

Porcupine Caribou Annual Harvest Meeting Update 2020-2021

February 2022



 Yukon



Licensed Harvest

- Licensed hunters (Resident and Non-Resident):
 - restricted to 2 bulls
 - harvest reporting is mandatory
- Total licensed harvest 2020/21
 - 138 bulls + 5 cow caribou = 143 caribou
 - PCH harvested primarily west of the Dempster Hwy near the NT-YT border



Hunter Education

- Limited activities due to COVID
- CO's occupied with managing Yukon border



PCH Research and Monitoring

- Monitoring as committed to in HMP/IP
- Support for PCMB-led TK study
- Lichen map for PCH – now available
 - Field-mapping of lichen in July 2021
 - Estimates every 5 years of lichen from 1985 to 2020 using satellite imagery to map



PCH Research and Monitoring

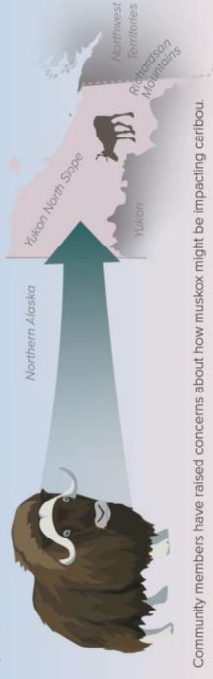
- Collaboration with PCTC members on major 5-year project (USGS lead):
 - Co-author on paper assessing climate change on the herd and link to 1002 development
 - Summer 2021: collected fecal pellets for diet
 - 2018-2022: use of camera collars – diet, behaviour, insect harassment
 - 2022-2024: sample nutrition in vegetation and relate to caribou survival, habitat and movements



Caribou – Muskox Research

Is there enough room for muskox and caribou in the Yukon North Slope?

About 50 years ago, muskox were reintroduced to Northern Alaska and some moved eastward into the Yukon North Slope and Richardson Mountains. This region is also home to the Porcupine caribou herd, an important species for Gwich'in and Inuvialuit.

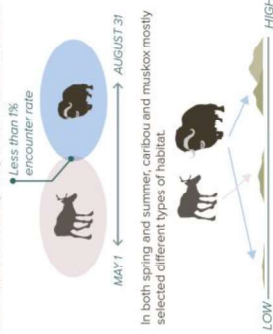


Community members have raised concerns about how muskox might be impacting caribou.

Using GPS collar data, we studied:

- How often muskox and caribou use the same area at the same time.
- Whether muskox and caribou use the same kinds of habitat.

During the study from 2015 to 2019, we found that muskox and caribou ranges overlapped the most in spring and summer, however, they rarely encountered one another.



When they did use the same habitat, it was often in wetlands and floodplains.



While muskox and caribou both live on the Yukon North Slope, they rarely interact with each other and often use different habitats. **Based on their current population, there seems to be enough space and habitat to support caribou and muskox.** It's important to keep monitoring this relationship, especially if muskox numbers increase.

To learn more about this study, please contact:
Laurence Carter at laurence.carter@mail.mcgill.ca



How are muskox impacting vegetation in the Yukon North Slope?

Reintroduced muskox groups have been reported in the Yukon North Slope since 1985. Based on the land observations, community members are concerned about how grazing by muskox is reducing vegetation and how this might affect caribou.

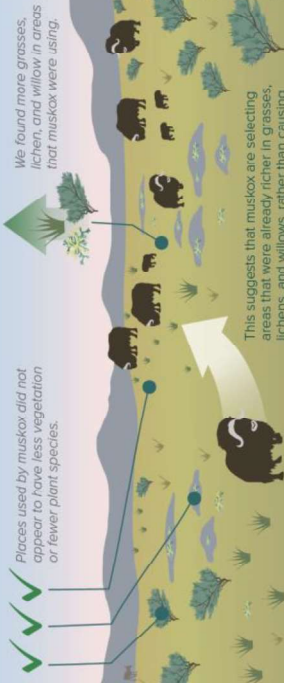
Within habitats used by muskox, we compared plants in areas muskox had visited a lot vs areas not visited as much.



During summer 2018 and 2019, we sampled 205 vegetation plots in three habitat types in Inuvik National Park. At each site, we recorded plant height and cover, as well as the number of muskox fecal pellets.

So far, this is what we have found:

Places used by muskox did not appear to have less vegetation or fewer plant species.



This suggests that muskox are selecting areas that were already rich in grasses, lichens, and willows, rather than causing those differences through grazing.

Based on this study, it appears that at present muskox have little impact on vegetation in this region.

To learn more about this study, please contact laurence.carter@mail.mcgill.ca





Upcoming Activities: Mgmt

- Working with VGG to complete industry guidance
 - Anticipate broader engagement on these as well
- Continue to contribute to PCMB-led Conservation Plan as needed
- Reviewing and providing advice on projects in herd's range (e.g., BAR-2, Chance Oil and Gas)



Upcoming Activities: Research

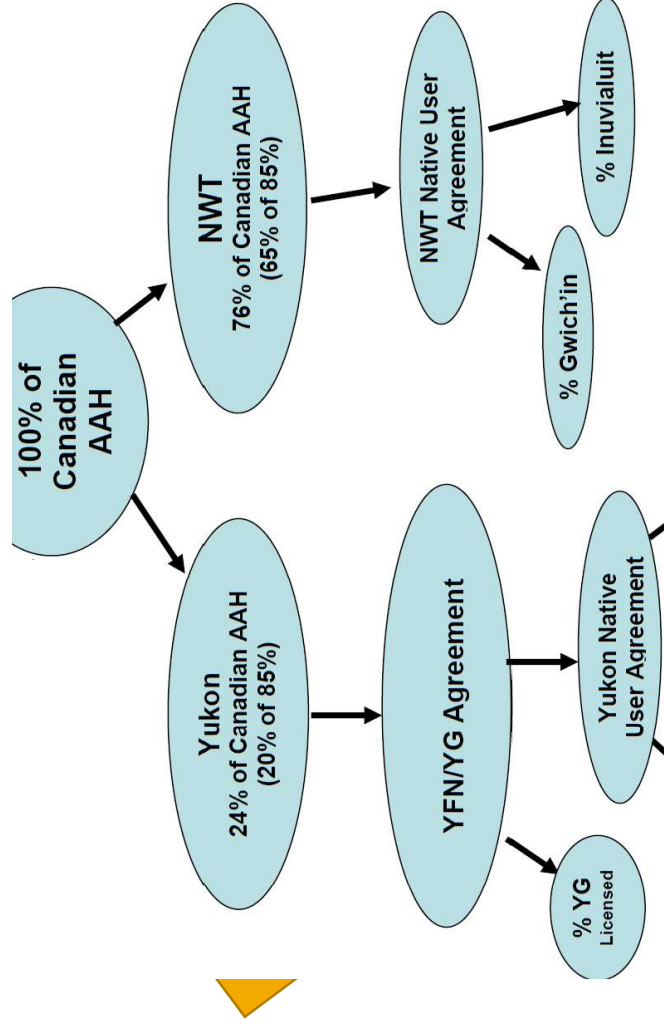
- Collaboration with partners to understand climate change to herd's summer range:
 - Vegetation change
 - Environmental change
 - Species changes
- What does this mean for the herd and its users?



Upcoming Activities: HMP

- Interested in completing user agreement between YFN and YG as described in HMP IP (2.2.3)

ORANGE ZONE
45,000 - 80,000 animals





Harvest

Fall-Winter 2021-22

- Very few caribou readily available this current year
- YT-licensed harvest = 10 bulls



Questions?

