# Article #2 ~ Monitoring Plants and Animals at Mount Nansen Mine



LSCFN Visit to Mount Nansen

# What studies are happening at Mount Nansen Mine Site?

Government is responsible for looking after Mount Nansen and planning for final closure of the site. There are several ways the site is studied in order to understand the effects of the mine and protect the health of humans, wildlife and the land.

**Caretaker**: Year round, a caretaker is on the site for general security. The caretaker ensures the pumps are working and that there are no problems with the tailings dam. The road is plowed in the winter to allow access for water monitoring and in case of emergency.

Terrestrial and Aquatic Studies: This past summer, Environmental Dynamics Inc with assistance from Little Salmon Carmacks First Nation members conducted studies on the impact of the Mount Nansen mine on the surrounding land and water. At the start of the study, community members were interviewed about what type of plants and animals they harvested to make sure the right things were studied. The research team gathered samples of the soil, plants, wildlife, water and fish, to test the levels of metals.

Generally, the studies showed that the mine had minimal impact on the surrounding land, plants and water. The impact is limited to the areas close to the mill site, the pit and the tailings pond. This article will describe what the studies found out about the ground, plants and wildlife. Next month's article will talk about the water and fish.



Researcher Jamie Roberts collects plants for terrestrial studies

### **Plants**

Lichens are indicators of the amount of metal dust in the air. Lichens collected from around the mine site had small amounts of metals. For a comparison, the metals in these lichens were less than 5 % of the amount found at lichens near Faro mine.

The only plants that showed some higher levels were Labrador Tea and willow samples on the mine site and near the pit and tailing areas. Below the tailings dam, there was a small section of dead vegetation that also had high levels of metals. Researchers think this is from contaminated water that was released during mine operations. There is no concern about the levels of metals found in berries and they are safe to harvest.

#### Animals

A few small animals and birds were collected during the study. Tests showed they had slightly higher levels of metals than those found further away from the site. Further work will be done this summer to collect samples of animals like marten or weasel that are higher up in the food chain. More samples will give us a better idea about what these higher levels mean.

Moose and caribou tissue was also tested for metal levels. The levels were low so there should be no concerns about harvesting and consuming animals that spend time near the mine.



Jamie Roberts collects samples of plants around Mount Nansen site

# How can you help with these studies?

The best research requires many samples. Hunters can help by providing tissue, such as a small piece of liver and kidney, from game killed in the area. Samples can be brought to the LSCFN Lands Office or call Environmental Dynamics Inc (867-393-4882). All samples will be used to compare metal levels in the food chain.

For more information, please contact:

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