





FROM RESEARCHER-DRIVEN TO COMMUNITY-LED: MUSKOX AND CARIBOU HEALTH SURVEILLANCE IN ULUKHAKTOK, NORTHWEST TERRITORIES

F. Mavrot^{1,5}, B. Inuktalik², G. Okheena², T. Davison³, H. Fenton³, J. Di Francesco¹, X. Fernandez Aguilar¹, J. L. Rothenburger⁴, S. Kutz¹ and the Olokhaktomiut Hunter's and Trapper's Committee ¹Department of Ecosystem and Public Health, University of Calgary ²Olokhaktomiut Hunter's and Trapper's Committee, Ulukhaktok ³Environment and Natural Resources, Northwest Territories ⁴Canadian Wildlife Health Cooperative - Alberta Region, University of Calgary ⁵fabien.mavrot@ucalgary.ca

Background:

- The muskox health monitoring program started in 2016 as a community-based initiative in Ulukhaktok (Northwest Territories [NWT])
- In 2018, it transitioned to a community-led monitoring program for muskox and caribou surveillance
- Three partners: Olokhaktomiut Hunter's and Trapper's Committee; University of Calgary; Environment and Natural Resources, NWT



Steering Committee meeting of the community-based muskox and caribou health monitoring program (October 2018, Ulukhaktok,

Goals:

- Bring together the community of Ulukhaktok, government agencies and academic researchers to guide the monitoring effort
- Enhance the flow of information and knowledge among all parties
- Improve disease awareness and detection of pathogens relevant for human health
- Build community capacity in wildlife health monitoring and project administration

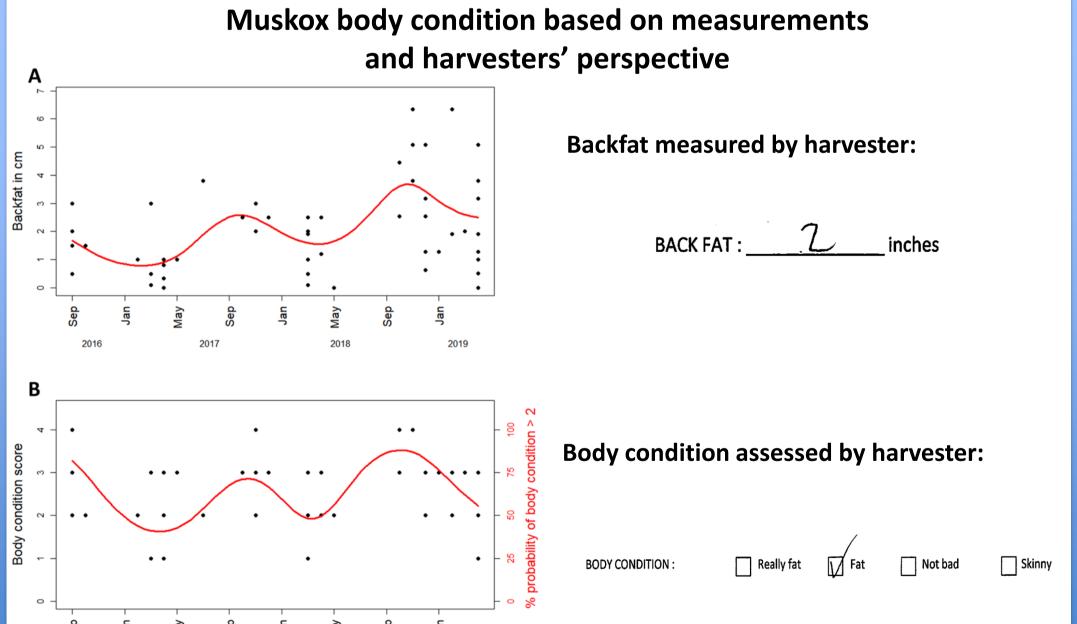




Collected information included in the upcoming NWT report "Species Status Report for Muskoxen, Traditional and Community Knowledge Component"

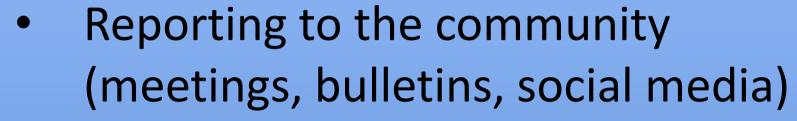
75 sample kits returned and analyzed since 2016

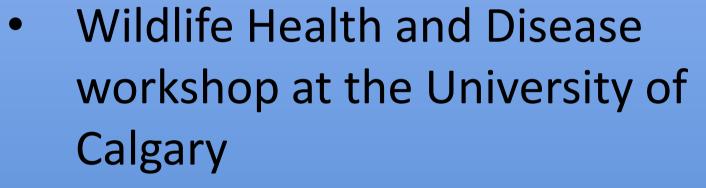
- Improved reporting of abnormalities in harvested animals
- Documentation of an increased occurrence of Brucellosis in muskoxen around Ulukhaktok (~10% of animals). This is of Public Health relevance as people can get infected



Community engagement:

- Project run by the Olokhaktomiut Hunter's and Trapper's Committee
- Hunter-based sampling program
- Local monitor and youth trained to oversee the sample collection, process samples, manage databases, report on results





On-the-land trips organized for the community youth







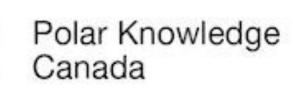


What's next:

- Collect Local Ecological Knowledge on muskox and caribou health through yearly interviews
- Identify reliable indicators that can be used to track changes in the health of harvested muskox and caribou populations
- Coordinate our efforts with other communities to better understand drivers of wildlife health across the Canadian Arctic and inform management decisions







Canada

Amy Strange Stuff

Abnormal lymph nodes

harvester. Brucella was

isolated from the sample

reported by a local



Results so far:







2016

