential Conflicts

Lancaster Sound and vicinity and western Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Anon. 1978, 1979,

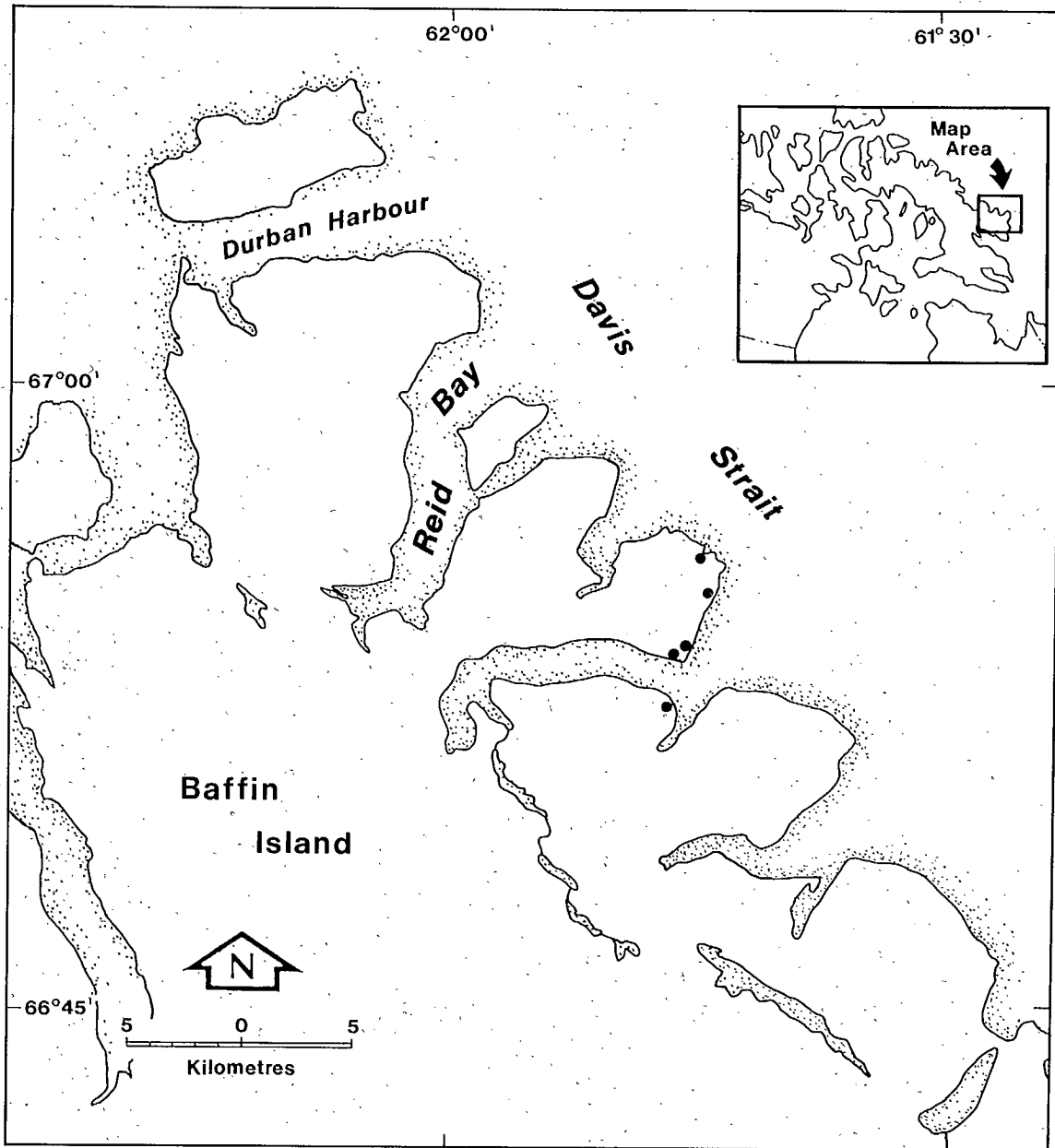
1982). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

### Status of Key Habitat Site

IBP Site.

### References

- Anonymous. 1978.** Environmental impact statement for exploratory drilling, Davis Strait region. Unpubl. rep., Imperial Oil Ltd., Aquitaine Co. Canada Ltd., Canada Cites Service Ltd. 31 pp.
- Anonymous. 1979.** Initial environmental assessment. Proposed Baffin Bay exploratory drilling program. Unpubl. rep., Petro-Canada Ltd., Calgary. 414 pp.
- Anonymous. 1982.** The Lancaster Sound Region: 1980-2000. Green Paper, Dep. Indian Affairs North. Dev., Ottawa. 102 pp.
- Gaston, A.J. 1985.** Report on seabird studies in the Cape Dyer-Cape Searle area of Cumberland Peninsula, Baffin Island; July 1985. Unpubl. rep., Can. Wildl. Serv., Ottawa.
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**REID BAY**

## FOXÉ BASIN ISLANDS (38)

**Location:** 68° 00' N, 75° 05' W   **Size:** 3 000 km<sup>2</sup>

### Description

Prince Charles Island, Air Force Island, and Foley Island are located in east-central Foxe Basin. The coasts of these islands have extensive intertidal mud flats with gently sloping, well-vegetated shorelines. The inland areas, particularly on Prince Charles Island, are of low relief and dotted with small lakes and ponds. The islands are vegetated predominantly by a sedge-grass complex (Gaston et al. 1986; G. Cooch, pers. commun.).

### Biological Value

Prince Charles and Air Force islands are important breeding sites of Atlantic Brant and Sabine's Gulls. The estimated breeding population of Brant (subspecies *hrota*) for the two islands was 900 pairs in 1979, which is approximately 1% of the Canadian population. Larger numbers of moulting birds also use the coastal areas prior to fall migration (Reed et al. 1980). In July 1983, approximately 2 300 Brant were seen along the coasts of the two islands (Gaston et al. 1986). The principal areas for Brant are the northern and southern shores of Prince Charles Island and the southern shore of Air Force Island. Several hundred nesting Lesser Snow Geese were recorded on Air Force Island and Prince Charles Island in 1975 (R. Kerbes, pers. commun.). In 1989, the few Snow Geese found nesting in the northwest of Prince Charles Island were all Greater Snow Geese (H. Boyd, pers. commun.).

Eleven colonies of Sabine's Gulls (407 birds) and 13 Arctic Tern colonies (526 birds) were observed in 1979 (Reed et al. 1980). In 1983, approximately 3 700 Sabine's Gulls were seen along the coasts of Prince Charles, Air Force, and southern Foley islands (Gaston et al. 1986), which represents more than 18% of the Canadian population. Studies are needed to determine the yearly consistency of nesting in these areas.

King Eiders, Common Eiders, Oldsquaw, and Herring Gulls also nest along the coast and on inland ponds. Shorebirds are very abundant and more common on these islands than elsewhere in Northern Hudson Bay and Foxe Basin, but their populations have not been adequately assessed (Gaston et al. 1986).

Breeding birds arrive about mid-June and leave the area by mid-September.

### Sensitivities

Nesting and moulting birds are sensitive to disturbance. Degradation of the coastal lowlands and pollution of surrounding marine areas would be detrimental to local populations.

### Potential Conflicts

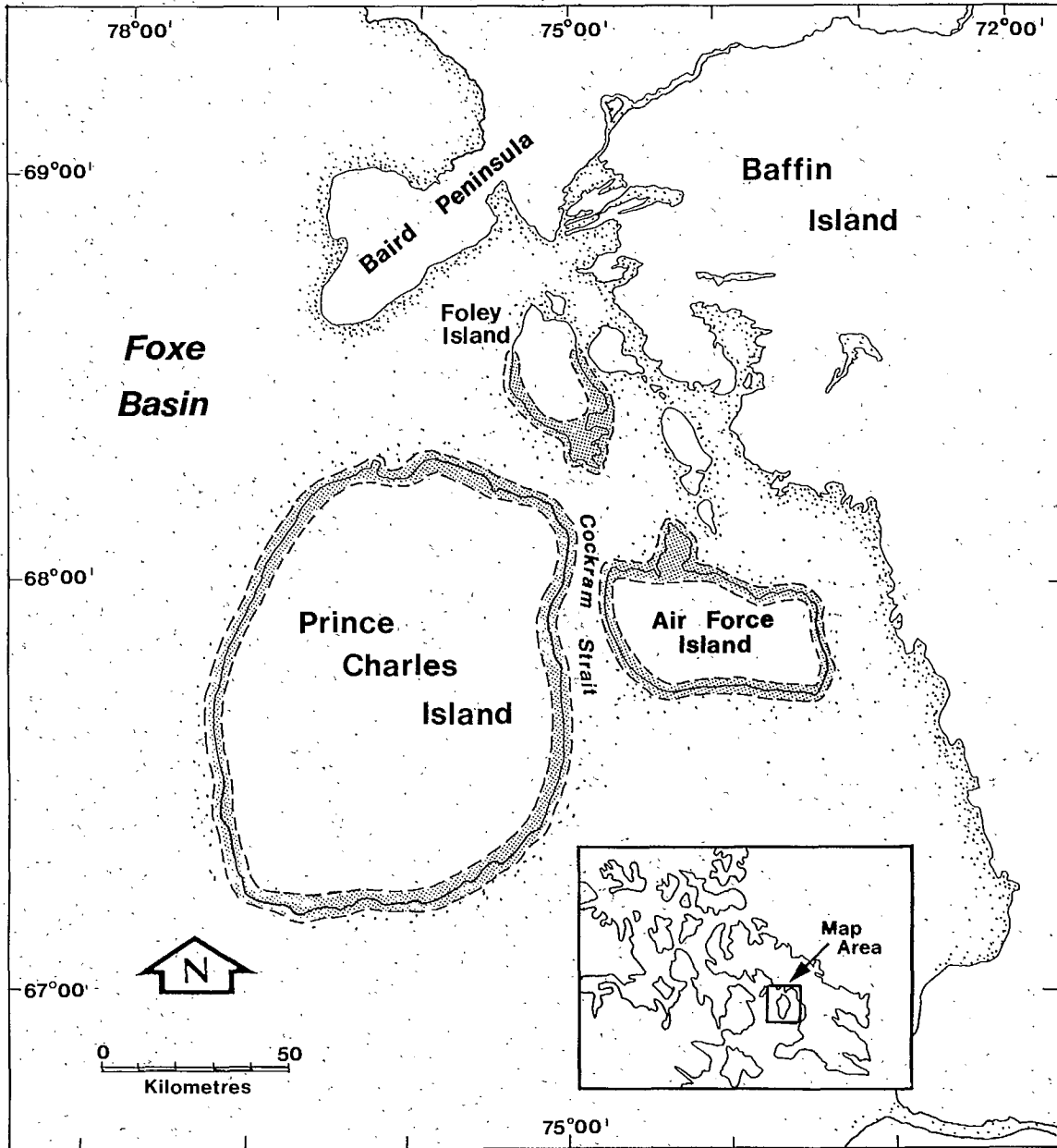
None.

### Status of Key Habitat Site

No special status.

### References

- Ellis, D.B.; Evans, J. 1966. Comments on the distribution and migration of birds in Foxe Basin, Northwest Territories. *Can. Field Nat.*, 74:59-70.
- Gaston, A.J.; Decker, R.; Cooch, F.G.; Reed, A. 1986. The distribution of larger species of birds breeding on the coasts of Foxe Basin and northern Hudson Bay, Canada. *Arctic* 39:285-296.
- Reed, A.; Dupuis, P.; Fischer, K.; Moser, J. 1980. An aerial survey of breeding geese and other wildlife in Foxe Basin and northern Baffin Island, Northwest Territories, July, 1979. Prog. Note No. 114, Can. Wildl. Serv., Ottawa. 21 pp.



**FOXEBASIN ISLANDS**

## RASMUSSEN LOWLANDS (55)

**Location:** 68°40'N, 93°00'W **Size:** 5278 km<sup>2</sup>

### Description

The Rasmussen Lowlands extend along the east side of Rae Strait and Rasmussen Basin, from the south shore of Netsilik Lake to approximately 45 km north of Chantrey Inlet. The settlement of Taloyoak is located about 55 km north of the site.

The lowlands, which are of Palaeozoic origin, represent an area of recent marine emergence. The southern portion of the lowlands is flat, poorly drained, and covered with marine silts and sands, with an occasional esker or rock outcrop.

Approximately 10 km north of the Inglis River, glacial moraine protrudes through the marine sediments, forming the gently rolling Ross Hills. Numerous lakes and ponds are scattered throughout the lowlands. The escarpment of the Wager Highlands occurs along the eastern border.

Habitats in the lowlands vary from partially vegetated, dry tundra to densely vegetated sedge marsh. Tussocky sedge meadows and sedge marshes are predominant.

### Biological value

The lowlands support a high diversity and density of summering birds. In the order of 1.5 million birds from 46 species, 35 of which are known to breed, used the lowlands in 1975 and 1976 (McLaren et al. 1977).

The Rasmussen Lowlands are a major nesting area in the eastern Arctic for Tundra Swans. An estimated 5 000 to 6 000 adults (over 4% of the Canadian population) summered in the area during 1976 (McLaren et al. 1977). The lowlands are also important to Greater White-fronted Geese. Approximately 13 000 or 10% of the Canadian population, nested and moulted in the area in 1977 (Allen and Hogg 1979). Between 500 and 1 000 Sabine's Gulls nest on the lowlands, representing 2 to 5% of the national population.

McLaren et al (1977) also observed 5 000 to 6 000 moulting and breeding Lesser Snow Geese; 10 000 to 15 000 Oldsquaws; 30 000 to 35 000 King Elders; about 500 000 shorebirds (mostly Red Phalaropes (40%), White-rumped Sandpipers, Pectoral Sandpipers, Lesser Golden-Plovers, Black-bellied Plovers; and Semipalmated Sandpipers) and

approximately 845 000 Lapland Longspurs (92%), Horned Larks, and Snow Buntings. Although the above population estimates need updating, it is likely that estimates for King Eiders, the first five shorebird species above, and Lapland Longspurs exceed 1% of their respective national populations. Unfortunately, national population estimates are not available for these species. Seven Peregrine Falcon nest sites were located along the eastern escarpment and adjacent highlands (McLaren et al. 1977).

Most birds arrive in late May and depart by mid to late September, although Oldsquaws and King Eiders may remain in the area until freezeup.

### Sensitivities

Wetland areas are susceptible to terrain disturbance through the disruption of natural drainage patterns and the melting of permafrost. Wildlife in the area is sensitive to disturbance.

Pollution of offshore waters would result in the degradation of shoreline habitats.

### Potential Conflicts

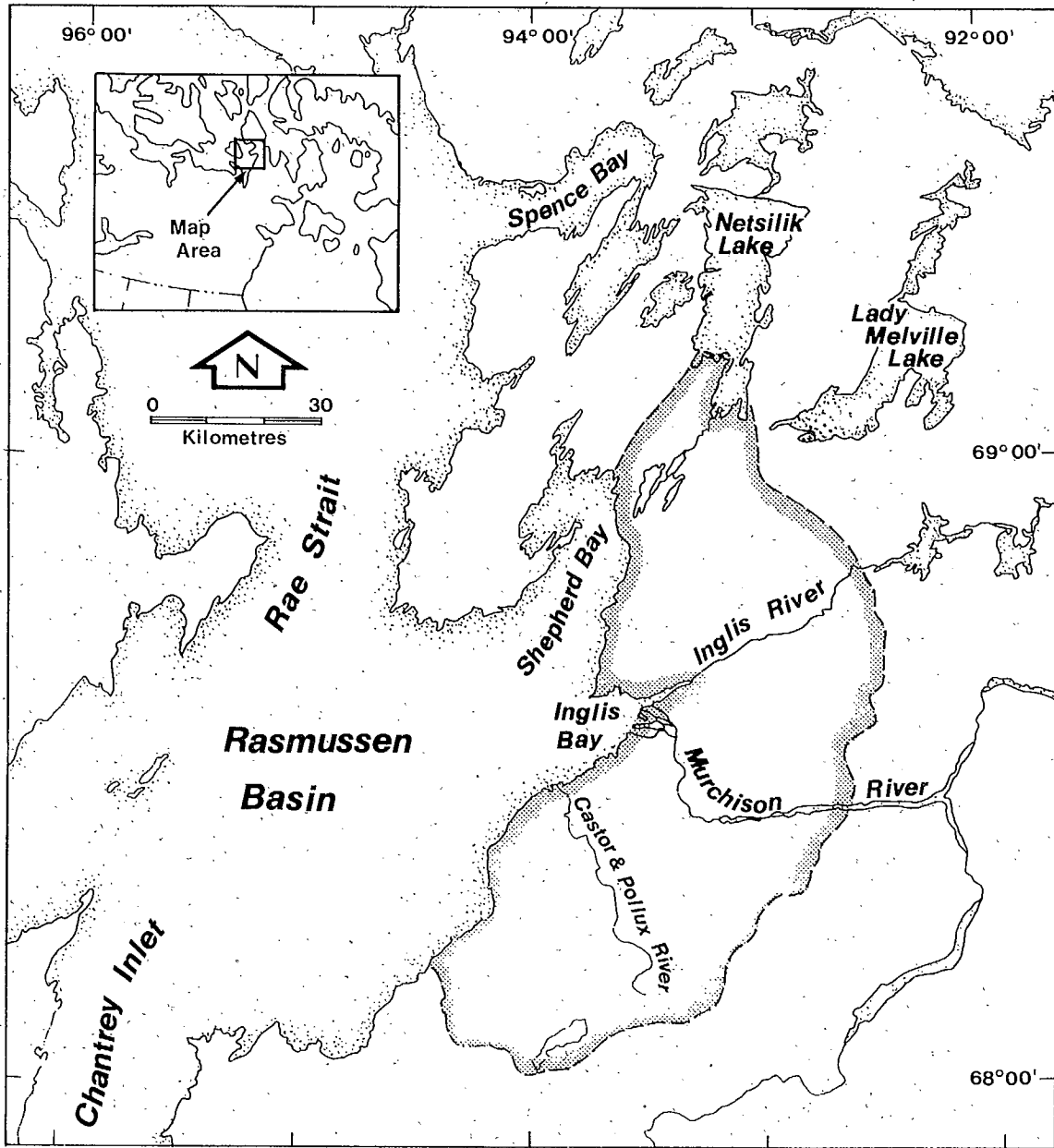
The Rasmussen Lowlands were on the route of the proposed Polar Gas Pipeline. At present, there are no impending conflicts.

### Status of Key Habitat Site

Wetland of International Importance.

### References

- Allen, D.L.; Hogg, T.H. 1979. Bird studies in the Keewatin District. ESCOM Rep. No. A1-27, Can. Wildl. Serv., for Dep. Indian North. Affairs, Ottawa 129 pp.
- McLaren, P.L.; McLaren, M.A.; Alliston, W.G. 1977. Bird populations in the Rasmussen Basin lowlands, NWT, June-September, 1976. Unpubl. rep., LGL Ltd., for Polar Gas Project, Toronto. 350 pp.



**RASMUSSEN LOWLANDS**



## COATS ISLAND (61)

**Location:** 62° 57' N, 82° 00' W      **Size:** 3 km<sup>2</sup>

### Description

Coats Island is located in northern Hudson Bay, approximately 75 km east of Southampton Island and 110 km west of Mansel Island. The island is predominantly Ordovician and Silurian limestone with a low-lying flat topography covered by large areas of tundra ponds and raised beaches. A small, elevated outcrop of Precambrian gneiss occurs at Cape Pembroke, on the northeastern tip, where cliffs rise 215 m above sea level (Heywood and Sanford 1976).

Historical sites of former Inuit residents of Coats Island occur in the vicinity of Cape Pembroke.

### Biological Value

Two Thick-billed Murre colonies, consisting of about 35 000 breeding pairs (approximately 2% of the Canadian population), are located on steep rock cliffs 5 km west of Cape Pembroke (Gaston et al. 1987). Murres reach the island in May and depart, with their young, on a swimming migration by early September.

Black Guillemots, Peregrine Falcons, Glaucous Gulls and Herring Gulls also nest on these cliffs. Atlantic Brant, Canada Geese, Tundra Swans, and Lesser Snow Geese breed on Coats Island (R. Kerbes, pers. commun.).

Polar bears frequent Coats Island year-round. Ringed, harp and bearded seals are present in offshore waters during the summer. In the fall, an estimated 3 000 walrus migrate to hauling-out areas along the coast near Cape Pembroke.

### Sensitivities

Seabirds are sensitive to disturbance at their breeding cliffs and pollution of their marine foraging areas.

### Potential conflicts

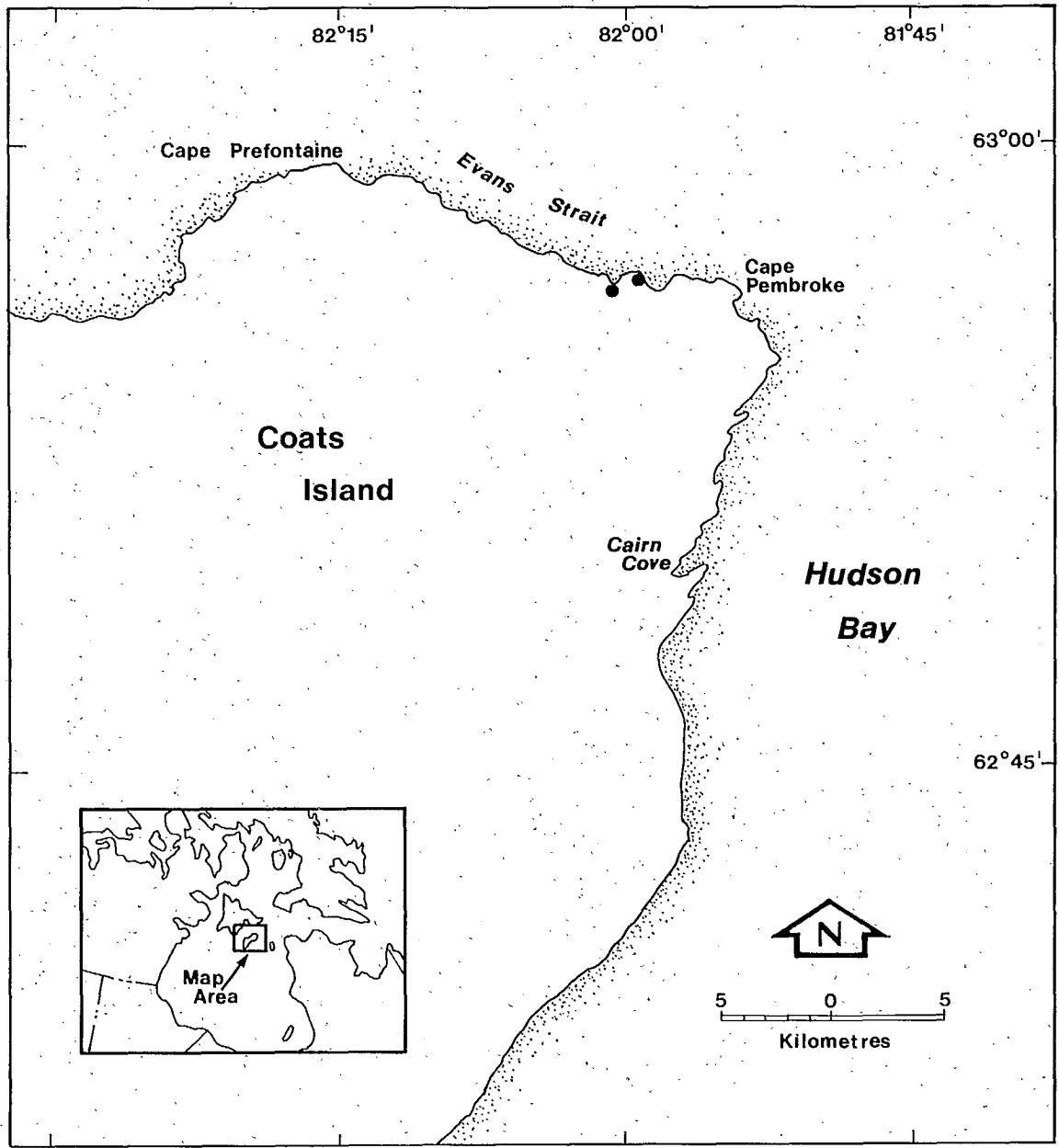
None.

### Status of Key Habitat Site

No special status.

### References

- Gaston, A.J.; Elliot, R.D.; Noble, D.G. 1987. Studies of Thick-billed Murres on Coats Island, Northwest Territories, in 1981, 1984, 1985 and 1986. Prog. Note No. 167, Can. Wildl. Serv., Ottawa. 13 pp.
- Heywood, W.W.; Sanford, B.V. 1976. Geology of Southampton, Coats, and Mansel islands, District of Keewatin, NWT. Mem. 382, Geol. Surv. Can., Ottawa. 35 pp.



**COATS ISLAND**

## DIGGES SOUND (64)

**Location:** 62° 33' N, 77° 35' W    **Size:** 12 km<sup>2</sup>

### Description

Digges Sound is located at the northeastern corner of Hudson Bay where it meets Hudson Strait. It is enclosed by the Digges Islands to the north and the mainland of Ungava Peninsula, Quebec, to the south. East Digges Island has cliffs along its southern coast that are over 200 m high. The cliffs on the mainland, 4 km south of Cape Wolstenholme, reach heights of over 300 m above sea level. The rock is a granitic schist, which fractures, forming stacks and ledges.

### Biological Value

The cliffs along Digges Sound support over 20% of the Canadian population of Thick-billed Murres, one of the largest colonies of this species in Canada (Nettleship 1980). More than 180 000 pairs of Thick-billed Murres breed in a colony extending 4 km along the southeast shore of East Digges Island. A second colony of over 107 000 pairs extends from Cape Wolstenholme, Quebec, southwest for 8 km (Gaston et al. 1985).

The murres arrive at the cliffs in late April or early May and depart with their young in late August. Foraging, particularly for Arctic cod, occurs over the water as far as 100 km from the colonies.

About 870 pairs of Black Guillemots also breed on islands in Digges Sound. Razorbills have been sighted in the area, but no evidence of nesting has been found (Gaston et al. 1985). A small number of Atlantic Puffins nest in a colony on Dome Island to the south of West Digges Island (Gaston et al. 1985). This is the only confirmed colony of this species in the Northwest Territories.

Approximately 350 pairs of Kumlien's Gulls have also been noted in the area (A. Gaston, pers. commun.).

Polar bears, seals, walruses, and white whales also inhabit the surrounding area.

### Sensitivities

Colonial nesting seabirds are sensitive to disturbance and pollution of their marine foraging areas.

### Potential Conflicts

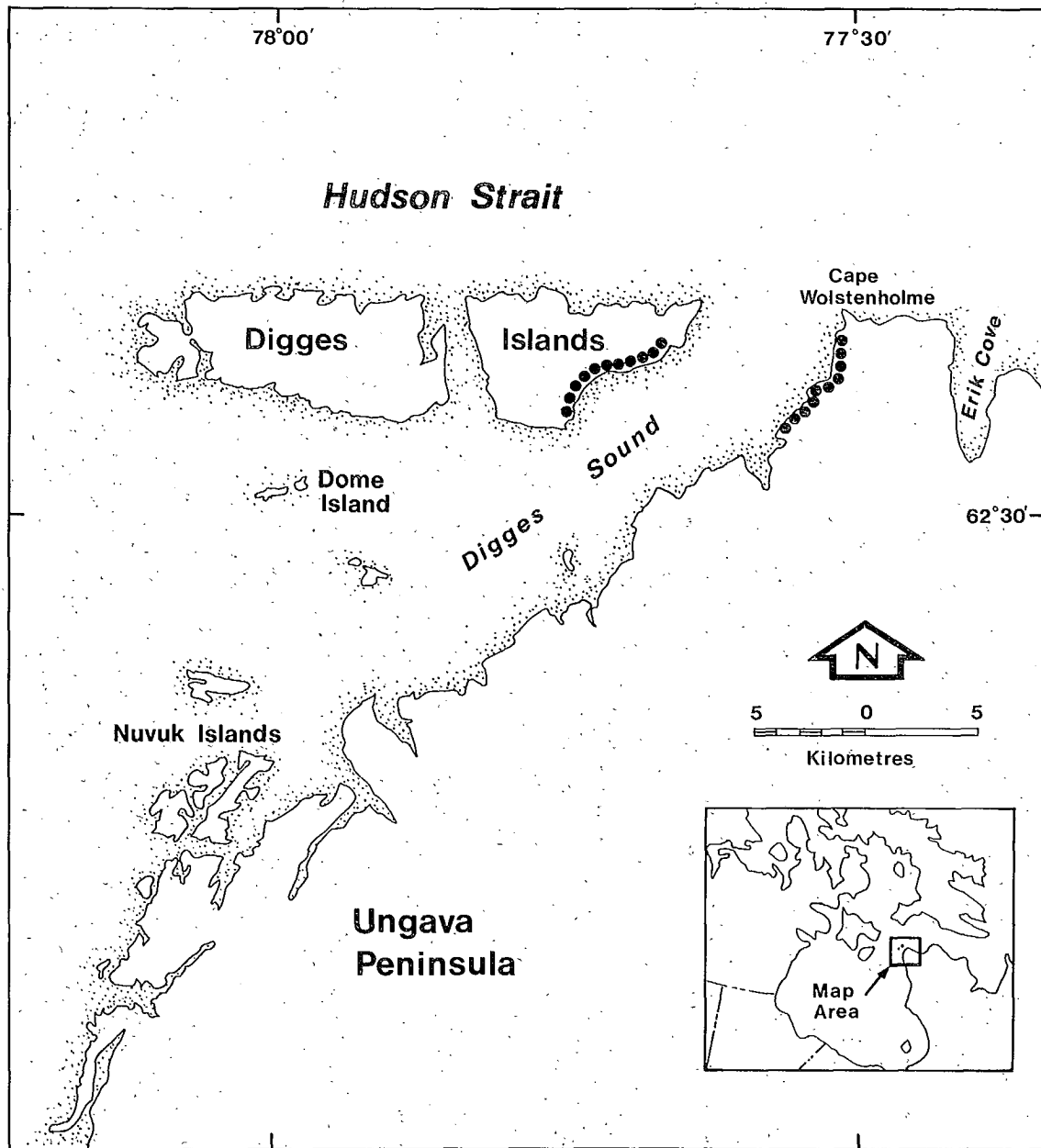
None.

### Status of Key Habitat Site

IBP Site.

### References

- Gaston, A.J.; Cairns, D.K.; Elliot, R.D.; Noble, D.G. 1985. A natural history of Digges Sound. Rep. Ser. No. 46, Can. Wildl. Serv., Ottawa. 63 pp.
- Nettleship, D.N. 1980. A guide to the major seabird colonies of eastern Canada: identity, distribution, and abundance. Unpubl. rep., Can. Wildl. Serv., Ottawa. 133 pp.



**DIGGES SOUND**

## AKPATOK ISLAND (67)

**Location:** 60°25'N, 68°08'W    **Size:** 32 km<sup>2</sup>

### Description

Akpatok Island is located in northwestern Ungava Bay, about 65 km offshore from the mainland of Quebec. This flat-topped island is surrounded by steep cliffs that rise over 245 m above the sea. It is composed mainly of Ordovician limestone and vegetated by sparse upland tundra.

### Biological Value

Two large colonies of Thick-billed Murres are located on the north and southeast coasts of the island. The colonies occur on horizontal ledges that begin on the cliff faces approximately 30 m above sea level. The northern colony extends for 14 km along the cliff face and had an estimated 173 000 breeding pairs in 1983. The southern colony extends for 15 km and harboured approximately 120 000 pairs of murres in 1982. Both estimates are believed to be low, and the total number of breeding pairs is probably between 300 000 and 400 000 (Chapdelaine et al. 1986). At over 20% of the Canadian population, these two colonies constitute one of the largest Thick-billed Murre concentrations in Canada. Thick-billed Murres arrive at their nesting cliffs in early May and set out to sea, with their young, at the end of August.

Approximately 300 to 500 pairs of Black Guillemots nest along most of the island's coast. Peregrine Falcons and Gyrfalcons breed on the island.

Marine mammals, especially walruses and seals, inhabit the surrounding waters during the summer. The island is an important summer retreat and possible maternity denning area for polar bears in the Ungava Bay, Labrador, and Hudson Strait area (Smith et al. 1975).

### Sensitivities

Murres are sensitive to disturbance and pollution of marine foraging areas.

### Potential Conflicts

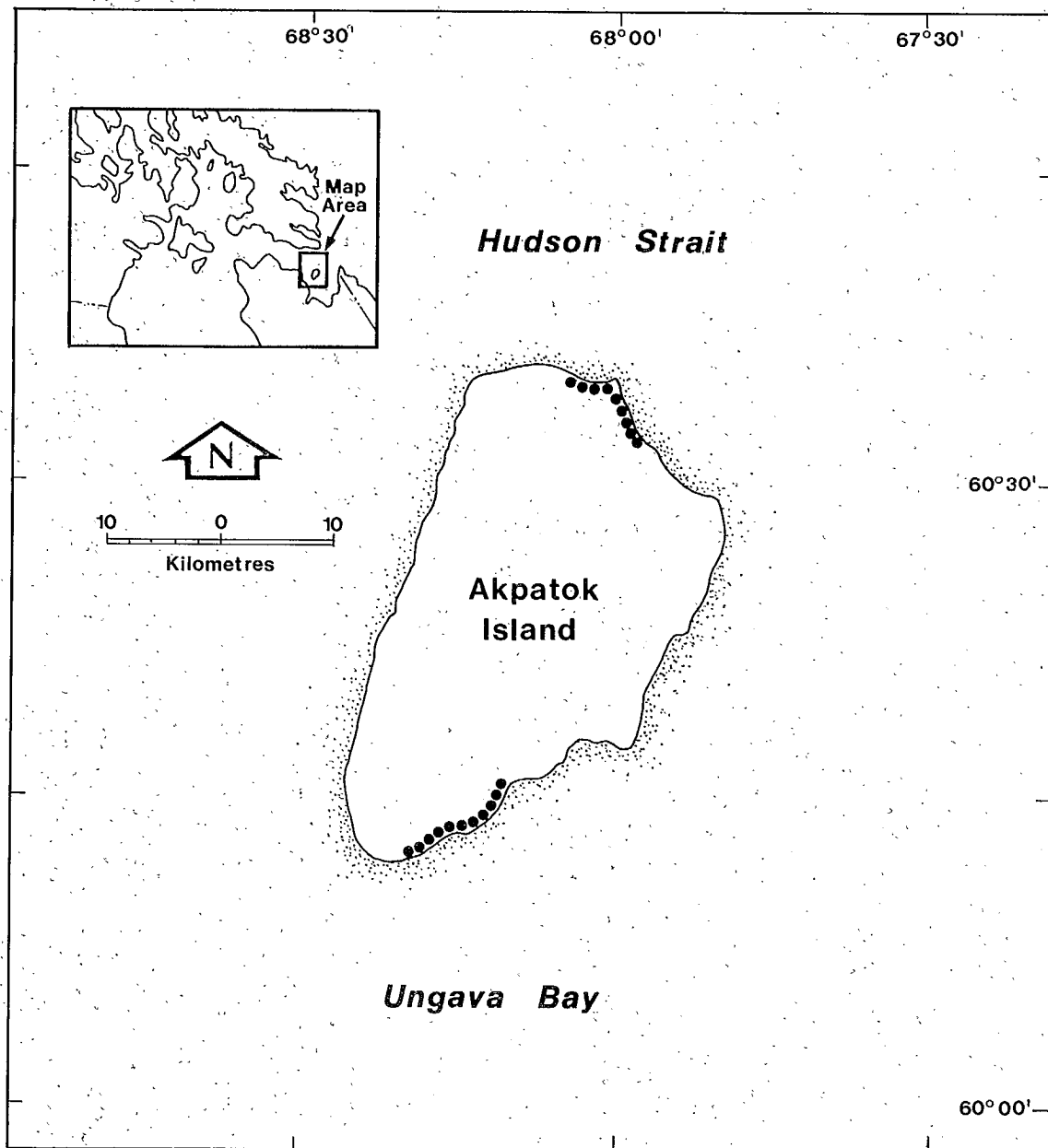
None.

### Status of Key Habitat Site

IBP Site.

### References

- Chapdelaine, G.; Gaston A.J.; Brousseau, P. 1986. Censussing the Thick-billed Murre colonies of Akpatok Island, NWT. Prog. Note No. 163, Can. Wildl. Serv., Ottawa. 9 pp.
- Smith, P.A.; Stirling, I.; Jonkel, C.; Juniper, I. 1975. Notes on the present status of the polar bear (*Ursus maritimus*) in Ungava Bay and northern Labrador. Prog. Note No. 53., Can. Wildl. Serv., Ottawa. 8 pp.



**AKPATOK ISLAND**

## SLEEPER ISLANDS (73)

**Location:** 57° 30' N, 79° 45' W **Size:** 226 km<sup>2</sup>

### Description

The Sleeper Islands (Qumiutuq) archipelago is situated in Hudson Bay about 115 km north-northeast of the community of Sanikiluaq. The archipelago stretches about 49 km north to south and consists of over 360 islands plus numerous reefs and shoals. Most of the islands are less than 50 ha, but two are greater than 1 000 ha. They consist mainly of exposed, smooth bedrock. Vegetation is restricted to depressions in the bedrock and is more abundant on the larger islands (Nakashima and Murray 1988).

Less than 100 years ago, Inuit occupied the Sleeper Islands year-round. Man-made stone rings still surround old and active nest cups on many of the islands. These structures limited the females' access to their nests and facilitated the trapping of birds for food. The archipelago is now visited infrequently by Inuit (Nakashima and Murray 1988).

### Biological Value

In 1985, an estimated 5 900 pairs of Hudson Bay Common Eiders (subspecies *sedentaria*) nested on small islands in this area (Nakashima and Murray 1988). This represents 14% of the national population. Not all islands were inhabited by the eiders; in their survey, which covered half the islands, Nakashima and Murray recorded 90% of the nests on 8% of the islands. The more isolated and exposed islands around the perimeter of the archipelago were the preferred sites. These islands were likely free of ice earlier in the season than more central islands. The eiders also preferred islands with large, flat, well-vegetated areas.

Many Hudson Bay Common Eiders winter along the western land-fast ice edge northwest of the Belcher Islands (see Key Habitat Site 74) and Sleeper Islands and, to a much lesser extent, on polynyas around the Belcher Islands (Freeman 1970; Nakashima and Murray 1988).

Concentrations of wintering birds are very unusual in the Northwest Territories. In spring, eiders disperse as open water becomes available elsewhere. Eiders at the Sleeper Islands initiate nesting in the second and third weeks of June, and the eggs hatch in July, shortly after which families

disperse from the nesting islands.

About 1 600 pairs of Arctic Terns and 200 pairs of Glaucous and Herring gulls nested on islands in the archipelago in 1985, usually in association with Common Eiders (Nakashima and Murray 1988).

### Sensitivities

Nesting eiders are sensitive to disturbance and will desert the colony site altogether if disturbance is persistent. The occurrence and success of colonies are highly dependant on the presence of small, isolated islands. Pollution in the surrounding marine environment would be detrimental to the eiders.

### Potential Conflicts

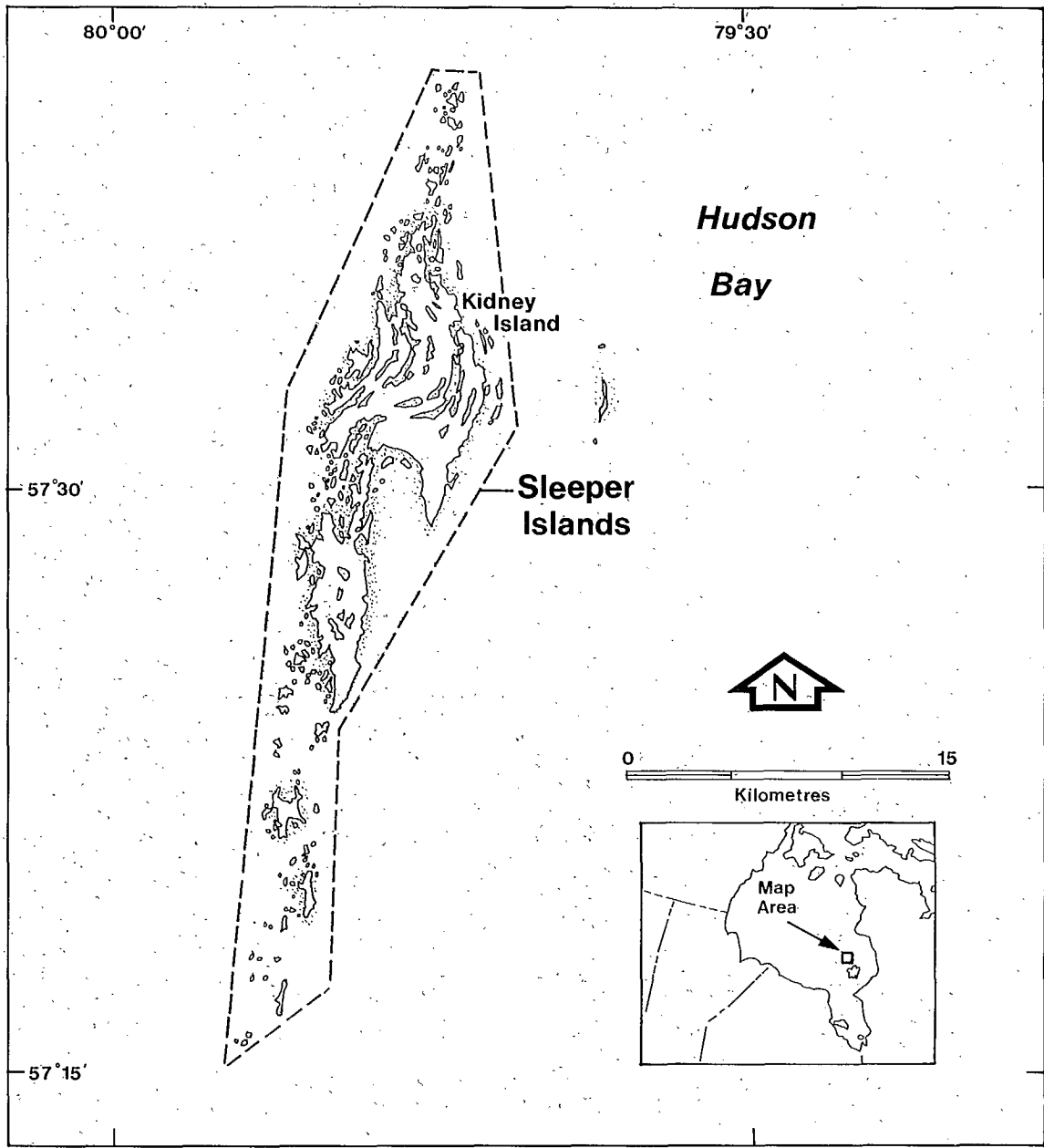
Oil exploration in central Hudson Bay is a potential source of pollution. Prevailing west and northwest winds render the east coast of the bay most susceptible to oil damage (Davidson 1985, cited in Nakashima and Murray 1988).

### Status of Key Habitat Site

No special status.

### References

- Davidson, L.W. 1985. Oil spill trajectory scenario for the proposed Canterra Energy Ltd. Hudson Bay acreage well-sites. Seaconsult Ltd., St. John's.
- Freeman, M.M.R. 1970. Observations on the seasonal behaviour of the Hudson Bay Eider (*Somateria mollissima sedentaria*). Can. Field Nat. 84:145-153.
- Nakashima, D.J.; Murray, D.J. 1988. The common Eider (*Somateria mollissima sedentaria*) of eastern Hudson Bay: A survey of nest colonies and Inuit ecological knowledge. Environ. Stud. Revolving Funds Rep. No. 102, Ottawa. 174 pp.



**SLEEPER ISLANDS**



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