

NU Site 19 – Baillarge Bay

Location: 73°25'N, 84°30'W

Size: 7.5 km²

Description: Baillarge Bay is situated at the northeastern tip of Admiralty Inlet on northern Baffin Island, approximately 40 km north of the community of Arctic Bay. This part of the northern Baffin Island coastline is dominated by steep cliffs up to 610 m high, between Baillarge Bay and Elwin Inlet. Rocks of these cliffs are dominated by Cambrian and Ordovician sandstone, limestone, and dolomite (de Kemp 1999). The Baillarge Bay site is part of a large dissected plateau encompassing most of the northwestern Baffin Island (Lemon and Blackadar 1963). The nearby marine regions of Admiralty Inlet and Lancaster Sound are described in Mallory and Fontaine (2004).

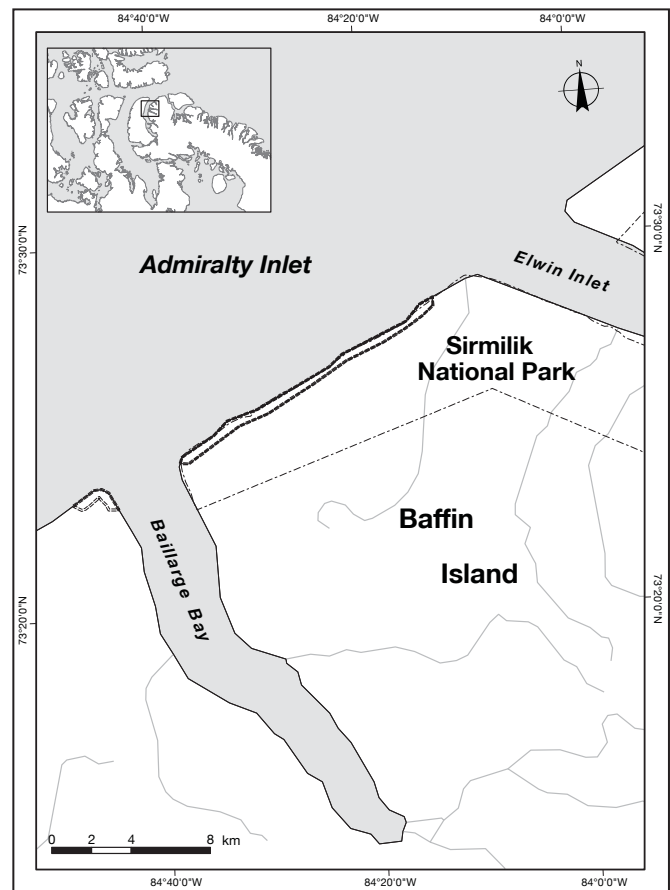
Biological value: A major Northern Fulmar colony, estimated at 30 000 pairs, breeds along 16 km of coast between Baillarge Bay and Elwin Inlet (Hatch and Nettleship 1998). This colony represents about 13% of the Canadian population of this species (Hatch and Nettleship 1998). However, the estimate is provisional and could be between 10 000 and 100 000 pairs (Nettleship 1980). Estimates from surveys in 2002 put the colony size at more than 23 000 occupied breeding sites (Gaston et al. 2006).

There are also about 50 pairs of Glaucous Gulls breeding at Baillarge Bay (A.J. Gaston, unpubl. data). Northern Fulmars use Baillarge Bay between April and early October. Northern Fulmars and Black Guillemots congregate at the floe edge along Admiralty Inlet and may congregate off the colony when fast ice disperses. Traditional Inuit knowledge indicates that many seabirds feed in Admiralty Inlet off Baillarge Bay (Riewe 1992).

The waters around Baillarge Bay are important for marine mammals, notably narwhal (Sergeant and Hay 1979), ringed seal, harp seal, and beluga (Dickins et al. 1990). Polar bears use the area as a summer retreat, concentrating in deep bays where the ice persists (Stirling et al. 1979).

Sensitivities: The waters around Baillarge Bay are considered to be of “moderate” offshore sensitivity to damage from oil spills through most of the year (Dickins et al. 1990). Seabirds are sensitive to disturbance at their colonies 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 (DIAND 1982). This area is also of increasing importance as a tourist destination for cruise ships (Hall and Johnston 1995; Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas. The lead/zinc mine at Nanisivik (40 km away) closed in 2003, so any further threats from mine tailings were reduced at that time.



Status: Baillarge Bay is an International Biological Programme Site (Site 7-7; Nettleship 1980), an Important Bird Area in Canada (NU067; IBA Canada 2004), and a Key Marine Habitat Site in Nunavut (Site 13; Mallory and Fontaine 2004). The terrestrial portion of the majority of the colony (between Baillarge Bay and Elwin Inlet) is part of Sirmilik National Park, established in 2001.

Location: 71°15'N, 85°50'W

Size: 10 323 km²

Description: This site encompasses the coastal zone and surrounding lowlands of Bernier Bay, Berlinguet Inlet, and southern Admiralty Inlet on northwestern Baffin Island.

The shores of the bays and inlets are generally low, but hills rising to elevations of 150–300 m occur near the coast in some areas. Numerous small lakes are found in the coastal areas south of Admiralty Inlet and in the Moffet Inlet region. The area is predominantly a gently rolling, coastal plain of very low relief. Lowland vegetation complexes of sedge–grass and tundra polygons occur in the river valleys.

Biological value: After Bylot Island, this area, including Jungersen Bay, is probably the second most important breeding area for Greater Snow Geese (A. Reed, pers. commun., in Giroux et al. 1984). Heyland and Boyd (1970) reported that a major portion of the Canadian breeding population utilizes the area. A partial survey of the site in July 1969 revealed 6700 Greater Snow Geese. In July 1979, Reed et al. (1980) recorded over 2000 Snow Geese in one section of the site. A more complete survey in August 1983 disclosed 14 700 Greater Snow Geese, which was 7% of the North American population at that time (Reed and Dupuis 1980).

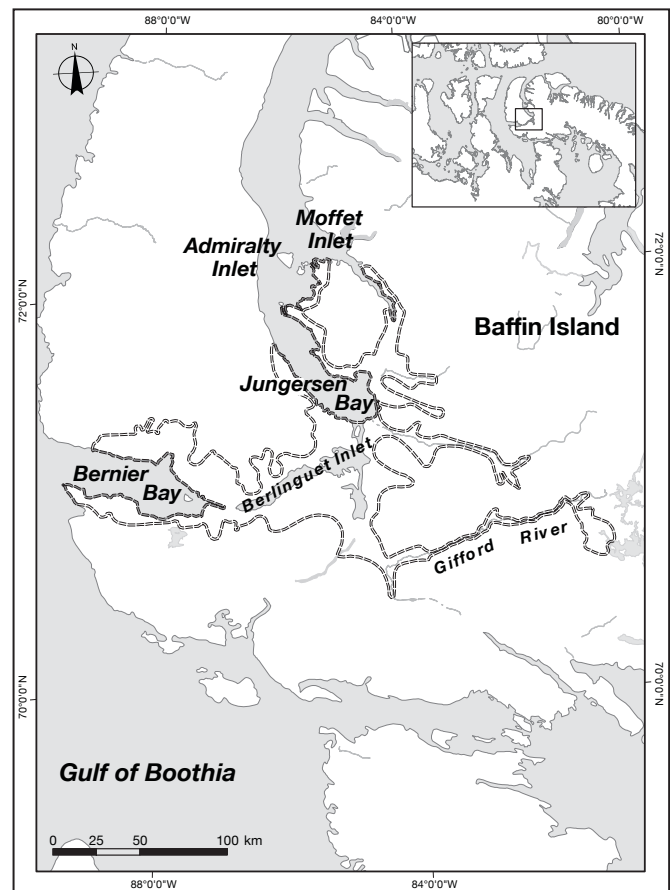
Broods of Canada Geese (now Cackling Goose), which represented the most northeasterly breeding records of this species, were observed in 1980 (Reed and Dupuis 1980) and 1983 (A. Reed, pers. commun., in Giroux et al. 1984). Terns, gulls, fulmars, seaducks, and Peregrine Falcons nest and feed within the area (Kemper 1976; Reed and Dupuis 1980).

The waters of the area are used by ringed seal, bearded seal, and polar bear. The islands of Admiralty Inlet are important as a summer retreat for polar bears (Kemper 1976).

Sensitivities: Lowland habitats and other permafrost environments are susceptible to terrain disturbance and degradation, and marine waters are susceptible to pollution. Waterfowl and other migratory birds are sensitive to disturbance during the nesting, brood-rearing, moulting, and migration periods.

Potential conflicts: Lancaster Sound, Barrow Strait, and Prince Regent Inlet have potential to become marine shipping routes and areas of hydrocarbon exploration and development (DIAND 1982). Drilling activities and an increase in air or marine traffic could subject feeding and nesting areas to disturbance and pollution.

Status: This key site is an Important Bird Area in Canada (NU066; IBA Canada 2004).



NU Site 21 – Cape Hay

Location: 73°45'N, 80°22'W

Size: 3.5 km²

Description: Cape Hay is located near the northwestern tip of Bylot Island at the eastern entrance to Lancaster Sound. The Cape is approximately 140 km northwest of the community of Pond Inlet (Mittimatalik). The area around Cape Hay consists of Precambrian dolomite (Jackson and Davidson 1975) and is adjacent to the Byam Martin Mountains, which reach up to 1900 m above sea level and are largely covered by glaciers. At Cape Hay, vertical cliffs rise 60–460 m above sea level.

Open water is typically present for 17 weeks off Cape Hay, but this varies annually (Dickins et al. 1990). The marine environment of Cape Hay is summarized in Mallory and Fontaine (2004).

Biological value: Approximately 140 000 pairs of Thick-billed Murres (Gaston and Hipfner 2000) and 20 000 pairs of Black-legged Kittiwakes, each representing more than 10% of the Canadian population, nest at Cape Hay. These counts are lower than the original estimates (Tuck and Lemieux 1959; Tuck 1961), and it is unclear whether a population decline has occurred. Nonetheless, Cape Hay is one of the five largest Thick-billed Murre colonies in Canada (Gaston and Hipfner 2000). Johnson et al. (1976) found that most murres from Cape Hay foraged within 30 km of the colony, although some were up to 60 km away.

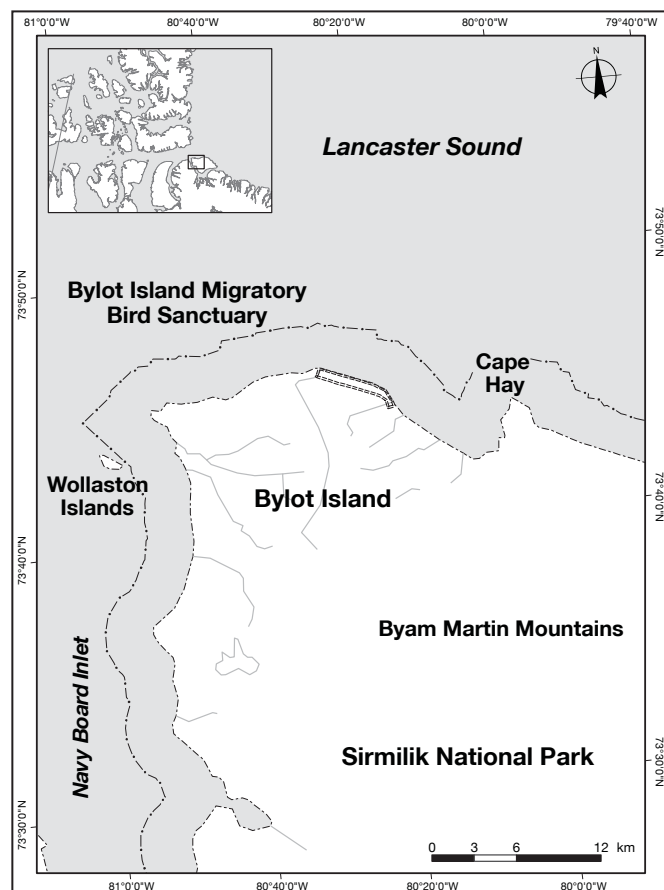
The ice edge around the Cape is also a critical staging and feeding area for murres and kittiwakes migrating to colonies farther west in Lancaster Sound (McLaren 1982). Although they do not nest at Cape Hay, thousands of Northern Fulmars use ice edges around Cape Hay for feeding during migration (McLaren 1982). Hundreds of Black Guillemots also feed and stage off Cape Hay in May and June (McLaren 1982). This marine region is occupied by seabirds from mid-April through October.

The marine area around Cape Hay is also important for many mammals, especially narwhal, harp seal, and beluga (Dickins et al. 1990). Bowhead whales move past this cape during migration (Riewe 1992; Fisheries and Oceans Canada 1999). Polar bears are numerous in the Lancaster Sound area and use the northern coast of Bylot Island for maternity denning and as a summer retreat (Schweinsburg et al. 1982).

Inuit from Pond Inlet hunt marine mammals along the northern shore of Bylot Island (Fisheries and Oceans Canada 1999).

Sensitivities: Nesting seabirds are sensitive to disturbance and the pollution of their feeding areas. The shoreline area around Cape Hay is listed as being of “high sensitivity” from May to October for impact of oil spills. The offshore area is listed as being of “moderate sensitivity” from September through April, but of “high sensitivity” from May through August (Dickins et al. 1990).

Potential conflicts: Lancaster Sound, western Baffin



Bay, and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979; DIAND 1982). There is also increasing activity with cruise ships or outfitters in boats in the eastern Arctic (Marshall Macklin Monaghan Ltd. 1982; Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

Status: Cape Hay is an International Biological Programme Site (Site No. 7-5; Nettleship 1980), an Important Bird Area in Canada (NU004; IBA Canada 2004), and a Key Marine Habitat Site (Site 12; Mallory and Fontaine 2004). The Cape is part of Bylot Island Migratory Bird Sanctuary, established in 1965, and part of Sirmilik National Park, established in 2001.

Location: 72°55'N, 79°30'W

Size: 1670 km²

Description: Bylot Island is situated northeast of Baffin Island at the entrance to Lancaster Sound and 15 km north of Pond Inlet (Mittimatalik). Most of the island consists of the Precambrian metamorphic rock of the Byam Martin Mountains, which reach a maximum height of 1900 m above sea level. Numerous glaciers radiate towards the sea from this central mountain chain.

In the southwest corner of the island, a rolling outwash plain cut by glacial rivers rises 60 m above the water and slopes gradually upward to the mountains. Dominant vegetation types are low shrub–herb tundra and shrub–sedge tundra (Zoltai et al. 1983). Heath, willow, and flowering plants are common along ravines and river valleys.

Biological value: This lowland is a major breeding ground for Greater Snow Geese. Nesting colonies of 25–300 pairs are scattered throughout the area. The population size has increased over the years. Estimated numbers were 15 000 geese in 1957 (Lemieux 1959), but numbers increased to 25 500 adults and 26 500 young in 1983, 31 700 adults and 41 400 young in 1988, and 69 500 adults and 86 500 young in 1993 (Reed 1983; Reed et al. 1992; A. Reed, pers. commun.). Numbers subsequently declined to 60 700 adults plus 59 100 young in 1998 and 47 700 adults and 58 000 young in 2003. Adults returning to Bylot Island each year have constituted, on average, 10% of the spring population of Greater Snow Geese.

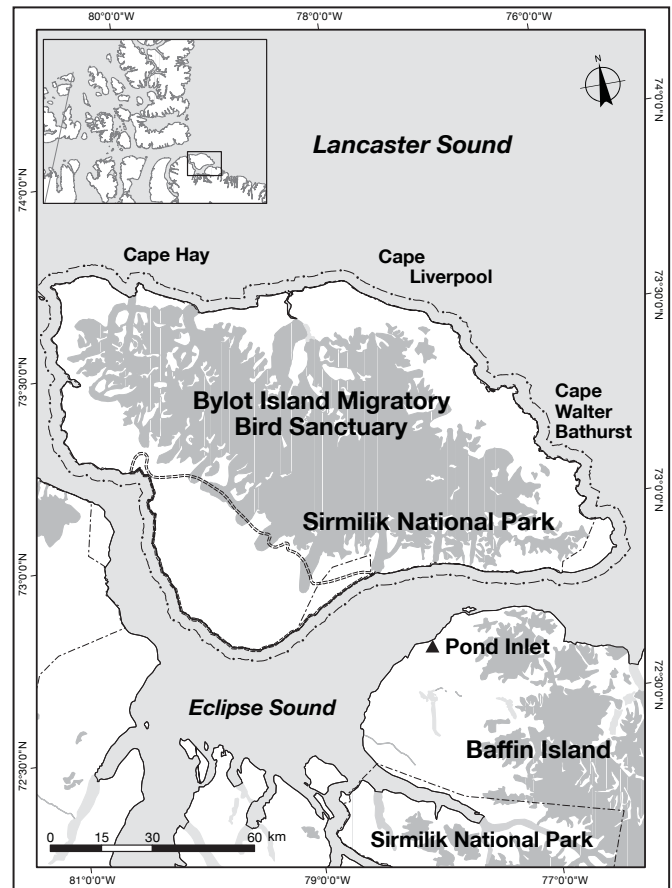
Red-throated Loons, Long-tailed Ducks, King Eiders, and shorebirds also breed in this area, but their numbers have not been assessed.

Bylot Island is a major summer retreat for polar bears in the Lancaster Sound area (Schweinsburg et al. 1982).

Sensitivities: Greater Snow Geese are sensitive to disturbance and to pollution of nearshore waters. Increased numbers of Greater Snow Geese could impact the lowland habitats on Bylot Island.

Potential conflicts: Increased tourist-related activities could be a source of disturbance (Marshall Macklin Monaghan Ltd. 1982).

Status: This site occurs within Bylot Island Migratory Bird Sanctuary and Sirmilik National Park. It is an Important Bird Area in Canada (NU013; IBA Canada 2004) and an International Biological Programme Site (Site 7-4; Beckel 1975).



Location: 72°55'N, 76°05'W

Size: 2.5 km²

Description: Cape Graham Moore is situated on the southeastern tip of Bylot Island at the eastern entrance to Lancaster Sound. The Cape is approximately 70 km northeast of the community of Pond Inlet (Mittimatalik). The southeastern portion of Bylot Island consists of Precambrian metamorphic, sedimentary, and volcanic rock (de Kemp 1999), including the Byam Martin Mountains, which reach up to 1900 m above sea level. Most of Bylot Island is covered in glaciers. At Cape Graham Moore, the steep cliffs rise 150 m from the sea (Jackson et al. 1975).

Recurring offshore leads form in sea ice off Cape Graham Moore (Smith and Rigby 1981), with a relatively narrow landfast ice band (although this may vary greatly between years; McLaren 1982), so that the floe edge is usually not far from shore (Dickins et al. 1990). The marine region is described in Mallory and Fontaine (2004).

Biological value: Approximately 30 000 pairs of Thick-billed Murres (Gaston and Hipfner 2000) and 3000 pairs of Black-legged Kittiwakes, representing 2.1% and 1.5% of the Canadian populations, respectively, nest about 7 km north of Cape Graham Moore. However, the colonies have not been visited for many years, and recent surveys are needed to update these data.

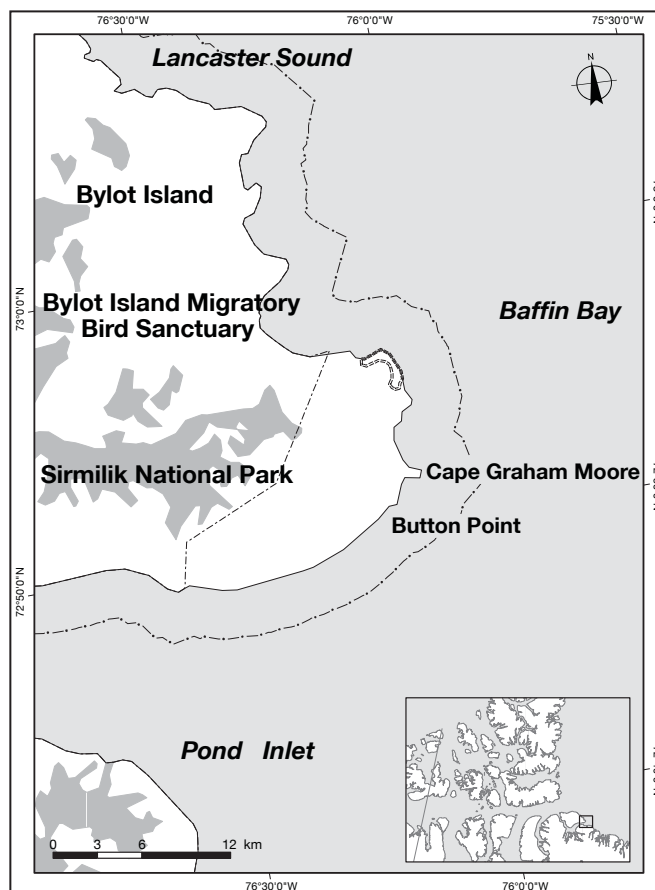
The ice edge near Cape Graham Moore supports numerous seabirds during migration (summarized in Mallory and Fontaine 2004), with as many as 18 species using this site (Bradstreet 1982). This marine region is occupied by seabirds from mid-April through October (Riewe 1992).

The marine area around Cape Graham Moore is also important for many marine mammals, especially narwhal, ringed seal, harp seal, beluga, and polar bear (Bradstreet 1982). Bowhead whales move past this cape during migration (Riewe 1992; Fisheries and Oceans Canada 1999).

A traditional seasonal hunting camp is located at Button Point, a few kilometres southwest of Cape Graham Moore (Riewe 1992). From this site, Inuit hunt bears and seals at the nearby floe edge (Fisheries and Oceans Canada 1999) and also collect murre eggs.

Sensitivities: Nesting seabirds are sensitive to disturbance and the pollution of their feeding areas. The shoreline area around the Cape is listed as being of “extreme sensitivity” from May to October for impact of oil spills. The offshore area is listed as being of “moderate sensitivity” from September through April, but of “high sensitivity” from May through August (Dickins et al. 1990).

Potential conflicts: Lancaster Sound, western Baffin Bay, and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979; DIAND 1982). There is also increasing activity by cruise ships and local outfitters in the eastern Arctic



(Marshall Macklin Monaghan Ltd. 1982; Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

Status: Cape Graham Moore is an International Biological Programme Site (Site 7-5; Nettleship 1980), an Important Bird Area in Canada (NU068; IBA Canada 2004), and a Key Marine Habitat Site in Nunavut (Site 15; Mallory and Fontaine 2004). The Cape is part of the Bylot Island Migratory Bird Sanctuary, established in 1965, and is located just south of the boundary of Sirmilik National Park, established in 2001.

Location: 71°50'N, 74°30'W

Size: 8 km²

Description: Buchan Gulf is situated on the eastern coast of north Baffin Island, about 200 km southeast of Pond Inlet (Mittimatalik). The northern coast of the Gulf is notable for two promontories, The Bastions and The Mitres. The region is part of the Davis Highlands, a glacier-covered mountain belt of the Canadian Shield, penetrated by long fiords. The area is underlain by Precambrian gneiss (Jackson et al. 1975; de Kemp 1999).

Shoreleads form in sea ice near the Gulf as early as February, but ice breakup may not occur until July, and freeze-up begins in late October. A description of the marine zone around Buchan Gulf is in Mallory and Fontaine (2004).

Biological value: Buchan Gulf supported approximately 25 000 pairs of Northern Fulmars, about 12% of the Canadian population of this species, along the 22 km of cliffs in the 1970s (Nettleship 1980). New surveys are needed to confirm these estimates. This fulmar colony is almost totally composed of light-phase birds, anomalous among eastern Canadian Arctic fulmar colonies (Hatch and Nettleship 1998). Fulmars occupy the colony from April through September each year.

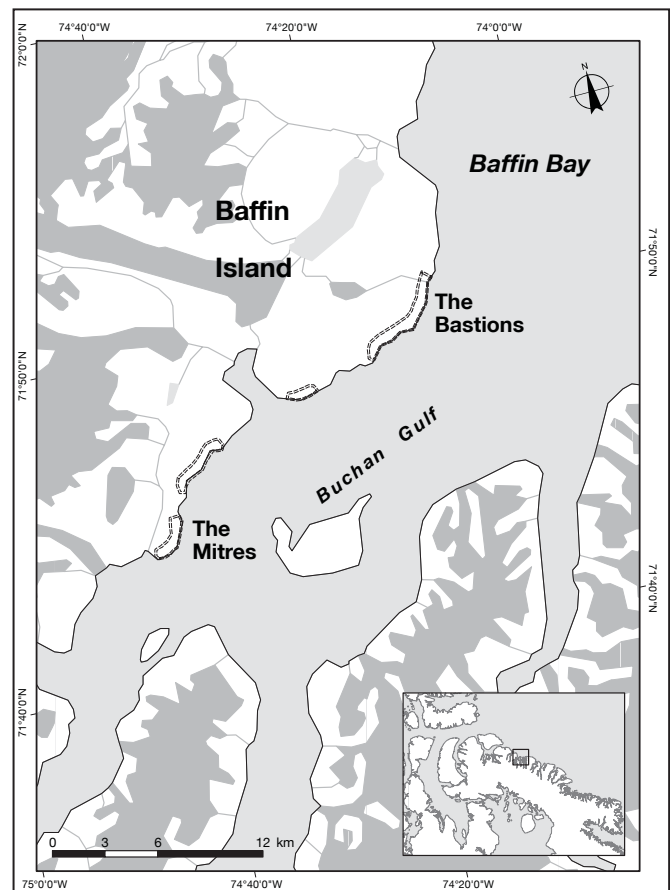
Nearby marine waters support important numbers of Black Guillemots, King Eiders, Common Eiders (*S. m. borealis*), Thick-billed Murres, and Dovekies (McLaren 1982; McLaren and McLaren 1982). The extent to which these species use regions immediately adjacent to the colony requires further study. This marine region is occupied by seabirds from mid-April through October (Riewe 1992).

The area around Buchan Gulf is also important for many marine mammals, especially narwhals, ringed seals, and polar bears, which use parts of this area for maternity denning (Riewe 1992).

Sensitivities: Seabirds are sensitive to disturbance at their colonies and to the pollution of offshore waters.

Potential conflicts: Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979; DIAND 1982). This area is also of increasing importance as a tourist destination for cruise ships (Hall and Johnston 1995; Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

Status: Buchan Gulf is an International Biological Programme Site (Site 7-11; Nettleship 1980), an Important Bird Area in Canada (NU069; IBA Canada 2004), and a Key Marine Habitat Site in Nunavut (Site 17; Mallory and Fontaine 2004).



Location: 71°03'N, 71°08'W

Size: 3 km²

Description: Scott Inlet is located on the east coast of Baffin Island, about 120 km north of Clyde River (Kangiqtugaapik). Scott Island, approximately 11 km long and towering 600 m high, is in the centre of Scott Inlet, which further subdivides into Gibbs and Clark fiords. Precipitous cliffs of primarily Precambrian gneiss rise up to 365 m along the southern coastline of Scott Island and the adjacent mainland (de Kemp 1999). Ice caps and snowfields cover much of the surrounding mainland. The marine region around Scott Inlet is dominated by ice much of the year, but shore leads do open in this area, providing open water access and migration routes for marine wildlife (Smith and Rigby 1981).

Biological value: Scott Inlet initially was thought to support approximately 25 000 pairs of Northern Fulmars on the coastal region south of Scott Island (Nettleship 1980), but this estimate was revised to 10 000 pairs from a 1986 survey (Hatch and Nettleship 1998). This represents about 5% of the Canadian population of this species. This fulmar colony is almost totally composed of light-phase birds, anomalous among eastern Canadian Arctic fulmar colonies (Hatch and Nettleship 1998).

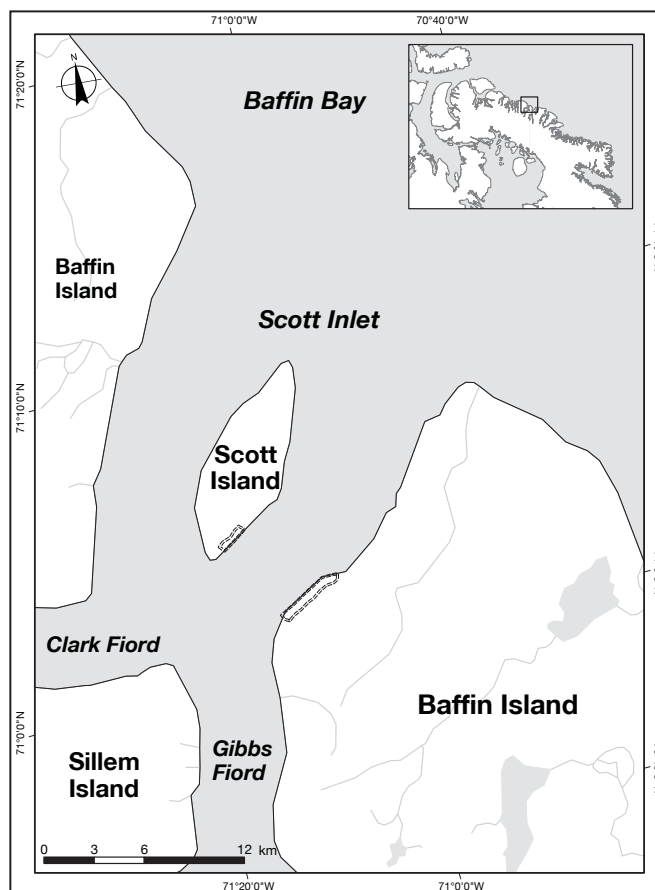
Approximately 100 pairs of Glaucous Gulls nest in two colonies on southwest Scott Island (Nettleship 1980). A few thousand Black Guillemots winter in open-water areas of northwest Baffin Bay (Renaud and Bradstreet 1980), and some of these birds may nest near Scott Inlet (McLaren 1982). This marine region is occupied by seabirds from mid-April through October (Riewe 1992).

The marine area around Scott Inlet is also important for many mammals, including narwhal, beluga, harp seal, bearded seal, ringed seal, and polar bears, which use parts of this area for maternity denning (Riewe 1992).

Sensitivities: Seabirds are sensitive to disturbance at their colonies and to the pollution of offshore waters.

Potential conflicts: Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979). This area is also of increasing importance as a tourist destination for cruise ships (Hall and Johnston 1995; Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

Status: Scott Inlet is an International Biological Programme Site (Site 7-8; Nettleship 1980), an Important Bird Area in Canada (NU070; IBA Canada 2004), and a Key Marine Habitat Site in Nunavut (Site 18; Mallory and Fontaine 2004).



Location: 69°02'N, 67°23'W

Size: 17 km²

Description: Abbajalik and Ijutuk are two small islands in Home Bay off the east coast of Baffin Island, approximately 75 km north of Auyuittuq National Park. Qikiqtarjuaq (Broughton Island), the nearest community, is located about 130 km southeast of this site.

Abbajalik Island is located close to the spring floe edge. It narrows considerably in the middle, with the east end featuring bouldery terrain (Finley and Evans 1984). The location of Ijutuk Island is tentative, and a description is not available. However, both islands lie in a region of Precambrian metasedimentary rock (de Kemp 1999).

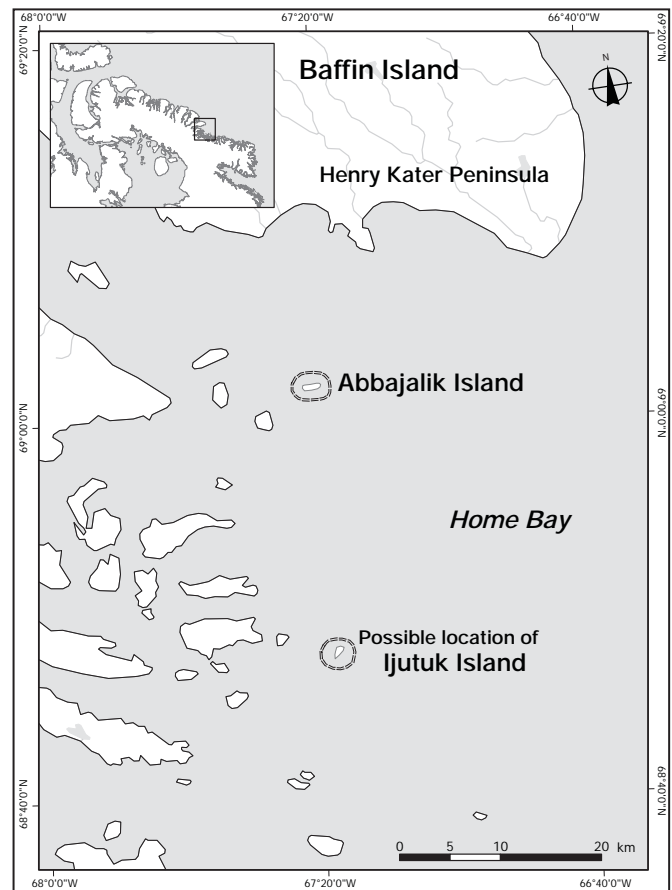
Biological value: Abbajalik Island and Ijutuk Island are the only reported breeding sites for Dovekies in Canada (Finley and Evans 1984; Nettleship and Evans 1985). Finley and Evans (1984) were informed of a colony on Abbajalik Island by A. Qaqqasiq (pers. commun., *in* Finley and Evans 1984); all three visited the site on 20 August 1983. Among the boulders at the east end of the island, they found two addled eggs and two chicks, one of which was near fledging. Several small flocks of adults were also seen flying about the island. The authors suspected that most chicks would have fledged by the time of their visit; peak fledging occurs in mid-August in northwest Greenland, where millions of Dovekies nest (Roby et al. 1981). Enhanced growth of vegetation and nitrophilous lichens, coupled with the authors' find of an ancient baleen Dovekie snare, attested to the past use of the colony.

Ijutuk Island was not visited by Finley and Evans (1984); however, it was indicated to them that the colony there was larger than the one at Abbajalik Island (A. Qaqqasiq, pers. commun., *in* Finley and Evans 1984). Only a tentative location could be given by the authors. More recent inquiries about these colonies indicated that they were quite well known to the local community, but were difficult to reach due to the pattern of ice breakup (M.L. Mallory, pers. obs.). Based on the above observations and studies in Greenland, Dovekies likely occupy the colonies from early May to late August (Finley and Evans 1984; Harris and Birkhead 1985).

Approximately 500 Arctic Terns along with some Common Eiders nest on Abbajalik Island (Finley and Evans 1984). Studies are needed to determine the size of colonies at both islands and to investigate any other potential sites in the region.

Sensitivities: Auks in general are sensitive to human, airplane, and boat disturbance at the colony. Pollution in Davis Strait may affect 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 (Imperial Oil Ltd. 1978; Petro-Canada Ltd.



1979; DIAND 1982). Drilling activities and an increase in air or marine traffic could subject feeding and nesting areas to disturbance and pollution.

Status: None.

NU Site 27 – Qaulluit (Cape Searle)

Location: 67°14'N, 62°28'W

Size: 1 km²

Description: Qaulluit (Inuktitut for fulmars) was formerly known as the Cape Searle key terrestrial habitat site (Alexander et al., 1991). Cape Searle is located on the northeastern tip of Qaulluit Island in Merchants Bay, eastern Baffin Island, approximately 100 km southeast of Qikiqtarjuaq (Broughton Island) and just north of the Cumberland Peninsula. The rock of the island is a Precambrian cap overlying volcanic sediments (Kidd 1953; de Kemp 1999). The two rock towers of Cape Searle rise 430 m from the ocean. The sides of the towers are orange with *Caloplaca* lichen, and the flat tower surfaces are luxuriant in graminoid vegetation.

Landfast ice in Merchants Bay and between Qaulluit and Padloping islands generally forms in late October and remains through July. However, leads form close and parallel to shore in April, creating a close floe edge (Smith and Rigby 1981). The nearby marine region is described in Mallory and Fontaine (2004).

Cape Searle is close to the former community of Padloping Island (a U.S. Coast Guard Station) and the Distant Early Warning (DEW line) site on Durban Island. There are several archeological sites on Qaulluit Island.

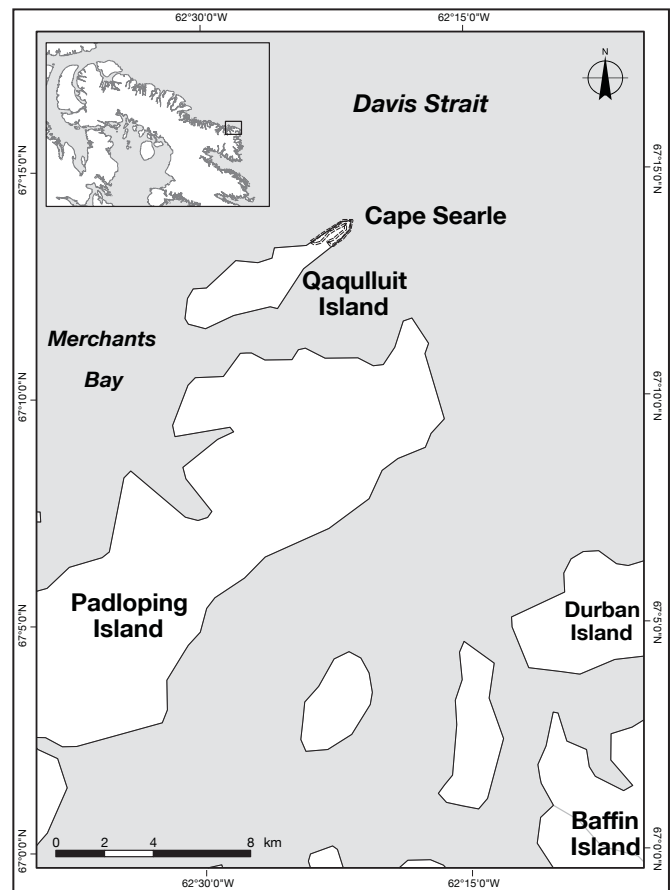
Biological value: Cape Searle (Qaulluit) was considered to be Canada's largest colony of Northern Fulmars, at approximately 100 000 pairs (Nettleship 1980). However, this estimate was based on a single survey from 1973. Wynne-Edwards (1952) had previously estimated at least 200 000 fulmars at the site. Recent survey estimates (2001) place the colony size at approximately 44 000 occupied breeding sites (Mallory and Gaston 2005; Gaston et al. 2006). If this estimate is accurate, the Qaulluit colony represents approximately 22% of the Canadian population. Glaucous Gulls, Iceland Gulls, and Black Guillemots are also numerous here (Nettleship 1980).

This marine area is also important for many marine mammals, especially walrus and ringed seal.

Sensitivities: Nesting seabirds are sensitive to disturbance and the pollution of their feeding areas.

Potential conflicts: Western Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979). There is also increasing activity by cruise ships in the eastern Arctic (Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of seabirds and pollute their feeding areas.

Status: Cape Searle is an International Biological Programme Site (Site 7-6; Nettleship 1980), an Important Bird Area in Canada (NU003; IBA Canada 2004), and a



Key Marine Habitat Site in Nunavut (Site 21; Mallory and Fontaine 2004). The community of Qikiqtarjuaq is working with CWS to create a National Wildlife Area for Qaulluit.

Location: 66°56'N, 61°46'W

Size: 2 km²

Description: Akpait was formerly known as the Reid Bay key terrestrial habitat site (Alexander et al. 1991). It is situated approximately 130 km southeast of Qikiqtarjuaq (Broughton Island) and 37 km northeast of Cape Dyer, on the eastern tip of the Cumberland Peninsula of Baffin Island. It is a promontory overlooking Akpait Fiord. The location of the colonies is known as “The Minarets” to seabird researchers (Gaston and Smith 1987).

The promontory is split by a small fiord, with the bird colonies on the southern side. The area is divided into steep headlands that rise dramatically to 915 m above sea level. The south headland is composed of a complex series of steep rock pinnacles and ridges bordered by a high talus slope and beach. Like Cape Searle, the rock of the island is of Precambrian sedimentary composition (de Kemp 1999). Rocks and islets protrude from the sea surface just offshore. Ice covers the fiords between October and July, but leads along the shore appear in April (Smith and Rigby 1981). The floe edge is typically close to Reid Bay (Mallory and Fontaine 2004).

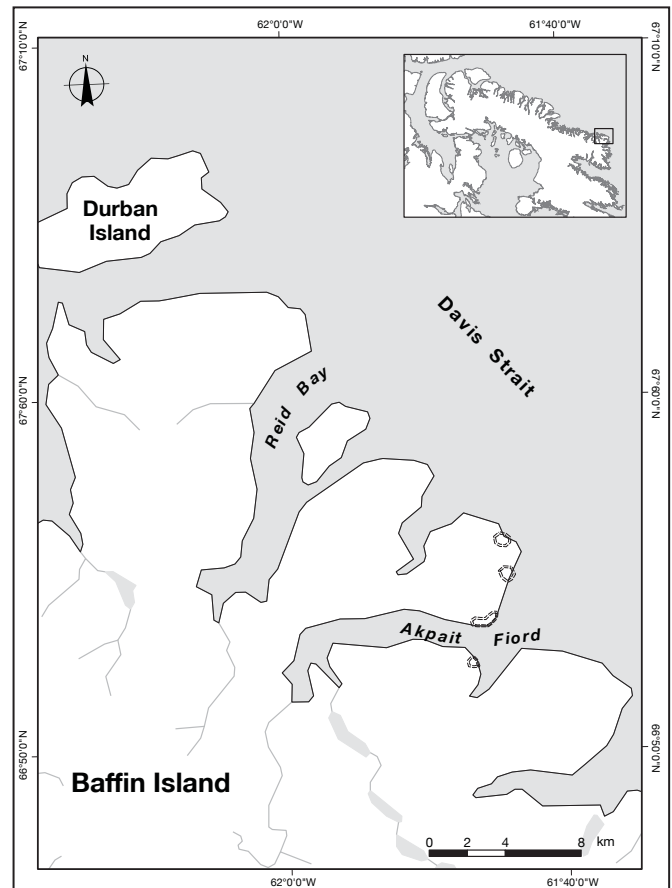
Biological value: Akpait is one of Canada’s largest Thick-billed Murre colonies, estimated at 133 000 pairs, or about 10% of the Canadian population in 1985 (Gaston and Smith 1987), somewhat smaller than the original estimate of 200 000 pairs (Nettleship 1980). Nonetheless, it is one of the five largest Thick-billed Murre colonies in Canada (Gaston and Hipfner 2000). Murres from Akpait have been observed up to 10 km offshore from the colony north to Broughton Island and are found regularly just north of Cape Searle (M.L. Mallory, unpubl. data). Northern Fulmars occupying about 20 000 breeding sites, or 10% of the Canadian population, also breed at Akpait (Gaston et al. 2006).

About 1200 pairs of Black-legged Kittiwakes nest at the site (Gaston and Smith 1987). Glaucous Gulls and Black Guillemots also breed here (Nettleship 1980). Inuit traditional knowledge suggests that Atlantic Puffins occur at Akpait (M.L. Mallory, unpubl. data), although they have not been reported in CWS surveys (Nettleship 1980; Gaston and Smith 1987). This marine region is used by seabirds from mid-April through October (Wynne-Edwards 1952).

This marine area is also important for many marine mammals, especially walrus, ringed seal, bearded seal, harp seal, and polar bear (Wynne-Edwards 1952; Stirling et al. 1980; Riewe 1992).

Sensitivities: Nesting seabirds are sensitive to disturbance and the pollution of their feeding areas.

Potential conflicts: Western Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979). There is also increasing activity by cruise ships in the eastern Arctic (Wakelyn 2001).



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

Status: Reid Bay is recognized as an International Biological Programme Site (Site 7-9; Nettleship 1980), an Important Bird Area in Canada (NU072; IBA Canada 2004), and a Key Marine Habitat Site in Nunavut (Site 21; Mallory and Fontaine 2004). The community of Qikiqtarjuaq is working with CWS to create a National Wildlife Area for Akpait.

NU Site 29 – Western Cumberland Sound Archipelago

Location: 65°30'N, 67°05'W

Size: 9327 km²

Description: Western Cumberland Sound is a rough coastline penetrated by many fiords and bays and dotted with numerous small islands. The key habitat site is composed of the many cliff faces and islands on the coast, between Clearwater Fiord and Chidliak Bay, and also in the Leybourne Islands. Pangnirtung is located 100 km to the northeast. Rocks of this region are principally Precambrian granite and gneiss (de Kemp 1999).

In western Cumberland Sound, landfast ice usually forms by late October and may persist until the following August, although leads and polynyas may form around islands during ice breakup. The marine environment near Cumberland Sound is summarized in Mallory and Fontaine (2004).

Biological value: Several thousand Common Eiders (*S. m. borealis*) concentrate along the coasts and fiords of Cumberland Sound during August and September (MacLaren Atlantic Inc. 1978b). The breeding population in Cumberland Sound is unknown, but likely represents 1% of the *borealis* population in Canada. Over 1000 Black Guillemots were surveyed in Cumberland Sound in August 1977 (MacLaren Atlantic Inc. 1978a), representing 1.3% of the Canadian population.

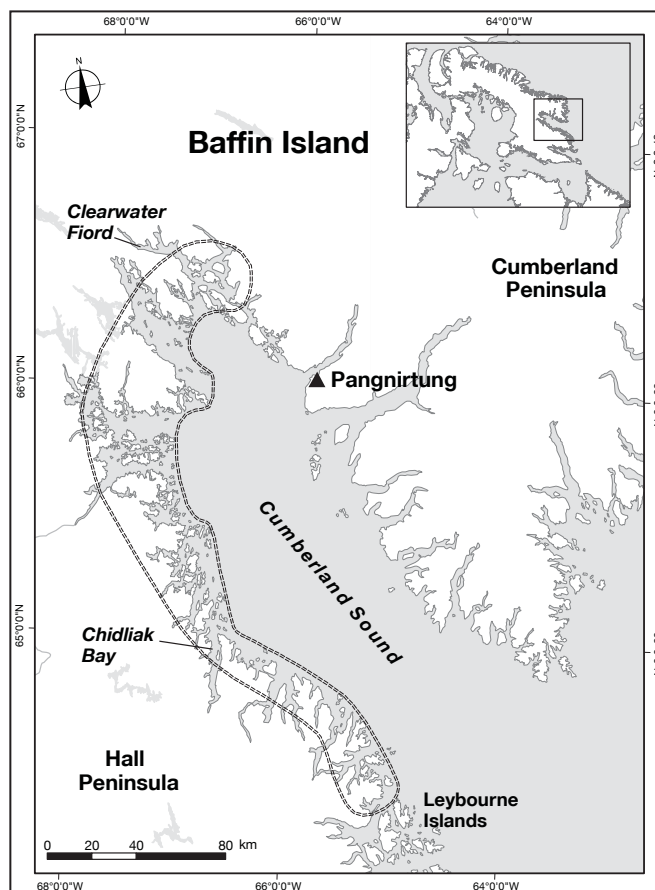
Hundreds of Iceland Gulls (*L. g. kumlieni*) are found in and around the mouth of the Sound in August. The islands of western Cumberland Sound support the largest breeding concentration of Iceland Gulls in Canada (Riewe 1992; A.J. Gaston, pers. commun.). Surveys in 1973 and 1985 documented over 200 Iceland Gull colonies, representing 12 000 pairs (10% of which were probably Glaucous Gulls; CWS, unpubl. data). Snell (2002) estimated a Canadian population of 5000 pairs (which included only an estimate of Cumberland Sound populations); thus, the Cumberland Sound colonies represent nationally and globally significant proportions of the population (Snell 2002). New surveys are needed to confirm colony sizes.

Northwestern Cumberland Sound is an important marine area for a variety of marine mammals, including beluga, various seal species, and walrus (Stirling and Cleator 1981; Riewe 1992).

Sensitivities: Seabirds are sensitive to disturbance and pollution of their staging and foraging areas.

Potential conflicts: None.

Status: None.



Location: 66°10'N, 74°00'W

Size: 13 491 km²

Description: The Great Plain of the Koukdjuak is an extensive sedge lowland on Baffin Island, bordering the southeastern shores of Foxe Basin. Lack of relief on the plain and high tides in Foxe Basin combine to form a tidal zone, which extends up to 15 km inland. The wide marshy plain is dotted with shallow rounded lakes and wetlands and is drained by innumerable small sluggish streams. The underlying bedrock consists of limestone and shales of Paleozoic origin, with scattered granitic outcrops. The inland limit of the plain is marked by raised beach ridges 25–80 km from the coast.

Biological value: The largest goose colony in the world is located at this site. In the summer, probably well over 2 million geese, mainly Lesser Snow Geese, are dispersed throughout the key site. In 1973, 446 600 nesting Lesser Snow Geese were recorded at this colony (Kerbes 1975), and in 1979, 454 800 nesting Lesser Snow Geese were present (Reed et al. 1987). More recent counts (Kerbes et al. 2004) indicate a nesting population >1.7 million Lesser Snow Geese — about 38% of the Canadian population of this species in 1997–1998. Flocks of non-breeding birds are generally found inland from the coastal nesting areas. Lesser Snow Geese arrive at the colony in the last week of May. After the hatch, adults and young disperse to inland feeding sites. They begin to leave the area by early to mid-September.

Over 100 000 Cackling Geese have been present in the key site in recent years (CWS Waterfowl Committee 2003). This number would probably make up at least 35% of the overall population.

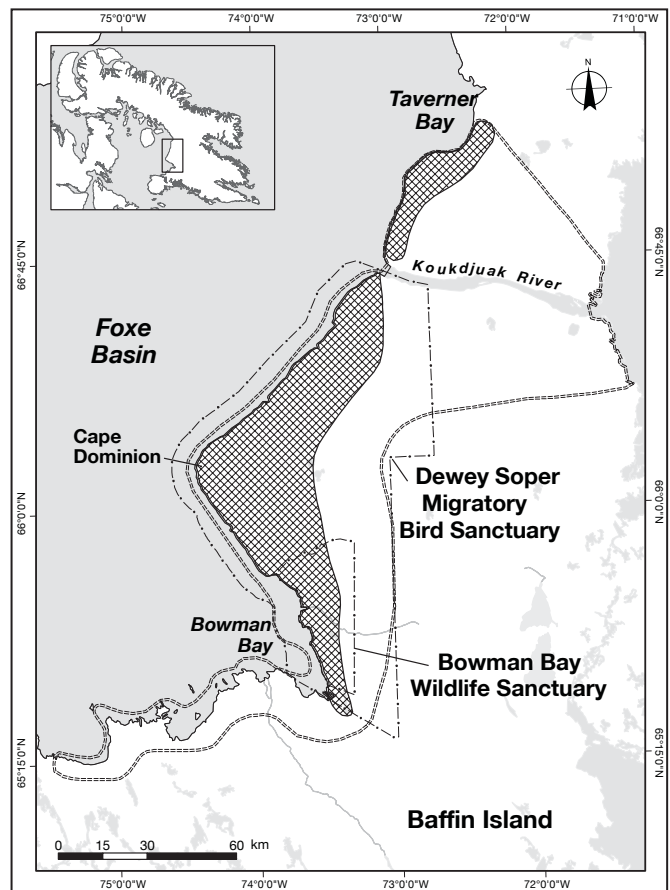
Approximately 1600 Atlantic Brant (1% of the Canadian population) were recorded in the Cape Dominion area in 1979 (Reed et al. 1980). More recent aerial surveys indicate that 2600 adult Atlantic Brant (plus additional young) and 3200 adults plus young were present along the coast of the key site in 1998 and 2001, respectively (K. Dickson, pers. commun.). Thus, about 2% of the Canadian population of Atlantic Brant would have occurred in the key site in those years. Other waterfowl species in the area include Long-tailed Ducks and King and Common eiders.

Over 1500 Sabine's Gulls nest within a few kilometres of the coast in this area (Gaston et al. 1986), and this represents 2% of the estimated Canadian population.

Red Phalaropes and other shorebirds are abundant, but there are currently no estimates of numbers for these species.

A major caribou migration route crosses the Koukdjuak River.

Sensitivities: Geese and other birds are sensitive to disturbance and the degradation of their lowland habitats. As witnessed at other sites in the Hudson Bay region, increasing numbers of Snow Geese could have negative effects on lowland habitats.



Potential conflicts: None.

Status: Part of the key site is included within the Dewey Soper Migratory Bird Sanctuary. The Bowman Bay Wildlife Sanctuary is located within the Dewey Soper Migratory Bird Sanctuary. The sanctuary is a Ramsar site (Wetland of International Importance) (Ramsar 2005), an Important Bird Area in Canada (NU078; IBA Canada 2004), and an International Biological Programme Site (Site 7-4; Beckel 1975).

NU Site 31 – Foxe Basin Islands

Location: 68°00'N, 75°05'W

Size: 12 977 km²

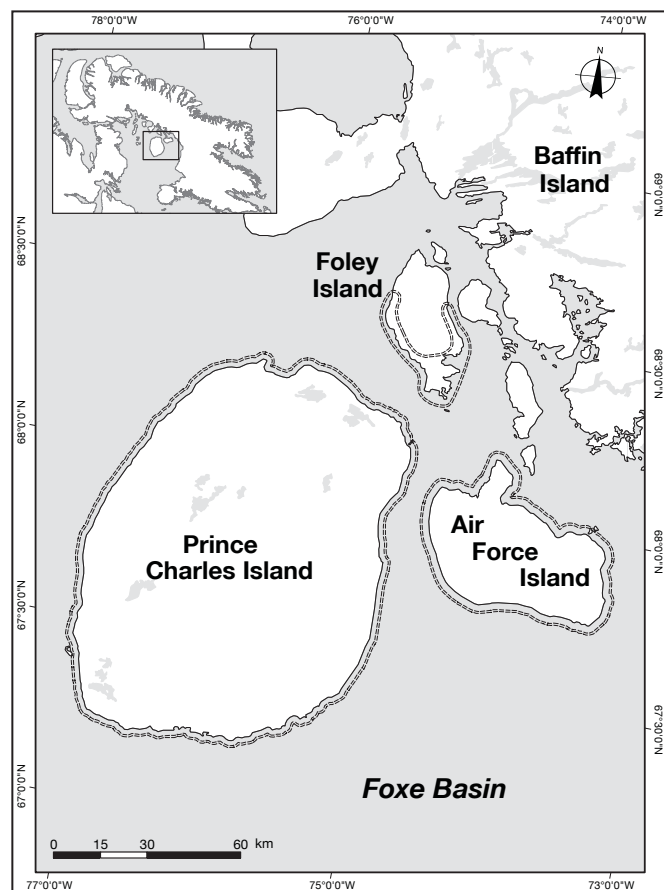
Description: This site consists of Prince Charles Island, Air Force Island, and part of Foley Island, located in east-central Foxe Basin. The coasts of these islands have extensive intertidal mudflats and gently sloping, well-vegetated shorelines. The inland areas, particularly on Prince Charles Island, have low relief and are dotted with small lakes and ponds. The islands are vegetated predominantly by a sedge–grass complex (Gaston et al. 1986; Morrison 1997).

Biological value: Over 40 species of birds have been observed in the Foxe Basin islands, and 26 are known to breed. This site supports nationally significant populations of at least 11 bird species. The Foxe Basin islands have been recognized as a significant nesting area for Atlantic Brant since the first detailed surveys in 1979. The estimated breeding population at this time was 1800 (Reed et al. 1980). Early summer surveys of Prince Charles and Air Force islands in 1996 and 1997 (Johnston and Pepper, in prep.) recorded 20 000 Atlantic Brant (11% of the Canadian population), 60 000 Lesser Snow Geese (1%), and 4000 Cackling Geese (3%). The principal areas for Brant are the northern and southern shores of Prince Charles Island and the southern shore of Air Force Island. Recent late-summer surveys over these islands counted in excess of 140 000 Lesser Snow Geese, which represents 3% of the Canadian population of this species (K. Dickson, unpubl. data). A total of 36 000 Sabine's Gulls was also observed on these two islands, and this represents at least 50% of the Canadian population. Ross's Gulls have nested at Prince Charles Island, one of four known nesting sites in Canada (Béchet et al. 2000).

Ground surveys on Prince Charles and Air Force islands also recorded an abundance of shorebirds: 202 000 White-rumped Sandpipers (50% of the Canadian population; Morrison et al. 2001), 301 000 Red Phalaropes (33%), 67 000 Dunlins (9%), 24 000 Ruddy Turnstones (10%), 14 000 American Golden-Plovers (9%), 11 000 Black-bellied Plovers (6%), and 2100 Purple Sandpipers (14%) (Johnston and Pepper, in prep.). Surveys by Morrison in 1989 recorded similarly high shorebird abundances on Prince Charles Island (Morrison 1997). King Eiders, Common Eiders, Long-tailed Ducks, and Herring Gulls are also common breeders. These numbers, however, do not take into account the turnover of birds moving farther north and the importance of the islands to migrating individuals.

Sensitivities: Extremely high densities of Lesser Snow Geese may affect nesting habitat for shorebirds. Nesting and moulting birds are sensitive to disturbance. Pollution of surrounding marine areas would be detrimental to local populations.

Potential conflicts: None.



Status: This key site is an Important Bird Area in Canada (NU011; IBA Canada 2004).

Location: 68°33'N, 78°45'W

Size: 326 km²

Description: North Spicer Island is situated in northern Foxe Basin approximately midway between Prince Charles Island and Melville Peninsula. The island is low lying, not exceeding 100 m in elevation. Wet sedge meadows and areas of standing water cover much of the island. Raised beaches occur on the east coast south of Skelton Bay.

Biological value: A colony of approximately 400 Atlantic Brant nested on this island in 1979 (Reed et al. 1980). Approximately 1250 adults were banded and 142 goslings were observed during a subsequent survey in 1980 (Reed and Dupuis 1980). This total represented 1% of the Canadian population of Atlantic Brant. Brant occurred throughout the island, although they were most numerous near the coast.

Sabine's Gulls, Arctic Terns, Long-tailed Ducks, Pacific Loons, and Red-throated Loons were also observed on the island (Gaston et al. 1986; A. Reed, pers. commun.). Aerial counts in 2003, associated with radio-tracking of Atlantic Brant, indicated that at least 280 Sabine's Gulls were present on the island (K. Dickson, pers. commun.).

Sensitivities: Nesting and moulting Brant are sensitive to disturbance.

Potential conflicts: None.

Status: None.

