

## Report on Wildlife and Plants

### What were they looking for?

The goal of the research was to closely observe the land and environment of Sahyoue and Edacho and to create a list of all the different kinds of wildlife, trees and plants found there.

The research paid close attention to things that might have special environmental or cultural interest.

Even though this research was needed to set up Sahyoue / Edacho as a protected area, it will also be very important for creating a management plan for the area in the future.

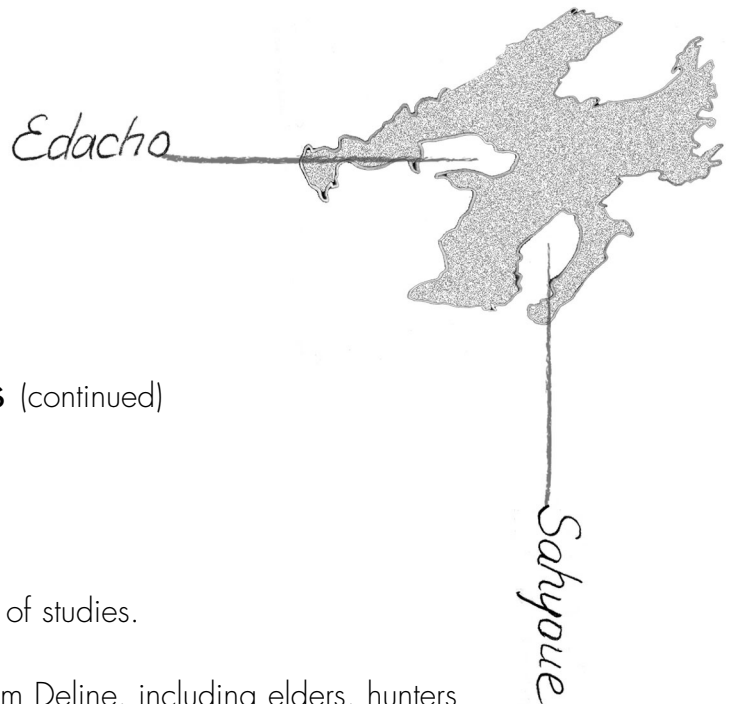
### Who did the research?

The research was led by a wildlife biologist, who was assisted by several people from government and environmental groups.

Many local people from Deline were involved in the research. They arranged discussions with elders, held meetings in the community, provided guiding services, and participated fully in the field trips.

Elders contributed traditional knowledge about the land, wildlife and plants.

The report thanks all the people involved.



## Report on Wildlife and Plants (continued)

### How was the research done?

The researchers did many different kinds of studies.

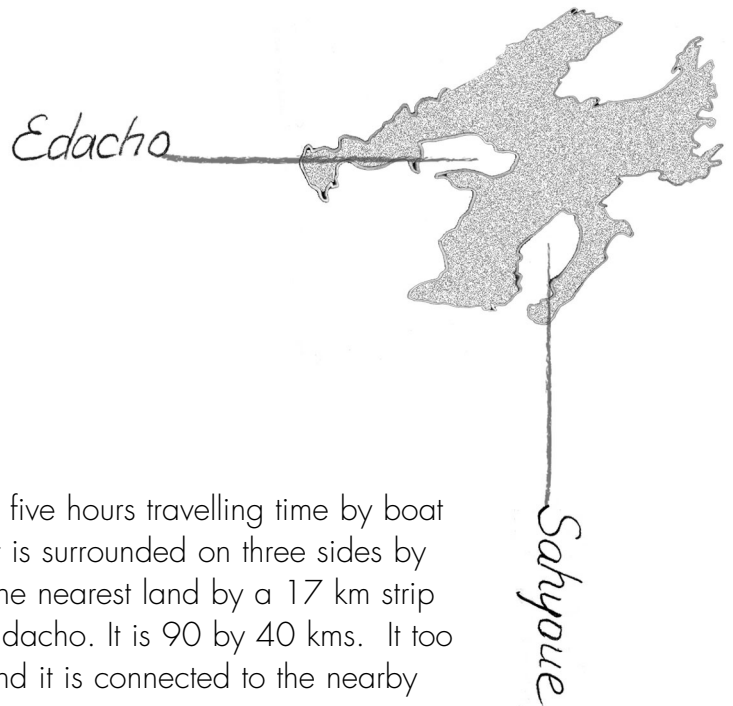
First, the researchers talked to people from Deline, including elders, hunters and trappers. They also spoke with other people who worked or lived in the area, including people from industry, scientists and archaeologists. From these discussions, the researchers gathered traditional knowledge and other helpful information.

Before going on the field trips, the researchers created lists of all the possible kinds of wildlife, trees and plants they expected to see. This information came from RWED, and from other research and books. The researchers could then compare this list with what they actually saw on the land. The list also helped them know specifically what they were looking for.

For the field trips, the researchers, guided by local people, visited over 100 different places in Sahyoue and Edacho. They travelled by boat and helicopter. Researchers made very careful observations of the land, plants and trees. They also looked for signs of wildlife.

The researchers took many samples from the land. These samples were brought to Yellowknife to be analysed.

They also had satellite and aerial pictures of the whole area. The pictures provided some information on the trees and plants in the areas where no visits were planned.



## What the Report says

### Facts about the Land

Sahyoue and Edacho are approximately five hours travelling time by boat from Deline. Edacho is 80 by 27 kms. It is surrounded on three sides by Great Bear Lake and it is connected to the nearest land by a 17 km strip of land. Sahyoue is a little bigger than Edacho. It is 90 by 40 kms. It too is surrounded on three sides by water, and it is connected to the nearby land by 14 km strip of land.

Most of the plant and wildlife occurs along the shoreline. There are wetlands, bogs and raised beaches. Inland, there are large ridges of land that gradually grow higher and steeper. At the top of these ridges, there are many small pools and lakes but many fewer plants and animals. The landscape we see today, including the ponds and raised beaches were all caused by the retreat of the glaciers long ago.

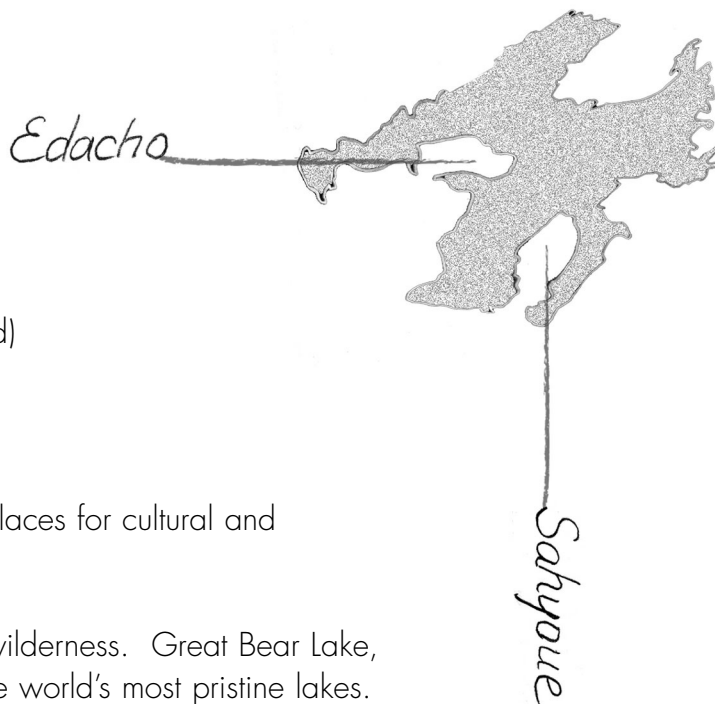
There appears to be no permafrost in Sahyoue or Edacho.

### The Climate

The climate is very harsh. The whole area has long, cold winters, followed by short cool summers. But because of Great Bear Lake, Sahyoue and Edacho are a little warmer in the fall than the surrounding areas. Spring starts a little later, as well.

Great Bear Lake often does not freeze until December, and by mid-June most of the shoreline water is free of ice, even though ice does not disappear from the middle of the lake until mid-July.

The land is covered in snow for about 220 days a year, but mainly the snow is not very deep.



## What the Report says (continued)

### The special nature of the Land

Sahyoue and Edacho are very special places for cultural and environmental reasons.

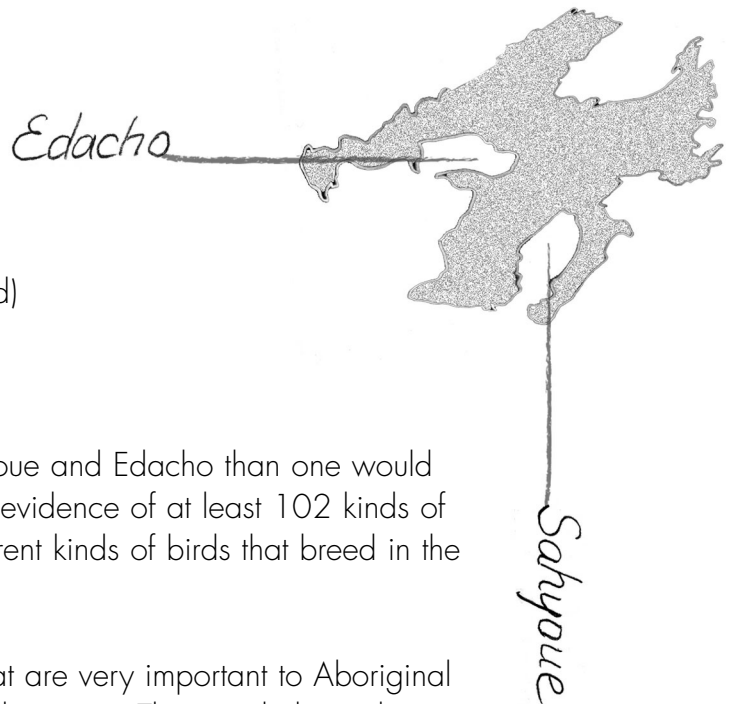
Sahyoue and Edacho are both pristine wilderness. Great Bear Lake, which surrounds both areas, is one of the world's most pristine lakes.

The landscape in the area is a rare combination of three different kinds of environment. There is a tundra like area, which has plants usually found only in the alpine environment and boreal forest. There are many tundra plants and wildlife, especially at Sahyoue Point, Edacho Point and Goodfellow Point. The alpine environment has plants and animals typical of the Mackenzie Mountains to the east. The boreal forest is typical of this part of the NWT. The three come together, along with raised and pebble beaches, wetlands and bogs on these two peninsulas, to create a unique habitat.

In Sahyoue, the wetlands are made up of many connected ponds, which have an unusually large number and variety of plants and animals. Some ponds have fish that are now isolated from Great Bear Lake.

In Edacho, the area to the south and west of Deerpass Bay also has many ponds and wetlands. Here too are many more fish and waterbirds than normal, including pacific loons. The valley between the plateaus has special conditions which also leads to more plants and animals than one would expect.

The landscape of the Sahyoue and Edacho is woven into the stories and culture of the Sahtu Dene, defining the Sahtu as a people. It is also a harvesting area for the people of the Sahtu, because of its fish, berries, traditional medicine plants and wildlife.



## What the Report says (continued)

### Animals

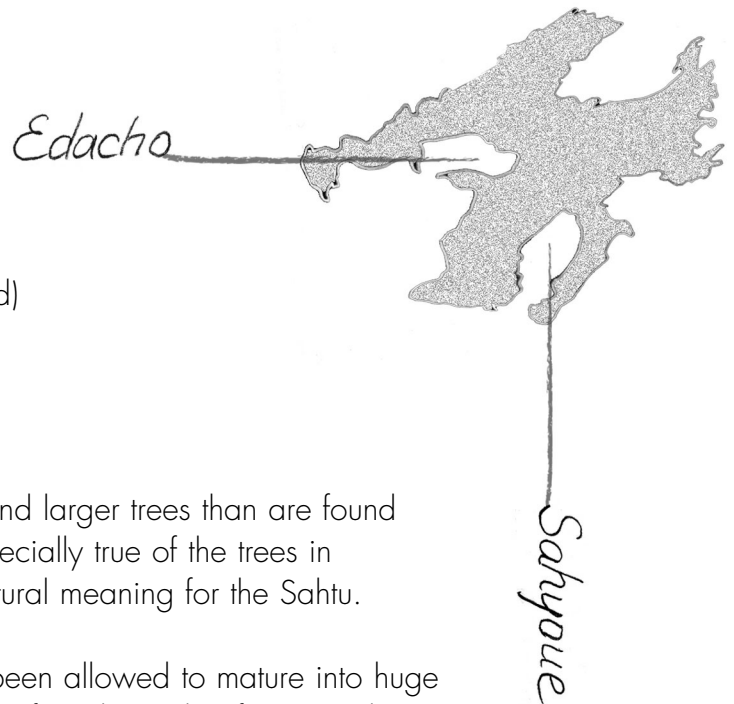
Researchers found more wildlife in Sahyoue and Edacho than one would normally expect. The researchers found evidence of at least 102 kinds of land animals, 6 water animals, 85 different kinds of birds that breed in the area, and five different kinds of fish.

Among these animals are 18 species that are very important to Aboriginal people, governments and other users in the area. These include caribou, marten, mink, muskrat lynx, beaver, red fox and moose. In addition, the barren-ground caribou migrate through the area each year.

There is abundant fish in Sahyoue and Edacho and the surrounding waters, especially whitefish, lake trout and arctic grayling. These species are used for food. On Edacho, ninespine stickleback and lake cisco are also found.

Some of the wildlife in the area is especially interesting to scientists. Including porcupines, wolves, birds of prey, and waterbirds, like the pacific loon. The researchers believe that this might be the southern limit of tundra swans. It may be also the most northern location of woodfrogs in the region.

Five animals found in the Sahyoue and Edacho are of special concern. The Eskimo Curlew has endangered status, which means that it is almost extinct. Sahyoue and Edacho are near the Curlew's former north-south migration route, and there is a chance they may still be found in the area. The Peregrine Falcon and Woodland Caribou are threatened species, and could be endangered unless their situation is changed. The Grizzly Bear and Wolverine are of special concern because both are very sensitive to the activities of people.



## What the Report says (continued)

### Trees and Plants

Both Edacho and Sahyoue have older and larger trees than are found anywhere else in the region. This is especially true of the trees in Sahyoue, and the trees have special cultural meaning for the Sahtu.

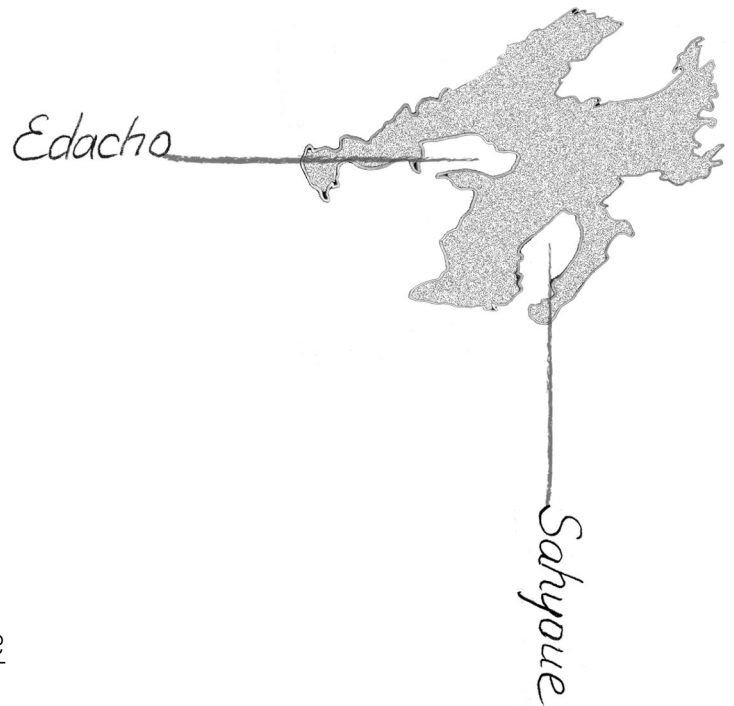
The white spruce forest in the area has been allowed to mature into huge old trees because the area has had fewer fires than other forests in the NWT. Boreal forest usually have many forest fires. But Sahyoue and Edacho appear to have had fewer fires than one would expect. Fires that start on the mainland cannot spread easily into Sahyoue and Edacho because they are peninsulas. And, fires that start in Sahyoue and Edacho cannot easily spread further because of the many wetlands and bogs.

Much of Sahyoue and Edacho is covered in a thick layer of lichen and moss. There are also large areas covered by shrubs and low lying plants, mainly where there have been forest fires caused by lightning.

Sahyoue is very rich in plant life with a total of 262 different kinds of plants. Many of these plants are used for food, including wildrose, bilberries and cranberries. Nineteen of the plants found in the area are used in traditional medicines.

Five of the plants found in Sahyoue and Edacho are of special concern. They are not yet endangered, but they are thought to require special protection.

There are many different kinds of plants in Sahyoue and Edacho that grow where plants usually do not grow well, like in sand dunes and areas of rock and tundra. The valleys create rich habitats for plants to grow.



## What does this mean?

Are the scientists sure about the findings?

The researchers could not see everything in Sahyoue and Edacho on these field trips. And they cannot be totally sure that the lists are complete and accurate. However, the information they collected is good enough for the decisions that need to be made at this stage of the Protected Area Strategy process.

This is first ever report that is based on a careful counting of wildlife, trees and plants in Sahyoue and Edacho.

The report also brings together many sources of information that already existed about Sahyoue and Edacho. This includes information about the area's environment, natural history and fishing, especially the commercial fishing in Great Bear Lake. It includes studies of wildlife in the NWT and for the area just north of Great Bear Lake. And it includes a great deal of traditional knowledge about Sahyoue and Edacho.