

**Consultation with Sanikiluaq Hunters and Trappers Association on  
the 2021 Southern Hudson Bay Polar Bear Subpopulation Aerial  
Abundance Survey Report**

May 13, 2023

Department of Environment  
Government of Nunavut  
Iqaluit, Nunavut



## Executive Summary

Government of Nunavut (GN), Department of Environment (ENV) representatives conducted in-person consultations with Sanikiluaq Hunters and Trappers Association (HTA) on May 13, 2024.

The intent of this consultation was to ensure the GN and HTA could discuss the results of the 2021 Southern Hudson Bay (SH) polar bear subpopulation aerial survey, led by the Ontario Ministry of Natural Resources and Forestry in collaboration with ENV. The survey collected data in 2021. The previous abundance data for SH was collected in 2011 and 2016. The 2021 survey results suggested an increase in the polar bear subpopulation from 2016 to 2021, but when results were pooled with the 2021 Aerial Survey of Western Hudson Bay Polar Bear Subpopulation results, there was a difference of 1 bear between 2016 and 2021. Due to the limitations of an aerial survey method, it could not be determined how much of the increase was due to movement. Environment and Climate Change Canada (ECCC) have been conducting research on WH since the 1980s, including a biopsy darting project from 2017 to present. Results from this work suggested that the increase was in large part due to movement near the boundary between WH and SH in 2021, as opposed to higher reproductive rates. The goals of the consultations and presentations were to provide co-management partners with an overview of the results of the GN report and ECCC's research, collect feedback on the results presented, collect additional IQ, and to discuss the ENV harvest recommendation.

Polar bear biologists met with the Sanikiluaq HTA, which hunts from the SH subpopulation.

Support for or against ENV's harvest recommendation was not explicitly expressed by the HTA at the time of consultation. At the end of the consultation, the HTA was left with questions to discuss and send their feedback to ENV or the Nunavut Wildlife Management Board, whichever was preferred by the HTA.

The feedback and IQ collected during this consultation will be summarized when submitting Total Allowable Harvest (TAH) recommendations for the SH subpopulation to the Nunavut Wildlife Management Board (NWMB) for decision.

This report attempts to summarize the comments made by participants during the consultations.

## Preface

This report represents the Department of Environment's best efforts to accurately capture all of the information that was shared during the consultation meeting with the Hunters and Trappers Association of Sanikiluaq on May 13, 2024.

The views expressed herein do not necessarily reflect those of the Department of Environment, or the Government of Nunavut.

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## 1.0 Report Purpose and Structure

This report is intended to collate and summarize comments, questions, concerns and suggestions provided by the Sanikiluaq Hunters and Trappers Association (HTA) regarding the results of the 2021 Southern Hudson Bay (SH) polar bear subpopulation aerial survey.

Representatives from the Department of Environment (ENV) attended the consultation along with other co-management partners and interested parties.

## 2.0 Purpose of Consultation

The purpose of the consultation was to discuss the newest scientific information regarding the SH polar bear subpopulation as reported in the 2021 Aerial Abundance Survey report and scientific work done by Environment and Climate Change Canada (ECCC). In addition, the Government of Nunavut (GN) also put forward a Total Allowable Harvest (TAH) recommendation during this consultation, but also discussed that management objectives can be formulated depending on the communities' needs and objectives for this subpopulation.

### 2.1 Format of Meeting

The meeting was held in the evening and ran for approximately 2.5 hours. Government of Nunavut Polar Bear Biologist, Alyssa Bohart, and Senior Wildlife Advisor, Jonathan Pynn, facilitated and led the meeting. Joseph Northrup, Ontario Ministry of Natural Resources and Forestry Regional Biologist planned to attend virtually, but was absent due to a work emergency. The presentation started with opening remarks from A. Bohart, and J. Pynn on who they are and what organization they are representing as well as the purpose of the consultation. This was followed by a PowerPoint presentation with an overview of the scientific survey and co-management process, historic management background, a detailed overview of the results from the 2021 polar bear aerial abundance survey, and the results from scientific work conducted by ECCC in Hudson Bay (Appendix 1). Results from the aerial abundance survey were inconclusive, whereas scientific work by ECCC aided in the explanation of the aerial abundance survey results. The participants were invited to ask questions, raise concerns, or provide recommendations throughout the meetings. At the end of the meeting, the GN position on the TAH for SH was presented. After the presentation, questions/discussion continued until the HTA adjourned the meeting. The HTA was left with discussion questions regarding the studies and SH management objectives from ENV to internally discuss and send responses to ENV or directly to the Nunavut Wildlife Management Board (NWMB).

### 3.0 Summary of Consultations

This summary combines the general themes and ideas generated from the HTA. For specific commentary and participants in the consultation, please see Appendix A.

#### **Comments and questions:**

- HTA had questions and expressed concerns over the welfare of bears in biopsy darting and collaring/handling projects.
- HTA identified a large presence of polar bears in 2021, damaging eider nests. This aligned with the findings of more bears in SH during the 2021 aerial survey.
- HTA shared that the ice has been thinning and is not as predictable anymore with climate change.
- HTA identified their interest in submitting their own letter to NWMB for their SH TAH decision at the October meeting. HTA did not express support or non-support for the draft TAH presented by the GN.

#### **Appendix A**

### 2021 Southern Hudson Bay Polar Bear Subpopulation Aerial Survey Report Consultation Meeting Highlights

Location: Qikiqtait Building (Arctic Eider Society/HTA Building)

Date/Time: May 13, 2024

Start time: 19:00

End time: 21:30

#### **Participants**

Eli Kavik (HTA Acting Manager)

Mick Appaqaq (HTA Vice-Chairperson)

Charlie Takatak (HTA Secretary-Treasurer)

Moses Appaqaq

Garry Rumbolt

Johnny Kudluarok

Alyssa Bohart, Polar Bear Biologist, GN ENV

Jonathan Pynn, Senior Wildlife Advisor, GN ENV

Kyle Ritchie, Senior Wildlife and Policy Advisor, Wildlife Management Biologist, Nunavut Wildlife Management Board

Jonah Qittusuk, ENV Conservation Officer Sanikiluaq

Lisi Kavik-Mickiyuk, Translator

Regrets: Joe Northup, Regional Biologist, Ontario Ministry of Natural Resources and Forestry

#### **Goal of meeting:**

Provide an overview of the newest scientific information regarding the SH polar bear subpopulation as reported in the 2021 Aerial Abundance Survey report and scientific work done by ECCC. Discuss the GN TAH recommendation. Discuss any questions HTA has for both studies. Collect feedback and IQ on SH management.

## Next Steps and Action Items:

### Short term Action Items (within 4-6 weeks):

- Email HTA the questions

### Longer term Action Items (next 2-3 months):

- Provide HTA the animation of collared bears

## Meeting Highlights:

### ***Question to Group after Introductions:***

The meeting began with introduction of participants. **Joe Northurup** had planned on attending virtually, but a work emergency prevented him from joining. **Alyssa Bohart** informed the HTA that if they had any questions she was not able to answer, she would pass them on to Joe. **Alyssa Bohart** presented slide show with background on the transition at the GN polar bear research group due to the loss of biologist Markus Dyck. She then presented an overview of the polar bear study process including the planning stages up to when a TAH management decision is accepted by the minister and harvest tags are distributed to communities. She then noted that the purpose of this meeting was to provide a summary of the results from the aerial abundance survey and ECCC's work to hear HTA feedback.

### **Aerial abundance survey background slides**

- No comments received.

### **Aerial abundance survey methodology/field work**

- **Moses:** I understand the quantity of the bears estimated during the survey. Are the bears identified if they are male or female?
- **Alyssa:** They do a visual ID from the air. We also rely on HTO members to tell us if bears seen on survey are male or female, but we can't confirm it genetically. It's kind of like an estimate.
- **Charlie:** I helped in the survey and it's harder to tell male or female from the air than when on the ground.
  
- **Johnny:** For the bears that have been collared, has it been known if they go long distances? Or stay in similar areas where they were collared?
- **Alyssa:** From the tracks we have seen, they travel long distances, all across Hudson Bay. We are working to get this information in an animation for existing collar data. We have a video of bears that were collared for WH and after the consultation we can show that video if they HTA would like.
- **Charlie:** As a participant to the survey, yes polar bears on land were identifiable on land, but were hard to spot in the water. We spotted some bears, but I think we missed bears that were in the water because they are hard to spot.
- **Alyssa:** Yes we've heard that too. Its hard for safety reasons to be flying over water, but there is some ongoing drone research and the focus this year is on caribou. We are hoping that this improves and we can fly over water with drones in future surveys.
  
- **Gary:** Do you have any records for how long of a lifespan of bears with a collar? They do affect their hunting patterns and ways they can hunt.

- **Alyssa:** The GN hasn't collared bears in over a decade. There are still bears that are collared by ECCC in Manitoba. A typical collar will last 1-3 years then should fall off. In talking with researchers who collar bears, they try to track down collared bears. They do their best to make sure the collars come off, but bears in water or in dens make it hard. Only female bears are collared. One of the most recent bears harvested with a collar was in Whale Cove; that bear was 24 years old and they've caught bears that have been close to 30 years old that had been collared, but that old of a bear is not as common. Thank you for sharing the concerns about collaring bears and the researchers that do collar bears want to not harm bears and want to understand how the collars are affecting the bears.
- **Johnny:** (Alyssa went back to flight line slide) When you mark the black lines (the subpopulation boundary) what is that? Does that show where the survey is? Sometimes the bears are more inland and not on the coast yet so you might miss bears. Were there studies being conducted in Western Hudson, Southern Hudson Bay and on the islands, and along the Quebec coast?
- **Alyssa:** The black line is the map boundary between the subpopulations. The other colour lines show the flight lines within the SH boundary. The survey estimate is for the full area, including along the Quebec coast, not just near Sanikiluaq. Thank you Johnny for letting us know that there are still some bears further inland.
- **Charlie:** How long does a collar last? 1-3 years? Battery operated?
- **Alyssa:** Yes, more commonly they last 1.5 years but sometimes can last up to three years.
- **Lisi:** Is it computerized to drop off?
- **Alyssa:** Yes, it is.
- **Charlie:** One year my father caught a bear with a collar on it (a long time ago). He gave that collar back to the government because he thought it might still be active.
- **Alyssa:** Sometimes they are! They are programmed to send data up to a satellite, but it doesn't always work, so some data is missing from the computer. When you turn in a collar, we can download all the information from the collar by plugging it into the computer. If people were interested, there was a bear harvested in Sanikiluaq this year that I have some information on and a map of the locations. I believe Jonah has more information.
- **Moses:** Come on down to the people who make the decisions as to what the quotas will be, during bear hunting season. It was the younger, the juvenile bears, we would want to harvest, but they are not harvestable now. We want the people who make the decisions to come down and hear what our traditional knowledge is on harvesting animals that we eat. Now there is a saying that we cannot harvest young bears, we can only harvest adult bears. I'd like to see those people come to here to meet with us. We should write letters allowing us to harvest younger bears.
- We would appreciate and to hear that these officials will come. As Belcher Islanders, we live off eider ducks and they are very important to us. When there are too many bears left on land, we lose many eider eggs to bears. And so that's the reason we want to see the people who make final decisions about bears.

**20:05 – 20:10 Break**

### **Aerial abundance survey methodology/field work & ECCC research**



- **Jonathan in response to Moses' comments** clarified that there are exemptions for harvesting cubs/young bears.
- **Jonathan:** This is a process and there are a number of rules and regulations associated with it, but it does exist. The Regional Manager, Jeff MacDonald, and CO William Flaherty, should be here tomorrow and they can better explain how the cub exemption process works.
- Board seemed pleased that this existed as they didn't know about it; Jonah said that he was not aware of it either. Also mentioned that the decision maker they want to meet, is Minister Daniel Qavvik who is the Sanikiluaq MLA.
- **HTO general comment** made that they'd like to meet Jeff and have that explanation while he is in Sanikiluaq.
- **Alyssa:** In WH communities, people noted that it was a really windy year in 2021 and that might have pushed the ice into SH, leading to more bears being counted in SH in 2021. Did the board notice if there were any anomalies in 2021?
- **Moses:** Through Inuit Qaujimagatqangit, if we not just oral and we documented our findings and things that we noticed were different, we would have jotted them down. Unfortunately, that's the Inuit traditional way to document in your brain only and not share it on paper. I'm sure if we did have documentation as a hunter, then we would share it but as a hunter, every year and every season is different. They're always changing on a yearly basis.
- As a community member to an environment that sees a lot of climate change, through traditional knowledge, we used to go to the highest peaks to see how long the ice would stay. That is not possible today, there's so much change now. Now you can't see what the ice will be like. Due to climate change so much movement is happening so it is hard to predict how the ice is moving or how long it will stay.
- **Gary:** There was a year, I don't remember which year, there was a lot of polar bears harvested in the summer. Polar bears that got left behind by the ice and stuck on islands. We went to gather down and there was not much left to gather. There was a lot of bear damage to eider nests.
- **Group:** It was 2021.
- **Charlie:** Like Moses said earlier, traditional knowledge doesn't work the same. The ice is so much thinner now. This is one of the biggest changes we see as hunters. And it thins out fast.
- **Johnny:** In summer 2021, I participated in the eider duck nesting survey on the south end of Belcher Islands and Sleeper Islands. In both areas there was a lack of nests. There was a lot of evidence of nests, but all of those nests were empty of eggs because there was a disturbance of bears. That fall, someone from James Bay area, a Cree person, asked us what our summer was like because a lot of eiders moved into James Bay and nested there that year.
- **Charlie:** The surveys that you talked about (WH and SH), do the people in Baffin have their own studies, population studies, darting studies, and all that? And in northern Quebec? We know they harvest bears too. They must have information too about where they are darted and harvested too.
- **Alyssa:** Yes, we cycle/rotate through subpopulations to survey, since we have 12 to manage. For this year we plan on surveying Foxe Basin which includes Quebec and Baffin and northern Kivalliq. We are trying to do some biopsy darting and an aerial survey. Our colleagues in Quebec are going to focus their part of the survey in this area (pointing to northern Quebec shoreline). We plan to send harvest samples to be tested to find out if

any of the bears we've been biopsy darting in SH are being harvested in Foxe Basin. The most scientific information we have is for WH as that area is the most studied. So we might not have all the same information for other areas.

- It is very important to provide the harvest samples to the wildlife office. It helps us to answer research questions like this, but it is also very important for us to be able to defend Nunavut's harvest management system at the international level. I've been at meetings where the other countries don't allow harvest and they criticize Nunavut's management system, but it really helps when we have the records of the harvest from the communities and when you submit those samples to defend Nunavut's management system. So I just wanted to take the time to thank all of the harvesters for providing those samples because it helps keep harvesting in place.
- **Charlie:** I remember an HTA meeting that there was a survey for bears for this summer. Do you have any idea when the next survey will take place for SH?
- **Alyssa:** We don't have a definitive year, but we have been going on every 5 years. It's dependent on how much money is available because surveys are very expensive. Hopefully 2026 if we follow the cycle.
- It doesn't have to be an aerial survey. We might be able to do a biopsy survey if that is something the HTO is interested in. With biopsy darting, we'd be able to see a bit of movement data, but in the future we can come back to the HTO for consultation and discuss options on what the HTO supports.
- **Eli:** Does the NU government work with Eeyou, and Ontario and Nunavik governments when you are doing the surveys?
- **Alyssa:** In the past, we have provided funding to other governments to conduct the survey. We have provided funding for the ON and QC governments to lead the SH survey and we typically deal with WH. We still need support from other HTOs and permitting, so we work together. The ON government recruits people to help with the aerial survey.
- The GN would still come to Sanikiluaq to present the survey methods and pass along the wishes of the HTO to the ON government, but we usually aren't the ones in the field doing the survey.

## TAH Discussion

- **Eli:** Since the population has increased, can Sanikiluaq request an increase to the TAH?
- **Alyssa:** That's a good lead into our next slide. At this time, our draft TAH recommendation is to keep the TAH the same, but if the HTO wants, this is something we are here to discuss and will document in our notes.
- **Moses:** I would like to start with a story. Long ago me and my older brother went seal hunting and came across a helicopter. That helicopter was tiring out a polar bear for many hours and that polar bear couldn't run and was exhausted. They finally put that bear to sleep. Inuit Qaujimajatuqangit tells us to never put any animal in that state, where you are tiring them out to the point where they are gasping for air. Do the people who do biopsy darting, are they running down a bear so much that it can hardly breathe anymore?
- **Alyssa:** They've timed how long it takes to biopsy dart a bear and that is usually less than one minute. With that short of a timespan, there's less of an impact on the bear. We recognize that chasing a bear is disturbing/stressful for a bear. We want to limit the time we are disturbing a bear so it doesn't get as stressed. There are rules in place in how we biopsy dart. Some of the rules is a temperature cutoff (don't pursue bears when it is too

hot), we don't want a bear to overheat. We don't chase bears in rocky terrain so they don't fall and hurt themselves on the rocks. Also don't want to separate moms and cubs. So from what I've seen, biopsy darting is less intrusive than drugging and collaring a bear.

- I don't know about researchers who came way before me, but researchers that I know try to do the least amount of negative impact to bears. For the GN's biopsy project in Foxe Basin, we're taking many precautions. Because the aerial survey is the most important part of the survey, we will only be darting bears if we can do it quickly and not disturb them much. We won't be darting bears in dangerous situations. We also won't biopsy dart bears near communities where the HTOs don't support it.
- **Moses:** Like I said earlier, oral history is not written. My parents and grandparents emphasized that we don't run the bears ragged and tired. Today we have snowmobiles and can get up to a bear much faster and harvest it before it's done its course of running. Harvesting a bear with Elders traditional knowledge, our elders will not eat the bear if it has been run too much, because it changes the taste of the meat on the bear. Hunters know to harvest a bear in a quick manner as it is going to feed the people.
- **Alyssa:** We had proposed that the TAH stays the same based on the fact that we're seeing the movement between the two subpopulations, suggesting that the number of all of Hudson Bay has relatively stayed the same. What it sounds like I'm hearing from the HTO is there's concerns over the number of bears having an impact on the number of eiders. Perhaps the HTO would be interested in having an increase in their TAH to address the effect on eiders? Is that correct?
- **Eli:** That was just a point of discussion, but this is something that we will discuss and get back to you on.
- **Alyssa:** This is also something you can discuss as a board after our meeting. You can make a submission to NWMB to modify the TAH request. It would be important to include some reasons in why you want a change because it helps the Board (NWMB) to understand why.
- **Kyle:** The Board (NWMB) members really appreciate HTO feedback to make these decisions. There are other opportunities to discuss this with the board. October is when the GN currently intends to present this item to the board. The Board would have a meeting in October, and you could attend virtually or in person, I'm not sure where the meeting will be yet. It would be appreciated by the board if you could participate in that decision-making. At that time, if they don't make a decision, they may choose to hold a hearing if they don't have enough information. With Sanikiluaq being mostly affected, they may choose to hold the hearing here, but I can't say for sure. A letter and participating in the October meeting would be really helpful in the decision-making process.
- **Alyssa:** We'll email the list of questions to the HTA and Lucassie will present it to the Board.
- Alyssa showed a map of the recently harvested collared bear. The collar stopped working, which is why it doesn't show the bear coming to Sanikiluaq. Bear born in 2008 and collared near ON-MB border. Last known location was May 2023 but not sure how long the data would show.
- Alyssa offered to send a collar animation of WH bears to Lucassie so he can show the Board.

Participants were thanked for attending, and their feedback.

**21:30 Meeting End**