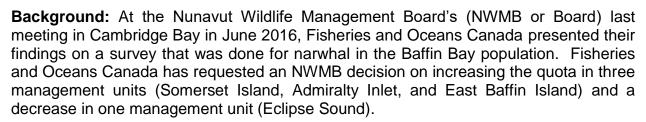
SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD

FOR

Information: X Decision:

Issue: Inuit Qaujimajatuqangit narwhal interviews



In July 2016, the NWMB's Inuit Qaujimajatuqangit Coordinator worked closely with the four Hunters and Trappers Organizations on East Baffin Island – Arctic Bay, Pond Inlet, Clyde River and Qikiqtarjuaq – to collect Inuit Qaujimajatuqangit on narwhal. The NWMB also coordinated with the Qikiqtaaluk Wildlife Board and created a service agreement to handle the financial side of this important collection of Inuit Qaujimajatuqangit on narwhal. In August, the NWMB's Inuit Qaujimajatuqangit Coordinator traveled to Qikiqtarjuaq to conduct interviews with 10 people, whose ages ranged from 30 to 70 years old. The Clyde River and Pond Inlet Hunters and Trappers Organizations hired a local interviewer to conduct their own interviews. Arctic Bay unfortunately couldn't take part at that time due to unforeseen circumstances.

The questions were the same used in Qikiqtarjuaq, Clyde River and Pond Inlet. The questions were mainly dealing with the environment, for example the changes in the ice, the migration of the narwhal, changes in the characteristics of the narwhal, where the young are born, wintering areas, changes in the population, changes in the last ten years, changes in the composition of the stocks, and differences in the appearances. All the questions received responses.

The majority of interviewees said that the narwhal were not decreasing and attributed this to observations of calves at all times of the year. In Qikiqtarjuaq interviewees frequently mentioned that the narwhal go up to Home Bay. Interviewees also noted that the young are born in an area of Home Bay. This area of Home Bay is where they hunt narwhal during the spring and summer. Interviewees believe that the narwhal spend their time in this area from spring to fall. It was often mentioned that bowhead whales were also increasing every year, in a similar manner as narwhal.

Interviewees also noted changes in ice conditions, specifically that the ice is getting thinner near the communities. It was suggested the thinner ice observed could be a factor in changes to narwhal distribution, specifically narwhals remaining near the communities for longer periods of time before they migrate to their wintering areas.

Interviewees also stated that narwhal spend the winter in open water between Baffin Island and Greenland, in three specific areas.





Prepared By: Sheila Oolayou, Inuit Qaujimajatuqangit Coordinator **Date:** November 10, 2016

Clyde River Inuit Qaujimajatuqangit of Narwhal

I can say my name? Jacopie Iqalukjuaq

Questionnaire number 9.

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

Jacopie: The ice is forming later whereas it used to form earlier sometimes the ice used to form in October, now it is taking longer that is the change.

Anna: Has the migration of narwhal or charateristics changed?

Jacopie: Yes, I don't go there often now but when I used to go up there when the narwhal were not bothered they stayed there comfortably when they were not being chased. When we would go up to Kingaaqujuk when the water was calm in the morning when the tide was going out they would go into the inlet they seemed to be playing with their tusks being happy they would make whistling noises when they were going in that is how they used to be and it was nice.

Anna: What about, when they are migrating during spring or fall has that changed?

Jacopie: Yes, I was not here but I heard that they were like before. They were hunting narwhal here whereas they did not hunt as many at the floe edge that is what I hear.

Anna: Do you know where the calving areas are?

Jacopie: Yes, I have heard that the narwhal have calves at any time but up there when they are on their own they go up to the inlet after the ice has gone, they have their calves up there too not just here. They go into the inlets yes, even though I've heard that they get calves at any time. I used to think that during the summer they go up to the inlets to have their calves, yes, I have seen the calves up there.

Anna: Are there narwhal hunts where they have their calves?

Jacopie: Yes, that is happening nowadays, that is always happening now, it never used to be like that. Now that is where people go hunting now where we hunt narwhal more often more that before. That is the hunting area where cabins have been built where people stay that has changed from before.

Anna: Do you know where they go during the winter?

Jacopie: I really don't know where they spend the winter but off Qikiqtarjuaq, in the open water between Baffin Island and Greenland I've heard that is where they spend the winter.

Anna: Are there changes in the numbers every year?

Jacopie: When we were hunting narwhal there used to be lots, it was like, the shore is there when they get away they tend to go along the shore that is where we used to hunt narwhal. Right now when we follow them, they would be here, then they go down that way that is how we go after narwhal now with lots of boats that are fast that is the difference.

Anna: Are there any changes in the characteristics of narwhal in the last ten years?

Jacopie: The change seems to be when they are near land trying to get away they don't stay in the area where we can see the bottom but now they go to deeper water and stay there that is what they do now. That never happened before they would stay in shallower water when we were hunting them.

Anna: What about when they are migrating during spring or fall do you know if that has changed?

Jacopie: During the fall the ones that pass through here when they are moving south they used to pass through here, yes, they still do pass through but they don't come near the land some go through down there when they are migrating they don't stop here we live in an area where the narwhal just pass through. Sometimes they come close sometimes they migrate further away on the open water.

Anna: What are differences in narwhal?

Jacopie: There are different narwhal we don't get any beluga here but there are stockier narwhal some longer narwhal they are different and there are those with good muktaaq which are not fully grown they tend to come through during fall with other narwhal.

Anna: Do you have anything which I did not ask that you feel should be known about narwhal?

Jacopie: Hunting narwhal has changed...I like it when people get narwhal when they get the meat they do this, when a lot of narwhal are caught from everywhere here as well as other areas when they arrive in the community they bring the meat for the community. They announce for people to get some without selling it they share the meat from the narwhal, that never used to be like that when we did not have radios they would take some home by sharing. Now when they come back to the community they make them available for anyone and ask those to come and get some.

Anna: That is all the questions I have, thank you.

August 26, questionnaire number 8

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

What I have seen the glaciers are melting for example up in our inlet at the inlet of Aarrujaq there is one hanging, there used to be one that was hanging but now it the water just flows, we call it the one where some of it falls it doesn't fall anymore the water just flows now and the ice seems to be forming later it is always different but is seems to be forming later than before.

Anna: Has the migration of narwhal or charateristics changed?

I haven't noticed some years we don't get many narwhal that go into our inlet sometimes there are lots so I haven't really noticed if there is any change.

Anna: Do you know where the calving areas are?

Where we go hunting there are seals, in Home Bay and here in our inlet Aarujaq further up in the inlet we notice that is where they have calves that is obvious.

Anna: Do you hunt narwhal there?

Yes, we do go after them when the ones with newborns are with adult males.

Anna: Do you know where they go during the winter?

When the ice is forming here while the ice is thin we see narwhal, they are seen when the ice forms they go down to open water during the late fall between Greenland and Baffin Island I think that is where they stay.

Anna: Are there changes in the numbers every year?

I really don't know this as I mentioned they are different every year here we don't get very many narwhal even when we are hunting from the floe edge during the spring there are not that many narwhal and some years there are more narwhal.

Anna: Are there any changes in the characteristics of narwhal in the last ten years?

It doesn't seem to be very much sometimes the ones that pass through during the fall they come into this inlet in our community some came later during the fall there are some here and the others are there they seem to be fewer to me in the last ten years.

Anna: What about, when they are migrating during spring or fall has that changed?

I haven't noticed this if there are any changes this seem to be similar to what I mentioned in 8, during the fall when they are migrating through our community we tend to go after adult males, in the past they seemed to be more.

Anna: What differences are there in narwhal?

The very young ones, is this a question about their appearance? The very young ones are grey, when they are growing they start turning darker we call them muktaaqiut when they are young their muktaaq is all black it is difficult to see their front they start to get blotches when they are getting older and there are some adult males as well as females we call them the ones that have turned white as most of it has turned white only their back has black dots. I think that was the question and I apologize for I am going back to the first question the ice around here in front of our community down near Umiujaq is where we go hunting is where we usually see dead narwhal down pass Umiujaq is where we go hunting seals. I think in the last three or five years that area has been rough ice that has really changed and where we go hunting at the floe edge during the spring the ice is worse that is what I wanted to say.

Anna: Do you have anything which I did not ask about narwhal that you feel should be known?

Yes but not now I think these are sufficient.

Anna: That is all thank you.

Questionnaire number 7

August 25

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

The ice is forming later and rougher.

Anna: Has the migration of narwhal or charateristics changed?

I don't think so.

Anna: Do there seem to changes durning spring or fall when the narwhal are passing through?

There used to be fewer but now they have gone to back in the last two years.

Anna: Do you know where the calving areas are?

Yes, at Kimmiatuqtujuq and the esturary of Aarujaq.

Anna: Do you hunt narwhal where the calving areas are?

Yes, but we don't go after the ones accompanied by their calves.

Anna: Do you know where the narwhal go during the winter?

No.

Anna: Are there changes in the numbers every year?

What did you say?

Anna: Do you know if there are changes or have you noticed the numbers every year?

For example, narwhal?

Anna: The number of narwhal.

Yes there seem to be more.

Anna: What about in the last ten years has there seem to change in the characteristics of narwhal?

No

Anna: What about when they are migrating during spring or fall has that changed?

No, as well.

Anna: What are the differences in narwhal?

The muktaaqiit (young ones) are all black, the ones with blotches, male and female when they are getting older we call them muktaaqiq.

Anna: Do you have anything else to add that I did not ask aboout narwhal that we should know about?

They seem to be all there.

Questionnaire number 6

August 25

Anna: You can say who you are if you want.

Irqu: I am Irqu Angutirjuaq living in Clyde River...I was born in Qilanaaqtuuq.

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

Irqu: Right now the ice is forming later, it is also thinner the landfast ice seem to be smaller since the past, when the ice formed earlier and thicker the ice used to be gone later.

Anna: Has the migration of narwhal or charateristics changed?

Irqu: There doesn't seem to be any change, some years there will be less and in other years there are more that is always the case. Last years there were less narwhal, right now this summer there are more.

Anna: What about, when they are migrating during spring or fall has that changed?

Irqu: Here the floe edge take a long time to form, when it forms sooner they seem to pass through earlier but this past spring the floe edge did not form so there didn't seem to be that many that pass through we had to go to Home Bay which is far to hunt at the floe edge. When the floe edge formed earlier not many times the narwhal used to pass through there earlier but after they have gone through the ice finally goes it seems that they did not pass through.

Anna: Do you know where the calving areas are?

Irqu: Nowadays they already have young ones when they come and here in July is when the narwhal come here, I think maybe they were born in June when they are small they arrive here so we really don't know where the calving areas are. Up near Pond Inlet when we went caribou hunting there was an inlet that was not that large with a narrow entrance there were a lot of narwhal that had young ones with them. We think they go into the inlets after the ice has gone to have their young one.

Anna: Do you know where the narwhal go during the winter?

Irqu: Yes of course, they go over to Greenland side, they say that there are always narwhal there that has also been the story I have also asked do you get narwhal here during the winter...but, they say no in January if there is a floe edge as long as there is open water they sometimes get narwhal.

Anna: Are there changes in the numbers every year?

Irqu:

Anna: Are there any changes in the characteristics of narwhal in the last ten years?

Irqu: The only thing from what I can remember is that they used to go near land to get away, now that they have been hunted using motorized boats when we go after them it is harder. The narwhal seemed to have gotten smarter.

Anna: Are there changes during migration in the spring or fall?

Irqu: I can only say two things, during spring they migrate up north then during late September in early fall the marine mammals narwhal, bowhead whales and we now see the ones we often don't see such as minke whales. We don't often get minke whales here in parts of Baffin Island. Now when we were down near where we go seal hunting on a ship we observed ones that

almost looked like small minke whales that we never saw in large numbers. It has been said that would happen where we would start seeing the ones we never saw before of the marine mammals or strange fish that would be caught. We have heard this before when the temperature of the water starts to get warmer and the ice is not around, when there is ice the water is very cold and it seems that there are fewer char. Last year when the ice was around there seemed to be fewer char, but now the ice is not around so we can catch more char. The marine mammals here and everywhere they move somewhere else, some years they are not around as much in other years there are more. We don't think they are declining they have that character, not just narwhal. There used to be a lot of seals here that were easy to get they follow those that are moving even when you are rowing they come up very close. But since we start using motorized transportation like snowmobiles and boats and there are more lnuit that are hunting them they are harder to get. I think they move over this way for example down to Home Bay and between here and Pond Inlet. Even the one I mentioned where there used to be a lot of seals but now there are hardly any seals.

Anna: What are different characteristics of narwhal?

Irqu: We get black ones and the ones with blotches narwhal here. Sometimes the beluga go through here but not every year. Since I can remember they passed through maybe twice, first time there were few second time there were a lot that stayed here in the inlet of Clyde River.

Anna: Do you have anything else to add that I did not ask about narwhal?

Irqu: The only thing we can say is that because of the noise the motors make and they are fast it seems to be harder to get them. Before when we did not use motors to hunt them they were easier to get. The ones that seem to have good muktaaq even when they don't seem to be full grown are hard to get, that is what we keep hearing, maybe because they recognize the noise made by motors. Before this area is damaged by those that want to do seismic testing in the water, those will have an affect if they were to go ahead where the narwhal stay, we think that they would move closer.

Anna: If that is all we are done thank you.

Irqu: Thank you for taping me.

Questionnaire number 1

Inuit Qaujimajatuqangit about narwhal

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

I haven't really noticed but it is different every year sometimes if forms earlier other times it forms later that is all I can say.

Anna: Has the migration of narwhal of charateristics changed?

Here near Clyde River that hasn't really changed, sometimes there are a lot of narwhal sometimes there are not, but now compared to last year there are narwhal aroung.

Anna: Are there changes when the narwhal are migrating during spring or fall?

I don't think so they are different every year, sometimes there are ice entrapments near Pond Inlet that seems to be happening every year.

Anna: Do you know where the narwhal calving areas are?

There doesn't seem to be any near Clyde River. But up in Pond Inlet and Arctic Bay area is known where the calving areas are but I don't know any near here.

Anna: Have you heard if there are hunts near calving areas?

I haven't heard this as there are no calving areas of narwhal here so I don't know.

Anna: Do you know where the narwhal go during the winter?

I think they stay around here in open water even during the winter.

Anna: Do there changes in the numbers every year?

Yes, it is always different every year sometimes there are lots of narwhal sometimes there are hardly any.

Anna: When there are changes in the last ten years of their characteristics... how have the characteristics changed?

I don't think so, it is always the same, I don't think there are any changes.

Anna: When they are migrating have there been any changes, in the numbers during spring or fall?

From what I've noticed there seem to be more during the fall when the narwhal come through that is the only change I've noticed during the fall.

Anna: What differences of you noticed?

I know the differences; there are the ones with tusks, females, young ones, the ones with good muktaaq those are the ones I know.

Anna: That's it, thank you.

Questionnaire number 2

Inuit Qaujimajatuqangit about narwhal

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

Every year is different that is what I've noticed. It is never the same every year sometimes the ice forms earlier, sometimes it forms later that is what I've noticed, but in front of our community the ice is getting rougher that is what I've noticed.

Anna: Has the migration of narwhal or charateristics changed?

Yes, here in Sam Ford Fiord, the inlet up there...where they go to have their calves we are noticing now, I have noticed, not just me, our elder also said that when I was up there with him. We are noticing where the calving areas are every year.

Anna: Are there changes during spring or fall migration?

When they are migrating we see adult males and the ones older from up there, maybe from Kangaarjuk, Nattirsujuk, where our narwhal come from and from the area of Anauliriaq when they are migrating during the fall the older ones with bigger tusks pass through in October, ...we've known this for a long time.

Anna: Where are the calving areas?

Here in our inlet, in the inlet of Clyde River, we call it Kingmiataqtujuq is where they have calves it is north of us, in Sam Ford Fiord we call is Urqurtinni is where they go to have calves that we a noticing now.

Anna: Do people hunt narwhal in the calving areas?

Here in our inlet we hunt narwhal all the time, but up there to the north of us in Kangirtuvak we don't hunt narwhal as we don't go up there often in Nattirsujuk is probably where they have calves as well as Kangaarjuit. Because we don't go up there often we don't hunt up there.

Anna: Do you know where the narwhal go during the winter?

Off Iqaluit we have noticed now as there is always open water, in English it is called polynya down there off Iqaluit every year.

Anna: Are there changes in the numbers every year?

It is different every year like the weather, it seems to be like the weather, sometimes there are more at other times there are fewer. But this year we have more narwhal, I think it was last year there were more narwhal it is always different.

Anna: Are there any changes in the characteristics of narwhal in the last ten years?

Not really, it was only up there where they did not have calves in Sam Ford Fiord, I have noticed up there in the last several years that I have been hunting narwhal that is the only area I've noticed. Like last year it is different, sometimes they arrive earlier sometimes they arrive later.

Anna: Are there changes in the stocks when they are migrating during spring or fa..?

I just know that those with young ones are smaller tend to be together even though we know the older ones are fewer even when they come at the same time the ones with the young ones are larger in numbers that is what I know.

Anna: What do you know about the differences?

In narwhal?

Anna: Yes.

There are those that are called grey in appearance are narwhal, as well as narwhal that are called the ones with blotches and there are black narwhal that don't become lighter those are the ones I know.

Anna: Do you have anything else to add that I did not ask about narwhal?

Yes, The ones I mentioned about the three differences; the black ones they say will have shorter tusks we know them but when they are under water the other narwhal don't seem to be with them, but sometimes when they are with them they are very hard to get.

Anna: Is that all?

Yes.

Anna: Thank you.

Questionnaire number 3.

Inuit Qaujimajatuqangit about narwhal

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

The ice seems to be forming later in the fall, as we can go boating longer, the ice used to form towards the end of October but now during the first week or second week is when the ice forms now.

Anna: That is good?

Yes.

Anna: Has the migration of narwhal or charateristics changed?

There seems to be more narwhal here, I remember when there were not as many narwhal, when they did not stay around only when they were migrating the narwhal be seen.

Anna: Are there changes during the spring or fall migration?

I don't think so, they are always passing through when the ice is gone and when small particles of ice is forming when it gets cold they always pass through.

Anna: Do you know where the narwhal calving areas are?

Here in the inlets up north of us and south of us in the estuaries of the inlets is where they go to have their calves.

Anna: Do you go after them in the calving areas?

We hunt narwhal anywhere at the floe edge, in the inlets and here where they have their calves I cannot say. They are accompanied by the young ones at different times, we see them during the summer when they are passing through they are accompanied by the young ones even during the fall there are young ones as well.

Anna: I see.

I saw one with a young calf during the fall, summer. During the fall when there are patches of ice on the water the past Jacopie caught a young calf that seem to have been born recently it was brownish grey.

Anna: Do you know where the narwhal go during the winter?

They stay in the open water when the ice is forming when they pass through. Down at the open water when it is cold when the ice sometimes break up we see some narwhal during the winter in the open water between here and Greenland and when we go to Home Bay during the winter I have seen them more than once.

Anna: Are there changes in the numbers every year?

There seem to be more narwhal every year or maybe we have better guns or they are increasing.

Anna: Are there any changes in the characteristics of narwhal in the last ten years?

Some are very hard to herd is what I have noticed when we try to herd them near land some don't even go near the land when they are trying to get away. When I first started following when we follow them we just go past where they dove without reaching them when they were being herded towards the land they were easy to herd. But now they don't seem to do that we now hunt narwhal that are hard to herd.

Anna: Are there changes during the spring or fall?

What, during the migration? Or when they go back and forth?

Anna: Yes.

I don't think so, sometimes there are more but there are times when they are not together there seem to be less even when they are there all the time. When they are together there usually are lots that seem to be their characteristics. When we go after them when they are not together there are few of them they tend to surface with their head in the water, when there are few who are hunting they are very hard to notice when there are few of them. When there are more they spend more time on the surface they are more visible that seems to be the only difference when they come at the same time.

Anna: What are the differences that you've seen?

Our whales are mostly narwhal we don't get beluga often evey though we see them sometimes. It has been for some time that I have noticed when there are lots of narwhal there was a huge narwhal, it was not a bowhead whale, the appearance was all black that was with them, it had a large body when they were surfacing with the head down I have seen it more than once. I saw one right after the ice break up I also saw one last year but when we are not used to seeing them they are black with large bodies that accompany narwhal we often think maybe because they are old they have turned black if one was every caught maybe the tusk is huge.

Anna: Do you have anything else to say that I did not ask about narwhal?

We seem to be getting more narwhal here, before it seemed that the narwhal were near Pond Inlet and Arctic Bay, we seem to be part of that now. Even in Qikiqtarjuaq during the late fall when they have passed through here we hear that they are hunting narwhal down there. They seem to be staying down there longer when the ice is forming, we hear them through CB Radios, we heard that they were hunting narwhal not too long ago, we were envious.

Anna: That is all unless you have anything else to all.

I don't have anything else to add, I think we could say who we are, my name is Esau from Clyde River.

Anna: Thank you.

Questionnaire number 4

Inuit Qaujimajatuqangit about narwhal

Anna: What changes have you noticed in the environment for example the thickness of the ice, does it form earlier or later?

Ice, how,...sometimes it is different, some years the ice forms early sometimes it forms later when it is windy it takes longer to form. When it is not windy the ice forms earlier that is what I've noticed.

Anna: Has the migration of narwhal changed?

Not really I haven't noticed but it is always different every year. In some years there are more narwhal where we go hunting some years there are fewer narwhal...Up there at Nattiqtujuk and Sam Ford Fiord when there are not many narwhal I think they have moved here in our inlet at Aarrujaq Inlet.

Anna: What about, when they are migrating during spring or fall has that changed?

There doesn't seem to be any change, when the ice is forming sooner they seem to pass through earlier before the ice forms, they migrate through when the ice has formed in the coast.

Anna: Do you know where the narwhal calving areas are?

I observed during the spring when we were hunting at the floe edge maybe towards the end of June but I have never observed it during the summer when the ice is gone. But I observed a calf being born when some part of it was covered in ice down at the floe edge.

Anna: Do you hunt at the calving areas?

I have never noticed since they have their calves anywhere, but here when the ice is still around down at the floe edge they do that. I've seen a narwhal giving birth when were hunting from the floe edge during the spring not during the summer.

Anna: Do you know where the narwhal go during the winter?

I think they go where there is open water. They go to the open water, I don't think they go south they go to the open water during the winter that is what I've heard.

Anna: Are there changes in the numbers every year?

They are different every year, this year the areas up there in Nattiqsujuq and Sam Ford Fiord they said that the narwhal were fewer there are more narwhal here than last year.

Anna: In the last ten years, re there any changes in the characteristics of narwhal?

I have never noticed that as every year is different so I don't really understand that.

Anna: What about when they are migrating during spring or fall has that changed?

I really don't know about that whether it has changed, I tend to say that it is different every year.

Anna: What kind of differences have you noticed on the narwhal?

How?

Anna: For example, the differences in appearance or migration what you observe.

There does not seem to be any differences from what I've observed the narwhal seem to be the same, as we don't get beluga here there are only narwhal that doesn't seem to have changed.

Anna: Do you have anything else to add that I didn't ask about narwhal?

Not really, I don't seem to remember if there are any changes here, down at the inlet they say there are lots of narwhal, which is different from last year, there were fewer narwhal last year but this summer there are lots.

Anna: That is all the questions I have, thank you.

Questionnaire number 5

Inuit Qaujimajatuqangit about narwhal

Anna: What changes have you noticed in the environment? For example the thickness of the ice, does it form earlier or later?

The ice is forming later here and the ice break up is sooner. The thickness of the ice is different as it is thinner, it used to be a lot thicker before. The ice is thinner now by about half the thickness before.

Anna: Has the migration of narwhal or charateristics changed?

The migration doesn't seem to have changed and their characteristics don't seem to have changed.

Anna: Do there seem to be changes on the migration during the fall when they are passing through, are there changes during spring or fall migration that you know?

They migrate north at about the same time during spring...they come through the same time and during the fall they come through during the same time at times they don't pass through here.

Anna: Do you know where the calving areas are?

The estuary of Kingmiaqtaqtujuq is where the calving area is, that is where the calves are born, where the narwhal have their calves.

Anna: Do you know if they hunt narwhal at the calving areas?

They do hunt narwhal, we told them not to hunt narwhal there but they still hunt narwhal. We never did that before when we were hunting narwhal we never went after them up there.

Anna: Do you know where the narwhal go during the winter?

No, I've never caught a narwhal during the winter so I don't know.

Anna: What about are there changes in numbers every year?

I remember there were lots when I was a boy, that seem to be the same.

Anna: Are there any changes in the characteristics of narwhal in the last ten years?

Yes, there are changes, the fat used to be good before but now...they have less fat there has to be a reason for that.

Anna: Is that so?

Yes, they never used to be like that.

Anna: Are there any changes during the migration during spring or fall?

I don't think so but it was not too long ago that we started hunting narwhal.

Anna: Is that right?

Yes, we were already adults when they started...we started hunting narhwal at that time we seem to have started it.

Anna: What differences do you know?

Yes, there are differences in narwhal, the ones with tusks that arrive here seem to be the same ones. We can tell by the scars they seem to be the same ones and there are bigger ones that we don't see often, they are becoming more common that is what I've noticed.

Anna: Do you have anything else to add that I did not ask regarding narwhal from what you know?

I don't think so.

Anna: That is the end of the questions, thank you.