



Department of Environment
Avatiliqiyikkut
Ministère de l'Environnement

Teleconference with Hunters and Trappers Organizations and Co-Management Partners

Meeting Minutes and Speaking Points

June 18, 2020



Meeting started at 11:15 am EST

- Attendees:

- | | |
|----------------------------|---------------------------------|
| ○ Kevin Methuen (GN-DOE) | ○ Jason Aliqatuqtuq (GN-DOE) |
| ○ Caryn Smith (GN-DOE) | ○ Jon Neely (GN-DOE) |
| ○ Drikus Gissing (GN-DOE) | ○ Jason Akearok (NWMB) |
| ○ Denis Ndeloh (NWMB) | ○ Kate England (NWMB) |
| ○ Jordan Hauffman (NWMB) | ○ Kyle Ritchie (NWMB) |
| ○ Bert Dean (NTI) | ○ Bobby Greenly (EHTO) |
| ○ Beverly Maksagak (EHTO) | ○ Bobby Klengenberg (KRWB) |
| ○ Amanda Dummond (KHTO) | ○ Bobby Anavilok (KHTO) |
| ○ Arlene Hokanak (KHTO) | ○ OJ Bernhardt (KHTO) |
| ○ Andrea Hanke (UofC) | ○ Susan Kutz (UofC) |
| ○ Javier Aguilar (UofC) | ○ Connie Kapolak (Burnside HTO) |
| ○ Cheryl Wray (NTI) | ○ Clarence Kaiyogana (EHTO) |
| ○ George Angohiatok (EHTO) | |

*Peter Kapolak was not able to call in; Kevin will send him a summary afterwards via CO III and seek input

Presentations

- Caryn Smith presented overview of the results from the 2018 population survey and current status of the Dolphin and Union Caribou (Appendix A)
- Andrea Hanke presented overview of TK study methods and results from 2003 and 2018-2020 (Appendix B)
- Susan Kutz presented overview of caribou sampling and health assessment program (Appendix B)
- Kevin Methuen presented the next steps and management recommendations (Appendix A)
- Break from 11:55-12:05 PM EST

Kugluktuk HTO Comments and Questions

- Amanda Dummond - wants to know about a collar from early 2020 that stayed on Victoria Island
 - Caryn will check on that collar and get back to HTO
- Amanda Dummond – where did you get the information to indicate that there has been a significant harvest from DU caribou?

- Caryn Smith – it was stated at March public hearings that there is more harvest pressure on DU caribou due to BNE and Bathurst declines and there were reports from harvesters of harvest happening in the Spring of this year (2020).
 - Amanda does not think the word “significant” should be used and that it is misleading.
- Amanda Dummond – Why is there no Predator control and what is the government planning for predator control?
 - Drikus Gissing – there are no new programs being proposed for predator control but the current support for active harvesters has been very effective. We are increasing efforts on predator research, such as Grizzly Bear research, and continuing the wolf sample program
 - Drikus Gissing – added more insight into where the reports of continued harvest have come from and why the harvest levels are concerning and are significant in his opinion
- Amanda Dummond – their board would not be comfortable with interim TAH being implemented July 1st. They need more time to meet with community and have more HTO consultation. They feel they need more time with the report and time to meet with the community. Question to the NWMB on whether the interim decision can be implemented without consultation.
 - Jason Akearok – the Minister of Environment has the authority under the Nunavut Agreement to implement an interim management decision as per 5.3.24 in the agreement (for urgent and unusual circumstances).
- Amanda Dummond – wants to know what the position of the other co-management partners is at this point, especially the other jurisdiction.
 - Drikus Gissing – the GN has sent a letter to the GNWT Minister to relay the results and indicate that we need to initiate discussions on the shared management of this herd. We would like to have a collaborative process but we cannot force them to go faster in their process. We hope that they will start to implement a harvest restriction in their jurisdiction as well. The GN has no role in allocation but we can help facilitate the discussion between the appropriate organizations.
 - Drikus Gissing – also pointed out that the GN does not like to implement harvest restrictions, especially through this method, but we feel the need to initiate this due to the conservation concern and with an expedited process of consultation. We are looking for guidance from the HTOs on how they want the consultation process to start. It is correct that the decision will not be in place by July 1 as it will take some time for the decision to go through the proper process before implementation. If there are mistakes in the current status of this herd we will likely pick it up in the next survey process. We will be making it a priority to gather more information to inform whether the harvest limitations should be adjusted to better reflect the population status.

- Amanda Dummond – their community did not expect the current status. The harvesters out there do not believe the number. They want more time to review the report and get their thoughts together. They won't be ready for a while. It is unacceptable that the report took so long to be shared with the communities. They recognize the decline but to wait two years for the report.
 - Caryn Smith – In early 2019 there was some outside concerns with the methodology of the survey so the DOE initiated additional spatial analysis and included additional data from genetics to ensure that the results presented in the report were as strong as possible and the most accurate with the available information. The additional analysis strengthened the report an improved scientific confidence in the results. Unfortunately there was the blackout period at the end of 2019 caused by the Ransomware attack on the GN, which delayed progress, and the workplace changes due to Covid-19 caused a another slight delay just before it was finalized.
- Bobby Anavilok – has questions about the number and the survey methods. There were huge areas that were not looked at or caribou that were not counted. The timing of the survey may not be appropriate. The biologist that is coordinating the survey is responsible for that. Maybe because the biologist doesn't eat meat.
 - Caryn Smith – there is typically misunderstanding between composition survey and population survey. Also the methodology has been the same since 1997 and been consistent. The methodology for this survey was developed because the traditional calving ground survey was not a good fit for Dolphin and Union Caribou since their calving behaviour is spread out over Victoria Island but they do gather in large numbers just before crossing the ice in fall and for the rut. The survey has been done the same way and time of year so because of that it should be more effective in capturing a trend. If we used a different method in 2018 and tried to compare it to 2015 the change in method could easily be used to say the decline might not be that accurate. If you walk into a room the same time every day and there is fewer people each time, you know its likely because there are less people and not because of how and when you walked into the room. The collars are still showing movement over the sea ice so the bulk of the herd is still moving to the coast and into the survey area at that time of year.
 - Bobby Anavilok – worries about the survey and whether many of the animals are not being counted
- Amanda Dummond – mentioned the chairperson, Larry, could not attend. They want more time with the report and the information. They don't think they are ready for a decision to be made.

Cambridge Bay HTO Comments and Questions

- George Angohiatok – questions about the methodology used to do the study. From a distance it is hard to tell what the animals are. Growing up they watch their animals. They have noticed there is a change and they know it has happened. When you start to look at ways to fix that

problem you should go directly to the cause of the program. The harvesters take a very small proportion of the animals when compared to the predators. The wolves take a large number of calves in the spring. When any living thing runs out of food they have to move. We have a lot of work to do as an HTO on what we want to see and sharing our concerns with the community. We don't agree with some of the methods you are using. We don't think the numbers are necessarily going down, they are likely moving into different areas. My grandparents said that you can't control the numbers, they will go up and down. They are not ready to make a recommendation. He thinks the methods being used a waste of time. We need to look at this more realistically and meet face to face. The Kugluktuk concerns are their concerns too. What can be done? Making the hunters pay by not harvesting, instead of looking at the direct cause of the decline, the predators is not right. The GNWT looks at predators, but not in NU. Two different approaches. The key people who make these decisions need to look at this. We need to look at what our priorities are.

- Bobby Greenly – in looking at the letter signed and sent by Drikus. They have concerns about the recommendation of 42. We have a population of close to 2000 people with 80% Nunavut Inuit, the same applies to the other communities. I know it was mentioned to do a 1% harvest of the 4,205 caribou that is left. Is this going to be submitted to the NWMB for a decision? It is going to be very difficult to keep traditional ways going with such a low harvest limit. Is this automatically going to be submitted to the NWMB without consultation?
 - Kevin Methuen – acknowledged that issues around food security are very important right now and that is certainly something that gets considered by the Minister when making these decisions. The intention and purpose of the interim decision is to address the situation until a fuller process can be completed. The GN will be submitting the interim recommendation to the NWMB now with the intention to fulfil the process of consultation and another formal recommendation to the NWMB
 - Drikus Gissing (re-joined the call after audio problems) – this is an interim decision and we know that it does not really meet the basic needs level of the communities. The GN has an obligation to address conservation concerns and if we did not act on this we would not be fulfilling our mandate. We are following a process that is outlined in the Nunavut Agreement. We want to go through this process as soon as possible to have proper consultations and formal submission to the NWMB, which could require a public hearing as well, just as for Bluenose East and Bathurst caribou. When you review the report, pay attention to the survival rates as indicated by the collars. Many of the collared animals were harvested or died due to other reasons. We also have a TK report that has basically confirmed that there are declines in this herd.
- Bobby Greenly – they all care about the wildlife but if this is going to be an interim decision, they would like to see the number a bit higher even though he knows that it is the harvest rate that was agreed upon in the Management Plan. They only take a maximum of 200 caribou each year. He's glad to see there is a previous process such as the Baffin population and TAH process. He understands that there are 10 communities in Baffin. It is frustrating but they would like to see the interim number a bit higher as it is too low.

- Susan Kutz – wanted to make a clarification that the decline in the TK results is not as drastic as the decline indicated by the survey results.
- EHTO member (name was hard to hear when question was posed) – interested to know what NTI has to say about this.
 - Bert Dean – him and Cheryl have been involved in this file and the big concern NTI has is in and around the survey methodology so there are concerns about the migration back to the mainland. Ulukhaktok is actually seeing an increased harvest so it is important that it is an inter-jurisdictionally shared herd and we need to acknowledge that they are seeing more caribou in their area. They would like to know what the more recent harvest information is. There may have been some recent harvest of a couple hundred but there has not been a harvest study and there is no complete information on that. There are a lot of things we should be looking at such as information from hunters. The information on Brucellosis is also concerning. Has there been a change in distribution, has there been issues with the sea-ice crossing and the quality of ice, shipping, and harvest. What kinds of management actions would the communities like to see? Working together is going to be difficult. It's not a matter of picking sides or having that debate, are there some actions that the communities would be interested in doing? Communication is a big issue. When we started conversations about Bluenose East and Bathurst, NTI was involved in getting the communities involved in the conversation. Kugluktuk had been hunting more Dolphin and Union caribou a few years ago because there had been more caribou around. This information is important for the NWMB for when they make decisions on this. Cheryl may have more to add. ECCC is also involved because they want to list this subspecies as Endangered and there were issues with how the results were shared a few years ago.
- Bobby Greenly – mentioned that for his comments about the 1% harvest for the interim decision, even if we have community consultation and public hearings, if this was a 2.5% harvest it would give us 105 tags which would be more significant than 42 caribou. Is that something that would be possible?
 - Drikus Gissing – this was not an easy decision and there were several formal meetings with the Minister. There were even discussions on implementing a moratorium. Based on our consultation with our Minister, 42 is the best recommendation we could present. It might not even have to be for a year, it could be for less time depending on how quickly the process of consultation and submission to the NWMB goes. The harvest limit could go up or down based on that process. The change won't come until after the formal consultation. He agrees with some of the points made by Bert Dean in that there is a need for more information, community input, and more survey information to be collected. NTI has not made any alternate suggestions. We hope that we can meet with you in the next month or two, if not sooner so that we can speed up the process.
 - Bert Dean – wanted to add that NTI's focus has been on what the HTO or community supports and that is why they have not come forward with an alternative suggestion. He

pointed out that the Coral Harbour community worked together to support a lower HTO and all the co-management partners were on the same page. I don't know how much harvest there would be. Is it a critical time when the herd aggregates on the coastline? We need to acknowledge that this harvest has to be shared. If the significant part of the herd is migrating to a different area how do we address that issue? There would have to be discussion on allocation.

- Denis Ndeloh – had a question and clarification on the process that the GN is trying to go through with this process. Your letter says that at this time the GN is recommending an interim decision as outlined by 5.3.24 of the Nunavut Agreement. I understand you are bringing a recommendation to the board after this process. Why are we saying we are going to the NWMB if we want to use 5.3.24, we do not need to involve the Board before the interim decision is made.
 - Caryn Smith and Drikus Gissing – we will be making a Ministerial Management Initiative recommendation to the Board as outlined by 5.3.25 of the Nunavut Agreement before making a decision under 5.3.24. This gives the board the opportunity to make a decision before we move forward with a Minister's Interim Decision.
- Bobby Greenly – doesn't really have any more questions but wants to point out that he doesn't agree that thousands of caribou are being harvested and that he does not think the limit of 42 is appropriate and would like to see it a bit higher.

Burnside HTO Comments and Questions

- There were no comments or questions from the Burnside HTO

Kitikmeot Regional Wildlife Board Comments and Questions:

- Bobby Klengenberg – he was out in the field when the survey was done and the caribou were starting migrating down at that time and it was only a small portion of where the caribou were. I know things won't change from what was said this morning. If the survey is repeated I would like to see more areas added to the survey. You might get better numbers if you add more areas. We have more communities involved so it would be great if the number was a little higher.

NTI Comments and Questions

- Bert Dean – NTI will be willing to work with the communities to help figure out what approach they think would be the most appropriate in this situation. They also have a call soon with Inuvialuit Game Council. Cheryl has been working with the KHTO to set up meetings with Inuvialuit. We will just continue to work with the communities.

NWMB Comments and Questions

- Jason Akearok – he can see that this is considered an urgent issue for the GN, but given the suggestion put forward by EHTO of a higher TAH, is there a possibility of considering a higher number before submitting to the NWMB.
 - Drikus Gissing – at this point, based on the evidence we cannot consider a different recommendation. Also, there has been almost 2 years since the survey so the overall population may be lower. The NWMB is able to consider other information in their response, such as Traditional Knowledge. As you know, additional information is collected through the consultation process. We hope that all the information collected through consultation can help direct a harvest management decision that is reflective of the best available information.

University of Calgary Comments and Questions

- Susan Kutz – they are there just to provide additional information to all the organizations.

*Omingmaktok HTO Comments and Questions

- Peter Kapolak *(provided after the teleconference) – In Bathurst Inlet, in May or April, we see the Dolphin and Union caribou going with the Ahiak caribou, going to the east, they're traveling with the Beverly herd. Quite a few caribou going east. Maybe that's why the numbers are down.

Closing Remarks

- Caryn Smith – We want to work with communities and follow their lead on how the consultations should proceed. We are looking for direction from the HTOs on the best time and method for holding formal consultations. It's important that we work closely on this as we know the consultation step in this process is very important.
- Bobby Greenly – wanted to make a suggestion that now that we are able to travel, if you come to the community very soon while it's warm we could do this outside and maintain distance. Like setting up speakers. He suggests we deal with this right away and ASAP before people are going out on the land.
- Bobby Anavilok – how did the government come up with 42? I don't think it was a serious matter for the government but it was a serious matter for us. This is going to create a problem for us. We don't believe the proof of the survey. Can't just go by assumptions or guessing. We have to get the real numbers. Have to get the real numbers from the people of the North and not the people from the South.
 - Caryn Smith – the DOE will be putting a lot of effort into ensuring there is adequate involvement from the communities before and during the survey work. There will need to be meetings with HTO and local harvesters before the survey to ensure that the

survey area represents the best amount of coverage and best areas to survey the most amount of animals. We will also be sure to include HTO/community members on the actual survey as well.

- Bobby Greenly – in the past they have pushed to make sure that someone from their community was on the survey flights and he wants assurance that they will be represented on the upcoming survey.
- Drikus Gissing – assured Bobby that they will involve the HTOs in the survey and if they feel they are not being involved properly to contact him directly.

Meeting adjourned at 1:55 pm EST

Appendix A

Scientific Survey Results and Management Recommendations Speaking Points for Dolphin and Union Teleconference with Co-Management Partners Thursday, June 18, 2020

Scientific Survey Results

- The Dolphin and Union caribou herd has been surveyed, using the coastline methodology, in several years including 1997, 2007, 2015, and now in 2018.
- Prior to the most recent survey, the population trend was showing a slight decline, representing about 34% over an 8-year period (4.2% annually on average) between 2007 and 2015.
- The results of the 2018 population survey have indicated that herd is experiencing a drastic decline, which represents a serious conservation concern for the future recovery of this herd.
- The 2018 population estimate is 4,105 caribou, which is a continued decline from the estimate of 18,413 caribou in 2015, 27,787 caribou in 2007, and 34,558 caribou in 1997.
- There has been substantial harvest from the herd since the 2018 survey, partly as a response to the declines of neighbouring Bluenose East and Bathurst caribou herds, and that harvest could have resulted in further declines to the herd.
- The currently declines are not due solely to harvest but with very few animals, the risk posed by overharvest is significant and could result in continued population decline and/or extirpation on some parts of the traditional Dolphin and Union range.
- Climate-related changes, timing of the sea-ice freeze-up, shipping, predation, and competition with other species are also considered main threats to the survival of the herd.
- Demographic indicators such as low calf to cow ratios, low female survival, low pregnancy rates in harvested females, and low bull to cow ratios are also concerning factors for the sustainability of this herd.
- All collars that were deployed in 2018 continued to cross to the mainland in both 2018 and 2019 winters. Based on historical assumptions and some Traditional Knowledge, the herd will stop migrating if the population gets too low. The population may be near that level so it is critical that it is maintained, especially for all communities to maintain access to the herd.
- Your communities and your HTOs have been leaders in the stewardship of your wildlife populations. You have taken measures that should absolutely be commended, such as cancelling sport hunting and working with the GN on the wolf sample program.

- Research on wolverine in the Kitikmeot is in the analysis stage and will be followed by results and a final report to be shared with communities. Plans for grizzly bear research in the Kitikmeot are in the early planning stages but faced some delays due to Covid-19 restrictions.

Management and Recommendations

- Considering the population estimate of 4,100 in 2018 and TK study results, we need to discuss the Next steps, and management recommendations
 - GN is recommending an Interim TAH of 42, representing a 1% harvest of the population
- This Small harvest would help preserve cultural and traditional harvest practices
- This interim recommendation reflects the severe recent decline, and it is critical that this is implemented as soon as possible so we are reaching out to the NWMB to address this interim recommendation outside of their regular quarterly meetings.
- The GN is looking to implement for the upcoming harvest season and meet as soon as possible afterwards for a consultation.
- We would like to know how HTOs want to proceed with full consultation in the coming months. The interim decision does not mean there can't still be a change in the TAH after the interim decision is implemented. Consultation will be held, and a new recommendation submitted to the NWMB that incorporates all the information gathered through consultation.
- More important than ever, that all co-management partners acknowledge this decline and we come together to protect the herd so that it can persist on the landscape for future generations of harvesters.
- We are hoping this short-term sacrifice will allow us to realize the long-term goal of ensuring this herd is sustainable for future generations of harvesters.
- We Need HTOs to relay this urgency to their members and work closely with conservation officers to implement and adhere to the TAH as a protective management measure
- I'd like to thank all HTOs for the existing measures they have taken , like suspending sport hunts, and for closely working with us to date on voluntary harvest reporting and sampling
- The next survey is a high priority for our department, we would like HTOs to be highly involved. Fall 2021 at the latest

Appendix B

Traditional Knowledge and Health Monitoring Speaking Points for Dolphin and Union Teleconference with Co-Management Partners Thursday, June 18, 2020

TK points (Andrea Hanke)

- Methods description
 - In 2003, Monica Angohiatok led Traditional knowledge interviews with Ida Kapakatoak. Together, they interviewed 15 harvesters in Ekaluktutiak and 15 harvesters in Kugluktuk (total of 30 harvesters). Then, I analyzed these interviews and brought the results back to both communities in 2019 during their HTO AGMs (January), the User-to-Users meeting in Kugluktuk (May), and the Ice-Breaking meeting in Ekaluktutiak (October).
 - As Amanda Dumond and Larry Adjun know well, I've been working really close with the KHTO and GN to hold new TK interviews in Kugluktuk (just here due to constraints in resources). This started with 15 individual interviews in the fall of 2018, where Amanda graciously had me in her office for two months. Then, I returned in January 2019 to discuss the initial results with harvesters and complete some more activities. This happened in 7 group interviews with 16 people in total. Then, I returned in January 2020 to finalize the results with harvesters and to modify or clarify any of interpretations from our previous interviews. For this, we had 4 formal group meetings and 7 meetings where people dropped in to the HTO to go over the results with me (25 people in total). It has been a very collaborative process and engaged a total of 33 harvesters.
- Interpretation point: Hunters expect variation from annual/seasonal changes (ex. weather) and harvester/caribou locations (ex. harvesters' camps and caribou aren't expected to use the exact same locations every year).
 - Results are specific to the communities and harvesters they're informed by as people are familiar with different parts of the land and different times of the year (2003/2018)
 - Reports on abundance are tied to location of harvesters (2003/2018)
- **Caribou story**
 - Kugluktukmiut perspective
 1. Kugluktukmiut said that the DU caribou abundance peaked ~1980 (2003/2018)
 2. Near this time, between 1980 to early 1990s, Kugluktukmiut in the 2018-2020 study said DU caribou were found both east and west of the community during the winter and summer. People did not have to travel far to find and hunt DU caribou.
 3. Harvesters said the late 1990s and early 2000s was a time of change for DU caribou. They said DU caribou were not as abundant on the mainland west of Kugluktuk, and there were fewer observations of DU caribou crossing the Dolphin and Union Strait. Instead, they saw DU caribou more frequently on the mainland east of Kugluktuk, moving towards Tree River. On southwestern Victoria Island, harvesters also said there were fewer caribou, but still enough for hunting purposes so they didn't have to travel any further. This decline was also reported in the 2003 study, where people were seeing fewer DU caribou and more sick caribou in 2003 than they had in the 1980s.

4. Moving to the late 2000s and early 2010s (2018-20 interviews), harvesters said people continued travelling further east on the mainland to find DU caribou, now mostly between Tree River and Grays Bay. Near southwestern Victoria Island, harvesters said this time period was when they started travelling further inland to find DU caribou and needed to plan their hunting trips later in the season to match the DU caribou movements.
 5. From late 2010 to today, harvesters said people continued travelling further east on the mainland to find DU caribou, now mostly travelling to Grays Bay, Wenzel River, and beyond into Bathurst Inlet. Harvesters familiar with the southwestern Victoria Island area said this time period was when, even though they are travelling further inland to find DU caribou, they find fewer DU caribou than the late 2000s and early 2010s.
 6. Today, Kugluktukmiut from the 2018-2020 study said there are approximately 40% DU caribou left today. To get this number, we used a pile of beans to represent the most DU caribou people have seen (the peak). When asked how many DU caribou they see today, harvesters moved the portion of beans they thought represented the approximate portion of DU caribou they see left today compared to the peak. We did this with the 7 group interviews in 2019 and the abundance trend was approved in 2020 with harvesters.
- Ekaluktutiakmiut perspective
 1. Ekaluktutiakmiut reported peak abundance between 1990-2003, also the time when they said DU caribou were close to the community.
 - **Summary:**
 - From the Kugluktukmiut perspective, the DU caribou abundance peaked ~1980s and were close to the community. Then DU caribou started to move away from Kugluktuk in late 1990s and early 2000s, and today they are the furthest from Kugluktuk with ~40% of DU caribou present today compared to the population peak around 1980.
 - The Kugluktukmiut perspective differs in some timing and details from the Ekaluktutiakmiut perspective. In Ekaluktutiak, caribou numbers peaked later (1990s-2003) and fewer sick animals were seen in 2003 compared to Kugluktuk. To understand DU caribou at the herd level, it'll be important to consider TK from all communities within the DU caribou range as they inform on different times of the year and different geographic regions.
 - **TKK concerns for DU caribou and management suggestions from Kugluktukmiut 2018-2020**
 - Kugluktukmiut were concerned about the impact of harvesting practices (caribou herds and predators), exploration/traffic, climate change, thin ice, and insects have on DU caribou status (2018)
 - Formation of sea-ice impacts the location of caribou and safety during migration (2003)
 - They advocated for education for inexperienced harvesters as the most feasible, short-term action to mitigate pressure on the DU caribou herd for long-term outcomes (ex. Pairing those who want to learn with those who want to teach). Education about the supports already available could be useful too (including supports available for predator harvesting). (2018)

Caribou Sampling (Susan Kutz & Javier Fernandez Aguilar)

- Goal: Understand the health, condition, pregnancy rates of animals through samples from harvested and captured caribou
- Why: Individual health reflects how they are doing that year and may help predict future population trends, also tells us if the caribou are safe to eat
- Samples 2015-2019, 209 in total

- Harvester sampled: Kugluktuk=97, Cambridge Bay=49 and Ulukhaktok=4 (does not include samples from CB [18] and Kug [7] in fall 2019)
 - Captured and collared for population monitoring purposes by the Government of Nunavut (n=85).
- Genetics – in progress, but 3 from hunted near Ulukhaktok in Dec 2018/Jan 2019 were tested and confirmed as DU. These were given high priority to test because it was a bit unusual to harvest DU caribou in high numbers near Ulukhaktok in the winter.
- Blood on filter paper testing for various diseases – found several that can affect reproduction, but this is ‘normal’
- One finding that is of importance is high occurrence of **brucellosis** (14%)– animals with that are less likely to be pregnant (92% vs 63%), are in poorer body condition, and survival may be reduced. This disease can also affect people.
- Hair tested for trace minerals – lower than other caribou populations – especially Selenium which is important for growth and reproduction
- Hair tested for stress hormones – 2018-19 lower stress levels than 2015-17
- Higher overall pregnancy rates compared to 2 other studies (1987-91, 2001-2003) (combined pregnancy rates for harvested and captured caribou are: 2015=88.2%, 2016=87.5%, 2018=85.5% and 2019=96.3%).
- Higher body condition compared to samples from 1987-91 when the herd was either at its peak or just beginning to decline, depending on location
- These findings of higher pregnancy rates, declining stress levels, and higher body condition in the last few years suggest a few good years recently for the DU caribou. BUT
 - we don’t know actual calving rates or calf survival (could be affected by some of the diseases, low selenium, as well as weather, predators, etc)
 - Brucellosis is affecting reproduction, condition, and survival
 - Trace minerals may be low – cause ongoing problems in reproduction and calf survival
 - Ongoing monitoring will help to determine if there is a trend in individual health improving, or if it is only a few good years.