



WORKING TOGETHER FOR THE DOLPHIN AND UNION CARIBOU

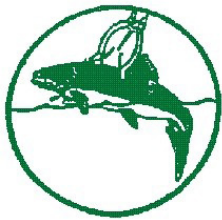
Community-Based Muskox and Caribou Health Monitoring

Activity Update - June 2024

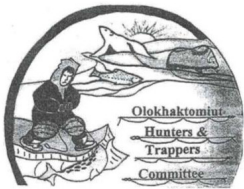
PARTNERS



Kugluktuk Angoniatit Association



Ekaluktutiak Hunters and Trappers Organization



Olokhaktomiut Hunters and Trappers Committee



Government of Nunavut



Government of Northwest Territories

Government of Northwest Territories

WHAT ARE WE DOING?

Andrea Hanke's PhD thesis focused on Traditional Knowledge of the Dolphin and Union (DU) herd, the caribou who are smaller and whiter than barren-ground but larger and darker than Peary caribou. These caribou generally winter on the mainland and summer on Victoria Island. In 2020, the survey estimated there were only ~3,815 caribou left, a significant drop from 1997 when there were ~34,558. The goal of this thesis was to support co-management and advance our understanding of this caribou herd with Traditional Knowledge and other available information.



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WHAT ARE WE FINDING?

Starting off well - Creating a research framework that works for us all

In 2019, representatives from the Kugluktuk Angoniatit Association, the Government of Nunavut, and the University of Calgary met to create a research framework based on the review of interviews and understanding of Kugluktukmiut knowledge (**Fig. 1**). We focused our meeting on "What can we learn from Kugluktukmiut Knowledge around caribou?" We agreed that knowing caribou meant paying attention to the systems caribou exist in—the biological and physical environments—and the caribou themselves. To understand caribou, you need to understand the people and their relationships to caribou. With this in mind, we agreed that moving forward with management actions guided by Kugluktukmiut Knowledge must go together with relying on and being consistent with Inuit laws.

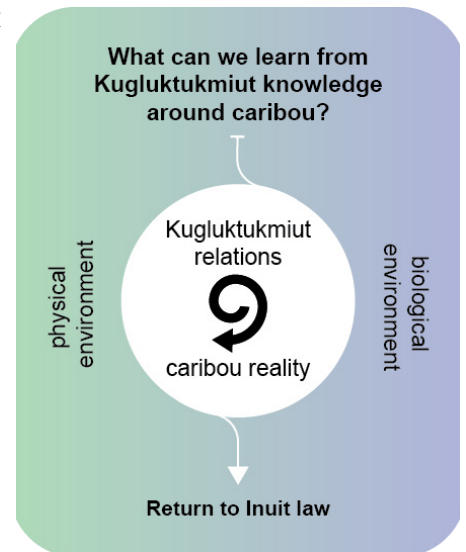


Figure 1. Our collaborative research framework.

Finishing past work before asking for more - TK from 2003

We revisited an interview study done by the Government of Nunavut with Kugluktukmiut and Ekaluktutiakmiut. Through our analysis, we learned

that the DU caribou herd was always adapting to the environment around them. The differing accounts between communities showed a deep understanding of caribou ecology and trends across seasons, years, and a broad geographic range. As the overall caribou numbers decreased, harvesters on the edge of the caribou range (i.e. Kugluktukmiut) noticed first alongside a shifting distribution and more sick caribou (Fig. 2). This widespread and depth of knowledge showed that it is important to learn from Traditional Knowledge of communities and knowledge keepers throughout the caribou range.

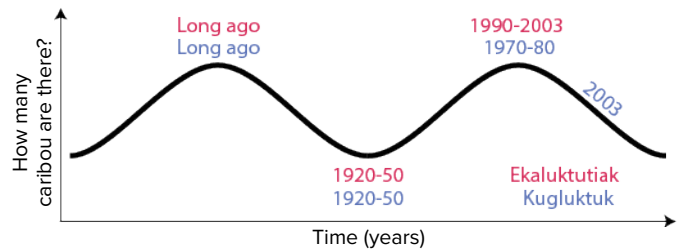


Figure 2. How many caribou people saw over time based on the 2003 interviews. Community reports differed starting in the 1970s.

Getting updated by harvesters - How are the DU caribou doing?

We did new interviews—one-on-one in 2018, small groups in 2019, and feedback sessions in 2020—to learn about the DU caribou and their trends over time. We found that understanding Traditional Knowledge of caribou meant understanding harvester’s family histories, harvesting methods, conservation ethics. With this in mind, we recorded an Inuit-described system of measuring caribou status that shows how Inuit were able to track how the caribou population was doing according to their abundance (i.e. their numbers), distribution, and health.

Our next goal was to connect this Traditional Knowledge with other available information on the herd, like the surveys. All this knowledge together indicated that the overall population size increased since around the 1990s and then decreased after approximately the early 2000s, alongside a range contraction (Fig. 3). Drawing from different sources of information provided greater insights across different time periods, parts of the land, and caribou life history. Since communities and researchers interact with caribou at different times of the year in different parts of their range, this means that study findings need to be considered in light of community context and how studies are done.

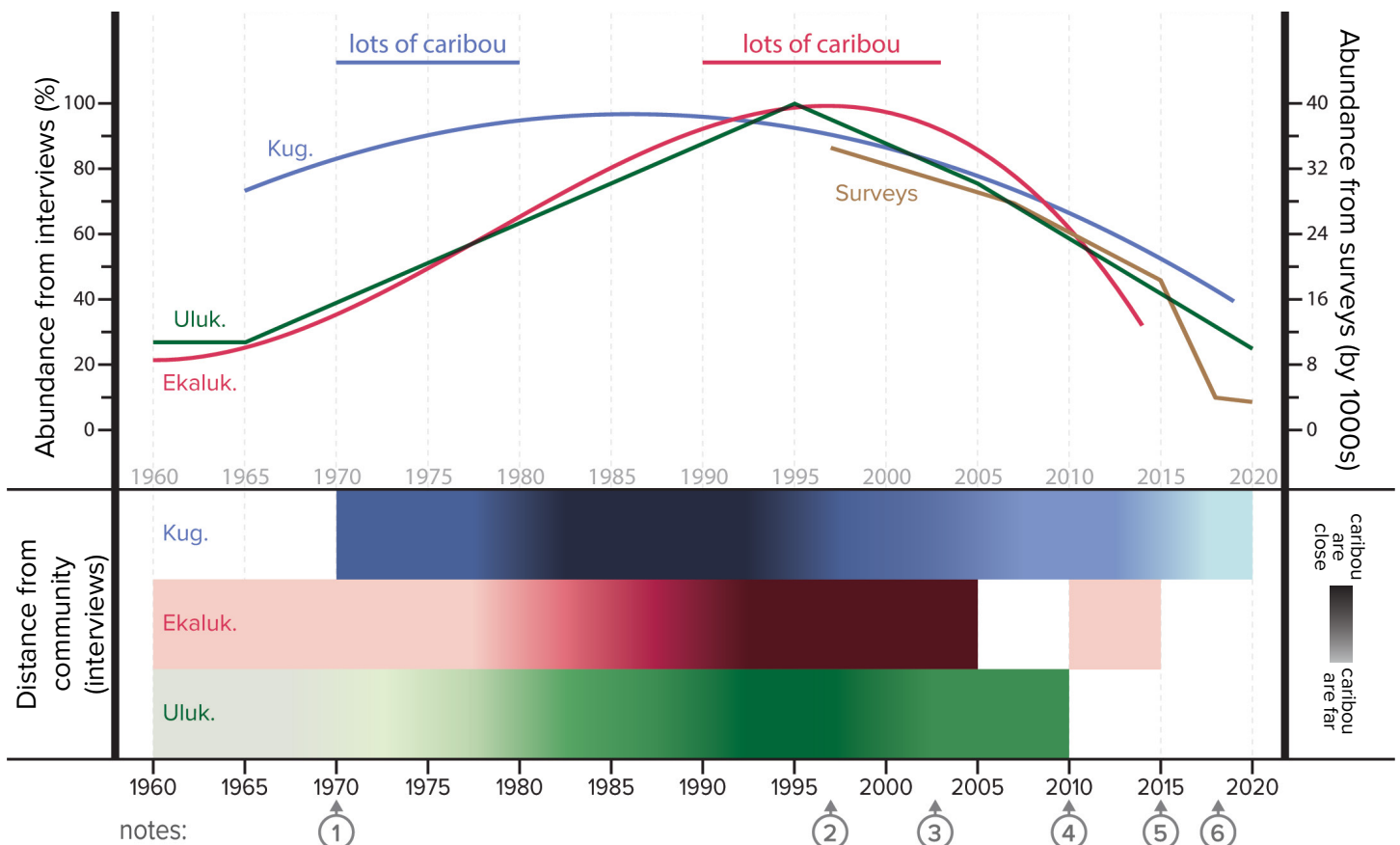


Figure 3. Compiled data on caribou abundance (interviews and surveys) and distance from community (interviews). Additional details: 1) sighting on mainland near Umingmaktok (interview); 2) highest density east of Ekaluktutiak (survey); 3) decline in numbers near Kugluktuk (interviews); 4) decline in numbers near Ekaluktutiak (interviews); 5) lower density in eastern range (survey), and 6) lower density in northern and eastern range (collar data and survey).

Learning from Elders - What do caribou need for their wellbeing?

We interviewed Elders about the DU caribou herd to pass on their knowledge and have it available to inform the next conservation actions. Elders from Kugluktuk, Ekaluktutiak, and Ulukhaktok (10 in total) met with us one-on-one or in pairs. They spoke about Inuinait ways of knowing caribou and their expected changes and ways of adapting. We learned that caribou need migration routes free of barriers, open areas rich in vegetation for calving, access to ocean breeze, access to snowbanks, and ability to gather in groups when threats to the individual caribou are strong (e.g. wolves). This project will be published as a ~320 page book with Nunavut Arctic College Media, where each Elder or Elder pair has their own chapter focused on their interview. Large sections of the book are available in English and Inuinnaqtun, including summaries based on the research question after each chapter, each community, and at the end of the book.



David Kuptana, Bobby Algona, and Jimmy Haniliak at the Elder workshop.



Granddaughter, Jean Ekpakohak, Pat Ekpakohak, and Andrea Hanke reviewing transcripts.

WHY DOES THIS WORK MATTER?

Through many reports, presentations, and meetings, we ensured that your Traditional Knowledge on the DU caribou herd was available and accessible to those making decisions about the caribou. Now, there are more materials preserving harvesters and Elders stories of caribou and the land, and we offered additional capacity for your Hunters and Trappers Organizations/Committees to focus on their conservation priorities for your communities. Together, we have learned so much about the caribou.

This report is the result of contributions from so many people—within community, the University of Calgary, the Government of Nunavut, and others—and it is something for all to be proud of. It demonstrates how we can work together to learn about wildlife while being mindful of the legacy and ongoing setting of colonialism and racism. This work provides memorial to those who have passed but were involved in this research, responds to the Truth and Reconciliation Commission's calls-to-action 46 and 62, and reaches towards Inuit self-determination.

WHO WAS INVOLVED?

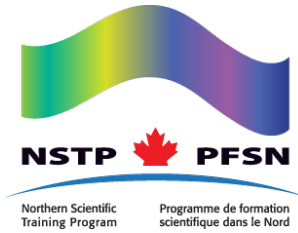
Community contributors: Larry Adjun, Jorgan Aitoak, Bobby Algona, Bobby Anavilok, George Angohiatok, Gerry Atatahak, OJ Bernhardt, Charlie Bolt, Jorgan Bolt, Stanley Carpenter, Jean Ekpakohak, Pat Ekpakohak, Joe Allen Evyagotailak, Bellarose Eyegetok, Mike Hala, George Haniliak, Jimmy Haniliak, Randy Hinanik, Eric Hitkolok, Roger Hitkolok, Darlene Hokanak, Dettrick Hokanak, Allen Joss, Ida Kapakatoak, John Kapakatoak, Kevin Klengenberg, Perry Klengenberg, Sheldon Klengenberg, Wendy Klengenberg, Allen Kudlak, David Kuptana, Brandon Langan, Beverly Maksagak, Billy McWilliam, Ida Ayalik McWilliam, Susie Memogana, Terry Milton, Ashley Newman, Allen Niptanatiak, Tommy Noberg, Agnes Panioyak, John Panioyak, Peter Taktogon, some anonymous contributors, and the board members for the Kugluktuk Angoniatit Association, Ekaluktutiak Hunters and Trappers Organization, and Olokhaktomiut Hunters and Trappers Committee.

Andrea Hanke and their supervisory committee: Susan Kutz, Cindy Adams, Amanda Dumond, Lisa-Marie Leclerc, Rita Henderson, and Gwendolyn Blue.

And many, many more!

THANK YOU TO ALL THOSE WHO MAKE OUR RESEARCH IN THE ARCTIC POSSIBLE

For over 10 years the Kutz Research Group, the communities of Ulukhaktok, Kugluktuk and Cambridge Bay (Ekaluktutiak), the Government of Nunavut, the Government of the Northwest Territories, and Canada North Outfitting, have been partnering to investigate and monitor wildlife health on Victoria Island and the adjacent mainland. The results presented here are a direct result of this program. We thank all our collaborators and funders who have supported this specific research and our broader caribou and muskox health research program. Please contact Susan Kutz (skutz@ucalgary.ca) if you have any questions about this program.



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