



KUTZ RESEARCH GROUP on SOMERSET ISLAND

RESEARCH UPDATE

MUSKOX HEALTH



UNIVERSITY OF CALGARY
FACULTY OF VETERINARY MEDICINE

Between 2021 and 2023 the Kutz Research Group collected baseline information on the health of muskoxen on Somerset Island, in partnership with Weber Arctic.

We collected qiviut and fecal samples from muskox herds, and tested them for lungworms, intestinal parasites, stress and trace mineral levels. We also investigated muskox remains found on the island.

In summer 2023, we also trialed supplementing the diet of muskoxen on Somerset Island, due to low levels of nutrients which are important to their health.

Partners and Funders



Ransanz Family
Van Sloun Foundation
The Arthur French Family Foundation

Update prepared by the Kutz Research Group | July 2024

What are we doing?

We have collected qiviut and fecal samples from five muskox herds, and have investigated remains from 14 muskoxen, including three entire carcasses.

What did we find?

Muskoxen generally had low stress levels, normal parasites, and we did not find lungworm *Umingmakstrongylus* which affects muskoxen in other parts of the Arctic. Muskoxen had low levels of copper and selenium, important trace minerals.

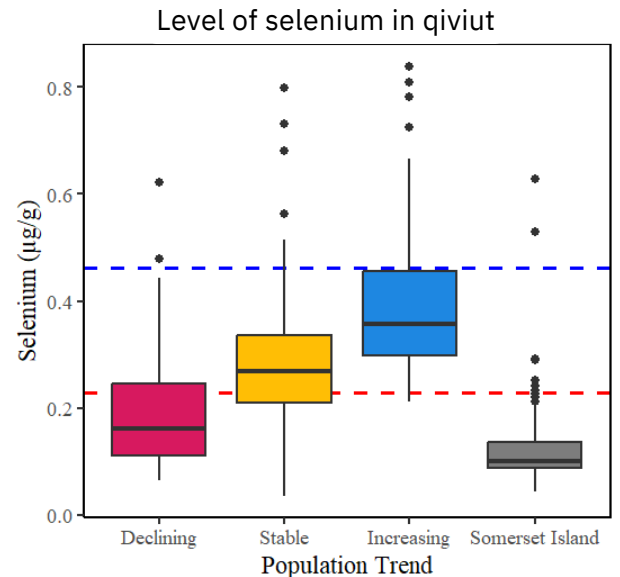
Trace minerals

Trace minerals are essential nutrients that animals get from their food. They are required in very small amounts, but are important to immunity, growth, reproduction and calf health.

There were no unusual findings from carcasses that would suggest these animals died of disease, although many animals had jaw abnormalities which may be linked to low trace minerals.

What can we do?

Supplementing the diet of animals is common in livestock when trace minerals are low, and it may be a useful tool to improve the health of wild muskoxen. In summer 2023, we trialed supplementing a group of muskoxen on Somerset Island.



Trace mineral levels in muskox populations relative to increasing, stable, and decreasing population trends, compared to Somerset Island muskoxen

We placed supplement at sites in the areas where muskoxen graze, and monitored these sites with wildlife cameras.

No muskoxen ate the supplement during the 6 week trial, although multiple foxes visited the sites. Future trials need to consider season, supplement type, and whether foxes might be a problem for supplementing muskoxen.

Supplementation could be an important part of muskox population management alongside continued health monitoring.

If you have any questions, please contact us.