NBCKC Monitoring Practices for Boreal Caribou

LOCAL AND HARVESTER OBSERVATIONS
HARVEST SAMPLING

HOW DOES IT WORK?

- Harvesters can collect samples (e.g. blood, feces, hair, tissue) directly from the animals they hunt to inform monitoring of individual and population health.
- Sampling typically follows specific guidelines/protocols, and can be tailored to specific pathogens (e.g. Chronic Wasting Disease).

Photo credit: Naima Jutha

WHAT CAN BE MEASURED?

- Harvest sampling is most suitable to body condition and nutrition monitoring, and to screening for signs of disease or parasites.
- Samples can also provide information on diet, contaminant levels, pregnancy, genetics.

WHAT (AND WHO) IS REQUIRED?

- Costs of sample collection are fairly low, but costs of shipping, processing, analysis are high. Staff are required to collate data, process and analyze samples, and report on findings.
- Experts are required to design harvest surveys, and facilitators/translators may also be needed.
- Harvest sampling relies entirely on participation by hunters, and by local community members who can be trained to lead sample collection.

WHEN CAN IT BE USED?

Use: Harvest sampling is valuable anywhere that caribou are harvested. Monitoring of Indigenous harvest should be led by the local communities.

Avoid: Any unethical sampling procedures must not be encouraged or supported.

Previous boreal caribou application: Standardized harvest monitoring has been conducted by CARMA (CircumArctic Rangifer Monitoring and Assessment) as well as other networks. Regional harvest-based sampling projects have also been implemented, including in NWT and northern BC.

Photo credit: Naima Jutha

KEY CONSIDERATIONS

- Regional variation in sampling approach among local-scale studies creates challenges for interpreting results. These can be lessened through standardized approaches and broad-scale sampling networks.
- Appropriate sampling techniques, data recording, sample storage/preservation and analysis is critical to ensure that meaningful information is gathered. Risks of sampling error can come from damage of samples during extraction, contamination, or improper storage of tissues.
- Sampling protocols should ideally be based on Indigenous Knowledge principles. Results must be shared with the communities through hosting of workshops and other communications.

Cost:	Logistical Complexity:	Capture/Handling:
$	MODERATE	NO

For more information, including regional subtleties and method particularities, please refer to decision tree, detailed write-ups and suitability tables 1 and 2. The information contained in this factsheet is intended for rapid communication and summary purposes only.

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