

Caribou herd reduction accomplished natural

by Rick Ernst

Sometime during this past winter an avalanche swept down a steep mountainside near Alpine Lake just west of Skilak Glacier.

Avalanches are nothing new on the Kenai Peninsula, but this one was very different: It took at least 143 caribou with it.

Caribou historically roamed the Kenai Peninsula until 1912. Some suggest that widespread fires may have decreased the amount of habitat; others concluded that caribou were probably exterminated by overhunting, as market hunters hunted caribou for mining camps during the early 1900's.

After a hiatus of 53 years, caribou returned to the Kenai Peninsula through a cooperative effort of the U.S. Fish and Wildlife Service, U.S. Forest Service and Alaska Department of Fish and Game. Fifteen caribou were released at an airstrip near Chickaloon River in 1965 to form the Kenai Mountain herd.

Another 29 caribou were released at Watson Lake, near Sterling, the following year, which became the Lowland herd. The Kenai Mountain herd now roams the mountains north of the Sterling Highway to Turnagain Arm. The Lowland herd is commonly seen along the Kenai River flats and north of the Kenai Airport in summer, and in the Moose River drainage north of Sterling in winter.

The next releases were made in 1985-86 to reestablish caribou on the Skilak-Tustumena benchlands and in the Caribou Hills (where the last original caribou were known to exist). Twenty-eight animals were released on Tustumena Glacier Flats, 18 at Lake Emma, 16 at Caribou Lake, and 18 at Green Lake. These releases became the Fox River, Killey River and Twin Lakes herds. But my avalanche story relates to the Killey River and Twin Lakes herds.

These releases have been very successful, especially for the Killey River herd, and wildlife managers have become concerned that the increasing population of caribou is overgrazing the habitat to the point that it cannot be supported. Hunting of the Killey River herd was first allowed in 1995 and continues today, with the goal of limiting population growth.

Our October 2001 census showed the Killey River herd at 643 caribou and the Twin Lakes herd at 67. In

March 2002, biologists from the Alaska Department of Fish and Game, U.S. Fish and Wildlife Service and the U.S. Forest Service met in Soldotna to discuss caribou management. Several years of radio-tracking data showed that the Killey River and Twin Lakes herds intermingle frequently, so we decided to consider the Killey River and Twin Lakes herds as one population, at least for management purposes.

The newly enlarged Killey River herd had a population of just over 700 animals—the largest on the Peninsula. This reclassification also opened access for caribou hunters who could now fly in to Twin Lakes and Iceberg Lake. Hopefully, this increased hunter access would raise the harvest of caribou and slow the population growth of the Killey River herd.

In late October and early December of 2001, we collared ten caribou calves and put global position satellite (GPS) collars on five cows in the Killey River herd. When I tracked these animals on March 6, I noticed that five of the radio-collars were on “mortality mode,” which is an 80-beat-per-minute pinging sound from the collar transmitter when the animal has stopped moving for an extended period. I also noticed a snow slide that came down the mountain all the way to Alpine Lake.

On a later flight I, picked up four more collars on mortality mode near Alpine Lake, and began to suspect that an avalanche had killed the radio-collared caribou. I also realized that if nine out of 21 radio-collared caribou were dead, there were probably many more dead caribou lying at the base of that avalanche.

Biologists didn't get to the location until early April, while recapturing caribou that were captured the previous October as calves. However, the snow was too deep to locate the radio-collars.

On May 28, Fish and Game biologist Ted Spraker, Doug Fesler of the Alaska Mountain Safety Center and Deputy Refuge Manager Jim Hall visited the site by helicopter. The helicopter prop wash filled the sky with caribou hair, and caribou skulls and bones lay scattered over a large area. Skulls were picked up and cached in a gully in the hopes that predators would not scatter the counted skulls with those yet to be uncovered as the snow melted.

One cow that Spraker dug up displayed the extreme force of the avalanche through her twisted and broken form. Looking at the scene, Fesler estimated that the avalanche occurred in late December or January, with a speed of approximately 80 mph, and that it was very likely a soft slab avalanche involving dry cold snow.

This first assessment counted 48 dead caribou: 17 bulls, 30 cows, and one calf. It appeared that the caribou were walking across the slope when a sheet of snow gave way and swept the animals in its path.

A follow up visit on July 8 by Hall, Fish and Game biologist Gino Del Frate and I uncovered an additional 87 animals: six bulls, 73 cows, and eight calves.

That brought the total, including the previous visit, to 135. I was in awe at the sheer number of broken bones and how they were scattered over rocks and tundra. Tufts of hair and hide were stuck on the sharp rocks. Bears, wolves, wolverine, and eagles were reap-

ing the benefit of the caribou's demise. There were still animals buried in snow and a later visit would be necessary.

I made one last trip on Sept. 9 with refuge officer Rob Barto. Much of the snow was melted and we counted an additional 8 animals. We recovered another radio-collar. This made a total of 143 caribou killed by this natural event, and that number is a minimum. There may be additional animals still buried in snow patches, or even deposited in Alpine Lake.

Some animals may have been injured and died elsewhere. Any way you cut it, this was an incredible event and will have a big impact on future management of the Killey River herd.

Rick Ernst has been a pilot and biologist at the Kenai National Wildlife Refuge since 1992. For more information about the Refuge, visit the headquarters in Soldotna, call (907) 262-7021. Previous Refuge Notebook columns can be viewed on the Web at <http://kenai.fws.gov>.