

# Eastern Arctic Mariner's Guide

The following marine mammals are common in the eastern Arctic, however, other species may also be seen. It's possible for marine mammals to venture outside of their common habitats and be seen elsewhere.

#### **Bowhead Whale**

**Length:** 13-19 m

**Appearance:** Blue-black body with white markings on

the chin, belly and just forward of the tail. No dorsal fin or ridge. Blow is V-shaped and bushy, reaching 6 m in height.

**Behaviour:** Often alone but sometimes in groups of 2-10.

Sensitive months (calving and foraging activities and risk of ice entrapment): J F M A M J J A S O N D **Status:** Special concern

#### **Beluga Whale**

Length: 4-5 m

Appearance: Adults are white and young are grey. No dorsal fin, only a small portion of the body is visible out of the water. Blow is low and hardly visible.

**Behaviour:** Found in small groups, but sometimes hundreds to thousands during annual migrations.

Sensitive months (calving and foraging activities and risk of ice entrapment): J F M A M J J A S O N D

**Status:** Special concern

#### Narwhal

Length: 4-5 m

**Appearance:** Adults are speckled grey and white while young are dark grey/black. Males have a spiraled tusk up to 3 m long. No dorsal fin. Blow is puffy. Not much of the body is visible out of the water.

**Behaviour:** Often in groups of 15-20 but can be hundreds. Sensitive months (calving and foraging activities

and risk of ice entrapment): J F M A M J J A S O N D

**Status:** Special concern

#### **Greenland Shark**

**Length:** 2.5-4.5 m

Appearance: Coloration can be black, brown, grey or a spotted mix of all three. Two small dorsal fins. Behaviour: Slow swimming. Usually observed near the surface during the winter and retreats to deeper waters (180 to 550 m) during the summer.

Status: Not assessed

#### **Hooded Seal**

Length: 2-3 m

**Appearance:** Silver-grey with irregular dark blotches.

Males have a black "hood" on forehead and inflatable balloon-like nose membrane.

**Behaviour:** Solitary, except during pupping, mating and moulting. Sensitive months (pupping activities): JFMAMJJASOND

**Status:** Not at risk

#### **Bearded Seal**

Length: Up to 2.5 m

Appearance: Grey with brown tinge on the head and lighter coloring on the underside. Long, white whiskers and square shaped front flippers.

Behaviour: Solitary, but form small groups during mating and moulting.

Sensitive months (pupping activities): J F M A M J J A S O N D

Status: Data deficient

### Harp Seal

Length: Up to 2 m

**Appearance:** Light grey body with black or brown head and long, black 'harp-shaped' saddle on the back.

Behaviour: When migrating, the seals leap out of the water like dolphins.

Sensitive months (risk of disturbance): JFMAMJJASOND

Status: Not assessed

#### Ringed Seal

Length: Up to 1.5 m

**Appearance:** Dark grey body with light rings on the back and silver colouring on the front.

Behaviour: Associated with ice floes and pack ice. Maintain breathing holes throughout winter.

Sensitive months (pupping activities): J F M A M J J A S O N D

**Status:** Not at risk

http://www.sararegistry.gc.ca/virtual\_sara/files/cosewic/sr\_beluga\_whale\_e.pdf https://www.sararegistry.gc.ca/virtual\_sara/files/cosewic/sr\_narwhal\_e.pdf

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Arctic Biological Consultants, Winnipeg, MB for Canada Department of Fisheries and Oceans, Igaluit, Nunavut. iv+ 32 p.

## **Killer Whale**

Length: 8-9 m

**Appearance:** Black body with white underside and spot behind the eyes. Triangular dorsal fin in the middle of the back, reaching up to 2 m. Blow is tall and column-like; approximately 4 m in height.

Behaviour: Typically form groups of 2-25.

Sensitive months (risk of disturbance): J F M A M J J A S O N D

**Status:** Special concern

#### Minke Whale

Length: 6-9 m

**Appearance:** Dark grey, black or brown

back with a white spot on each pectoral fin. Large hook-shaped dorsal fin.

**Behaviour:** Mainly solitary. Snout appears first when they surface to breathe. Occasionally breach out of the water.

**Status:** No status

#### **Polar Bear**

Length: Up to 3 m

Appearance: White, but can appear yellow, or light brown.

Behaviour: Solitary, except during breeding and cub rearing.

Majority of time is spent on sea ice. Status: Special concern

### Walrus

**Length:** 2-3.5 m

Appearance: Brown skin. Broad flat muzzle,

white whiskers and two distinctive tusks.

Behaviour: Occur in tight groups on ice floes or on land.

Sensitive months (risk of disturbance): JFMAMJJASOND

Status: Special concern

#### **Distance Recommendations When Around Marine Mammals** (Changes in navigation should not be assumed

if they compromise safe operations)

Slow down and avoid abrupt course changes





or position vessel toward any marine mammal

Do not approach



Maneuver around marine

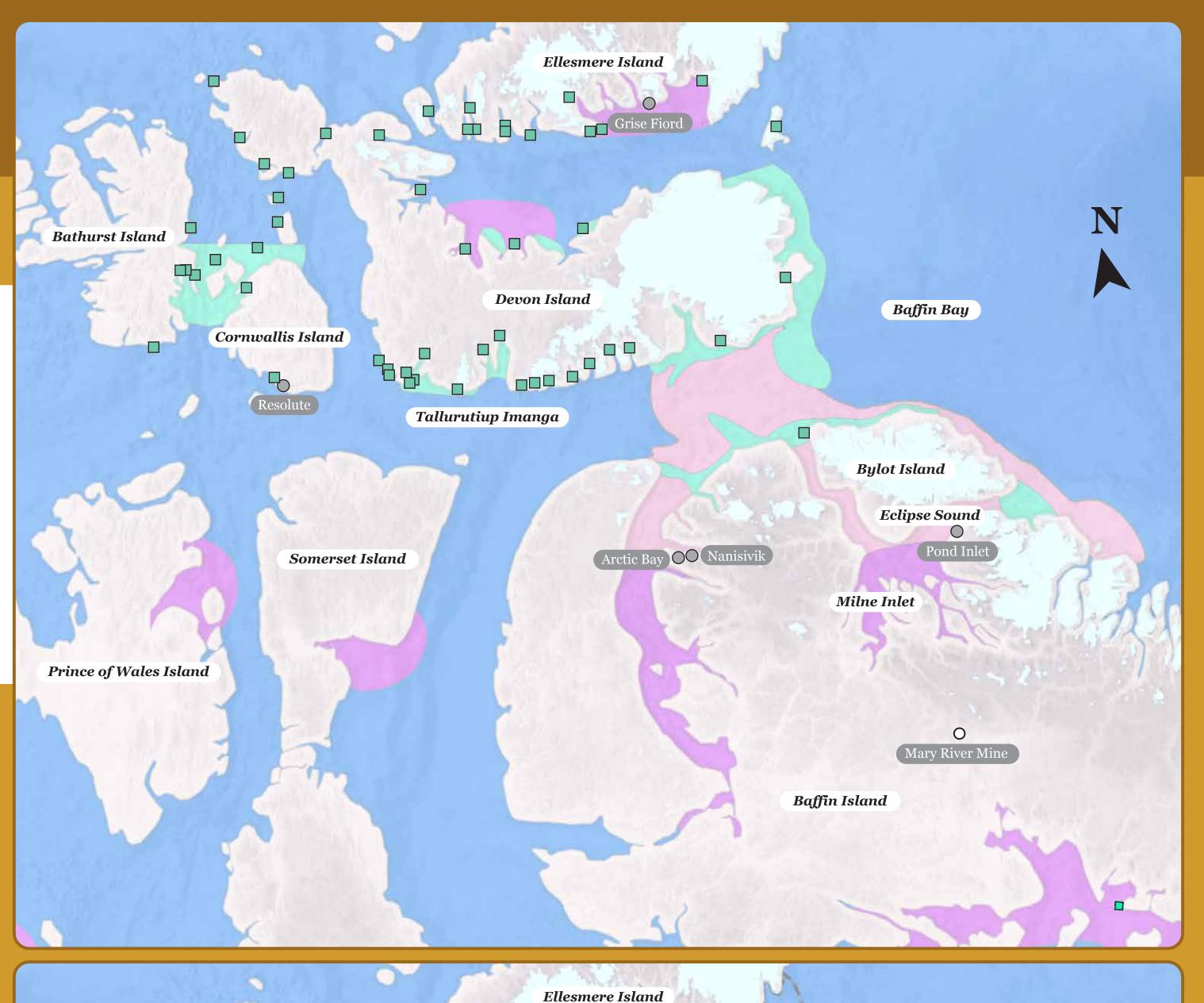
> mammals **2** km

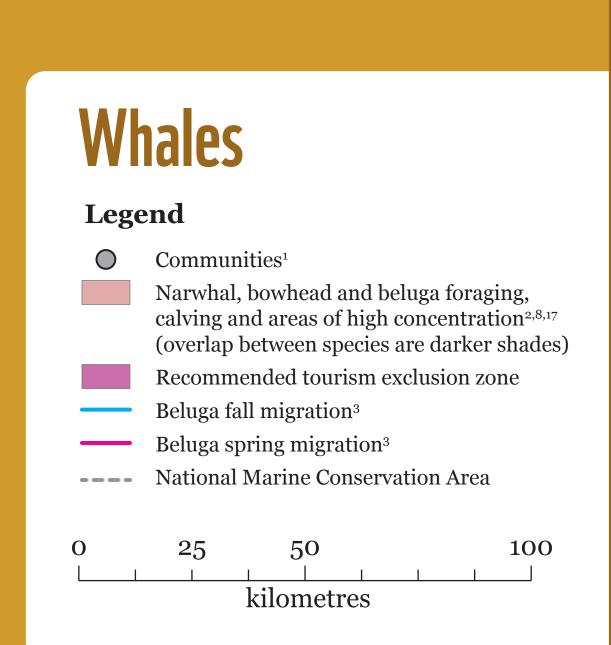
**5** km

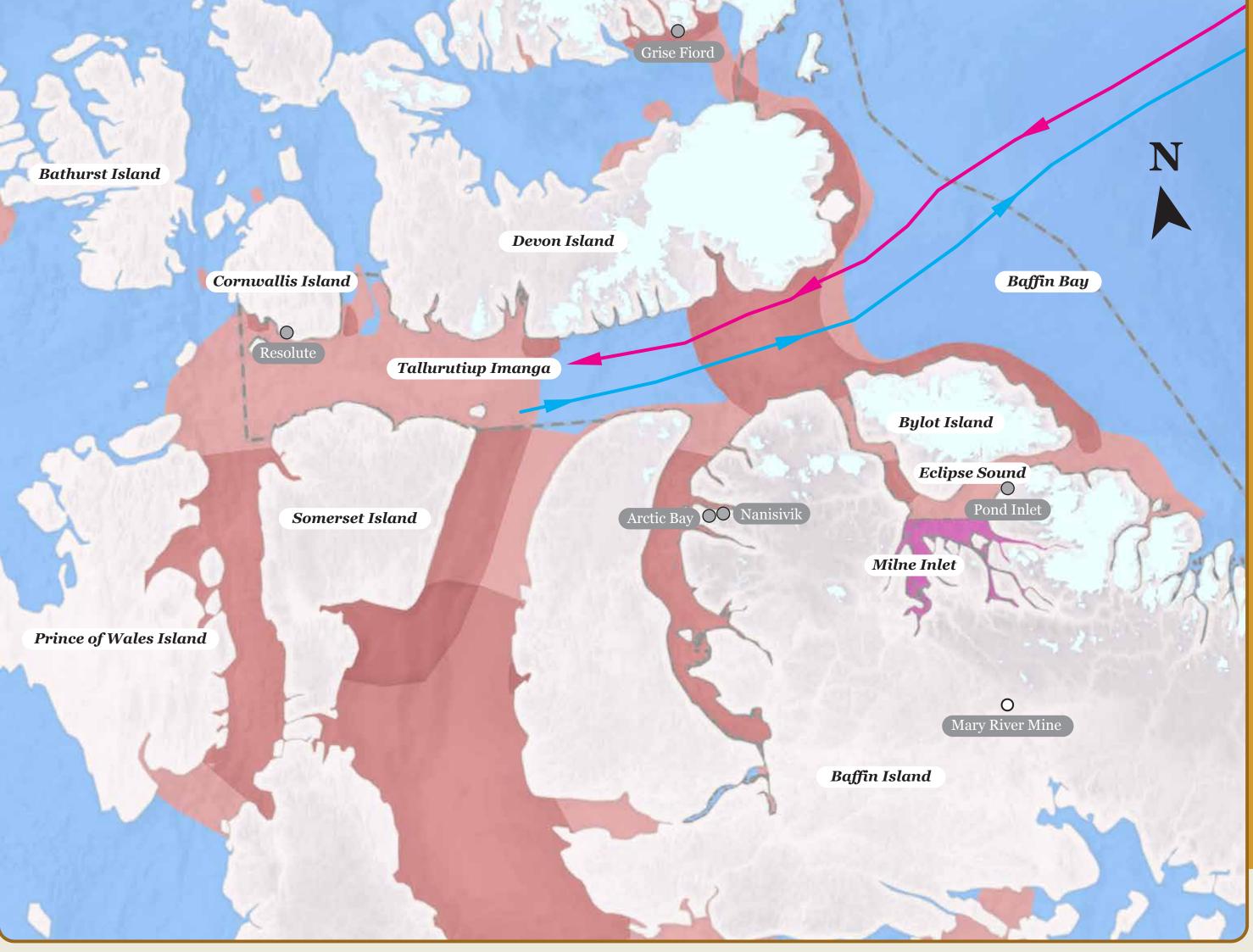


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### Seals, Walrus and Fish Legend Communities<sup>1</sup> Walrus haulouts<sup>2</sup> Walrus high concentration<sup>17</sup> Arctic char high concentration<sup>16</sup> Seal high concentration<sup>8,17</sup> 100 25 kilometres







#### NOTE:

For navigation purposes, please use charts provided by the Canadian Hydrographic Service.

#### WWF RECOMMENDATIONS

Based on community input and Traditional Knowledge, Science, Draft Nunavut Land Use Plan, Baffinland Shipping and Marine Wildlife Management Plan, North Baffin Regional Land Use Plan, and WWF engagement. Masters remain responsible for safe navigations.

#### Walrus haulout

Maintain a setback of five (5) km seaward of a walrus haulout, any time during the year<sup>9</sup>

#### Whale sensitive habitats

Be cautious in whale calving, foraging and migration areas from mid-July to mid-September and follow mitigation procedures in the vicinity of marine mammals:

- Wildlife will be given right-of-way;
- Maintain a straight course and constant speed, avoiding erratic behaviour;
- When marine mammals appear to be trapped or disturbed by vessel movements, implement appropriate measures to mitigate disturbance, including stoppage of movement until wildlife have moved away from the immediate area; and
- Adhere to setback distances (see chart) when in the presence of marine mammals9

#### Caribou sea ice crossing

Avoid shipping in caribou sea ice crossing areas from mid-January to mid-July9

#### Polynyas (open water in ice cover)

Avoid shipping in polynyas (approximately November to June)9

#### Floe edges

Avoid shipping through and around floe edges in April, May and June<sup>10</sup>

#### Ice breaking

Avoid shipping during ice formation, coverage and breakup<sup>9</sup> **Speeds** 

#### Maintain a straight course and constant speed of 7-10 knots in Eclipse Sound and Milne Inlet<sup>13,15</sup>

**Birds** When birds are present, year-round:

- 500 m setback for ships from seabird colonies
- 100 m setback from seabird colonies for zodiacs, kayaks and other small launch vessels
- 2 km setback distance from Ivory gull breeding sites
- 500 m setback distance from seaduck colonies, moulting aggregations of seaducks and waterfowl9

#### **Inuit travel routes**

Avoid crossing on-ice community transportation corridors when the sea is frozen, unless accompanied by ice-bridging9

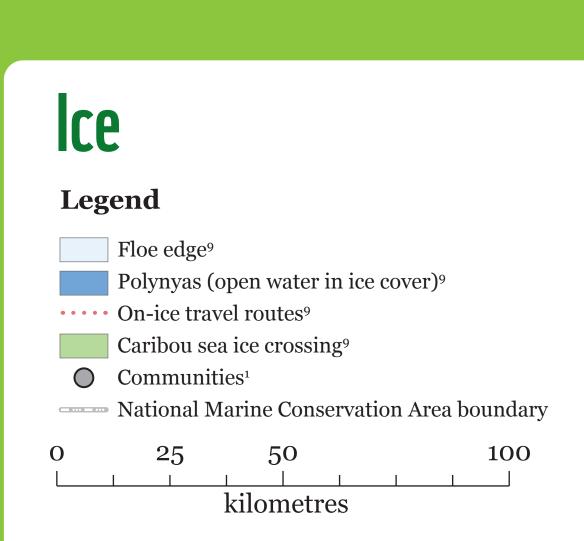
Seal pupping Avoid seal areas during pupping from late-February to June<sup>12</sup>

#### **Community use**

Give right-of-way, do not approach, or take photographs of hunting activities. Respect the "tourism exclusion zone" during the summer months



## Eastern Arctic Mariner's Guide





Ellesmere Island

**Devon Island** 

Tallurutiup Imanga

Arctic Bay OO Nanisivik

#### Conservation Legend National Marine Conservation Area boundary<sup>7</sup> Migratory Bird Sanctuary<sup>5</sup> National Wildlife Area<sup>5</sup> Baffinland shipping route<sup>11</sup> National Park<sup>5</sup> Communities<sup>1</sup> 25 100 50 kilometres

NOTE:

For navigation purposes, please use charts provided by the Canadian Hydrographic Service.

#### **LOCAL PHONE NUMBERS**

Contact the nearest community Hunters and Trappers Organization/Association for local knowledge of marine mammals

**Arctic Bay:** 867-439-9917 **Clyde River:** 867-924-6220 Pond Inlet: 867-899-8856 **Resolute:** 867-252-3616 Grise Fiord: 867-980-9959

Nunavut Wildlife Management Board: 867-975-7300

#### **WWF**

Please contact for errors, omissions, comments, additions

**Andrew Dumbrille**, 613-290-2006 adumbrille@wwfcanada.org

Melissa Nacke, 613-232-2509 mnacke@wwfcanada.org

## MARINE WILDLIFE SIGHTINGS, ENCOUNTERS & INCIDENTS

Report to: Department of Fisheries and Oceans, Steve Ferguson, 204-983-5057, steve.ferguson@dfo-mpo.gc.ca

Cornwallis Island

0 Resolute

Somerset Island

You may be asked to provide:

**Bathurst Island** 

Prince of Wales Island

- Date and time you found the animal or witnessed the incident
- Specific location, including latitude and longitude (if available) or driving directions (if accessible by land)
- Species or type of animal, including a description of the size, colour, features
- Condition of the animal alive, sick or injured, freshly dead, badly rotting away
- · Number of animals involved
- Your contact information, including name and phone number

#### CANADIAN WILDLIFE SERVICE

Mary River Mine

Baffin Bay

Bylot Island

Milne Inlet

**Baffin Island** 

**Eclipse Sound** 

Contact for permitting requirements if transiting in a Nunavut Migratory Bird Sanctuary or National Wildlife Area

Environment and Climate Change Canada P.O. Box 1870, 933 Mivvik Street Iqaluit, NU XoA oHo

Email: ec.nupermisscf-cwspermitnu.ec@canada.ca Telephone: 867-975-4636

#### **NATIONAL PARKS**

Sirmilik National Park: 867-899-8092 **Qausuittuq National Park:** 867-975-4673

- <sup>1</sup> Atlas of Canada, Northern Geodatabase, 2017 http://open.canada.ca/data/en/dataset/702ebdea-39ff-50e4-ab5f-de1150d16b7a <sup>2</sup> Higdon, J. 2016. Walrus haulouts in the eastern Canadian Arctic: a database to assist in land use planning.
- <sup>3</sup> Mary River Project Final Environmental Impacts Statement. February 2012. Appendix 8A-2 Marine Mammal Baseline
- <sup>4</sup> Mallory, M. and Fontaine, A. 2004. Key marine habitat sites for migratory birds in the Nunavut and Northwest Territories. Occasional Paper Number 109, Canadian Wildlife Service. http://www.ec.gc.ca/Publications/3CF6D6D9-A460-4348-9C10-
- 79648C948B2E/KeyMarineHabitatSitesForMigratoryBirdsInNunavutAndTheNorthwestTerritories.pdf <sup>5</sup> Canadian Council on Ecological Areas (CCEA) <sup>6</sup> Higdon, J. 2017. Mapping Critical Whale Habitat in the Nunavut Settlement Area.
- <sup>7</sup> Received from Parks Canada, 2018 <sup>8</sup> Mary River Project. 2001. Marine Mammal Baseline Synthesis.

- <sup>9</sup> Draft Nunavut Land Use Plan. 2016. Nunavut Planning Commission. http://www.nunavut.ca/files/2016DNLUP/2016\_Draft\_Nunavut\_Land\_Use\_Plan.pdf
- <sup>10</sup> David Currie, P.Eng. Canatec Associates International Ltd. 2012. http://webmap.geoanalytic.com/download/wwf/polynya\_report.html <sup>11</sup> Received from Baffinland, 2017
- <sup>12</sup> North Baffin Regional Land Use Plan. 2000. http://www.nunavut.ca/files/North%20Baffin%20Regional%20Land%20Use%20Plan.pdf
- <sup>13</sup> Baffinland Iron Mines. 2016. Shipping and Marine Wildlife Management Plan. <sup>14</sup> Wilson, S.C., Trukhanova, I., Crawford, I., Doglova, E., Dmitrieva, L., and Goodman, S.J. Assessment & mitigation of impacts from icebreaking vessels on ice-breeding pinnipends in the Holarctic.
- <sup>15</sup> Conn, P. B., and G. K. Silber. 2013. Vessel speed restrictions reduce risk of collision-related mortality for North Atlantic right whales. Ecosphere 4(4):43 <sup>16</sup> The Lancaster Sound Region: 1980-2000. 1982. Issues and Options of the Use and Management of the Region. Lancaster Sound Region Study. <sup>17</sup> Stephenson, S.A., and L. Hartwig. 2010. The Arctic Marine Workshop: Freshwater Institute, Winnipeg, Manitoba, February 16-17, 2010. Can. Manuscript Rep. Fish. Aquat. Sci. 2934:vi+67p