



Photo: Nansen Weber

ARCTIC WATCH and the KUTZ RESEARCH GROUP RESEARCH UPDATE



UNIVERSITY OF CALGARY
FACULTY OF VETERINARY MEDICINE



**THE TREBEK
INITIATIVE**



Mitacs

ASTON BAY 

Polar Knowledge
Canada

Savoir polaire
Canada

Ransanz Family

Van Sloun Foundation

The Arthur French family Foundation

Update prepared by the Kutz Research Group

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 <https://www.ucalgary.ca/groups/arctic-wildlife-health>

What are we doing?

The Kutz Research Group, in partnership with Weber Arctic, have been collecting baseline information on the health of muskoxen on Somerset Island.

We are collecting qiviut and fecal samples from muskoxen herds, and testing them for lungworms, intestinal parasites, stress and trace mineral levels. We are also investigating muskox remains found on the island.

Trace minerals

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

We measured trace mineral status in shed qiviut, and have found very low levels of selenium and copper in muskoxen on Somerset Island. We have also found a high proportion of jaws with abnormalities, something which may be linked to trace mineral problems.

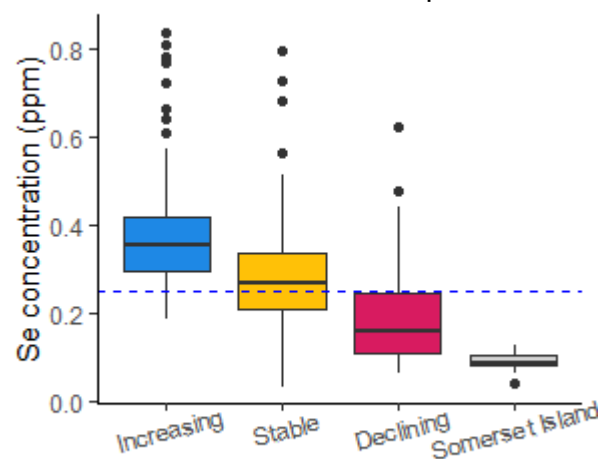
What can we do?

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.

We are trialling supplementing a group of muskoxen on Somerset Island (24 animals). We have placed supplement at sites in the areas where they graze, and are monitoring these sites with wildlife cameras.



Level of selenium in qiviut



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



While we do this, we will continue to collect qiviut and fecal samples to monitor stress, parasites and trace minerals, in this herd and others on Somerset Island.

Further research is also needed to better understand why muskoxen have low levels of trace elements.

If you notice anything strange in muskoxen, report your observations to your local wildlife officer. Please contact us if you have any questions.