A Study of Inuit Knowledge of the Southeast Baffin Beluga

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Report Prepared By

Peter Kilabuk

March, 1998

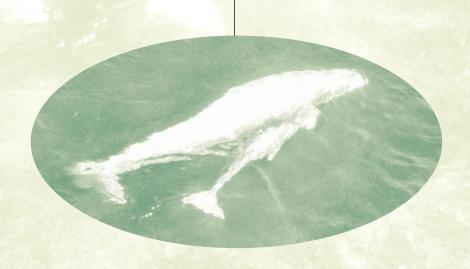
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The Southeast Baffin Beluga
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Final Report on A Study of Inuit Knowledge of the Southeast Baffin Beluga

REPORT PREPARED BY

PETER KILABUK

MARCH, 1998

FOR

THE SOUTHEAST BAFFIN BELUGA MANAGEMENT COMMITTEE



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Foreword

The collection of Inuit Traditional Knowledge in this report has been implemented by the current Southeast Baffin Beluga Management Committee (SEBBMC) which was a recommendation of the former SEBB Management Plan. The study was carried out in the three communities of Pangnirtung, Iqaluit and Kimmirut for which the SEBBMC is responsible. The information contained herein is from the knowledge and experiences of the people living in these communities.

Peter Kilabuk, Writer Pangnirtung, NT March, 1998

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Acknowledgments

I would like to thank the following people for their hard work in helping to complete this final report.

First, I'd like to thank the three community HTOs for their involvement, and especially the chairpersons for their guidance. I'd also like to thank the three cameramen for assisting me in the three communities: Mark Kilabuk in Iqaluit, Ricky Kilabuk in Pangnirtung and Eezeedsiak Padluq in Kimmirut. I'd also like to thank Daisy Sowdluapik, Eena Alivaktuk, Rosie Kilabuk and Mary Kilabuk for writing the transcripts, and finally, thanks to Jonah and Bill Kilabuk for their translation and transcribing services.

Again, thanks to everyone for all your help, dedication and encouragement.

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Introduction

This study has resulted in an abundance of Traditional Knowledge being obtained. It is through the sharing of Traditional Knowledge by the elders/hunters interviewed that I am able to submit this report on the Southeast Baffin Beluga and hunting.

Historically, fewer people have lived in the occupied areas of the Southeast Baffin. Most of the inhabitants were scattered along the coastal areas permanently residing in camps. By sharing what they had and conserving their catches even when game was abundant, the people were able to live in harmony with the wildlife and the surrounding environment and survived many hardships.

Today, many people in the bigger communities no longer live in harmony with the wildlife and the surroundings. Regrettably, a lot of Traditional Knowledge concerning the Southeast Baffin Beluga and its habitat has been lost over the past five decades. As Elder Nooveeya Ipeelee of Iqaluit said during the workshop, "I am glad I was given this opportunity at my age to pass along this information as I am no longer able to instruct out on the land." Nooveeya is of a past generation that used kayaks to hunt Beluga whales.

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Methodology

In planning and carrying out the study, the Nunavut Wildlife Management Board (NWMB), Department of Fisheries & Oceans (DFO), and the three communities were involved in the planning and collection of topics and questions for the three-day workshops. The study was carried out in three phases:

In Phase 1, Study Coordinator Peter Kilabuk visited each of the HTO boards to collect the topics for discussion and questions concerning the Southeast Baffin Beluga and methods of hunting Beluga whales.

In Phase 2, three-day workshops were carried out in the communities to collect the Traditional Knowledge of the Southeast Baffin Beluga as per the topics, issues and questions collected from Phase 1. The collection of information was done with eight Hunters/Elders who had been selected in Phase 1. The information was collected on videos which were then transcribed and translated into Inuktitut and English. Maps were also used to record ecological information.

Phase 3 involved the Study Coordinator who wrote the final report with the information provided by each of the communities.

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Overview of Southeast Baffin Beluga

Migration of whales

When Beluga whales leave the three communities in the fall, hunters are not certain where they go to winter.

Many believe some of the whales congregate in winter near the mouth of Frobisher Bay. This area is known by hunters from Iqaluit who hunt there when conditions permit. Beginning in April, whales are often seen from the floe-edge at all three communities. It appears that Iqaluit hunters can hunt both Pangnirtung and Kimmirut whale populations during this spring migration. In the summer very few whales are sighted around Frobisher Bay. Although an undetermined number of whales do summer around the bay, no permanent numbers are known to reside in the area.

Kimmirut hunters, with no whales summering in their area, instead hunt whales migrating towards Cape Dorset and beyond. It is in the fall migration that these whales return to the mouth of Frobisher Bay. The whales that migrate to the Clearwater Fiord reside there until fall or sometime in August after they have given birth to their young and have shed their skins or moulted. When they leave, they head towards the mouth of Frobisher Bay. However, due to high winds in the fall around the mouth of Frobisher Bay, minimal hunting for Beluga whales takes place. From this information, it appears that because of the extremely transient nature of the various whale populations –

especially during the summer season – only a minimal number are being hunted by each community as per the allowable quotas.

Interestingly, hunters in each of the communities are able to identify individual whales sighted at different times of the year and belonging to different populations. These whales are identified by their physical characteristics and behaviour.

DIFFERENT STOCKS

It is certain that different whale populations or stocks migrate through the Kimmirut area, as opposed to those whales that go up to Clearwater to give birth and shed. The populations – though similar in body size and behaviour – travel in opposite directions at the same time of year. It is not clear, however, which stock Iqaluit hunters are hunting in the summer and, in fact, this could be a separate, smaller population from the two mentioned.

CHANGES IN THE BEHAVIOUR, ABUNDANCE AND POPULATION OF WHALES

All three communities agree that behavioural changes have occurred due to the noise of motorized boats and snow-mobiles. Since the 1960s when motorized boats were first introduced to the North and hunters started using them to hunt whales, many changes have happened, both when and in the way the whales are hunted. Today, the whales are scattered in areas where they were once densely concentrated. Initially, the alien noise motorized boats brought was not feared. In fact, most whales were curious when they first heard them. Today, however, it is the last thing a whale wants to hear. Whales can hear from great distances and, as a result, avoid areas where motorized boats are heard. This has contributed to the thinning of whale concentrations and their population sizes.

Though Kimmirut and Iqaluit hunters have never been involved in commercial hunts to any

large degree, still they have
noticed a definite decrease
in the numbers of whales
available today compared
to the numbers they hunted five decades ago.

In Pangnirtung, the commercial hunts carried out by whalers from the late 1800s into the early 1900s have had a great impact that has resulted in a significant decrease in the whale population. The Hudson's Bay Company was also active in the commercial hunts of Beluga whales in the early 1900s. Great numbers were taken and as a result, elders recall that the size of the population continued to shrink even years after the commercial hunts were stopped.

Despite the quota given to each of the three communities, an emphasis for more commercial hunting was not a consideration of those interviewed, instead they see a need to implement better methods of conservation and hunting as a primary concern.

TRADITIONAL WAYS, MODERN WAYS AND EQUIPMENT

Today, there is a high degree of competition among the hunters. This is the result of a decline in Traditional Knowledge and the introduction of modern hunting equipment. Quotas are the most cited reasons given for the increase in competition among hunters. It is apparent that irreversible changes have occurred since the mass introduction of modern equipment that hunters avail themselves to today. The elders interviewed are still optimistic that there is a chance for compromise – by adopting and abiding by the practices of Traditional Knowledge, the elders feel that once again hunters can re-establish a harmonious relationship with the Beluga whales.

As hunter Jooeelee Papatsie of Pangnirtung stated during the study: "We, the younger group of hunters, have taken you away from your traditional ways and replaced them with our modern ways of rushing into everything." This is a strong statement advocating the use of Traditional Knowledge to help close the extensive gap in the use of Traditional Knowledge that today exists in each of the communities.

EDUCATIONAL NEEDS A PRIORITY

This study has introduced new views and understanding about the need to restore Traditional Knowledge as part of our school systems' curriculum. Currently, students learn about whales from other sources. There is no involvement from community elders on the subject. The three communities favour the creation and introduction of videos on selected topics. The videos could be produced in the communities and made available to the schools. There is also an identified need for written material in Inuktitut and English for teachers and students. Both videos and written material would promote Traditional Knowledge and skills.

There is also a desire to produce local or regional hunters' guidelines for hunting Beluga whales. These guidelines would ensure that hunters use the right equipment, that they use nets properly, butcher the whales properly, make safety a priority, use the proper calibre rifles, use proper harpoons and floats, practice proper hunting techniques and other related matters. An established set of guidelines would help ensure that there is minimal loss and wastage and keep the safety of hunters a priority. These guidelines would also be made available to the public in written form in Inuktitut and English.

Sampling program Carried out by DFO

The Beluga Sampling Program has been conducted in the southeast Baffin communities since 1989. The Department of Fisheries and Oceans has led the program. Hunters are supplied with sampling kits through the community HTO, and hunters are paid for the samples they return. The purpose of the program is to collect important information on Beluga hunting and tissue samples and measurements from Belugas that are harvested. This information is used primarily to answer questions about stock identity through genetic and contaminant studies, and to monitor the reproductive rate and general health of Belugas.

It is unfortunate that the three communities have very little or no knowledge of the sampling program. Most participants at these workshops had not been consulted on the intentions and goals of the program. Because there has been no proper community consultation, only a few active HTO board members have any knowledge on the program. All participants expressed a sense of urgency for proper

community consultations. This could be done with written material on the program and the ensuing results. The participants felt that hunters would be more willing to assist if they were made to understand more about the sampling program. They also feel that NWMB should be more proactive in making the program better known to hunters and people involved in the program. There is, at this time, a lot of mixed feelings towards the program and its progress as those who have contributed information feel that they are getting little, if any, feedback, on the study results. Consequently, some hunters are avoiding using the kits. This needs to be addressed by the NWMB and DFO.

Conclusion

Because this has been the most in-depth study to ever take place on the collection of Traditional Knowledge on the Southeast Baffin Beluga, the study has brought a better understanding to all the community participants. New opportunities and ways of hunting are being created with the information that has been collected, and new perspectives and views are being expressed. One would hope that this is how the study will be used – to improve the understanding and undertakings of all those involved.

I have enjoyed working with the people in the three communities and their hospitality was more than welcomed. I'd like to thank all those who gave me their advice, guidance and support in helping me to complete the study.

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Inuit Ecological Knowledge Study of the S/E Baffin Beluga

KIMMIRUT NT APRIL 8, 9 & 10, 1997

INTRODUCTION

listed below:

As part of the S/E Baffin Beluga Management Committee goals, an Inuit Ecological Traditional Knowledge Study was done in Kimmirut. Peter Kilabuk of Pangnirtung, with the involvement of the three communities, NWMB and DFO, planned out the study.

The Inuit knowledge and recommendations have been collected and are included in this report. The collection of the material was done with the involvement and support of eight hunters/elders in each of the three communities. This included the general knowledge, health, population, and hunting of the S/E Baffin Beluga. All the working material and final documents are the property of the NWMB and are available only through them.

The study was conducted at the Kimmirut HTO office with the group of eight hunters/elders

Newyaliak Qimirpik Hunter

Sandy Akavak Hunter/Elder

Josephee Padluq Hunter

Paulosie Lyta Hunter/Elder Simeonie Aqpik Hunter/Elder Joanasie Lyta Hunter/Elder Eliyah Michael Hunter Elder

Eeyeevadloo Josephee Hunter

Mikidjuk Kolola Hunter S/E Baffin Beluga

Committee Member

Peter Kilabuk Interviewer

Eezeedsiak Padluq Assistant and Camera Man

MIGRATION

From their many years of combined Traditional Knowledge, the group of hunters and elders interviewed believe that because Beluga whales are rarely encountered during the summer months, Kimmirut hunters are hunting mostly migrating whales.

The whales that migrate through Kimmirut first arrive at the floe-edge in the spring (around April). They travel from the east to the west towards Cape Dorset (see map #97-01 enclosed) and may be found feeding in the waters near Kimmirut. There are no known areas near Kimmirut where the Beluga whales spend any length of time (during summer). Most of the whales that migrate tend to travel outside Big Island near Kimmirut (refer to map 97-01) as the current of the tide is steadier, allowing the whales to travel further.

On their return migration through Kimmirut waters in the fall, the whales tend to travel the same paths but in bigger herds. It has been noted that compared to the past, the whales are reaching Kimmirut much later in the fall, closer to freeze up.

Changes in the migration of

THESE WHALES

According to the study participants, the whales that migrate through

Kimmirut nowadays appear later in the spring and in smaller numbers. It was noted that this decrease is not due to overhunting but rather due to some members of the population taking a different route during the migration. The decrease in numbers has been noticed since the early 1980s. Today, the whales do not return in the fall migration until much later – when the ice is forming and when it is difficult for the hunters to do any hunting by boat. The majority of the whales that migrate in these fall herds are females with young and juveniles. There are fewer male adults as there were originally in the mid 1900s.

Hunters in Kimmirut have very recently seen an increase in the number of individual whales and have noticed that the noise from motorized boats is deterring whales from reaching certain camps that were previously visited. This deterring effect changes from year to year, as does the number of returning whales.

Like Pangnirtung and Iqaluit, the main cause of this change in behaviour is attributed to the noise created by motorized boats and snowmobiles.

A more recent concern of the hunters has been an unknown source of explosive sounds that have been heard out in the open waters near Kimmirut. The sounds have been encountered by different hunters at different times in the summer. There is still no explanation for the cause of these sounds.

FEEDING

Beluga whales do not stay near Kimmirut in the summer. The only time they may visit is when they are feeding off Arctic cod at the floe-edge in the spring or when following the direction of the currents when searching for cod in the summer. It is also thought that after a period of time if no more disturbances are sensed, the previously-hunted whales return to feed. This may be at the next tide or the following day. Aside from cod, there are no other food sources available near Kimmirut, although some invertebrates have been found in the stomachs of whales. See feeding area on map #97-02.

There are no calving areas known near Kimmirut.

Populations and distribution of Migrating Whales

When migrating west, upon reaching Kimmirut waters, the whales travel in more scattered herds than they do in the fall upon their return. The whales are often seen in small groups or individually when feeding, they then regroup later to form bigger herds. If disturbed, scattered whales will also eventually regroup to form bigger herds from the same numbers. Today it is felt that there are fewer whales than there were 40 or more years ago. No actual numbers are available on how many fewer whales there really are. Hunters suggest that motorized boats and the noise they bring may be redirecting some of the whales elsewhere. Overhunting is believed to have had little to do with this decline.

COMMERCIAL HUNTS BY WHALERS OR TRADERS

According to the elders, in the early 1900s traders would trade for whale blubber. This, however, had a minimal effect on how many whales were actually hunted. Though some hunters may have traded blubber for tobacco if they couldn't make cash payments, most families only hunted what was needed for the camp. There were no organized hunts or blubber stored for the coming year or for trading which, if there had been, would have led to an increase in the numbers of whales being killed.

HEALTH OF THE BELUGA WHALES

Since the introduction of motorized boats, there is no evidence that there have been any detrimental changes in the general health of the Beluga whales. Though some individual whales have been found sick, too skinny or badly deformed, the general health of the Belugas has remained unchanged. Generally, the whales are fat when they reach Kimmirut in the spring, and skinnier in the fall when returning from their summering waters. Whales carrying young and calves tend to be fatter than the males in the same population. This is the natural annual cycle of all S/E Baffin Beluga whales.

Hunters have no reason to believe that there are any differences today in the way the muktuk and meat may appear in color or taste as compared to the earlier 1900s. The change that occurs with shedding (moulting) is an annual cycle and has no bearing on any other changes over the last decades. These whales are differentiated by age and by the color of their skin – the youngest calves being dark grey, then as they get older they turn whiter until they reach adulthood and remain white from then on. Hunters prefer the greyish whales as they are considered better eating.

BEHAVIOUR OF THE WHALES

Kimmirut hunters have seen major changes in the way these whales behave in their natural environment. Most behaviour changes started with the introduction of motorized transportation. The noise created by the motorized boats has made the whales detour by great distances. Whales will also flee any area where a motorized boat is detected. Hunters have also noticed changes in whale behaviour at the floeedge. Where most whales used to dive close to the ice to feed, today, they either do less dive-ins or make their dive-ins from further out. During the night when all is quiet, the whales will often return to feed at the floe-edge. This is evident with the breathing holes they leave on the newly forming ice alongside the thicker ice. In general the major causes of behavioural changes are suspected to be the motorized means of transportation whether they be boats or snowmobiles.

DIFFERENCES IN SIZES

Kimmirut hunters may very well be hunting smaller-sized whales than they would have been in the 1950s when there were bigger whales that are today notably absent from the population. The bigger whales were distinguished by being clean white in colour and having longer and bigger teeth than the present whales. They also travelled in larger pods. These larger whales can be traced back to "Numaayuuq" a scout and known whale leader who disappeared in the 1950s. This whale was particularly noted for its large physical appearance and its dominant role in the herd. The

disappearance of "Numaayuuq" may be related to the ensuing absence of large whales which is still evident today in the Kimmirut area.

Sampling studies Carried out by DFO

Hunters in Kimmirut, like hunters in Pangnirtung and Iqaluit, claim that they are not benefiting from the sampling studies carried out by DFO. Hunters have been very patient in waiting to hear about the results of these studies, as very little, if any, information is being passed onto them. Hunters here say the progress and process have been very slow with no consultations with the public and no written material being provided. There have also been no visits made by those running the study. Most people do not even know what the intentions of the study are.

Hunters also say that they have forwarded information to DFO and then never hear the study results. Though these studies have been carried out for a number of years, the hunters claim that there are not enough meetings or consultations being carried out on the study's progress or purpose. Although the hunters receive postcards acknowledging their input, it was suggested by the group that more information be returned to the hunters on the cards. The hunters have been given no indication on the health of the Belugas or any of the other findings from the studies. They also feel that the population group the whale is from should be noted on the cards.

Different populations reaching Baffin

Hunters in Kimmirut have noted different kinds and shapes of flukes and flippers for different whales. The ends of the fins often vary with the different populations. It is suggested that photos be made available to distinguish the different whales. The Kimmirut hunters feel that a certain population of larger Belugas that has longer teeth is no longer present. However, Sandy Akavak an elder/hunter, is not sure if this can be used accurately to determine the different populations. There was also mention of bigger whales with bent

front flippers that have been notably absent from Kimmirut since around 1982. The hunters feel that there may be different populations reaching the Kimmirut area now.

CHANGES AT THE OUTPOST CAMPS

There are notable changes that hunters have seen over the years concerning Beluga whales near the outpost camps. They are arriving later in the fall and they are fewer in number than in the past. The whales are also migrating farther out, probably in response to the sound of motorized boats. However, when an area has been undisturbed by motorized sounds, there are signs at the floe-edge that the whales do return. Kimmirut hunters still go out to the old outpost camps looking for whales but much less are found.

Hunters here are not able to recall if there have ever been any studies or counts done near these older outpost camps. The outpost camps are marked on map #97-03.

GENERAL HUNTING AREAS

Though Kimmirut hunters hunt at the different times of the year, they hunt in the same general areas in the spring, summer and fall. The spring and fall hunting area is marked on map #97-04. In these areas the hunters feel there has been a decrease in the population of migrating whales due to the more numerous motorized means of transportation. But in general, the hunters of Kimmirut are hunting the same general areas they would have hunted years back.

HUNTING OF BELUGA WHALES

In avoiding unnecessary injury to the whales, only the injured are chased. Whales are chased closer to the land where it is shallower and where it's possible to hook dead sunken whales. This takes careful planning as the whales sink more in the fall. Kimmirut hunters insist that harpoons be used and that injured whales be hunted first to avoid unnecessary wounding of other whales. The percentage of hunters who use these practices is unknown. Other examples of knowledgeable hunting methods include: In deep waters where the whale might sink if killed outright, it is instead shot in an area that will not kill it right away – it is only shot

and killed in shallower waters. Kimmirut hunters have also adopted new hunting methods. One example is that at the floe-edge harpoons are used less; big hooks (to retrieve a dead whale) are used instead which can be thrown out further and require less accuracy.

Nonetheless, hunters here have indicated that they would welcome and support the creation of local or regional hunting guidelines. Some of the topics suggested as guidelines include:

- 1) Distribution of catch (Traditional distribution methods)
- 2) Chasing of whales, including steering of whales
- 3) Safe hunting practices
- 4) Hunt leaders
- 5) Traditional laws i.e.: leaders to take first shot, etc.

The importance of developing guidelines was underscored by everyone in the group.

TRADITIONAL KNOWLEDGE

IN THE SCHOOL PROGRAMS

In Kimmirut, students learn about Beluga whales from outside sources. The reason for this is that there is no local knowledge material available to them in the schools. Hunters here feel this is a serious oversight and that material should be made available to the students. "We learned by taking part in the hunts and events," said one hunter. Hunters recognize the value of including students in the hunts and letting them witness first hand how they are correctly done. Sandy Akavak, an elder/hunter feels that this would be very beneficial for the students, and that it could be funded either through cultural inclusion programs, or activated through NWMB. It is also felt that it would be very beneficial if written materials could be made available to the students in Inuktitut and English. Some of the topics covered could include hunting methods, proper placement of shots, names and parts of whales, edible parts, sinew threads, drying of meat, and class visits by elders.

BELUGA STUDIES OR COUNTS

This was not discussed as hunters and elders said there had never been a study or count conducted near Kimmirut.

BELUGA HUNTING WITH NETS

Nets have been used near Kimmirut since the 1920s. They were used successfully even in the past when net material was hard to obtain. Seal nets were often used to catch whales. Today most nets are used in the fall when the whales are on their return migration. This occurs starting around September and usually lasts until freeze up.

The hunters in Kimmirut today use larger mesh sizes to avoid catching seals. The differences in a whale that is shot and killed and a whale caught in a net are quite noticeable. A whale that was caught in a net tends to be more salty, there is more blood in the blubber, the muktuk texture may be different and most noticeably the whale may be bloated. Bloated whale remains may not be suitable for consumption. Netted whales often yield products of lower quality than those from shot whales. To avoid this, hunters need to check their nets frequently.

WHALES IN KIMMIRUT INLET

It was expressed that Beluga whales used to enter the inlet of Kimmirut more frequently and in larger numbers in the past. Today this is rarely the case. Numerous motorized boats and vibrations from the power plant are suspected to be the reasons why whales are not seen at Kimmirut anymore. The Beluga whales do not like foreign noises, and if they hear a foreign noise they will avoid the area. There are also natural cycles in certain years where whales will not show in a particular area.

HUNTS AND DISTRIBUTION OF CATCH

Though there are no significant changes in the way whales are hunted today compared to the past, the introduction of motorized boats and snowmobiles have changed how a whale is hunted.

Today, unlike in the past, the whales are met at the floe-edge by snowmobiles or from lookout spots by boats. Before, people didn't hunt whales unless the whales were in the vicinity of the camp, thus the hunters didn't need to travel. Besides, there were no motorized means of transportation anyway.

At the conclusion of a successful hunt, the distribution of the catch is still an important part of the hunt in Kimmirut. Some traditional means of distribution are still practiced and are important to the community. Today in Kimmirut, hunters cut up the whale differently. Certain parts are not harvested anymore. In the past, the hunter who caught the whale would be allowed to take his share first, and have it cut up in a certain way. Not today. Now the skin is cut up in forms that have no traditional use. They used to make rope from the top part of the whale only. This was equally distributed among the hunters. Meat and tendons were cut in a certain way to make sinew. But this is not considered necessary anymore and as a result, the practice has disappeared. Today the flippers and vertebrae are still taken back for all the women to eat. However, because today there are more women, muktuk is added to make up for the insufficient number of flippers and vertebrae. This allows those less fortunate the opportunity to taste traditional country food within the community. One of the biggest changes has been in the way everything used to be divided equally for distribution. This is rarely practiced anymore.

BEHAVIOURAL CHANGES AT THE FLOE-FDGE

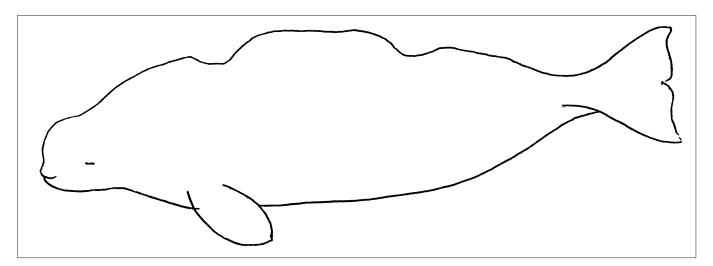
Like the other communities, Kimmirut hunters hunt whales at the floe-edge towards the spring. Some elders recall that there used to be more whales diving under the ice to feed. This was when hunters still used dogteams. As a result the whales were more vulnerable at the floe-edge. To minimize noise the hunters used to walk out to the floe-edge when they came across whales. Today there are less whales and the hunters use snowmobiles to arrive at the floe-edge before the whales arrive. Once again, foreign noise is suspected to be a problem for their shrinking numbers. The whales do not appear to be as playful anymore, but this could be due to the fact that they are just passing through during migration. There is no known area of mainstay (summering) for the whales or for shedding. Whales do not float still by the ice anymore; now they first move away from the ice and then float still. Some suspect this could be because they are

waiting for other whales who are still feeding. Whales are known to make noises of distress and playful whistling noises. When the leaders sense danger they give the distress call and all move away. But playful noise is hardly ever encountered by hunters here.

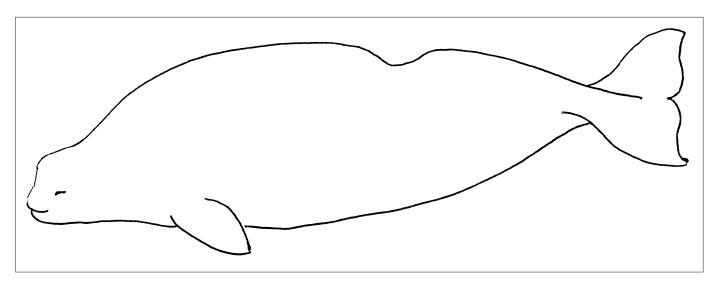
Some hunters think that less cod in the area, or because the cod have moved to another area, may be a factor in the decrease. There are many more harp seals feeding in the area now than before. When whales have fed, or if they sense danger, they move out to open water. They return to the floe-edge later. It was also noted that more dive-ins occur when there are more whales in the vicinity.

BADLY SCARRED WHALES

There is a small group of three or four individual whales that Kimmirut hunters recognize at the floe-edge or near Kimmirut. They seem to act as scouts patrolling an area before the larger groups appear. The others may appear the same day or the next day after the scouts. These scarred whales tend to travel away from the ice and travel alone, but one is usually seen before the others. One whale has been known to appear almost annually since 1977. The others could not be dated. See diagram below of the badly scarred whales seen near Kimmirut.



A) 2 notches from side view (still seen today).



B) Notch in the lower back (still seen today).

EXPECTATIONS FROM THE WORKSHOP

A strong sense of finally having a say in the gathering and distribution of Inuit Traditional Knowledge to the public, and especially to younger age groups, was expressed by all hunters/elders involved. It was felt that the younger age groups will have a lot of new information to absorb and learn from, providing the information is made accessible to them. The people of Kimmirut expect that with the Final Report out, the information can also be used by Inuit to deal with Government Departments on various issues. Those interviewed felt that the other communities would share similar views and as a result, the report findings would make the three communities more united.

It was also expressed that hunters are not accustomed to note-taking but that if diary books could be made available for them to use, it could prove very beneficial (e.g. recording their sightings and catches of Belugas).

Conclusion

It is apparent that the hunters and elders of Kimmirut have seen changes in the behaviour, feeding, migration, and sensitivity patterns of the S/E Baffin Beluga. These changes have been caused since the 1960s, by the introduction of numerous motorized means of transportation. Beluga whales continue to be a very important part of their lives and means of diet. The changes in the whales' behaviour are not known by the younger generation. That makes this study all the more vital in preserving Traditional Knowledge and passing it on to a new audience. Kimmirut residents are strongly committed to preserving the whales which is apparent in the measures and practices being carried out by the hunters today.

Suggestions made to NWMB and DFO

The Kimmirut participants in this study would like to make the following suggestions to NWMB. This is with the understanding that they would be approached first before the guidelines are activated as other important topics may need to be addressed:

- 1) More Traditional Knowledge material should be made available for learning to the school systems and to the students of Kimmirut. These should include: hunting methods, places of proper fatal shots, safe hunting practices, names and parts of whales, edible parts, sinew thread making, drying of meat, and class visits by elders.
- 2) That a local or regional guideline be drawn up to include the following:
 - 1) Distribution of catch.
 - 2) Chasing of whales, including steering of whales.
 - 3) Safe hunting practices.
 - 4) Hunt leaders.
 - 5) Traditional Laws be used at hunts, i.e.: leaders to take the first shots, etc.

The nine participants would also like to suggest that the DFO sampling program be reviewed by NWMB and DFO regarding the following problems being addressed by hunters involved with the sampling program:

- 1) The intentions and goals of the program should be made known fully to the hunters in Kimmirut.
- The cards being sent back to the hunters should include more information as to which populations the whales belonged to.
- 3) More meetings or consultations should take place with the public as to the results of the studies.

The above suggestions should be reviewed to improve the present school programs with the above noted, as there are no local materials available in Kimmirut on the Traditional Knowledge of S/E Baffin Beluga.

The sampling program as in the other two communities, can be improved to better the return of information. It has been made obvious with the participants that hunters are not clear at all as to the intentions and goals of the sampling program carried out by DFO. Nor are they getting any of the results these studies have to offer.

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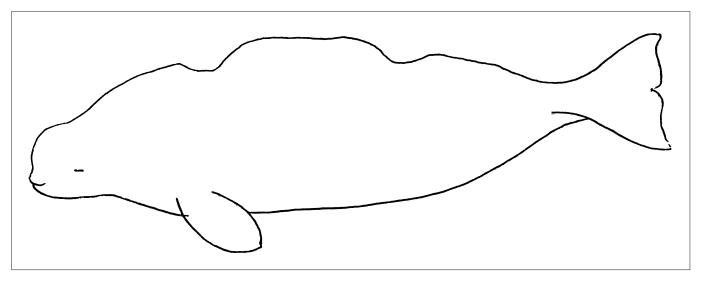
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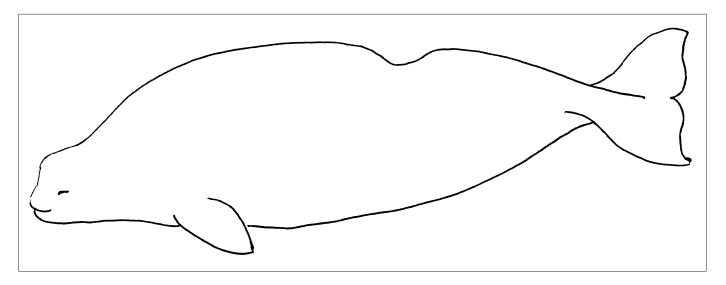
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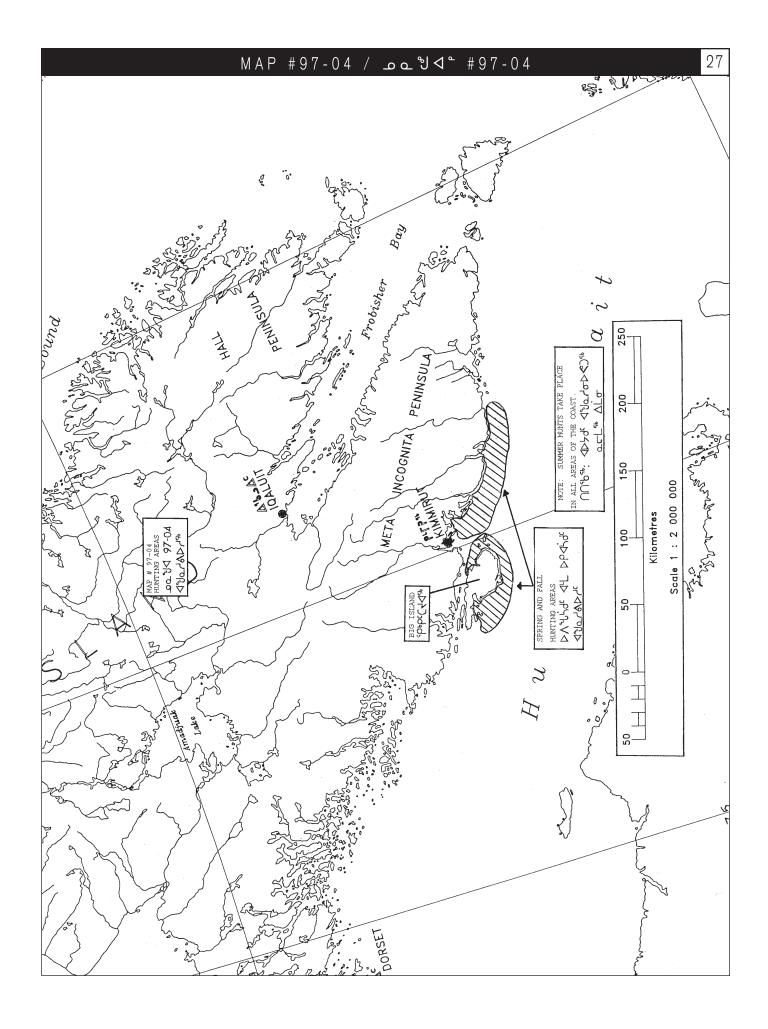
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Inuit Traditional Knowledge on the S/E Baffin Beluga and Hunting Study, Report for Iqaluit

APRIL 15 & 16, 1997, HTO OFFICE IN IQALUIT

As part of the Traditional Knowledge study on the S/E Baffin Beluga and hunting, eight hunters and/or elders from Iqaluit selected by their HTO participated in this study. The participants included:

Johnny Nowdlak HTO chairman/hunter

Qutaiggut Lyta Hunter
Akakaa Sataa Elder/Hunter
Peter Itungat Elder/Hunter

Jeetaloo Kakee Hunter
Noshoota Jimmy Hunter
Noveeya Ipeelee Elder/Hunter
Simaniq Kilabuk Hunter
Peter Kilabuk Interviewer

Mark Kilabuk Assistant/camera man

An introduction was given by Peter Kilabuk on the study plans for the next few days. It was also noted that the study was being done in two other communities: Pangnirtung and Kimmirut. The study was being carried out through the NWMB to collect Inuit Traditional Knowledge of the S/E Baffin Beluga and hunting.

MIGRATORY ROUTES

The whales that come into Frobisher Bay and the Iqaluit area do not permanently reside there. The whales spend a very short time in the area throughout the summer and in some years very few have been sighted. In the spring, however, many are found at the floe-edge out in Frobisher Bay. Many or most of these whales will migrate outside of the bay. When the whales do travel towards Iqaluit, they travel mostly on the west side of Frobisher Bay, although some have been seen travelling in the middle of the bay. (See map #97-01 Migratory Routes.) As in the other two Communities -Pangnirtung and Kimmirut – motorized boats and other means of transportation have affected where the whales travel. As one hunter said, "The whales are not given the chance to settle down." Hunters maintain lookout spots out in the bay. It was pointed out that there are probably whales throughout the winter further out in Frobisher Bay as evidenced by traces where they had surfaced through the ice at the floe-edge. When the whales are more active - in the early spring - the bigger yellowish whales tend to appear first, guiding the smaller whales. They seem to have the same travel pattern near the floe-edge each year. Overall, Iqaluit hunters have seen a decrease in the number of whales. Fewer are found today compared to the number found before on the west side of Frobisher Bay.

FFFDING

The whales in Frobisher Bay or the Iqaluit

area feed off Arctic cod, though turbot have also been found

> in the stomach contents of whales caught at both the floe-edge and the

Iqaluit area. Whales have been known to feed off char when char are returning up to the lakes. There are small size turbot on the deeper west side of Frobisher Bay which the whales also feed on at the floe-edge. Some invertebrates have also been found in some stomachs. (See map #97-02.)

Traditional hunting methods and equipment

Before the use of motorized boats towards the 1960s, the hunting of Beluga whales was quite different. Since ammunition was hard to come by, rifle shots were not used to steer the whales towards the land where hunters waited with their rifles. Kayaks were also used to steer the whales, the hunters created noise with the use of rocks and banging on their kayaks, or any other tools they could use to create noise. Harpoons were relied on much more and the "anguvigaq"* – similar to a harpoon – was sometimes the only weapon used to kill the whale.

Some families used nets, mainly in the fall. At the floe-edge the whales were only hunted if they showed up the same time that a hunter did. Hunters didn't go looking for whales at lookout spots like they do today. Also, no noise was allowed at any time before the hunters were ready to strike. The behaviour of the whales was undisturbed and as a result, methods used to hunt them were different. Whales came close to the ice and floating was part of their feeding and resting behaviour. Back then, designated hunters were chosen as sharp shooters. So accurate was their aim that some whales were killed with the use of 22 long rifles from sharp shooters perched high atop lookout spots.

Realizing that today, students and younger groups are less knowledgeable about Beluga whale hunting, the elder/hunter participants feel it would be beneficial if a video could be produced on the traditional ways of hunting whales.

* anguvigaq – killing lance or spear.

Whalers and traders history

In Iqaluit and the Frobisher Bay area, the elders say there were no whalers and traders in the early 1900s. The elders

suspect that because of the small number of whales back then, Beluga whale hunting never developed as an industry. Some elders only recall such activities near Kimmirut.

GENERAL HEALTH OF THE BELUGA WHALES

In Iqaluit, the physical health of the whales has not changed according to the hunters and elders. Just a few sick individual whales have been found in the area over the years. Like the other Baffin belugas, the whales are fat from spring to summer and then lose a lot of their fat in the fall. The shedding (moulting) period is when they lose most of their fat. This is an annual change that the whales go through in the region. In the Iqaluit area, there is no evidence of any physical changes that have occurred in the whale population; not in their appearance and size, nor in the taste and texture of the muktuk and meat.

BEHAVIOURAL CHANGES OF THE BELUGA WHALES

In Iqaluit, the hunters have seen changes in the whales' behaviour in feeding, migration, and in their populations and groupings. According to the Iqaluit hunters, the changes in whale behaviour can be attributed to the motorized boats and other mechanized means of travel. Whales are also feeding less at the floe-edge and in the summer due to numerous hunts in the area. They are migrating or travelling in smaller numbers and they are more scattered. Repeat disturbances in the area by hunters are also making the whales avoid areas where earlier they would have been found. Some of them are known to travel within ice packs to avoid hunters.

At the floe-edge, their behaviour has also changed in terms of feeding patterns. They no longer stay close to the ice when feeding nor do they float still after feeding. Many whales have learned to avoid hunters at the floe-edge. It is believed that noise has caused these changes. Hunting methods have also changed in the Iqaluit area with new equipment available to the hunters. Hunters no longer walk out to the ice to approach the whales. Instead they travel to the whales by snowmobile. Hunters also chase the whales

with their snowmobiles along the floe-edge. This is affecting the whales' behaviour to a great degree since most of Iqaluit's whales are found at the floe-edge.

Population and distribution of whales

In the Iqaluit area there are no summering whales. The number of Beluga whales differs from one year to the next. Some years, there have hardly been any whales due to ice packs in the bay.

Hunters and elders agree that there are not as many whales in Frobisher Bay nowadays as there used to be. The adult males travel in smaller pods unlike the juveniles and females who often travel in larger groups. It is not clear if there has really been a decrease in the number of whales with the information and knowledge forwarded, although it has been noticed that the whales are travelling in groups smaller than before. The elders and hunters are certain that motorized boats are causing the whales to be more scattered in the area. Before the introduction of motorized boats, elders recall seeing many whales that have never been seen in the area again. The noise of motorized boats is suspected to have been a big factor in the changes of the whale population and their distribution, especially when compared to past recollections prior to motorized vehicles being introduced.

As indicated earlier there are more whales found at the floe-edge than in the summer. The elders suspect the whales travel towards Pangnirtung from the Frobisher Bay floe-edge after the winter.

Sampling studies carried out By DFO

Like the hunters at Kimmirut and Pangnirtung, the hunters here have little knowledge if any on the intentions or reasons why there is even a sampling program on whales. It is apparent that a lot of the hunters are not being reached and that there is a definite lack of communication. Here again the hunters have not seen any results of studies that have been carried out. In Iqaluit the lack of communication between

DFO, HTO and the public is creating problems. Some hunters are hesitant to use the sampling kits. Some of them feel that the information they forward on the questionnaire contains negative information that has no bearing on the sampling of the whales. They are also unclear on the intentions of this study. Here in Iqaluit like Pangnirtung and Kimmirut, it is felt that more hunters would be willing to assist with the program if they had a better understanding of the sampling program as a whole.

Some questions raised by the participants include:

- Why are there no consultations with the community on the results?
- What are the intentions of the sampling program?
- Is it to determine different populations?
- Is it to see if other populations are reaching Baffin Island?
- Is it to see how many males/females are being killed?
- If it's to determine contamination levels what contaminant levels are harmful to the human body?
- What goals or purposes do biologists have in this sampling program?
- Are there any policies in place for any whales that may be found sick?
- Why are the results only discussed at the management level or board level, and not at the community level?

Regardless of the situation, Iqaluit hunters are certain that there are not enough community consultations to explain the intentions, results, and contents of the kits or questionnaires. It is strongly suggested that community consultations be done so that the hunters can have more knowledge and will be more willing to assist. "Cash payments are good," said one, "but, there are too many unanswered questions." In some instances, hunters are sampling other hunters' whales for the money. Another problem some hunters have measuring the whales is that some don't have the manpower to move the whale and as a result, they cannot complete the sampling.

Other concerns include: A follow-up on the samples that were to be studied in Winnipeg and due to a backlog were left in storage. No results are yet forthcoming. The resulting DFO study, determined it was clear that Pangnirtung and Iqaluit do not share the same whale population. It was also pointed out that there are foreign (contaminants) material being brought into the north, and that this study would assist in finding contaminant levels in the whales. What are the results?

As cited by the other communities, more community consultations are needed on the goals and intentions of the study here in Iqaluit.

DIFFERENT POPULATIONS OF WHALES

There are different populations of whales reaching Frobisher Bay according to the participants of the study. They are distinguished by their flippers and flukes, as well as the whales' size, behaviour, and their colours at different times of year. These differences may not be apparent to the younger hunters - which is why experience is important. Elders here have seen and know of the different populations but are unable to differentiate one from the other. As one elder said, "it is impossible to differentiate the populations as they have no boundaries to block their travels." Like the other communities they are certain that different Beluga whales are reaching S/E Baffin. The whales are first spotted at the floe-edge at the east side of Frobisher Bay, then they are seen and hunted on the west side in the spring and summer. These different populations may travel into the Iqaluit area in the latter part of spring as the ice recedes.

OUTPOST CAMPS AND THE WHALES

Today it is hard to determine the populations of whales in the outpost camps as the elders and most families do not live there anymore. In the past, whales were only hunted when they reached the outpost camps and not from the lookout spots that are used today. In any case those interviewed felt that there has been a decrease in the number of whales reaching the camps today. In the past, there were also more successful hunts from the land, due to the fact that the hunters didn't have motorized boats to chase the whales with.

Because of the motorized boats, hunters are spending less time at the camps and are hunting in other areas. The elders felt that they would have to spend time at the camps in order to determine the populations. According to the participants, there have never been any studies done at or near the outpost camps. Airplanes have been used to do counts before, but the results are not felt to be accurate. See map #97-03 for locations of the outpost camps.

HUNTING AREAS

Weather permitting, the hunters of Iqaluit hunt mostly in Frobisher Bay or in the Iqaluit area. Due to the strong winds in the bay, hunts rarely take place further out. See map #97-04 for areas of hunts. It was noted that the elders' knowledge goes back a long way, prior to when the studies or counts started in the 1960s. They find it difficult to understand why Inuit knowledge has not been included in the final reports of these studies, when it was they who had originally taken part in the actual counts or studies.

Since the commercial hunts were lifted in the late 1970s, there have been no noticeable differences in the populations of whales. It is with the noise motorized boats create, that the elders say there is a significant difference on the west side of Frobisher Bay, where today there are fewer encounters with whales.

Different hunting methods and equipment

In the Iqaluit area, high-powered rifles are being used to hunt Beluga whales. This is done to avoid unnecessary injury to whales. Hunters also prefer shallow to deep water; even though the whales can travel faster in the shallow waters, there is still less chance of loss. The 222 and 223 calibre rifles are less used today as Inuit prefer higher powered rifles such as the .303, 30-30, or higher. Today's hunts also include a sense of rush and urgency. This is due to hunters wanting to get their whale before the quota is filled, particularly if they encounter a whale after a long wait. There is also more random shooting and more scarred whales. Most importantly, there are a lot more boats out hunting whales. With the problems this has created, the participants would like to see instructions given to newer and older hunters alike on how to run more effective and safe hunts. They suggest harpoons

be used before the whales are killed to avoid loss, and that higher powered rifles be used from 22-250 and up. They also suggest guidelines be made available to all hunters (in both Inuktitut and English). These guidelines would include information that would make hunter safety a priority. Examples of other useful information would be: not to shoot at whales that are too far, hunt the injured first, use proper floats, bring proper equipment before the hunts and, that there be designated leaders at these hunts. The group feels that the creation of such guidelines would prove beneficial, help to organize hunts better, and make hunter safety a priority.

TRADITIONAL HUNTING LAWS

When people were still living at the outpost camps, traditional laws and rules were strongly adhered to. In hunting Belugas there were designated hunters who would take the first shot. Nobody would take the first shot except for the designated shooter in order to minimize any chance of loss. These designated hunters would usually kill the whale on the first shot. In times when the designated hunter was not available the whales were left alone. Also, in the past, kayaks were used to steer whales towards the land where hunters waited quietly with their rifles. Those in kayaks would create loud noises outside the perimeter of the whales' location. A long harpoon-like tool was used to kill the whale by striking at the heart. They also had designated harpooners who would strike, tug on the line to see if it was hooked properly, and then finally release the line if it was hooked right. This was done to avoid loss of equipment and game. The people in the kayaks had to be careful when harpooning a whale as the whale might turn on the side where it was struck and topple the kayak. So hunters always aimed for the far side of the whale from the kayak. These practices are hardly used anymore, if at all.

TRADITIONAL KNOWLEDGE IN THE SCHOOL PROGRAMS

In Iqaluit there is no traditional material on the S/E Baffin Beluga in the school programs. Some elders feel that they

are no longer able to educate the young with the knowledge they have accumulated. There is agreement that this knowledge gap should be addressed in order to help educate students about traditional Inuit ways and to help the younger generations understand why the beluga whale is so important to the S/E Baffin. Students would learn to make use of these traditional skills. Elders feel this would have to be written in both languages, and that a video should be produced on the step by step procedures involving hunting, traditional uses of parts, cutting and butchering, distribution of the catch, making sinew and ropes, and uses of blubber and meat.

The elders/hunters recognize there is a need to make this material available to the students and request that NWMB take note and address this issue.

Beluga surveys and counts

In the Iqaluit area and Frobisher Bay, counts by airplanes are not considered reliable. Hunters here who took part in counts by planes have been disappointed with the results, especially how and when the counts were taken. Inuit involvement and Traditional Knowledge have not been included in the reports. There were some hunters or elders that had or knew of somebody who had taken part in the counts and said that their input was often ignored. At times when they said whales had been spotted the response was, "No, it's a seal." But these elders and hunters knew better because of the size and shape of fins and the size and colour of the animal, it was actually a Beluga. They also felt that aircraft were not covering the appropriate areas at the right time of year. For the counts to be accurate, they should be done when daylight is longer, around June and July, as more whales are known to be in the area at that time of the year. The hunters and elders feel that a cliff count would have to be carried out with the use of today's telescopes and communication means in order to determine the numbers accurately. This has proven successful in Clearwater Fiord and has been carried out several times. The surveys and counts should be done away from the ice and have parties on both sides of Frobisher Bay. By having parties stationed on both sides of the bay, they feel that more accurate data will be obtained, as hunters who know the area can pick the best

locations to conduct studies. Today's younger hunters, unlike the elders, have little knowledge on the whales in the fall and would like to learn more about them by running a fall count or survey. The hunters here would favor cliff counts and more Inuit Knowledge in the final reports.

TUDGAT AREA (RESOLUTION ISLAND)

It was requested by the Iqaluit HTO that Traditional Knowledge be collected about the Beluga in the Tudgat area. As none of the participants had resided in that area, no information was available.

Whale hunting with nets

As far back as the elders at this workshop can recall, nets have always been used in hunting whales. These were used especially at the outpost camps. Today they are still used effectively. Back when the elders were growing up, net material was hard to come by and the nets were constructed of poor quality rope. Today they are made with stronger material and in the sizes needed. Some hunters had whales taken from their net by others, and there had been whales that got caught in the net while being chased. Nets are used in the summer when the area is free of ice but mostly in the fall when the ice is gone. Today about half of the nets in Iqaluit are used successfully. If a video and learning materials on nets could be put together, the elders and hunters would like to include information pertaining to the anchor, net tightness, location, floats, and the need to check the nets frequently.

Whales giving premature births in the area

As there is no known calving area near Iqaluit or in Frobisher Bay, births are scarce. Though according to the hunters and elders, births do happen in their waters. There are apparently not enough whales in the months of July and August for numerous births to occur. A small number of births are known to happen in the summer.

Traditional uses of meat, muktuk and bones

As modern tools and equipment were being introduced to the hunters and their families, the traditional needs met by the whale began to disappear quickly. Today hardly anything from the whale is used except as a food source. The way a whale was cut up before has also changed. Back when they were using the muktuk for rope, the muktuk was cut from the head area to the back according to the number of hunters. Everything was shared equally. The rope made from the muktuk was flexible and strong. It was also heavily used as a seal pup luring rope or made into a base for whips. It also served as an all purpose rope. The rope "Siaruaq" was an all purpose rope carried by most hunters. It was also used as "Sulujaq" the thin end part of the whip.

Fat from the whale's lower jaw was also used to oil rifles as a rust protection base. The intestines are also edible. Adults used the cartilage of the throat as a whistle. Bones from the flippers were used for dolls. The other bone parts were made into carvings after they had turned white which usually took a few years.

ICE ENTRAPMENT OF WHALES

According to the hunters and elders, there have been no such entrapments of any whales that they can recall. Some suspect there may have been the odd one that got trapped, but none in any great numbers.

CLOSING REMARKS BY PARTICIPANTS

Some elders said they are grateful for the opportunity of being able to take part in this very important meeting. Nooveya Ipeelee, "I am glad that I was able at my age to pass along this information at this meeting, as I am no longer able to instruct out in the land anymore." Others were also grateful that with the mix of hunters at this meeting they were able to bridge many existing gaps in Traditional Knowledge. "We show our sons by sketching on the sand on where to shoot the whale," said Noshuttaq.

CONCLUSION

It is apparent with the knowledge that has been shared that changes have occurred in both the hunters and the hunted. The hunters are adapting to new equipment, but also losing some of the Traditional Knowledge. The introduction of motorized boats has had an enormous impact on the whales and is suspected to be the main cause of the changes in the whales' behaviour in their natural environment, as hunters are able to travel faster and further with the motorized boats. The whales have had to learn new methods and ways of avoiding hunters.

With the realization of the existing knowledge and intergenerational gaps and the need to educate younger and older hunters alike, those interviewed suggested that educational material be made available to preserve Traditional Knowledge and the whales. Other suggestions to NWMB and DFO include:

- To NWMB: An educational package be put together to be made available to school programs. These should include topics like: Preparation before hunts, Traditional Uses of Whales, Cutting and Butchering, Distribution of Catch, Hunting Equipment, Hunting Techniques, Using Nets at Whale Hunts, Safe Hunting Practices and Traditional Hunting Techniques.
- 2) A hunters' guide be put together to include: Uses of Proper Equipment, Safety Guides, Uses of Higher Powered Rifles, Leaders of Hunts, Chasing the Injured Only, Lethal Target Areas of the Whale, as well as other areas of importance to the community.

- 3) The sampling program should be reviewed as there are problems with the current setup and lack of communication. This applies to both the NWMB and DFO.
- 4) To DFO: That cliff surveys be considered because past survey counts with the use of airplanes have not been reliable and have resulted in negative feedback from the community. They feel that a cliff count would be best tried with people who know the area and the movement of the whales. A fall survey should also be considered as there is a lack of knowledge on the number of whales in the fall.

With the above information it is felt that this study has opened up new opportunities for both the community and the people involved with the hunters in understanding the S/E Baffin Beluga whales and their habitat. The participants expect this to produce new knowledge and a better understanding of the Beluga whale and hunting. It is obvious that improvements can be made to preserve the knowledge and use it to educate the less knowledgeable members and students in the community.

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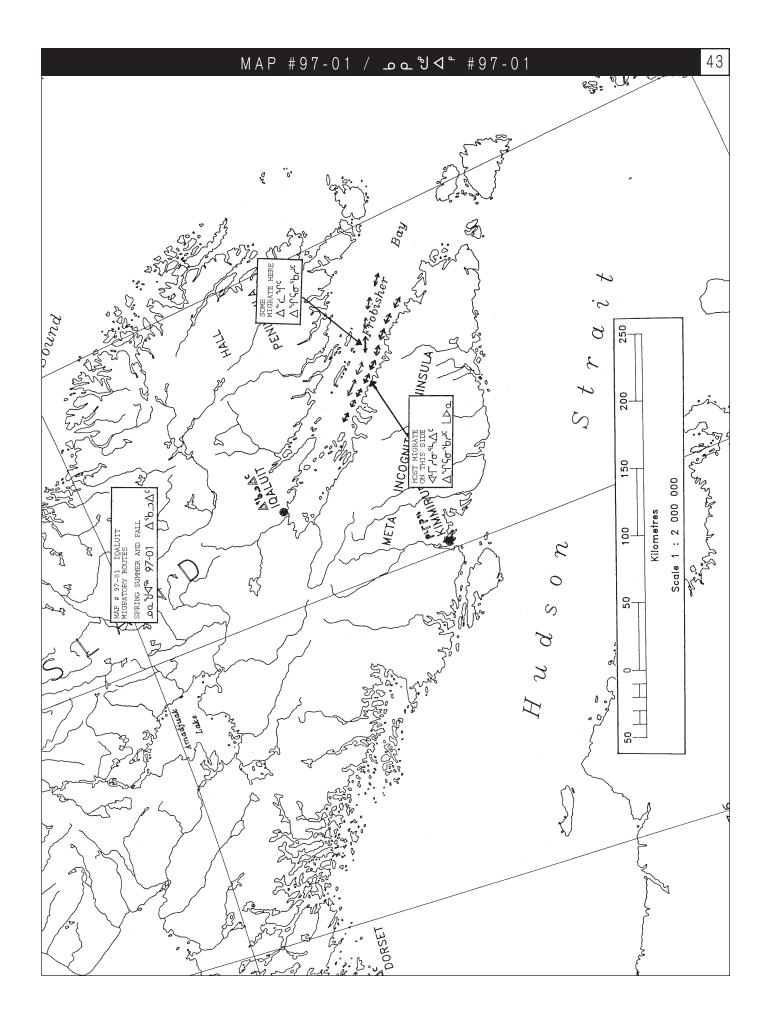
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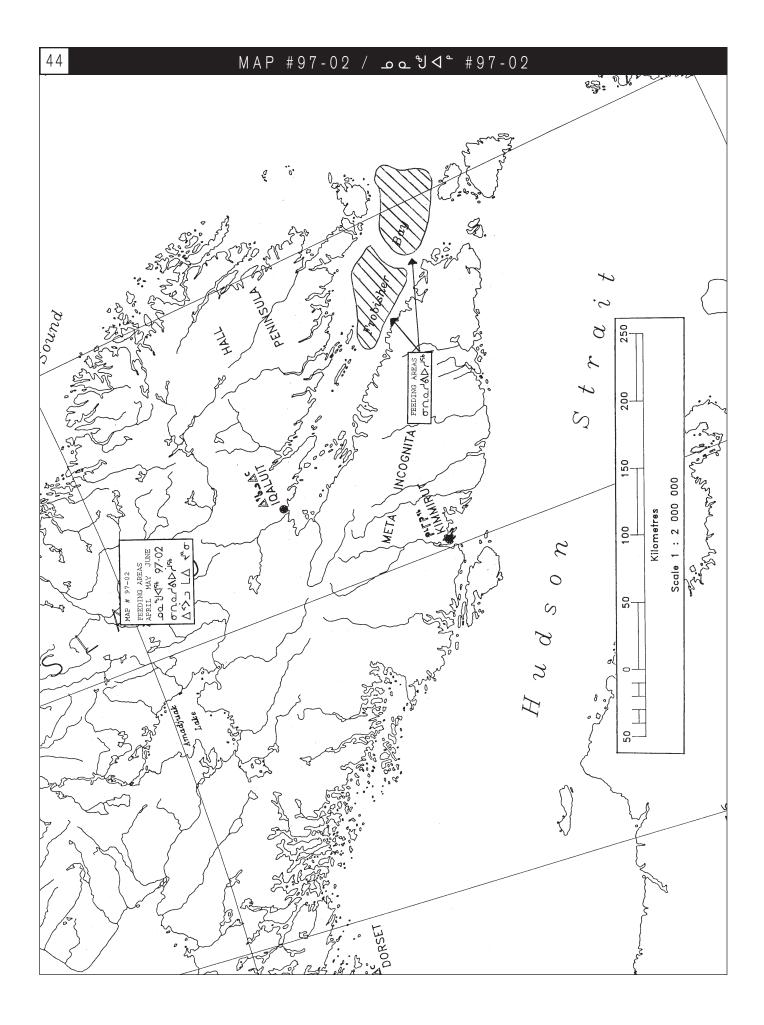
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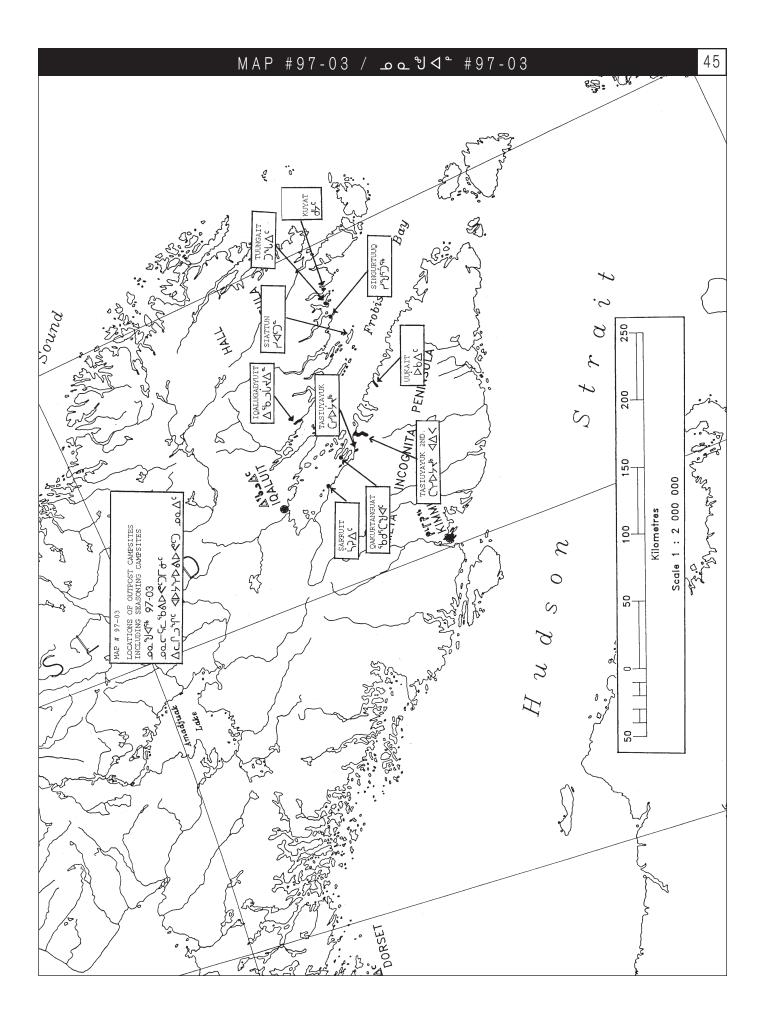
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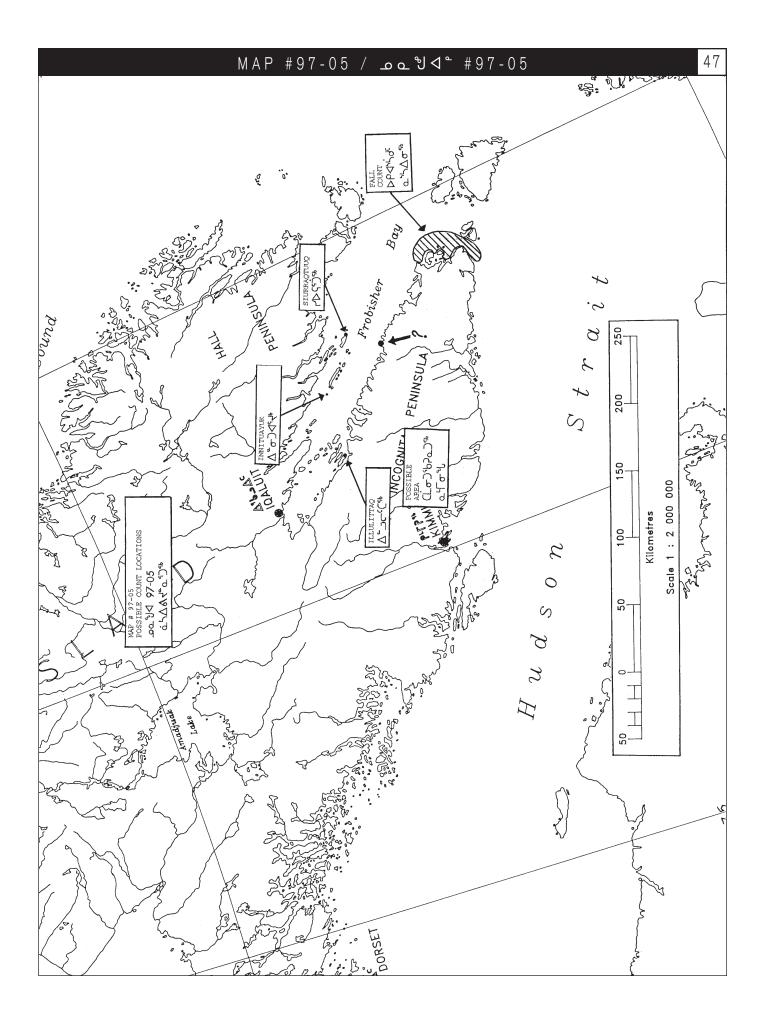
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Inuit Ecological Traditional Knowledge on the S/E Baffin Beluga

Pangnirtung NT XOA 0R0 March 25, 26 & 27, 1997

Introduction

The collection of the material in Pangnirtung was done with the involvement of eight hunters/elders from the community. Material collected included the general knowledge, health, population, hunting and history of the S/E Baffin beluga. All the working materials and final documents are property of the NWMB and are available only through them.

The study was conducted at the Pangnirtung HTO Office with a group of eight selected elders/hunters consisting of:

Jaco Evic Elder/Hunter
Enoosilk Nashalik Elder/Hunter
Mososee Keyuayuk Elder/Hunter
Peterosie Karpik Elder/Hunter

Apak Qaqasiq Elder/Hunter

Manasa Evic Hunter Joeelee Papatsie Hunter

Levi Evic Hunter/HTO Chairman

Peter Kilabuk Study coordinator Ricky Kilabuk Camera man

Migration of whales

According to the eight participants, the majority of the whales that migrate to and from the calving waters of Clearwater Fiord travel on the west side of Cumberland Sound. (See map 97-01.) Before the introduction of motorized transportation (snowmobiles and boats) in the 1960s, the Beluga whales would follow the newly formed ice cracks heading towards Clearwater. This was from June until the Sound was free of ice in July. The migrating whales upon arrival at these cracks were vulnerable and were only hunted then. At the floe-edge they were only hunted if they were very close to the ice where they could be harpooned when shot. Today, they migrate to and from Clearwater in groups within the same general period of time due to the noise created by the motorized means of transportation and hunting.

FEEDING

When whales reach the floe-edge they tend to feed off mostly Arctic cod and turbot under the ice. However, this feeding behaviour at the floe-edge has changed. Before the motorized means of transportation and more numerous hunts at the floe-edge the whales used to dive close to the ice to feed below the ice. This is known to take place less frequently nowadays probably due to the noise created by the hunters or in fear of the hunters' rifles.

Upon migrating to the Clearwater Fiord, whales used to feed in bigger numbers (as marked in map 97-01) and also upon leaving Clearwater Fiord. During their stay in

Clearwater the whales are known to

probably due to shedding (moulting) and females giving birth in the area.

The reason for less feeding activity is not exactly known. The whales feed more on shrimp and some invertebrates that are available in that area. This reduced feeding activity explains why they are much skinnier when they leave Clearwater in the fall.

BIRTHS

As Clearwater is the only place where whales are known to give birth to their calves in S/E Baffin, hunters have learned a great deal about these Beluga whales. Most of the whales will come to Clearwater to give birth when Cumberland Sound is free of ice. Most of the young are born in July or early August. Inuit and hunters here believe a whale may give birth annually. A lot of the females are accompanied by new borns, yearlings and another from the year before.

In Clearwater more numerous births occur in certain areas as outlined in map 97-02. Fewer births are known to take place upon the whales arriving at Clearwater. It is only after spending some time in Clearwater that they will give birth.

COMMERCIAL HUNTS

Until the 1940s the Hudson's Bay Company was still active in the commercial hunts of Beluga whales in Clearwater. Some of these hunts were not documented and it is impossible for today's elders to estimate how many whales were taken. People from camps would gather in Pangnirtung before the hunts. Whales were taken by means of drive-ins, a method where whales were herded by many boats towards shore and left stranded on the falling tide. Here everybody was given a specific role to play in the drive-ins of whales at Clearwater. One successful drive-in area was near Usualuk where both Belugas and Narwhals were taken. (See map #97-03.) This also suggests that there were probably more whales travelling on the east side of Cumberland Sound and is indicative of there having been larger whale populations. According to the elders there were no drive-ins taking place in the 1940s and 1950s. The elders have since seen a decrease in the number of whales even after the commercial hunts were stopped.

OUTPOST CAMPS

According to the elders there used to be more frequent appearances of whales during the arrival, departure and seasonal periods. At outpost camps (on map #97-04), whales were abundant near the camps while they were in Clearwater. At night the breaths of whales could be heard all night in front of Camp 6 until morning. Today, encounters with whales at the camp are rare.

Hunters at this camp had designated shooters most likely to make an instant kill should a whale come close to the land. This was a common practice at all camps. Even if there were numerous whales in the nearby waters they were not hunted unless a sure shot was determined. Back in the 1930s and until the 1960s ammunition was hard to come by and no shots were wasted. Despite the numerous whales in the area the camps would hunt only what they were going to use, minimizing wastage of meat and muktuk.

The meat back then was used mostly for dog food though usable parts were removed with care. These were mostly the tendons used for sinew. Certain sinews from the parts of the whale were used for certain types of women's work. There were also bones used for carving and there were certain parts that were considered a delicacy.

MOTORIZED BOATS

Today the biggest factor that is considered to be causing a decline in the number of whales at the outpost camps and the whole Cumberland Sound area is the noise created by the numerous motorized boats. The noise is preventing the whales from reaching certain areas in the large numbers identified before the 1960s. Overall the behaviour of the whales is very different than in the past. The noise and activities of the boats are suspected to be a major factor as to why fewer whales are reaching the Clearwater area than before.

HEALTH OF THE WHALES

Today's elders have seen a slight decrease in the thickness of the whales' fat. It is suspected that this is due to the whales needing to travel farther and faster to avoid the motorized boats. In the past, when the whale muktuk (skin) was cut back it would overflow with oil and split along the cut easier. The whale's back would also appear to have smaller bumps, due to the fatness of the whale's body. It was noted also that the intestines used to have more fat surrounding them. The elders suspect it's not due to the whales being poor in health but due to the increased travel and runs they must do to avoid boats and hunters. Essentially, the whales today have to expend more energy.

The thickness of muktuk, its texture, taste and colour have not changed in any way or form. The muktuk is thicker in spring and summer than in the fall. This is a natural change that has always taken place.

Today the whales leave Clearwater as early as late August, whereas until the 1960s they would not leave until late October. Some suspect it could be that the smaller numbers of whales in the area are more sensitive to the motorized boats and noise; that a killer whale population is no longer in the area; and, that the ice is forming sooner in Clearwater. It was also noted that there are fewer premature births taking place outside the calving area which could be a change due to the decreased number of whales in the area.

POPULATIONS AND DISTRIBUTION

Today's hunters are encountering smaller numbers in both male and juvenile pods as compared to the 1940s and 1950s. In one case a hunter at Camp No. 6 witnessed whales entering Clearwater from midday until sunset travelling in big numbers with no breaks. Today the male, female and juvenile pods have decreased in both numbers and groupings quite dramatically.

The commercial hunts before the 1940s were suspected to be the major factor in the decrease. Even after the commercial hunts were lifted at the end of the 1970s, hunters saw a decrease in numbers. Since then the numbers have steadied and are suspected to be rising in numbers due to the more numerous females carrying young and juveniles today. It is important to note the changes the hunters have seen over the years. The more recent decrease in numbers has not been due to overhunting, as some whales may stay elsewhere outside Clearwater or even Cumberland Sound.

The participants feel that the heavy commercial hunts that took place during the drive-ins in the early 1900s have reduced today's populations substantially.

SCARRING OF WHALES

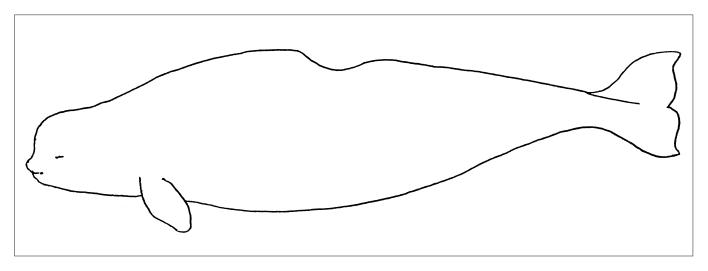
These whales appear to be more scarred with rifle shots than before. From the early 1900s to the 1960s it was a tradition that only the injured would be hunted as long as conditions permitted.

Motorized boats were also not available to these hunters and they were more selective in the methods they used. The motorized boats have been a major factor allowing hunters to chase the whales at random, therefore more shots are fired during a hunt. Today it is common to see more than 10 boats chasing a herd of scattered whales.

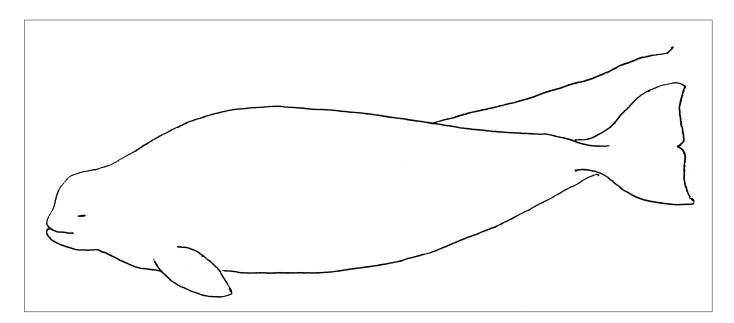
BADLY SCARRED WHALES

AND THEIR ROLES

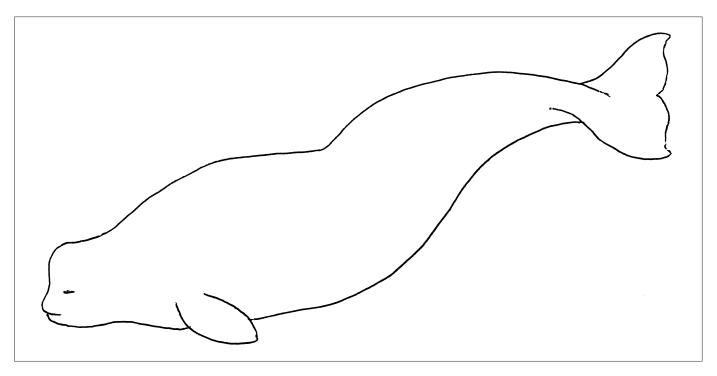
There is a certain group of badly scarred whales. These are ones with big notches in their back or disfigured bodies. They are known by most hunters to appear almost annually at the floe-edge or summer migration. The hunters respect these whales as they have been seen repeatedly scouting an area before the larger number of whales advance. Certain scarred whales scout for both the Narwhal or the Beluga. (The bigger scarred whales are shown below in diagrams A–D.) These are known to be found at a distance from the herds or groupings that are either travelling or resting. These badly scarred whales have been known for decades by the elders and hunters and their role has always been the same. Hunters avoid hunting them as they have proven to lead whales into this area year after year.



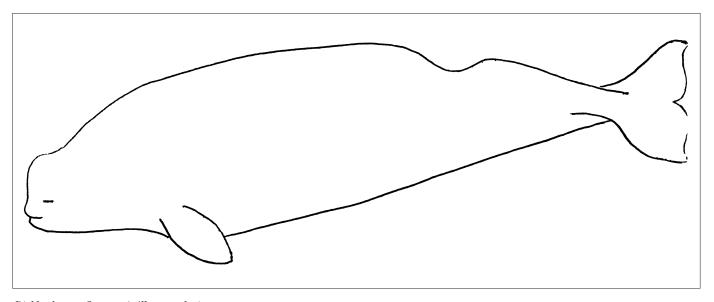
 $A)\ Notch\ in\ the\ back\ (still\ seen\ today).$



B) Dragging a rope (still seen today).



C) Disfigured body (still seen today).



D) Notch near fin area (still seen today).

SAMPLING COLLECTION BY DFO

The sampling collection program that has been conducted annually by DFO for the three communities has generated some mixed feelings and support. The hunters involved in this study and in the collection program, were not clear as to what was the purpose of the program. The general feeling was that if the hunters were made aware of the intent of the program, they would be more willing to provide information.

Possible solutions discussed to improve this program were:

- 1) Written reports be made available to hunters and the general public on the purpose and results of these studies.
- 2) More direct consultations between the DFO, HTO and the general public.
- 3) NWMB be notified of the problem and that they be included in the process.
- 4) That DFO and HTO should not rely on verbal conversations with small groups or individuals as a sufficient means of relaying the message to the public.

Distinguishing the different Populations

In Cumberland Sound alone there are three different Beluga populations being hunted during the year. The main group is the Clearwater population. There is also a group of smaller whales being hunted at the floe-edge, and there is a small population that summers on the west side of Cumberland Sound.

These are distinguished by the hunters with the notable differences in appearance, size, health and behaviour. Differences:

1) The Clearwater whales are the biggest in body size of the three populations. Also upon arrival the outer layer of skin is yellow and in its early stage of shedding. These whales are fat and most float when killed. They reach Cumberland Sound usually in late June or early July and travel in big herds. These characteristics apply to most adult whales. The younger ones are not as white or are still grey in colour.

- 2) The whales hunted at the floe-edge are different in appearance and in size. They are noticeably smaller and skinnier and appear in the Spring April, May or June. These whales are really white in colour and do not show any sign of shedding as the Clearwater whales do. Hunters suspect that these whales spend more time in the faster currents and that this is probably the reason why they are thinner and skinnier. Another difference they show in their behaviour is that they are much easier to hunt because they come closer to the ice and they do not stay under the water as long as the Clearwater whales do. These whales are usually not in as great numbers as the Clearwater whales. They also travel in smaller groups. It is not known from where these whales come or where they go.
- 3) The whales on the west side of Cumberland Sound are also smaller than the Clearwater whales. They are also not as fat and appear to spend their time along the coast and in faster currents of water. Though these are smaller in size, the skin (Maayak) is thicker than the other two populations. They also tend to sink when killed. The meat and muktuk is also stronger in taste than the other two populations and the muktuk tends to be more flexible.

Most counts have taken place only in Clearwater. The numbers found have been used in determining the size of the population and distribution.

To get a more accurate number of whales that are entering and being hunted in Cumberland Sound there should be more effort made to include the other populations. These are hunted and taken off the Pangnirtung quota annually. Further studies would help determine if these are different populations. The hunters feel that taking these other populations into account would improve the accuracy of the studies and counts. Another interesting note raised here was the fact that before the introduction of motorized transportation it was harder for the hunters to determine if there were different populations reaching the area. This was because they did not have the means of transportation to venture out to other parts of Cumberland Sound.

Beluga populations and distributions at the outpost camps

There is a great difference in the population and distributions of whales at the outpost camps. This is due to smaller numbers and changes in the behaviour of the whales at the northern part of Cumberland Sound. The decrease in numbers are the result of the commercial hunts by the Hudson's Bay Company into the 1940s, and local commercial hunts for a number of years until 1979. These hunts all took place at Clearwater. For years after the hunts, the number of whales continued to decrease. Today the hunters are seeing more whales carry young and suspect that the numbers are finally increasing.

At Nunatak (area 6 of map 97-04) at the mouth of the entrance to Clearwater where several families permanently resided into the 1960s, Peterosie Qarpik (elder/hunter) recalls that from the 1940s to the 1950s, the whales used to spend a lot of time near Nunatak in the summer months, almost right till freeze-up late in the month of October. These whales, he recalls, were in the hundreds.

He further recalls that while heading to the end of Clearwater, he used to see many whales, guessing the numbers to be over a thousand along one side of the fiord. He remembers the whales whistling and making noises near the Nunatak camp in the night.

Another Elder/Hunter, Mosesee Qiyuadyuk recalls when whales used to give birth at Iqalugadyuk (area 7 of map 97-04) outside Clearwater.

In Bon Accord (Illungayut, area 3 of map 97-04)
Jaco Evic, an elder/hunter, recalls when there were much more whales travelling near the camp heading to or leaving Clearwater. He recalls that whales used to temporarily leave Clearwater more frequently and in bigger numbers. He recalls whales travelling closer to the land. Today the whales tend to travel further out in the open water. Hunts were limited to only what was needed and also to avoid spoilage of meat and muktuk. Manasa Evic, a Hunter, also recalls when they used to hunt them in the late fall; today the whales are leaving in late August or early September. This is also a behavioural change suspected to be due to the motorized

boats or because of the lesser numbers of whales in Clearweater.

Enoosilk Nashalik, an elder/hunter who used to live at Sauniqtuuradyuk, (area 1 of map 97-04) recalls how the whales used to follow the new forming cracks towards land in the later part of spring near the camp. Then in the fall they would migrate back out, passing the same area. They used to hunt the whales in the newly forming cracks. The hunters killed only what they needed to share amongst the camp. He knows that today, most of the whales travel further out in the open water.

Whales used to travel below the ice of the high tide mark. This is rarely encountered today. In the past many of the whales would have travelled below the ice in a day or less. These comments were backed up by Apak Qaqasiq, an elder/hunter, who also resided at the same camp. Because there were no motorized boats in Clearwater when families camped for a part of a season, whales were left undisturbed in the waters.

In the late 1980s only one count study was ever taken involving the camps outside Clearwater. With the counts only taking place in Clearwater, it is felt by the group that it would be best if the counts were done at the entrance of Clearwater while they are entering, to determine how many really do enter.

GENERAL HUNTING AREAS

Pangnirtung hunters take advantage of all seasons to hunt Beluga, as long as the quota is still not taken. Most spring hunts are done at the floe-edge out in Cumberland Sound between April, May and June. The beluga are mostly hunted only if there are no Narwhals to hunt. Summer is when the heaviest of hunts will take place in Cumberland Sound and outside of the Clearwater boundaries. (This boundary is marked on map 97-03.) A gradual decrease in the number of whales has been noticed, and only in the last few years have hunters started noticing more Beluga carrying young and calves. As a result, they are certain there is an increase in the numbers of the Beluga in recent years.

HUNTING METHODS AND HUNTING OF BELUGA

Hunting methods and equipment have changed dramatically in the last 35+ years. The behaviour of the Beluga whales has also changed dramatically. Today hunters are using rifle shots to get the whales to go under water during chases. This has contributed to the number of scarred whales and to a general changed behaviour in the whales. A contributing factor in the wounding and chasing of whales at large is the quota of 35 which makes the hunter rush for his catch. At most hunts there are more than three times the hunters for the quota. This usually takes place at the time the Beluga arrives in Cumberland Sound. These rushed hunts originated with the introduction of the quota.

When a number of boats are chasing whales, hunters are taking shots with other boats and hunters in the line of fire. The group suggests that the hunter who first wounds the whale gets the whale when it is killed and not the harpooner. Another practice was that when a whale had been injured, the oil slick on the water's surface was used to pursue the wounded whale. Today the elders feel that to restore some order in the hunting of Beluga whales, traditional laws and practices need to be applied and adhered to more strictly. The group also feels there should be more community consultations to make the public more aware of the problems. This should be addressed at the school level.

Community knowledge and school programs re: traditional knowledge of the s/e Baffin Beluga

Today there are no libraries available for the students and instructors to educate themselves on Inuit Traditional Knowledge of S/E Baffin Beluga whales. Local knowledge is not available to the students and they learn of the Beluga elsewhere. The problem is recognized where a new teacher may have no knowledge or local information available to him/her at all.

It is strongly recommended that this be addressed to the local Education Council and system through NWMB so that Traditional Knowledge can be made available to both the school system, the teachers and to the students.

Some of the topics suggested for educating students could include:

- 1) Traditional hunting methods.
- 2) Research on Beluga by students.
- Hunting and Hunting Methods before, during and after hunts.
- 4) Hands-on experience on traditional uses of meat and parts.
- 5) Butchering, cutting and distributing of the muktuk and parts.

Community hunts within Pangnirtung

Pangnirtung HTO organizes annual hunts to distribute muktuk and meat amongst the elders, to less supported members, and to the public through certain community events throughout the year. This serves a good purpose and has been welcomed by the community in general.

As the HTO does not have an adequate budget to run these hunts, they are getting harder to run because of rising costs. It is also getting harder to find hunters to participate.

Upon returning from the hunts community feasts take place. This event is thought to be a good way of bringing the community together and is encouraged.

Because of the problem of high costs, the following suggestions are being made to organize and run the hunts more cost-effectively:

- 1) Run the hunts in the spring while they can still use snow-mobiles to reach the floe-edge to keep costs down.
- 2) The meat can be better prepared when the weather is not too warm to avoid spoilage.
- 3) Hunters should remain at certain look out spots at the time of hunt.
- 4) Activate the hunts only when whales have been spotted at the floe-edge.

- 5) Should hunts take place in the summer, they should be organized at the time the whales first start heading for Clearwater, in Cumberland Sound.
- 6) That the Hamlet of Pangnirtung assist more often in these hunts.

These suggestions are raised to help keep costs down and to further avoid any spoilage of meat or muktuk.

GENERAL HEALTH OF BELUGA IN THE SPRING, SUMMER AND FALL

The elders and hunters share the same knowledge on the health of the whales from season to season. These whales are fat and healthy when they first arrive in Cumberland Sound. Clearwater whales will float when killed between the months of April to August. Later in the fall from September on, the whales have lost weight and tend to sink when killed.

When these whales leave Clearwater in the fall, they tend to be more adventurous and can be found in more of the inlets and fiords along their migratory route. The whales will travel closer to the coast more than they would have upon arrival and they feed on their way out. When these whales have thinned out, they will travel faster and go without air for much longer periods of time (in the fall).

Stomach contents of the whales have shown that they feed more towards the last part of their stay in Clearwater, and feed regularly upon leaving Clearwater. (Note: some of the elders had witnessed dead whales that had died while feeding on a "tupiyyutik" better known as the grenadier.)

AGING OF MEAT AND MUKTUK

This traditional method of aging meat is still practiced, depending on the season of kill. Most of the aging was done with the younger and smaller whale meat and muktuk later in the summer. Regardless of the age of whales, the muktuk can be aged and made into "Singittaq" which is the stripping of muktuk from the skin and blubber after it has been aged.

HUNTING BELUGA WITH NETS

Today these nets are not used in any season to hunt Beluga. Some hunters avoid using seal nets fearing they will catch whales after the quota has been filled. In Pangnirtung or outside, whale nets are only used to hunt Narwhal. Elder/hunter Jaco Evic recalls that nets at the outpost camps were not used before the 1930s. This was probably due to no rope material being available to be made into nets. After the 1930s nets were introduced, but even these were made with very poor rope and material.

ICE CONDITIONS AT THE FLOE-EDGE AND ICE PACKS IN THE SUMMER

When hunting at the floe-edge thin ice is always a threat and creates problems for the hunters. Heavy ice packs at the floe-edge can be used to the hunters advantage where whales may be found in small openings of water and are vulnerable.

In the summer when heavy ice packs are in Cumberland Sound, it is harder to hunt game. Losses may be greater and travel may be impossible due to the heavy ice packs.

ICE ENTRAPMENT OF WHALES

In 1956 over a hundred Beluga whales were trapped during the forming of ice on the west side of Cumberland Sound. It was only in later years that it was noticed that the whales were missing. There are other areas that trapped whales repeatedly on the west side of Cumberland Sound. Most of these whales may survive the winter if not hunted. Another area that is known to have trapped more than 35 whales is Irvine Inlet, (see map #97-04). There are fast currents there and shallow waters. Enoosilk Nashalik (elder/hunter) suspects that the whales could have been washed ashore by a sudden fast current of water as their remains were found above the high tide mark. Another area that occasionally traps whales is the openings of water in Nettilling Fiord. Enoosilk has encountered a few trapped whales a number of times in that area.

Studies and counts of Beluga whales

Inuit knowledge has always been lacking or not included in some of the studies, final reports or findings where Inuit hunters participated. Some individuals, during aerial surveys, returned feeling neglected or found their input not included in the final reports. The group feels that there needs to be improvements made in the studies and reporting methods to include Inuit knowledge in the final reports. Even in the last few studies and counts, adequate Inuit knowledge was not included. Changes have been requested with DFO to work closer with the communities on such activities.

Traditional uses of whale meat and parts

Today the uses of a whale and its parts are less known by the younger generations, even though traditional uses and needs are still an important part of our culture. This is an area where elders need to educate and pass on their knowledge. Elder/hunter Enoosilk Nashalik said, "We must restore this (practice of Traditional Knowledge) ... as it used to be part of our daily lives." In the past, most parts of the whale were used except for the head. People made thread, jerky, and used the meat for dog food. There were different kinds of thread made from the tendons of certain parts – the type used would depend on what the women were going to use it for. It was done this way because certain tendons were weaker than others. Even the meat is not used for food today as it was in the past. Certain parts of the whale that were considered a delicacy back then are still eaten today by some hunters. The stomach was boiled by some people, the skin was made into the base of whip handles. Hunters made from the skin a certain type of rope used in luring the seal pup's mother to the hole. This type of rope turned white after repeated use and would not freeze in the cold. This was cut out from the top part of the whale skin. Uncleaned bones were stored to be used in the winter as fox bait, or, eaten when there was no other meat available. The meat on the front part of the whale head was not consumed as it

could make people or dogs dizzy or sick. The blubber was used extensively to fuel the "Qullik" (stove) which burns cleaner and brighter than most types of blubber. The blubber of the whale had even been used repeatedly as a gasoline mix to run motors.

The distribution of the whale parts were split evenly amongst the camp when a whale was caught either at the immediate camp site or elsewhere. There were also certain procedures followed in the preparation of the whale. Certain types of bones, the front flippers and tail fins were divided equally after being cut into smaller pieces.

"Today when a whale is caught, it is cut wherever it is convenient regardless of its possible uses. Very small parts of the meat or intestines are taken, and the parts that were eaten as a delicacy are hardly touched," said hunter Jooeelee Papatsie.

With the changing needs for whale parts and uses, respect by hunters for Belugas has changed too. "This is becoming a more common problem," says hunter Levi Evic. "This was never a problem when all parts and uses were divided equally amongst the camp," recalls elder/hunter Mosesee Qiyuayuk.

The elders and hunters recognize that the ignorance of traditional ways and laws are part of the problems today. Hunts are too rushed and too much eagerness is shown by most hunters. Even the elders are having to rush to get their catch or share. This was never done while living at the outpost camps. Before, more of the camp members were related unlike the many different families and community members today. The gaps between the elders and the younger generations are far and wide. "We the elders acknowledge that there is a need for us to give better guidance," says elder/hunter Enoosilk Nashalik. Elder/hunter Mosesee Qiyuayuk stated, "Hunters can obtain the elders' knowledge by listening to elders on the radio."

CLOSING REMARKS

Levi Evic, Hunter/HTO Chairman: "This study will bring out a lot of new information regarding educational views and other aspects on the hunting of Beluga whales." Manasa Evic, Hunter: "I expect good results from this study and want to hear the outcome of this study sooner than later. I thank the elders for participating."

Jaco Evic, Elder/Hunter: "I have high expectations from this study, not only on hunting Beluga whales but on the way we live our lives and through the teaching of more of our traditional ways of living."

Enoosilk Nashalik, Elder/Hunter: "I express my thanks. We expect good things to come from these meetings. Hopefully, with this information NWMB can make improvements through further studies and such."

Peterosie Qarpik, Elder/Hunter: "I express my thanks and expect Question #11 on "Traditional Knowledge in the school programs" and Question #19 on "Traditional needs and uses of whale parts and meat," to be most beneficial as educational tools."

Jooeelee Papatsie, Hunter: "I also express my thanks. From 1960 to 1970 the younger generation has lost a lot of traditional skills and ways that used to be followed. Having lived with an elder and therefore recognizing how far we have to go, I expect that there may be more hardships along the way."

Apak Qaqasiq, Elder/Hunter: "I express my thanks. This study has been very informative, I also respect the questions that were raised as they were very relevant to our traditional ways of life."

Suggestions and recommendations to NWMB

The eight participants from Pangnirtung involved in this study and meeting would like to request that the need to put out educational material in a written format for students, teachers and local people be addressed seriously.

The educational videos to be used at the school programs should include such topics as:

- 1) Traditional uses of meat and whale parts.
- 2) Proper hunting methods before, during and after the hunts.
- 3) Butchering, cutting and distribution of muktuk and parts.

 Another idea mentioned for teaching students is to have the students do research work on the Beluga whales.

Suggestions to DFO on the sampling program:

- The purpose and intentions should be made clear to the hunters and public on the sampling program being carried out by DFO.
- 2) There should be more direct consultations between DFO, HTO and the public on the progress of the study.
- 3) That NWMB should be addressed and take a part in the progress of these studies.
- 4) DFO and HTOs should not rely on verbal conversations to small groups or individuals as sufficient for conveying the messages of the study.

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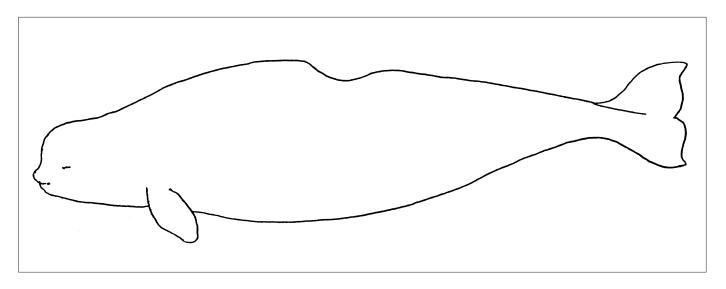
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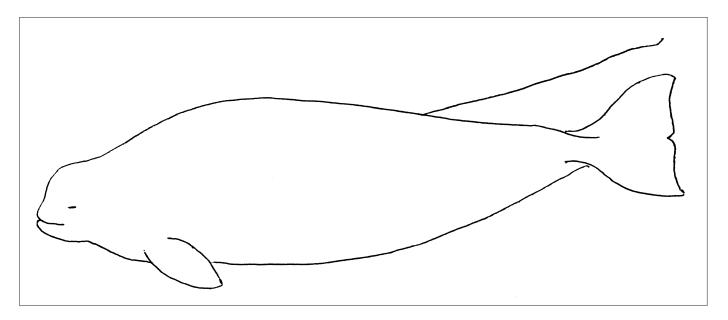
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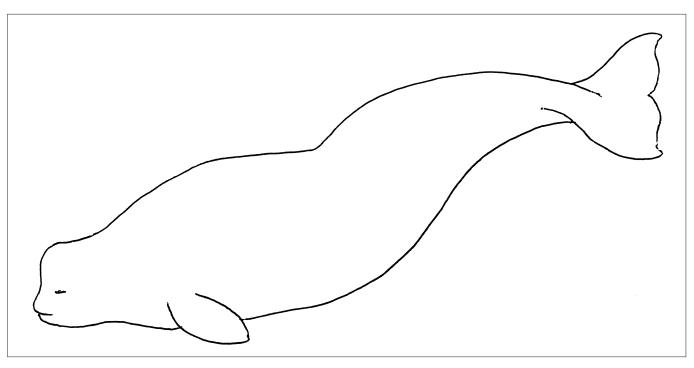
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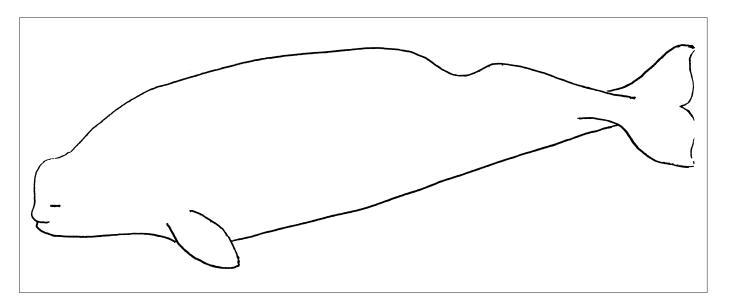
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- 3) \dot{C}^{\dagger} d^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} Δ^{\dagger} C94CD* CV APD. CΛΓ ΑΡΕΡΕΙΉ 76.76 100 10「Pololudic diff cia Libe Atole Cdat dryor Lior dryors. Codoco $PAUZ G DUCPUT^{b}$. CL a $G P^{b}U G U$ L'Ċ'n ᢣᡥᢛᡃᠺᠮ᠈ ᠒ᠰ᠆ Ċᠯᡆ᠊ᡅ ᡏ᠘ᢞᠮᢛᡃ ᠘ᡔᡥ ۵۲ خورچه ۱۲۵ مالادک، کرد. کو کردگی ۱۳۵ کویلی، CLdd $ah\Delta\dot{\sigma}^c$ $dhchCrld^c$ $Prd\sigma$ $\Delta r\Delta Dr$. C99 9L99 5-497. C39 4JCD&FTC 4A74-

YCPGYON AMERIC CIPA ALYRCIA ALT

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- 2) Λ Cbold's DbbNbol' C'dst Δ LCDCCLAd, \dot{D} LdCADd' \dot{C} 'dll Λ CCADd' \dot{C} 'dll Λ CCADd' \dot{C}
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