
TSEE COMMUNITY-BASED MONITORING PROJECT: JACKFISH CREEK. DEC. 2020 REPORT



FUNDERS:

On the Land Collaborative Funding, UK-Canada Arctic Partnership.

COMMUNITY RESEARCHERS IN 2020:

Douglas Esagok, Brian Martin, Vincent Cardinal

All photos were taken by our community research field team.

PROJECT PARTNERS:

Helen Wheeler (Anglia Ruskin University, UK), Edouard Belanger (Gwich'in Renewable Resource Board), Jeremy Brammer (Environment and Climate Change Canada)

ABOUT TSEE COMMUNITY-BASED MONITORING PROJECT

We have heard there are more beavers in the Delta, and that beavers are moving north. We have heard that people are concerned about the impacts of beavers on other animals, on rivers and lakes, and on life on the land and hunting and fishing. We want to learn more about people's concerns about beavers. We are also concerned about how beaver ponds might affect permafrost and how climate change fits into all this.

The project started in 2019 with the following goals:

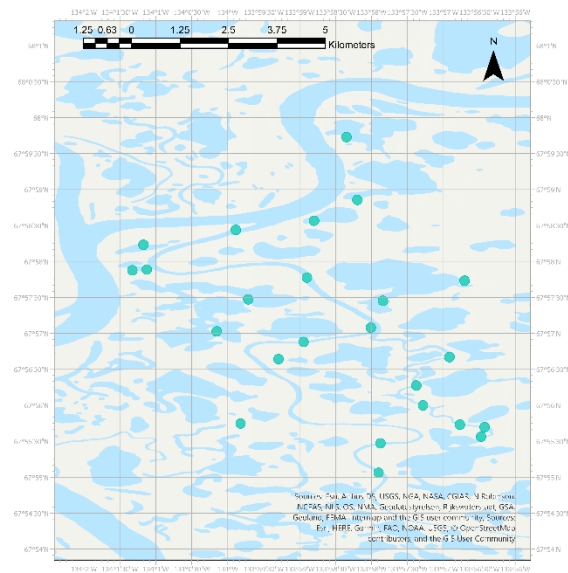
- To document changes in beavers in Jackfish Creek
- To understand what might cause changes in beaver numbers
- To understand the impacts of more beavers
- To develop this project to better address community questions about beavers

ACTIVITIES IN 2020

This summer a team of three community researchers collected data in the Jackfish Creek area of the Mackenzie Delta. The team were out in the field from August 16th to August 23rd. The team did surveys of beaver lodge locations and collected samples from shrubs to help estimate when in the past sites were occupied by beavers.

Map showing sampling locations in summer 2020 (right).

The main focus of the trip this summer was to collect shrub samples to determine when beavers had been active at different spots. By looking at shrub rings, we hope to estimate when beavers lived at sites where they cut shrubs. These samples will be shipped for analysis to test these methods.



Recording information at a beaver lodge (pictured left).

Our team reported that high water levels had meant that many lodges that we saw in 2019 had been destroyed. Even so, the team were able to survey 24 beaver lodges during the trip. This will help us monitor how the locations of beaver lodges and whether they are occupied changes over time.

Shrub discs collected around each beaver lodge (pictured right).

This summer, the field team collected 289 shrub samples. These shrub pucks will be used to estimate in which years beavers lived at each site. We will use this information to better understand the history of beaver activity in the Delta.



FUTURE AIMS OF TSEE COMMUNITY-BASED MONITORING PROGRAM

We want to know how beaver populations are changing at larger scales across the NWT and beyond. We want to start consultation about creating a cell phone app where people can record beaver sightings, memories of where beavers were in the past and other observations about how beavers in the region are affecting them. This app will help us share information about beavers. We are just starting to discuss this idea and want to consult with you on how to make this useful for communities in the NWT.

We also hope to continue studying beaver populations in Jackfish Creek to see how beaver populations are changing and have submitted funding applications to pay for our work. If these are successful, we will be working with community researchers to map beaver lodges again in 2021 and collect more shrub samples so that we can get a better idea of when and how many beavers lived in the Jackfish Creek area.

We welcome further ideas and suggestions for the tsee project to help guide us.

CONTACT

helen.wheeler@aru.ac.uk

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