

PARTNERS:



Kugluktuk Angoniatiit Association



Monitoring Caribou Through Harvester-Based Sampling

COMMUNITY-DEFINED AND MONITORED INDICATORS OF RECOVERY IN BARRENGROUND CARIBOU ACTIVITY UPDATE – JULY 2024

WHAT IS THE ISSUE?

Harvester sampling of caribou can provide crucial and timely insights into caribou health. The Kutz Research Group, in collaboration with northern communities, has been co-developing and implementing such programs for caribou and muskoxen for more than 20 years.

WHAT ARE WE DOING?

In 2023, we initiated a community-based sampling program for the **Bluenose East caribou herd** with Kugluktuk, NU, and with potential to expand to the Sahtu and Tłı̨chǫ regions of NWT. The program involves **easy-to-use sampling kits** that are designed so that hunters can collect caribou health and population data.

WHY DOES THIS MATTER?

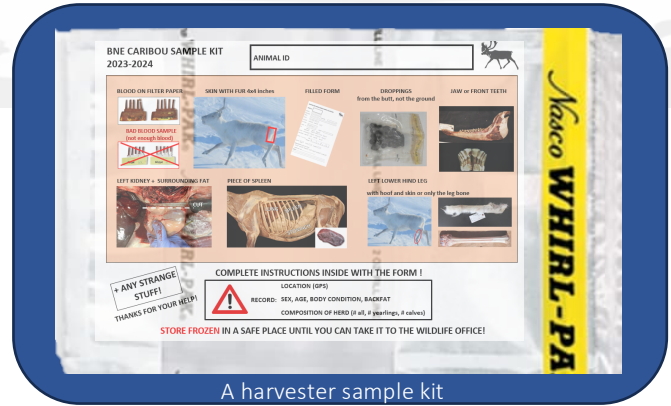
The environment of the Arctic is changing, with emerging diseases and more caribou meat abnormalities being observed.

It is vital to have a robust monitoring system that can identify causes of abnormalities and track diseases that can affect caribou populations, and in some cases human health. **The harvester-based sampling program for the Bluenose East herd is particularly crucial** for this reason. The collaborative approach enables **collection of detailed and timely data**, which means we can better understand the herd's health.

Scan me for a detailed video on sample kits



Extending the program to new areas (Sahtu and Tłı̨chǫ regions) will expand our understanding of Bluenose East caribou across their seasonal ranges. This leads to more effective, targeted management strategies that are tailored to specific regional challenges and needs.



A harvester sample kit



Sample processing at Kugluktuk



Fecal testing at U of Calgary



Environment and Climate Change Canada

Environnement et Changement climatique Canada



Polar Knowledge Canada

Savoir polaire Canada



NWT CIMP

Northwest Territories Cumulative Impact Monitoring Program

WHAT HAPPENS WITH THESE SAMPLES?

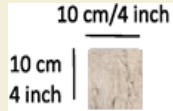
After the samples are collected, some are processed in community and the rest at University of Calgary. The Kutz Research Group does detailed analyses on the samples (blood, skin, bone marrow, other organs and tissues), and then reports results back to communities.

Spleen



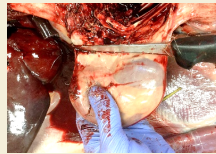
For infectious diseases, in particular viruses

Skin and hair



For stress level, contaminants, and food deficiency

Left kidney + fat



For fatness and contaminants

Back fat thickness

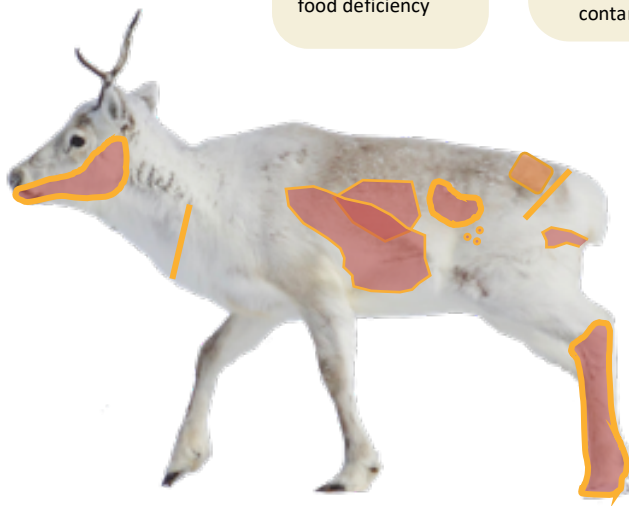


For fatness

Form



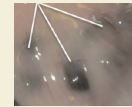
Additional information on the sampled animal and the whole herd



Blood on filter paper

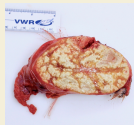
For diseases and pregnancy

Lymph nodes



For virus infection

Anything abnormal



To be examined and figure out what it is

Left hind leg



For hoof problems, parasites, bone marrow fat

Feces



For parasites, stress, pregnancy, genetics, and contaminants

The long-term aim is to establish and support an **ongoing community-led caribou health monitoring program** in the communities of Kugluktuk, Délı̄ne, and Wekweètì.



Bluenose East Caribou Range

