# **Beaver Lake Cree Nation Camera Monitoring Program**



Beaver Lake Cree Nation (BLCN), a Wood Cree community located in Treaty 6 territory near Lac la Biche, is building an independently-run wildlife monitoring program. Established in 2021 and still growing, this long-term effort will help BLCN understand changes in wildlife that are important to community members, integrate with regional Oil Sands Monitoring (OSM) work, and expand skills and experience within the BLCN community.

### **Background**

BLCN community members report cumulative effects on culturally important wildlife species that impact their ability to exercise inherent Treaty rights. This aligns with western-science perspectives, where research has linked changes in biological ecosystems in the Oil Sands Region to human activities, some related to oil sands development.

Building a wildlife monitoring program grows community capacity and addresses key concerns around access to, safety of, and abundance of resources vital to the meaningful practice of Section 35 rights in BLCN territory.



Detailed information is recorded for each camera and location.

# The project

Since 2021-22, BLCN community members have deployed automatic wildlife cameras to collect data on mammal presence, abundance, distribution, and habitat selection following the before–after dose–response (BADR) study design already used in OSM work. These efforts have been funded in part by OSM, and supported by training and equipment from the Alberta Biodiversity Monitoring Institute (ABMI).

The BADR design looks for relationships between oil sands stressors and effects, and focuses on landscape disturbances like mines, in-situ facilities, wellpads, seismic lines, and roads. Monitoring sites are deployed across the Oil Sands Region to track the effects of stressors; by aligning its approach with these efforts, BLCN aims to amplify the impacts of its monitoring.

Cameras are being deployed by community members in BLCN territory, contributing to two OSM questions:

- Has the abundance of wildlife species changed?
- How much is that change driven by oil sands activities?

Looking ahead, the project will continue to grow through data analysis and more camera deployments.



BLCN member Jace Lewis sets up a camera following standardized protocols to ensure data consistency.

Wildlife camera training was a really great two-day experience. I had a lot of fun working with the instructors and making new friends in the BLCN community. The training is a step toward a career for me in the near future!

Jaimee Hele Cardinal, BLCN member and camera training participant

## **Building capacity**

A core objective of BLCN monitoring projects is to build capacity in the BLCN community for wildlife monitoring, as well as for managing, analyzing, and interpreting resulting data. This project is being implemented through handson, in-person training open to all community members for camera deployment and retrieval, and for image and data processing. Capacity-building to date has included:

- Camera and audio recorder (ARU) deployment and retrieval workshop(s) for BLCN members, supported by the ABMI.
- In-field training, with BLCN members retrieving cameras and ARUs deployed as part of the ABMI's other monitoring work.
- BLCN participation in the ABMI's vascular plant training for the OSM program.
- Regular meetings between BLCN and ABMI representatives to develop an OSM funding application and plan BLCN's camera program.
- Study design support from the ABMI for an initial 20 camera locations; expanding the program and integrating with broader OSM work is intended as an opportunity to build further capacity and interest within the BLCN community.

Further support will be available as needed and requested.



Cameras are mounted in metal brackets drilled to trees to ensure they remain aimed at the targeted site location.

#### **About Beaver Lake Cree Nation**

BLCN is a First Nation community located in northeastern Alberta, in the heart of the boreal forest and on the shores of scenic Beaver Lake. It is home to approximately 440 citizens, with another 700 Band Members residing off-reserve. As a forward-thinking Nehiyaw Nation, Beaver Lake strives to deliver programs and services that facilitate a healthy, strong, and vibrant community while promoting physical, mental, emotional, and spiritual well-being.

# About the Alberta Biodiversity Monitoring Institute (ABMI)

The ABMI is a value-neutral scientific organization that tracks changes in Alberta's wildlife and habitats, providing ongoing information for free to all Albertans. Its Community-Based Monitoring and Engagement Unit (CBME) is a grassroots initiative that works collaboratively with Indigenous communities on projects driven by community interests and goals, providing support for project development, including proposal writing, study design, training, data processing, data analysis, and communication of results. Respecting the privacy and intellectual property of communities is an integral part of the CBME's principles.

Beaver Lake Cree Nation thanks everyone that participated in the wildlife camera training. A special thanks to our partners at ABMI for their guidance, hard work, and dedication in assisting our Nation as we build our capacity.

Cole Gladue, Beaver Lake Cree Nation ICBM Program Co-ordinator

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