

2011 AND 2012 NARWHAL CONSULTATION TOURS

SUMMARY OF COMMUNITY OBSERVATIONS ON NARWHAL

As part of the narwhal co-management process, Fisheries and Oceans Canada (DFO) organized three consultation tours to visit communities affected by changes in narwhal management (one tour in May 2011; and two simultaneous tours in March 2012). Representatives from the Government of Nunavut, Nunavut Tunngavik Incorporated, the Nunavut Wildlife Management Board, and the regional wildlife organizations participated as observers on each tour. Meetings were held with HTOs, hunters, and the public in each community, during which participants responded to and provided comments on the information presented by DFO. In addition, many participants described their knowledge of narwhal. Although it is an informal means of collecting Inuit Qaujimaqatungit, this information represents detailed, localized knowledge of narwhal distributions, movements, and biology – as well as the effects of human activities on such – that can inform decision-making.

(Please note, however, that the information contained in this document is a summary of the notes taken by the GN tour participants, and has not been verified by community members)

SCIENCE CONSULTATION TOUR BAFFIN REGION; 25 MAY – 1 JUNE 2011

Following the negative NDF decisions in 2010 for the Nunavut narwhal stocks of East Baffin Bay, Admiralty Inlet, and Northern Hudson Bay, DFO organized a tour of seven Baffin communities (the Kivalliq and Kitikmeot RWOs declined to participate). DFO presented some of the science that is known about narwhal populations in the Arctic, including the “summering stock” model, and described the CITES process; and communities were given the chance to provide feedback on the methods and results described (in particular the summering stock model), and were specifically asked to elaborate on local knowledge of narwhal movements and distribution.

General remarks

- All communities expressed their belief that there are many narwhal, and that it is southern “Greenpeace” groups that are pushing a notion that the species is endangered. They were not convinced that DFO Science is providing population estimates of sufficient accuracy, and were concerned that studies were infrequent, of short duration, and only performed in summer.
- All communities were concerned over the impacts of proposed seismic testing in Lancaster Sound, and increasing boat traffic, particularly cruise ships and cargo movements related to the Baffinland project at Mary River. The communities emphasized that stress from research, killer whale predation, overpopulation, entrapments, and climate change, may also alter narwhal mortality, distribution, behavior, and migration timing, as well as the distribution of narwhal prey species.

Clyde River

- Several HTO members agreed that the whales move north in spring, and spend the summer in Baffin Island fiords, when it is best to count them. Generally, Clyde River hunts between Ward Inlet and Home Bay (sometimes further south), and the stock they hunt is different to that in Pond Inlet. Many people emphasized that the whales move in groups both seasonally and annually, depending on feed availability and ice conditions. For instance, some whales moved permanently to Qikiqtarjuaq after mining companies completed exploration work near Clyde River.

Pond Inlet

- One HTO member described possible movements of stocks in the Jones Sound/Smith Sound area, suggesting they summered in the Devon Island area/Dundas Harbour and wintered in northern Baffin Bay.
- HTO members noted that they sometimes see narwhal from the Greenland stocks, and that these animals are larger, darker, and have thicker tusks that spiral less. They are harder to hunt than the Eclipse Sound stock.
- One community member described three groups of narwhal that form during the southern migration in the fall – the mature males, the breeding females, and a group of smaller, darker animals that have the best muktuk.

Arctic Bay

- According to Arctic Bay residents, Pond Inlet has noticed decreasing numbers of narwhal in Eclipse Sound, with increasing ship traffic. Conversely, Arctic Bay has noticed narwhal returning to Admiralty Inlet since the Nanisivik mine closed.
- It was agreed that the community shares a narwhal population with Pond Inlet; but it is more common than DFO thinks for narwhal to migrate west from



Admiralty Inlet to the Somerset Island area. It was suggested that the Admiralty Inlet stock may look different to other stocks, particularly in colouration.

- Community members suggested that narwhal return to summering areas to calve, and to feed in the fiords. Around Arctic Bay, they are skinny when they arrive in spring using the leads and sheltering from killer whales in the small bays; but they then calve and feed at the end of Admiralty Inlet, leaving in fall.

Resolute Bay

- There are more narwhal coming into the Resolute Bay area than previously, perhaps due to decreases in ice cover, increased shipping in the Northwest Passage, or a larger population. This was corroborated by other communities, who also mentioned that they are being seen more frequently further west, near Taloyoak and even Gjoa Haven. The narwhal are believed to calve near Bathurst Island, where the water is shallower and warmer; so the population doubles on the fall migration, as it includes the newborn calves, which are slower and often followed by seagulls.

Iglulik

(with participation by Hall Beach HTO)

- The Iglulik HTO confirmed that the Somerset Island and Northern Hudson Bay (NHB) stocks do not mix and that the NHB stock is usually resident for a longer period. The NHB stock calves at the head of Lyon Inlet, so the animals do not move far up the coast towards Hall Beach. The muktuk from the slightly larger Somerset Island animals is preferred, so most people hunt this stock. However, while the Nanisivik mine was in operation, there were fewer narwhal coming from the Admiralty Inlet area to Iglulik.

Qikiqtarjuaq

(with participation by Pangnirtung HTO)

- Three whales that were tagged in Eclipse Sound were seen in Cumberland Sound. Other people emphasized that narwhal from Qikiqtarjuaq migrate north to Pond Inlet, and when they return it is with many more calves.
- Some community members considered the Home Bay narwhal as a separate stock.

IFMP CONSULTATION TOURS

Following co-management discussions to draft an Integrated Fisheries Management Plan for narwhal in Nunavut, two consultation tours were organized in March 2012 to present it to the communities and gather their feedback on the potential new measures. Although this tour did not have a stated purpose of collecting Inuit Qaujijatuqangit on narwhal, many of the comments on the proposed management regime were supported by local knowledge.

Western region; 19 – 24 March 2012

Kugaaruk

- There was concern expressed that killer whales may be increasing in numbers or changing their migratory patterns, and are feeding on narwhal.

Repulse Bay

- There was much discussion around how the decision to restrict tusk trade was based on the last survey conducted by DFO, which was seriously flawed. The hunters commented that they have not noticed any decrease in narwhal numbers.

- Hall Beach representatives noted that historically they harvested in Lyon Inlet and should be allowed to continue this tradition if they so wished.
- Increased killer whale sightings were a concern, as was their possible impact on narwhal stocks. Narwhal seen at the Repulse Bay flow edge in February are thought to be avoiding killer whales.

Grise Fiord

- Grise Fiord has seen record numbers of narwhal in the community over recent years. There may be three different stocks of narwhal in the community during summer.

Baffin region; 19 – 31 March 2012

General remarks

- The East Baffin communities in particular were concerned about the age of the survey used to determine their TALC, and its coverage (e.g. the survey lines were to the north and south of Home Bay, and the survey did not cover the southern portion of the management unit, near Pangnirtung and Iqaluit).
- They are also concerned about other impacts on narwhal, including killer whale (and to some extent polar bear) predation, which is reportedly increasing; disturbance from shipping, sonar, and research; and habitat damage through mining or oil drilling.

Pangnirtung

- The HTO stated that they do not have a summering stock of narwhal.
- Tusked narwhal will enter Pangnirtung fiord, including some that were tagged in Eclipse Sound. Narwhal arrive near the mouth of Cumberland Sound in February, and stay in that open-water area

over winter. Hunters saw narwhal in April around Cumberland Sound, migrating north towards Qikiqtarjuaq. Although hunters saw many narwhal in 2011 at the floe edge, they were unable to harvest as many as they wished as there was too much ice and wind.

- Pangnirtung sees, and harvests, more beluga than narwhal, as beluga calve in the Sound and fiords.

Qikiqtarjuaq

- Qikiqtarjuaq felt that the East Baffin management unit was too large, that their whales are separate from those in Pangnirtung and Iqaluit. In particular, HTO members repeatedly described Home Bay as the main area where narwhal summer along the coast (although Qikiqtarjuaq hunters sometimes also hunt narwhal at Pakalopin (?), south of the community). Home Bay has some open water even in winter, so whales can also be harvested there in the spring and fall, since hunters can start seeing migratory whales as of March. Qikiqtarjuaq hunters will hunt narwhal that are further offshore than will many other communities, since narwhal winter offshore from Qikiqtarjuaq, and calve in this area in both summer and winter (however, there is no single calving area for narwhal).
- Qikiqtarjuaq is seeing more narwhal, especially larger numbers of smaller, dark whales (young). They never used to hunt narwhal because they wouldn't see them (people in Qikiqtarjuaq started harvesting narwhal in 1967), but now they see more and more. Narwhal can stay underwater for 30-45 minutes.
- HTO members agreed that the information provided regarding narwhal migration was fairly accurate. However Qikiqtarjuaq believes the narwhal population is shared with Greenland, since last year, they saw different narwhal at Home Bay than previously.

Clyde River

- Clyde River hunters do sometimes hunt in Home Bay, but generally focus the hunt at the floe edge and in the fiords near the community. However, they consider Home Bay to be a traditional area of Clyde River rather than Qikiqtarjuaq.
 - HTO members proposed changing the boundaries of the East Baffin MU, reasoning that narwhal only occasionally go as far south as Iqaluit, but go further offshore than the current MU boundaries.
 - The community is seeing more whales now than previously, but fewer walrus. Two years ago, the community noticed more, older narwhal, a lot with tusks and even double tusks. Hunters see a lot of narwhal that have been wounded or scarred, coming from Pond Inlet or Greenland, and think that increasing ship traffic, research, and sonar devices in Eclipse Sound could drive the whales further south along the East Baffin coast. One HTO member saw a different type of narwhal last summer. He believes that animals are moving more due to climate change.
 - Narwhal will calve anywhere, not in specific fiords; and at any time of year, although usually in summer. One community member stated that narwhal will fight for food when the population gets too high.
- #### **Pond Inlet**
- The community is not seeing as many whales in the summer, possibly due to a longer ice-free season so that the whales move elsewhere; or to shipping and sonar devices in Milne Inlet that disturbs the animals. The narwhal, as well as other marine mammals such as seals and walrus, may have moved further west towards Resolute and Cambridge Bay, as they saw more narwhal last summer. Pond Inlet also heard from Clyde River that there were lots of narwhal near Clyde River last summer, and they now regularly see



whales between Pond Inlet and Clyde River, where there never used to be any during the summer. Pond Inlet and Clyde River whales have different tusks. Similarly, the whales were acting differently to usual, last year at the floe edge, as they weren't scared away when one was shot. Some hunters thought that these whales may have moved from their regular areas in Greenland or further north, due to oil drilling. The HTO was worried about the impacts of shipping (e.g. the Mary River ships) and oil drilling in Baffin Bay on narwhal and their wintering grounds. They would like DFO to maintain records of shipping activity, but are not currently concerned about cruise ship impacts. Community members were frustrated that they are penalized if the stock size decreases, but mining companies are not affected.

- Pond Inlet hunters usually harvest narwhal during four months of the year, with the greatest effort in May and June. Pond Inlet normally harvests most of their narwhal in summer; but this past year, harvested mainly at the floe edge.
- Hunters see calves, but don't know if there are more than previously. Somerset Island has a lot more whales than Eclipse Sound. There are traditionally whales around Hecla Strait, with some that go through to Iglulik. HTO members repeatedly discussed the whales that they see around Devon Island in the spring, that then go further north to Alexandra Fiord. These animals are larger with much bigger tusks, and do not mix with stocks around Eclipse Sound.
- Narwhal numbers have not been affected by an observed decrease in sea lice or cod, since they also feed on turbot and other groundfish. However, they now move from Eclipse Sound into the fiords sooner than previously, as there is no longer any reason (i.e. prey species) for them to remain in the Sound once the ice has left the fiords.

- Narwhal have different stocks. There is a separate stock of narwhal near Grise Fiord that never comes south to the Eclipse Sound area, although it may mix with other stocks in the northern wintering ground and even with Greenlandic stocks. These whales are much larger and generally migrate through Jones Sound up to the Parry Channel area for the summer. There is a summering stock that feeds and calves in Eclipse Sound/Tremblay Sound/Milne Inlet (but not in the fiords closer to Pond Inlet), and that may interchange with Admiralty Inlet whales. Other, migratory whales also pass through Pond Inlet in the spring, feeding for a short while in Eclipse Sound before heading west; and some migratory whales come back through in the fall, spending a two to three weeks near the community (although most animals head around the north side of Bylot Island, and fewer whales now come through Eclipse Sound than previously). The migrating groups of narwhal are mixed, including males, females, and young. Harp seals follow the narwhal.
- Narwhal have been seen calving at the floe edge, but hunters don't know how often they calve.
- Hunters haven't caught whales with harpoon scars from Greenlandic hunts; but Greenlandic hunters report that Canadian whales are easier to catch since they aren't used to being hunted from qajaqs.

Arctic Bay

- An HTO member confirmed that there is a separate high Arctic stock of narwhal that goes to Creswell Bay and even further north. These whales are larger and lighter in colour (e.g. pale spots and a very white belly), with a long, wide, and very straight tusk. Arctic Bay used to see them quite a lot, but now very rarely. Communities further west are now seeing more narwhal, with Taloyoak even chartering a plane to go narwhal hunting. Arctic Bay residents believe that narwhal populations are shared with Greenland,

since they see whales that have scars from Greenland harpoons, and vice versa. Arctic Bay hunters can distinguish whales from other areas, as they will often have chipped tusks or wounds from being in shallow water; whereas Admiralty Inlet is deep. The narwhal arrive in groups at the floe edge – males first, then females, then the juveniles. Hunters are seeing more narwhal calves, especially when the whales leave in the fall, since many narwhal calve at the head of Admiralty Inlet where the water is shallower. They also feed during the summer.

- Hunters are seeing more narwhal with injuries from killer whale attacks, as well as hearing more reports of killer whale sightings. Hunters have previously seen large numbers of beached narwhal on the west side of Admiralty Inlet.
- The community would like to see Lancaster Sound made into a protected area, as they are concerned about the impact of oil drilling on narwhal; and that they will be further restricted in their hunting if drilling causes a decrease in the marine mammal populations. The community is also concerned about the mine at Mary River, and the refurbishments at Nanisivik Naval Base, since they saw fewer seals when Nanisivik was in operation.

Iqaluit/Regional meeting

- IQ, as well as some tagged whales, shows some connection between the summering stocks in Admiralty Inlet and Eclipse Sound.
- Communities identified concerns with the East Baffin survey, in particular the survey extent and coverage. Some participants proposed that the East Baffin MU should be separated into two sections (northern i.e. Clyde River and Qikiqtarjuaq; and southern i.e. Pangnirtung and Iqaluit). It was suggested that there may be several summering stocks within the East

Baffin MU, at Home Bay, Scott Fiord, Buqqen (sp?), and just north of Cumberland Sound.

- Iqaluit is regularly seeing whales (narwhal and other species), even entering Frobisher Bay. They can now see up to 15 whales each year, when historically it was only an occasional occurrence. At the time of the meeting, narwhal were just starting to migrate north, and had been spotted off Pangnirtung.
- Some East Baffin communities were concerned about the interactions between narwhal and the turbot and shrimp fisheries.