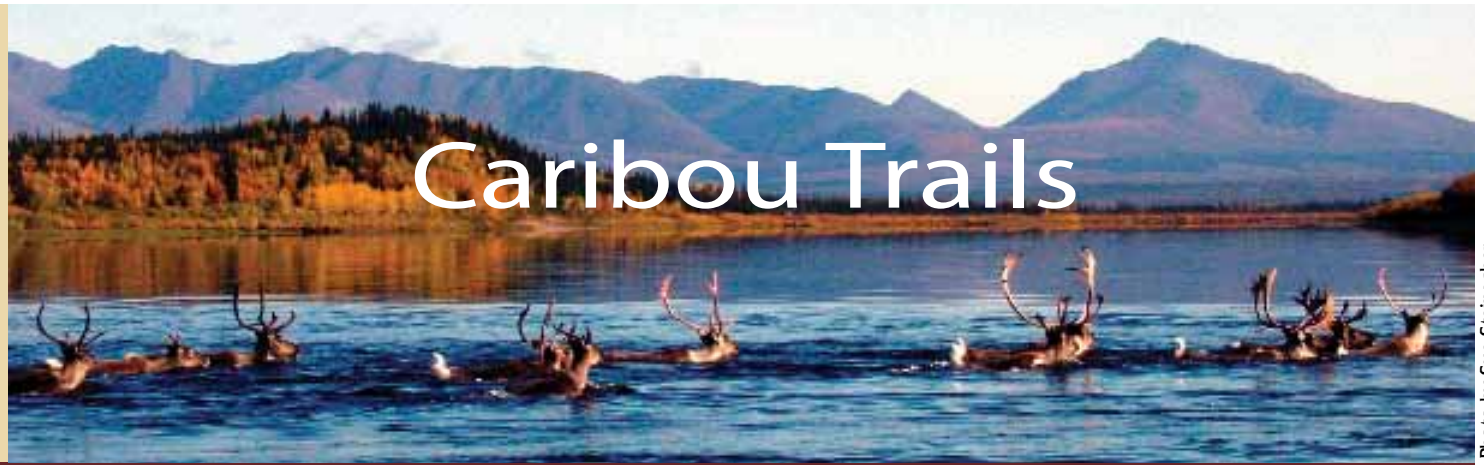


Tuttut tumai  
(Inupiaq)  
bedzeyh tene  
(Koyukon Athabaskan)  
tuntut tumait  
(Yup'ik)



# Caribou Trails

Photo by Sue Steinhacher

issue 7 spring 2005

News from The Western Arctic Caribou Herd working group

## Your 2005 Caribou Working Group Representatives:

Wainwright  
Vacant

Point Hope  
Earl 'Natchiq' Kingik, Pt. Hope

Nuiqsut & Anaktuvuk  
Isaac Kaigelak, Nuiqsut

Noatak & Kivalina  
Raymond Hawley, Kivalina

Kotzebue  
Attamuk Shiedt, Sr., Kotzebue

Lower Kobuk River  
Raymond Stoney, Kiana

Upper Kobuk River  
Sally Custer, Shungnak

Koyukuk River  
Pollock Simon, Sr., Allakaket

Middle Yukon River  
Benedict Jones, Koyukuk

Buckland, Deering, Selawik  
Ron Moto, Deering

Northern Seward Peninsula  
Elmer Seetot, Brevig Mission

Nome  
Roy Ashenfelter, Nome

Elim, Golovin, White Mtn.  
Charles Saccheus, Elim

Southern Norton Sound  
Frank Kavairlook, Koyuk

Reindeer Herders Assn.  
Tom Gray, White Mountain

Conservationists  
John Schoen  
Audubon Alaska, Anchorage

Hunting Guides  
Phil Driver, Anchorage

Transporters  
Colin Brown, Galena

Anchorage  
Advisory Committee  
Don Frederick, Anchorage

Non-local Resident Hunters  
Oliver 'Bud' Burris, Fairbanks

## Being a caribou hunter in the 21<sup>st</sup> century

Being a good hunter is no longer just about keeping your rifle, boat and snowmachine in good working order, and watching the weather and signs of wildlife. If there is to be game to hunt in the future we also have to pay attention to developments planned for the land our wildlife depends on.



Billy Adams on the trail. Photo by Craig George.

Being a good hunter now also means reading, listening and talking about things we never used to have to think about. Sometimes it means going to meetings instead of hunting, and speaking before a group of people even when it feels uncomfortable.

The world is changing rapidly. Some of these changes have improved the quality of our life

in the North, like advanced communications, transportation and health care. But it's important to recognize that development can affect important wildlife habitat and populations - the game we depend upon.



Caribou Working Group meeting.

Knowledge and involvement are now critical hunting tools. We need to learn to use them wisely in order to protect the future. We need to understand the needs of wildlife, and see that they are taken into consideration when development is planned.

### Who is the Caribou Working Group?

The Caribou Working Group includes subsistence hunters living within the range of the herd, reindeer herders, other Alaskan hunters,

hunting guides, transporters, and conservationists. The group's goal is to work cooperatively with each other and with regional wildlife agencies to protect the health of the herd. We want the Western Arctic Caribou Herd to be enjoyed by all Alaskans long into the future. Please come to any us with any questions or concerns you have about caribou.

Caribou Working Group  
P. O. Box 175  
Nome, AK 99762



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This newsletter represents the views and concerns of the Caribou Working Group, and are not necessarily those of the state and federal agencies that support the work of the group.



# Latest count 490,000 caribou!

Photo by Peter Bente

## Counting almost half-a-million caribou is no easy task. Here's how it was done.

The first part of the 2003 photo-census was staged out of a remote airstrip on the western North Slope in July 2003. A team of 13 biologists and four planes were involved, including a Beaver fitted with a large format U.S. Geologic Survey mapping camera in its belly.

Timing of the photo-census was critical. During mid-summer, intense harassment by mosquitoes, warble flies and bot flies usually cause the herd to bunch together in tight groups. Only then is it possible to photograph the entire herd.

Radio-collared animals led search planes to the groups, and helped the biologists determine what percentage of the herd was present. The biologists kept looking for other groups until they were certain that at least 90 percent of all the collared caribou are present.

The Beaver flew a grid pattern over each group and took photographs at a regular intervals. Each photograph overlapped on all four sides. The other planes looked for small groups without a radio-collared animal, and counted them directly from the plane.

It took more than 1,100 9"x 9" photographs to capture the entire herd on film. Once back in town the photos were laid out and areas of overlap marked so that no caribou were double-counted.

Every caribou in every photograph was counted - mostly by Don Williams of Ambler. Williams, who lives in the heart of the herd and has worked with ADF&G radio-collaring caribou, spent the long winter months peering through a magnifier counting each individual caribou.

With thanks to the efforts of Don Williams and the Alaska Dept. of Fish and Game, biologists feel confident that the Western Arctic Caribou Herd now numbers at least 490,000 animals.



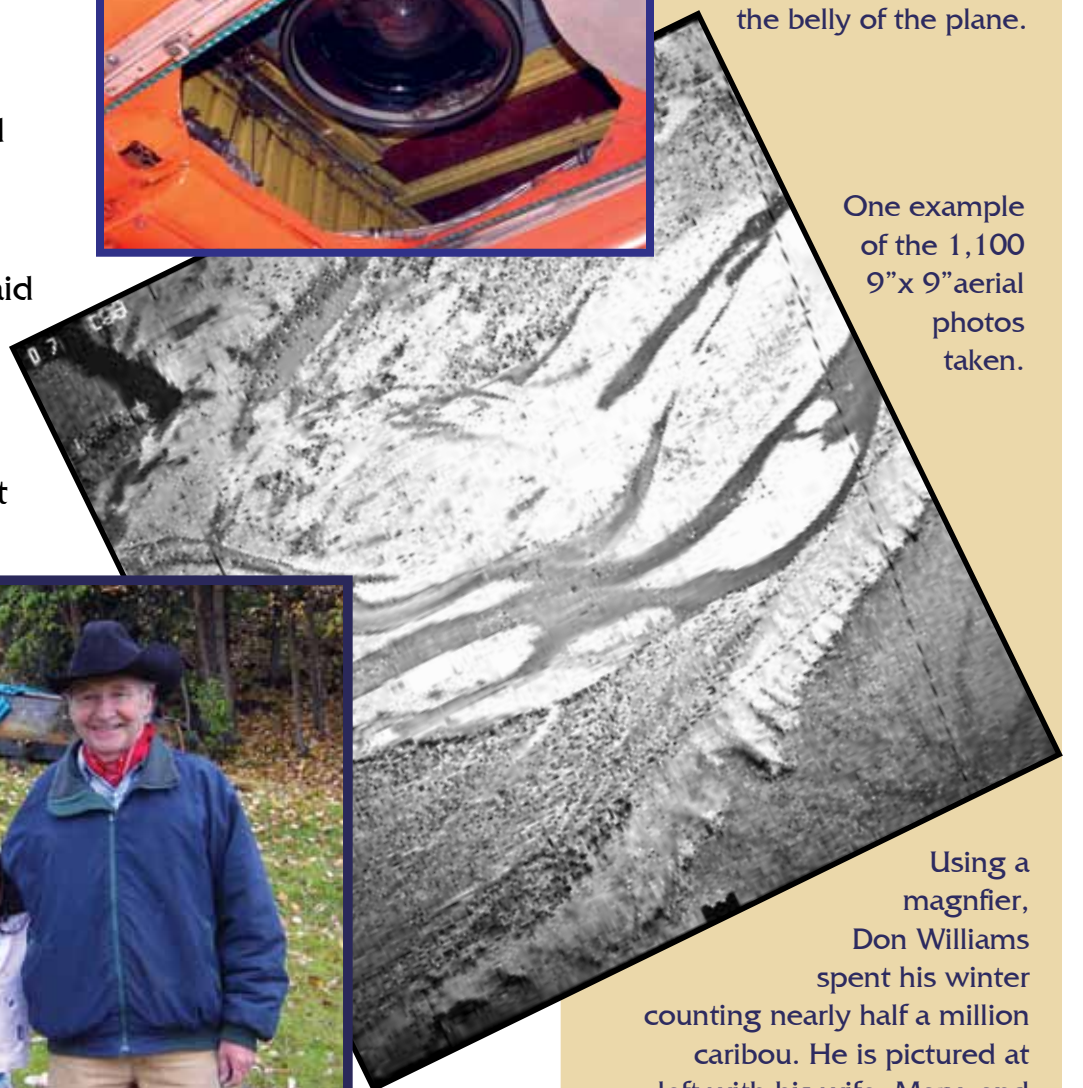
Biologists operated out of a weatherport for two weeks while photographing the herd.



The huge mapping camera was mounted in the belly of the plane.



One example of the 1,100 9"x 9" aerial photos taken.



Using a magnifier, Don Williams spent his winter counting nearly half a million caribou. He is pictured at left with his wife, Mary, and granddaughter, Brandy.



# Looking at Lichen

The Western Arctic Caribou Herd has reached almost half a million animals. In the summer of 2005, BLM will look at what effect this may be having on the lichen and other tundra plants in the herd's winter range.



The study began in 1981, when the herd was about 140,000 caribou

Because lichens grow slowly it is best to compare change over a long period of time. In 1981, BLM set up 20 permanent study sites in the Buckland River valley, and in the northern Nulato Hills. At that time, 33% of the surveyed ground was covered by lichens.

A permanent study site is just a line on the ground

Each site is marked by two small posts placed approximately 150 feet apart. Nothing else is done that would interfere with the natural grazing of the caribou. Every 12 feet along this line biologists place a frame on the ground

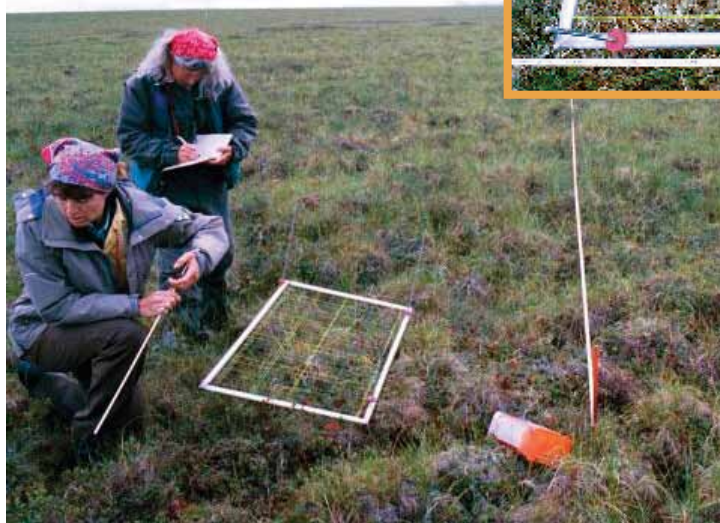
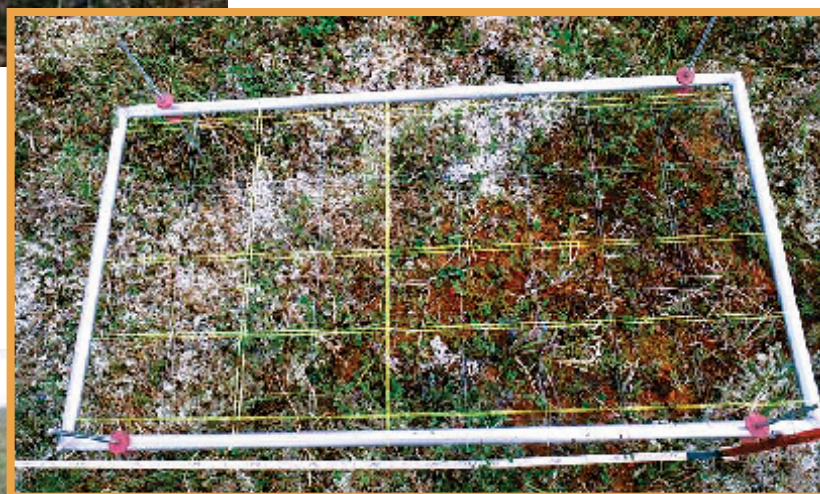
and identify every species of plant inside the frame. They also measure what percentage of the ground is covered by each plant type: lichens, green plants, grasses and shrubs. They save this information and return to the exact same location several years later and repeat the exact same process. By comparing the results from the different years they can measure what changes have taken place.



Above: A 150' tape is used to measure a permanent study site.

Right: This frame is placed on the ground every 12' along the tape.

Below: Biologists record every species of plant within the frame, and the percent of ground covered by lichen.



By 1996 the herd increased to 463,000 caribou – and the lichen cover decreased

In 1995 and 1996, BLM returned to the same study sites. They found 18 of the 20 original sites, and put in 7 more. All of the sites were measured the same way as in 1981. The lichen had decreased from 33% of the ground cover to 19% of the ground cover.

In 1997, BLM set up eight new study sites in McCarthy's Marsh and Death Valley, on the Seward Peninsula.

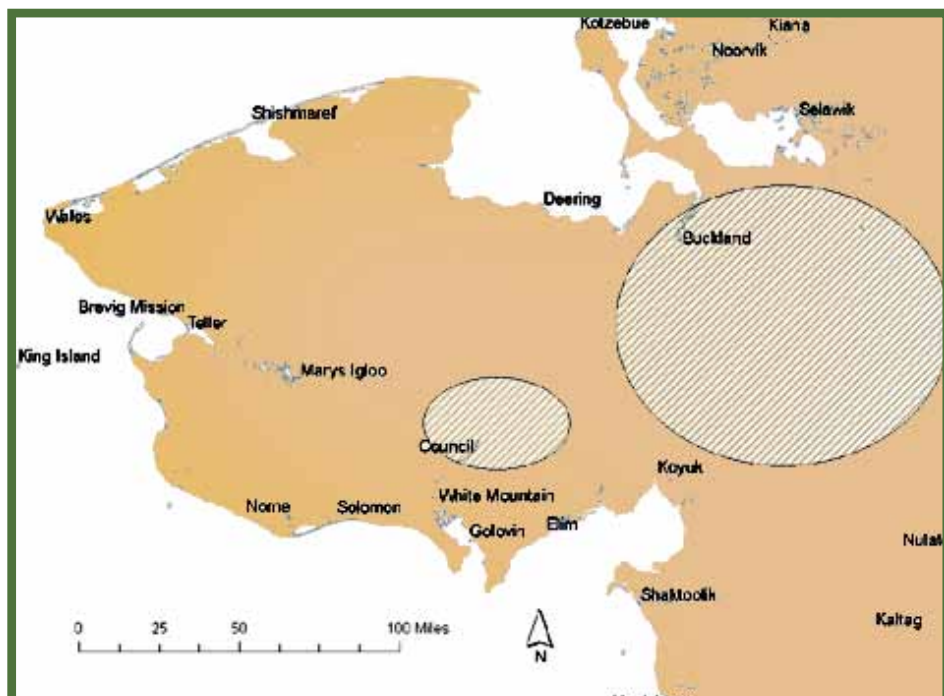
The herd continues to grow and the winter range study continues

In 2005, 2006 & 2007, BLM will examine all of the study sites. They will count and measure all the plants just as they did in the past. They will compare the results with the earlier years and measure any changes in the amount of lichen and other plants. This information will help biologists, caribou hunters, and reindeer herders understand what impacts the caribou may be having on the condition of their winter range, and how this may affect the future size and behavior of the Western Arctic Herd.

## Want more information?

Randy Meyers, in the Kotzebue BLM office is happy to answer any questions. She can be reached at: 907-442-3430 or [Randy\\_Meyers@ak.blm.gov](mailto:Randy_Meyers@ak.blm.gov)

General locations of permanent study sites



Map source: BLM

# our elders speak

**//** *The life experiences of Selawik's Elders and their customary caribou hunting practices reveal valuable ecological knowledge about caribou not available from conventional means. It is our hope that when their knowledge and insights are combined with data collected by biologists studying the herd we will gain a more complete picture of this valuable resource.* **//**

---Hannah Paniyavluk Loon, from her report,  
A Historical Perspective on Caribou Movements and Abundance in the Selawik Drainage, 2004

## Before the caribou came to Selawik

There were no caribou found near Selawik in the years that the elders spoke of between 1930 and 1947. There were no beaver or moose during those years either. Before the caribou started migrating close by Selawik, the people mainly subsisted on fish and small game. Trapping was another livelihood that enabled people to purchase 'naluaqmiutaq,' or white man's food.

Laura Iguaqpak Smith explained,

*"They walked, backpacked over to the headwaters of Noatak River area. They would leave in the early fall while the hides are thin and could be used for clothing. The hunters also took dogs to help pack. They also traveled one day at a time, and they relayed their possessions to and fro. This was done during the late summer, while the hides were thin to be used for clothing, and parkas."*

In the past, caribou were more easily spooked than today. Hunters walked to the caribou to get close rather than using dog teams. It was also essential for hunters to go in groups and pairs in order to harvest caribou successfully.

Johnny Norton remembered,

*"A hunter would go drive the caribou to a hunter hiding and waiting. The hunters in hiding start shooting at the caribou as they got close. That was how they hunted a long time ago. Today, our young people don't do that now. It is first come, first serve. The elders worked together in the past. When we followed the elder hunters that was how they made us hunt. Together, they worked as a team."*

Nearly all the hunters and women interviewed stated that nothing was wasted. The only part of the caribou left behind was the stomach contents. The innards and delicacies including the head were brought home. The hunting group shared everything in the camp. All the animals caught during the day's hunt were divided equally among all the hunters.

One elder woman said,

*"The ones who had hunters share with widows like me. We had to share when we get anything like moose, caribou or rabbit."*



## The arrival of the caribou

Caribou were not accessible in the Buckland or Selawik area in the 1930's to 1950's. On one occasion David Nasragniq Greist was trapping in the Kuugruaq River area, when he came upon caribou. Here is his account of the incident:

*"It was around that period in 1946 or 1947, when I went to Kuugruaq. As I started to set the traps, there appeared caribou! I had a gun and I didn't lack anything. I didn't set traps. I started getting caribou. I caught as many as I could. That was the first time caribou came in one of those fall times. When I returned from upriver, many hunters headed upriver."*

*Since then, the caribou started coming. At a later time, they begin to start passing through Selawik towards south. They started going farther behind Koyuk today. Even Unalakleet people are getting caribou in winter."*



Simon Paneak of Anaktuvuk after a successful hunt. Photo by Helge Larsen, courtesy of the Simon Paneak Museum, Anaktuvuk

Below are excerpts from Hannah Loon's report of her interviews with Selawik Elders Laura Iguaqpak Smith, Delbert Qignak Mitchell, Ruby Ayaqin Foster, Frank Qunguyuk Berry, Johnny Norton, Ralph Ayyatungaq Ramoth, David Nasragniq Greist, Daniel Sipaaq Foster, Eva Kitik Henry, and the late Marie Iqitqiraq Clark.



## Quyanna!

Just as hunting needed to be a group effort to be successful, so are projects like this.

Our thanks go to Barbara Armstrong, Bert Greist, Eleanore Loon Jackson, Sue Norton, and Johanna Ticket for their translation and transcription, and to Ruthie Sampson for help with the elders' biographies. We also thank Clyde Ramoth and Giuletta Minerva, both with the Selawik National Wildlife Refuge, for their help with conducting and recording the interviews.

Thanks also go to the 2003 Native Village of Selawik council members for allowing their elders to be interviewed, to the 2003 NANA Inuunialiqput Committee for supporting the project, and to the Selawik National Wildlife Refuge for funding the project.

And our biggest thanks go to the Selawik Elders who shared their experiences and knowledge. Quyanna!

When caribou began migrating to the Selawik area, the caribou population affected the reindeer herding industry regionally.

An elder recalled,

***"There were many caribou around us. The caribou started coming. They took away the reindeer from the herders whenever they came around. The caribou took with them the reindeer in Shungnak, Buckland, NANA, and here in Selawik. The caribou took them all away."***

## The rules we hunt by

Ralph Ayyatungak Ramoth stated that one must always respect animals by not playing with any kind of animal. He added,

***"You must only shoot the caribou that you can handle. The hunter shares the caribou he got with others. He shares with the hunting partner. Upon arriving at home, share with those having no meat. The more you share; it will always come back to you. You have to learn these skills in order to be a good hunter."***

Ralph continued,

***"All the hunters and people should know to allow the female and their fawns to pass through. We all know the caribou route. We don't like to change the caribou route, and this is rule number one. We have to let the first bunch go through, no matter what. Then after the first bunch has gone by, then you can shoot and catch caribou, but only what you need."***

## final reminders

When asked about other comments or advice they would like to leave the younger generation, one elder finished with,

***"Pray without ceasing. Help those in need and that asked. Share your harvest. And never get more than you need. These were taught to us."***

Laura Iguaqpak Smith ended with,

***"Have respect for all the animals. When you don't have respect for the animals, they will not come back to you. Have respect for the animals God made for us to be healthy and happy."***

***" Have respect  
for all the animals.  
When you don't  
have respect for the  
animals, they will not  
come back to you.  
Have respect for the  
animals God made  
for us to be healthy  
and happy. "***

~ Laura Iguaqpak Smith, Selawik Elder



# Potential effects of NPR-A development on the Western Arctic Caribou Herd

NPR-A development will likely happen slowly, one area at a time. While each smaller development project may not significantly impact wildlife, as it grows into a much larger complex of interconnected roads and development, wildlife may be affected – especially caribou.

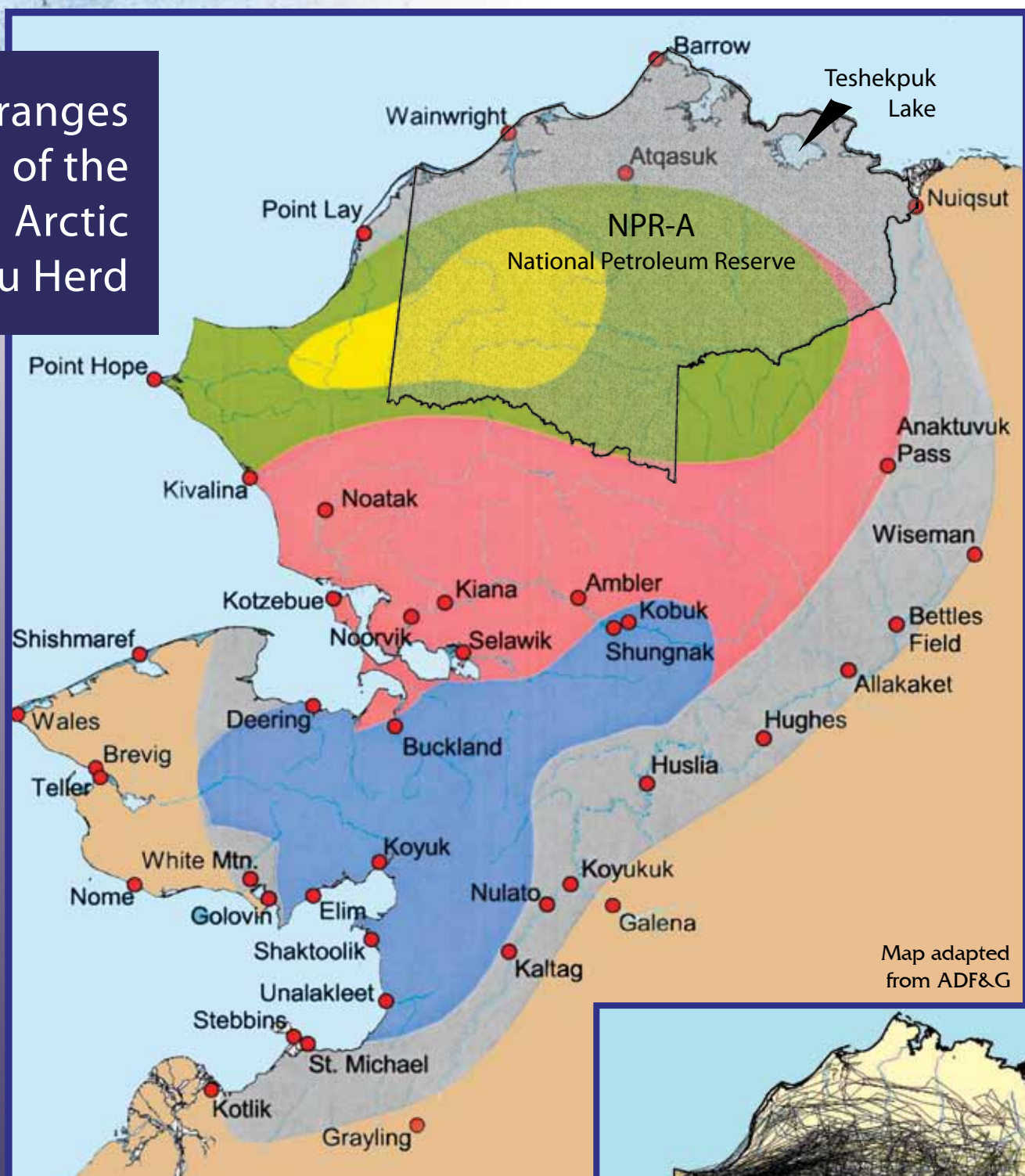
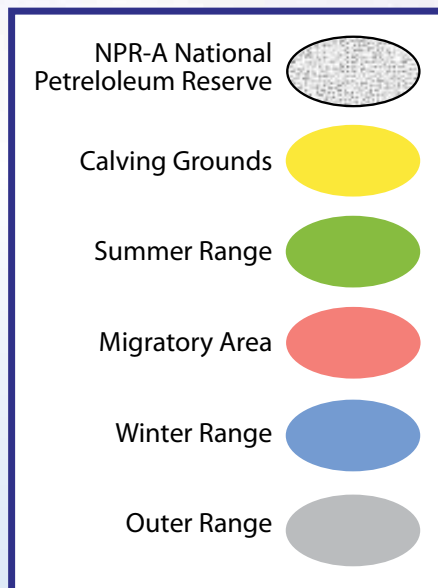
*“In 1973, when we were still living in tents, the oil industry was less than a flick of your Bic on the horizon. Now it is surrounding us on three sides.”*

~ Isaac Kaigelak, Nuiqsut hunter

This line of caribou paralleled the road for several miles before finally crossing.

Photo by Jim Dau.

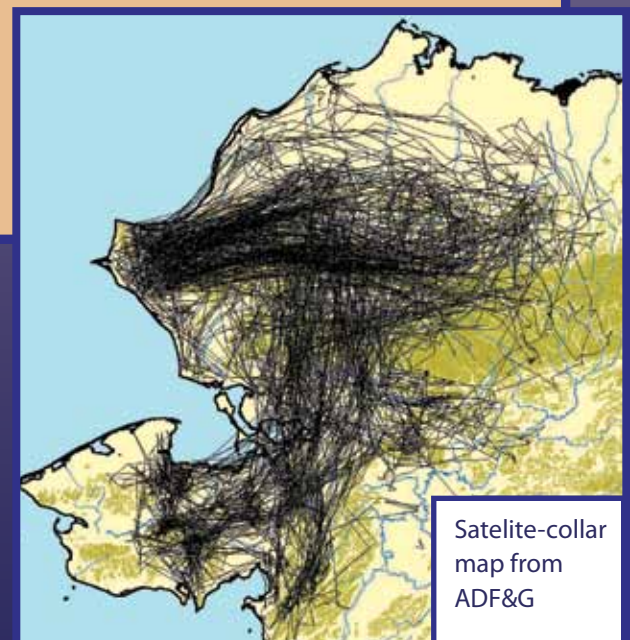
## seasonal ranges of the Western Arctic Caribou Herd

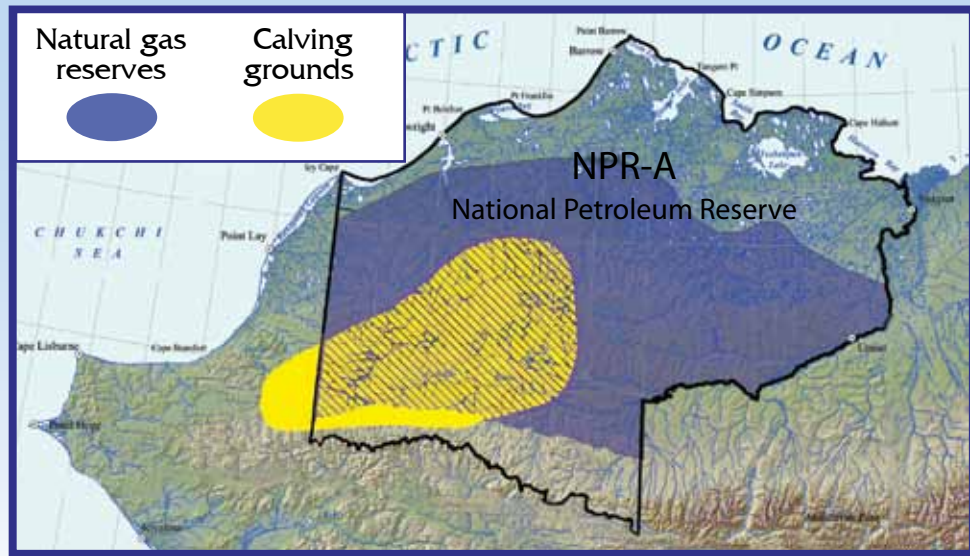


Have questions about development plans for NPR-A?  
Contact:

Mr. Bob Schneider  
BLM Northern Field Ofc. Mgr.  
1150 University Ave.  
Fairbanks, AK 99709  
907-474-2200 or  
1-800-437-7021  
bob\_schneider@ak.blm.gov

The map to the right shows the movements of all satellite-collared caribou from 1988 - 2003. Impacts to the herd in one part of its range, can affect the herd throughout its range.



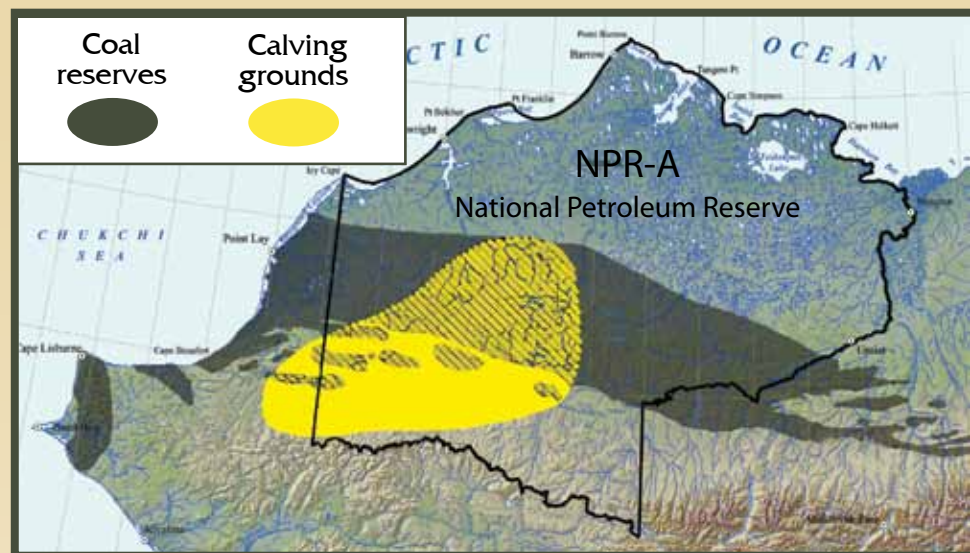


Map adapted from Audubon Alaska

## Natural gas and caribou

### Potential effects of natural gas development on calving grounds

Natural gas development is an energy industry that could affect the health of the Western Arctic Herd. A recent study showed that 90% of the calving grounds have potential reserves of natural gas underneath them.



Map adapted from Audubon Alaska

## Coal and caribou

### Potential effects of coal mining on calving grounds

The Utukok River uplands in northwest Alaska have the largest coal reserve in North America. Currently the high cost of building transportation systems needed to move coal discourages coal development. However, as transportation systems and industrial construction from oil and gas development spread westward across the NPR-A, coal mining may become more economical.

The Western Arctic Herd's primary calving grounds are in the Utukok Uplands and adjacent upper coastal plain. Nearly half of the primary calving grounds overlap major coal deposits. Industrial coal mining could result in major developments within the calving area, such as roads, railways and high-voltage power lines. Coal reserves could potentially be strip-mined during the same brief season when calving occurs.

### Potential effects of coal mining on caribou habitat

The effects of coal mining in the western Arctic on adjacent habitat, permafrost, and creek and river systems are currently unknown. Open-pit mining would likely affect caribou habitat.

### Potential effects of coal mining on migration routes and relief from insects

Coal development in this region could also affect the herd's annual migration from the calving grounds to the coast to escape intense harassment by summer insects. The stress from swarms of insects deplete the caribou's energy reserves, prevent weight gain, and increase their vulnerability to disease. Any development that prevented the herd from reaching areas of relief from insects could be a problem for the herd.

Even if the development did not alter the overall size of the herd, changes in migration patterns could affect access to the herd by the communities of Point Lay, Point Hope, Kivalina and Kotzebue.

### Potential Transportation Development for Northwestern Alaska



Map adapted from DOT

## MINING, ROADS AND caribou

### Potential effects of hard-rock mining on caribou migration routes

Additional Red Dog Mine development, and construction of a major utility corridor from the Red Dog Mine to the Cape Sabine area, could interfere with caribou migration across the western edge of the calving grounds to their summer range. This is a critical area used by 95% of the herd to escape the intense harassment by insects. (See satellite-collar map.)

### Potential effects of transportation development on the herd

To transport coal or other minerals to ports on the coast, or to other Alaskan communities, would require construction of roads, railroads, or both. Division of the herd's habitat, obstacles to migration routes, disturbance from road activities, and the possibility of increasing the number of hunters and concentrating them along roads are all issues that need careful consideration.

# The NPR-A and the future of caribou



Photo by Geoff Carroll

**“ The Working Group has interest in all planning areas of NPR-A, which include the ranges of both the *Western Arctic Herd* and the *Teshekpuk Lake Herd*. We are particularly interested in, and concerned about, the southern planning area because it contains significant portions of the calving ground, summer range, and insect relief habitat for the Western Arctic Herd. These seasonal habitats are essential for conserving this important caribou herd and we request that you develop a protected areas strategy for this area in your southern plan. ”**



From a letter to the Director of BLM-Alaska  
by Raymond Stoney of Kiana - Chairman of the Caribou Working Group

## more than just lines on a map

In 1923 lines were drawn on a map without much thought about the people or the wildlife that lived within them. Those lines form the boundary of the National Petroleum Reserve-Alaska, or the NPR-A. The NPR-A is the next frontier for oil, gas and mineral development in Alaska. The impact it may have on caribou affects everyone living within the range of the Western Arctic Caribou Herd; from Nuiqsut to St. Michael, and Bettles to Point Hope.

## You can make a difference

Get involved. Read. Listen. Attend meetings. Organize your own meetings. Ask questions. Write letters. Seek guidance from Elders. Bring any questions or concerns you have to your Caribou Working group representative.

Insist that all possible impacts to caribou and their habitat from oil and gas development, coal extraction, hard-rock mining, and the associated transportation developments be fully studied beforehand. Insist that the results be shared with everyone, and that everyone has an opportunity to express their concerns. And then speak up and encourage your family, friends and local leaders to speak up.



## Why does this matter to me?

Alaskans need to become informed about long term development plans for the NPR-A, and the possible effects on the health of the Western Arctic Caribou Herd and the Teshekpuk Caribou Herd. Development can bring a lot of financial advantages to Alaska, but those who depend upon wild game need to become involved in making sure development is balanced with hunting needs.

## Talk to your Caribou Working Group Representative

Use the Caribou Working Group as a tool to learn more and to have your questions and concerns about caribou addressed. While many of the members of the Caribou Working Group are subsistence hunters, the group also includes sportsmen, conservationists, hunting guides, reindeer herders, and transporters – everyone with an interest in the health of the Western Arctic Caribou Herd. Biologists and managers from ADF&G, USFWS, BLM and NPS are not voting members of the Caribou Working Group, but do provide information to the group. When all these different voices come together they are listened to.

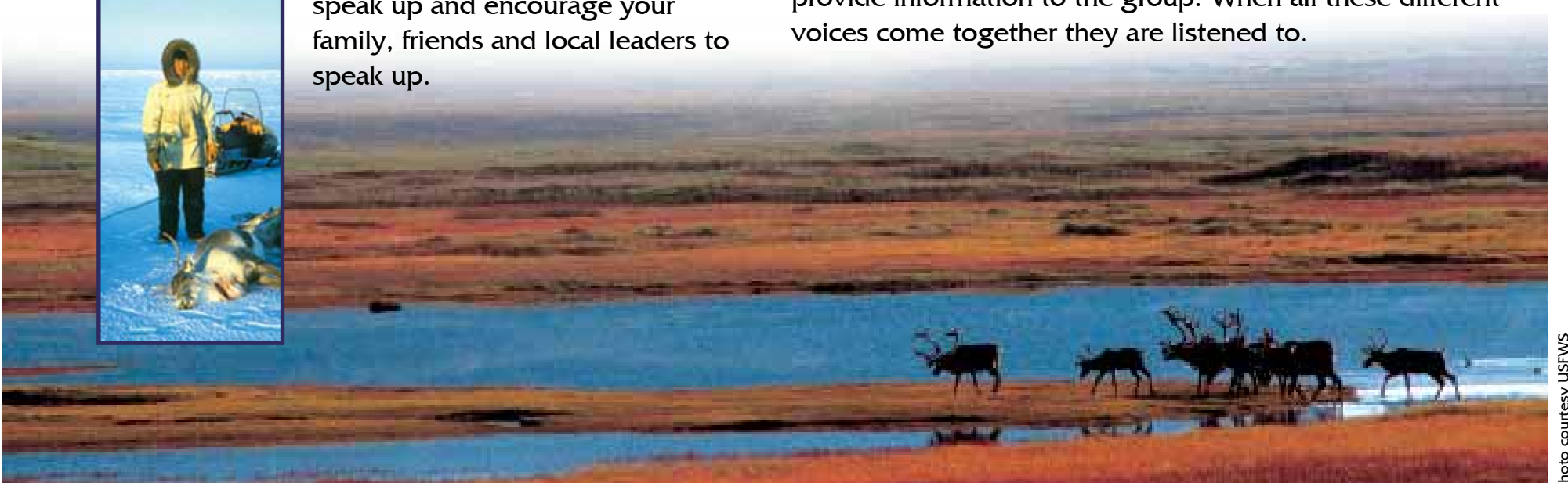


Photo courtesy USFWS



# The Teshekpuk Caribou Herd

Why its future affects you



## Subsistence needs in the balance

The Teshekpuk Caribou Herd is much smaller than the Western Arctic Caribou Herd, but it is the most important herd for subsistence hunters from the North Slope communities of Atkasuk, Barrow, Nuiqsut and Wainwright. This herd of 45,000 caribou, calves and summers on the lands around Teshekpuk Lake. If oil development takes place in or close to critical calving areas and summer insect-relief areas the herd size and the subsistence harvest may be affected.

## Are the Teshekpuk caribou protected?

In 1998, the Bureau of Land Management opened 87% of the northeast portion of NPR-A to oil and gas leasing. At that time they recognized that some lands, including those around Teshekpuk Lake, were so critical to wildlife that they needed special protection and were not opened to leasing.

However, early in 2005, the BLM changed their position and opened most of the lands surrounding Teshekpuk Lake to oil and gas leasing, but with additional restrictions. We remain concerned about the effects this may have on the Teshekpuk Caribou Herd.

## Why should this matter to me?

People need to become informed about long term development plans for the rest of the NPR-A, and the possible effects on the health of the **Western Arctic Caribou Herd**. Development can bring a lot of financial advantages to rural Alaska, but people who rely upon wild game need to involve themselves in making sure development is balanced with hunting needs.

share your caribou concerns with us - also, join us!

### What does the Caribou Working Group do?

The 20 representatives meet twice a year to discuss issues affecting the Western Arctic Caribou Herd. As a group they make recommendations on how the herd should be managed.

### What does a representative do?

Primary representatives attend meetings or send their alternate. They bring concerns and observations about caribou from their region to be discussed by the group. We have vacancies. Join us!

### Can only caribou hunters be representatives?

No, you do not have to be a hunter. You could be a mother, a retired hunter, a young adult, a grandmother. You do need to want to be involved in making important decisions about caribou.

### Who should I talk to if I want to know more?

Contact any of the representatives on the Caribou Working Group to bring questions or concerns about caribou to the group, or to express your interest in becoming a representative.

#### PRIMARY representatives

vacant  
Earl Kingik, 368-2330, earl\_kingik2004@yahoo.com  
Isaac Kaigelak, 480-6530  
Raymond Hawley, 645-2164  
Attamuk Shiedt, Sr., 442-7690 or 1-800-478-3312 ext. 7690  
Raymond Stoney, Chairman, 475-2103  
Sally Custer, (H) 437-2170, (W) 437-2161  
Pollock Simon, Sr., 968-1101  
Benedict Jones, (H) 927-2205  
Ron Moto, 363-2118, ronmotosr@yahoo.com  
Elmer Seetot, Jr., (W) 642-4091  
Roy Ashenfelter, Vice Chair, (W) 443-4323, roy@kawerak.org  
Charles Saccheus, 890-3231  
Frank Kavairlook, 963-3291  
Tom Gray, 638-3971, tomnbj@starband.net  
John Shoen, 276-7034, jschoen@audubon.org  
Phil Driver, 277-8829, cell 644-0687, 645-2203  
Colin Brown, 656-1388, yukoneagleair@hotmail.com  
Don Frederick, 333-3640, dgfrederick@yahoo.com  
Oliver (Bud) Burris, 474-0437, budandsally@ak.net

#### ALTERNATES

Raymond Avugluk, Jr.  
Steve Oomittuk, 368-2330  
vacant  
Mike Adams, 485-2146  
vacant  
Vernon Cleveland, 636-2144  
vacant  
Jack Reakoff, 678-2007  
Royce Purinton, 898-1101  
vacant  
vacant  
Ralph Anungazuk, 664-3062  
Luther Nagaruk, 890-3441  
vacant  
Herb Karmun, 357-3134  
Paul Jackson, 276-3133  
Bob Hannon, 963-2439  
vacant  
vacant  
vacant

Next meeting of the Caribou Working group is scheduled for May 2005

# In their own words

White Mountain students write about collaring caribou at Onion Portage



Paul Tomalonis

“Between September 12 through the 15<sup>th</sup>, 2003, nine 12-14 year olds of White Mountain helped the Fish and Game biologists collar the caribou of the Western Arctic Herd to help get an estimate of the herd’s population. **Onion portage is where thousands and thousands of caribou cross the Kobuk River.** Also, before they cross the river they have to climb the steep mountains which are known as the Brooks Range.”



Leslie 'LB' Brown

“The first day I got to Onion Portage, I felt nervous because Jim looked strict. But when I met him down at the beach, I was surprised because all the biologists were kind. I told my teacher, ‘Jim looks strict but he is nice. Him and the other biologists appear nice.’ Chris chuckled and went back to cooking. **I felt excited to be so close to live caribou. Not dead like usual, but alive. Breathing, scared, and alive.** Touching a caribou and working with the biologists excited me even more.”



Michelle Simon

“When we saw a herd of caribou getting into the water, we would drive up to the caribou and grab them by the antlers. One person would collar the caribou. The other boat would grab the calf and wait until we got done collaring the cow and taking blood samples. We held the calves so that they would stay with their mothers. **When I first saw one of my classmates grab a caribou it made me want to help out more.** The first thing I did was hold a calf’s tail with Phillip. Although the caribou kicked and splashed, I had a good grip and didn’t let go.”



Rebecca Haviland

“I heard the caribou trotting in the distance as I walked along a path they had made through years of use. As they marched by me I heard their unique grunting. I heard the thunder of splashing as a herd of caribou waded and jumped into the river on their migration to their winter grounds. As I listened, the pleasant smell of the aiyu and pine trees surrounded me. **Never would I have imagined being so close to a live caribou or holding them with my hands.**”

## Caribou Curriculum - A conference hit!

In addition to the Onion Portage experience, the White Mountain junior high students joined local hunters on a caribou hunt, and learned how to stalk, shoot and butcher a caribou. They each prepared their own caribou dish, and hosted a caribou potluck for their families and village Elders.

Classroom projects ranged from developing graphs and charts based on harvest numbers, to creative writing projects about the experiences with caribou.

The highlight of their ‘Caribou Year’ came at the Tenth North American Caribou Workshop in Girdwood, Alaska, in May 2004. Together with their teacher, Chris Brown, and ADF&G wildlife biologist Jim Dau, they gave a presentation to several hundred caribou biologists from



Alaska, Canada, Greenland, Finland, Norway, Sweden and Russia. The students’ presentation demonstrated the value of involving kids and communities with a caribou collaring project, and was the highlight of the conference!

The best way to describe what it's like for students to help biologists put radio and satellite collars on caribou is for them to tell you themselves... Below are excerpts of stories written by White Mountain junior high students after their four days at Onion Portage.



### Crystal Lincoln

"I will always remember the time Jim needed to get a collar on a cow. We turned around and went full speed towards the nearest cow. When we got to her Geoff grabbed her antler and pulled her to the side of the boat. I started taking the bolts on the collar off. I wrapped the collar around the cow's neck and fitted it. Then, I fastened the screws tightly, grabbed the clippers, and cut the excess collar off.

I'm glad I got to go to Onion Portage and have an experience like this. I am one of the few people who got to collar caribou. Go back next year?? Oh yeah!!"

### Sara Morris

"A bull must be held between two boats because, if it is not, it will be too tough to control. Although I felt a little bit frightened of getting nailed with an antler, I kneeled on the boat floor and put the collar on the bull. It was much more difficult than collaring the cow because the bull kept thrashing its head from side to side and shaking off the collar. I never knew caribou could be so strong and aggressive. Collaring that particular bull caribou will be something I will never forget."

### Stephanie Lincoln

"My class and I got to help with holding the caribou and putting collars on. We did this repeatedly all day, and we probably saw at least 1,000 caribou that day altogether. We went back to camp feeling good, but sad at the same time. We were feeling good because we had completed our jobs, and sad because that it was our last day working with the biologists and caribou. Going to Onion Portage is something I will never forget. Millions of other kids don't get to have this experience, and that is why I think that we are lucky."

### Leslie Shoogruwuk

"The whole time at Onion Portage was fun. Especially when the caribou would always go right behind our camp. It was fun, but when we held the bulls it was also kind of scary because of how big they were. That was my first time getting that close to a real, live caribou. It was cool-and scary-at the same time.

Before we started studying caribou I thought the caribou we have on the Seward Peninsula stayed on the Seward Peninsula. Now I know they migrate much, much farther."

## Caribou (and reindeer) websites - Share with your teachers!

### Caribou and reindeer resources for teachers/parents

[www.wildlife.alaska.gov](http://www.wildlife.alaska.gov)

This is the ADF&G, Division of Wildlife Conservation website. There are numerous educational resources about caribou and all Alaskan wildlife.

[www.projectcaribou.net](http://www.projectcaribou.net)

An educator's guide to wild caribou of North America. Online and book versions. Lots of information and many K-12 activities and lessons about caribou. Fully downloadable!

[www.uaf.edu/snras/afes/pubs/misc/MP\\_04\\_07.pdf](http://www.uaf.edu/snras/afes/pubs/misc/MP_04_07.pdf)

Reindeer Round-up K-12 lesson plans by the UAF Reindeer Research Station. Fully downloadable!

[www.ankn.uaf.edu/tuttu/](http://www.ankn.uaf.edu/tuttu/)

Four lessons about caribou from the Alaska Native Knowledge

[www.taiga.net/satellite](http://www.taiga.net/satellite)

A cooperative project using satellite collars to document migration patterns of the Porcupine Caribou herd.

[www.beingcaribou.com](http://www.beingcaribou.com)

Experiences of a couple traveling w/the Porcupine Herd.

[arctic.fws.gov/cm/cmoverview.html](http://arctic.fws.gov/cm/cmoverview.html)

USFWS' Caribou Mysteries site for teaching mathematics.

You can also contact:

Sue Steinacher, Wildlife Education Specialist  
ADF&G, Nome

1-800-560-2271 ext. 233, or 907-443-2271 ext. 233  
[susan\\_steinacher@fishgame.state.ak.us](mailto:susan_steinacher@fishgame.state.ak.us)

## 2004 Onion Portage update

In September 2004 a crew of wildlife biologists put 10 satellite collars and 22 radio collars on caribou as they crossed the Kobuk River at Onion Portage, downriver from Ambler.

From computer  
by satellite

Ten caribou (2 bulls, 8 cows) received collars that transmit a satellite signal that identifies their location. This signal is picked up by a satellite overhead which relays the information to a receiving station, which sends it to the biologists via computer. They can track and map the individual caribou's location throughout its yearly migration by computer.

from plane  
by radio

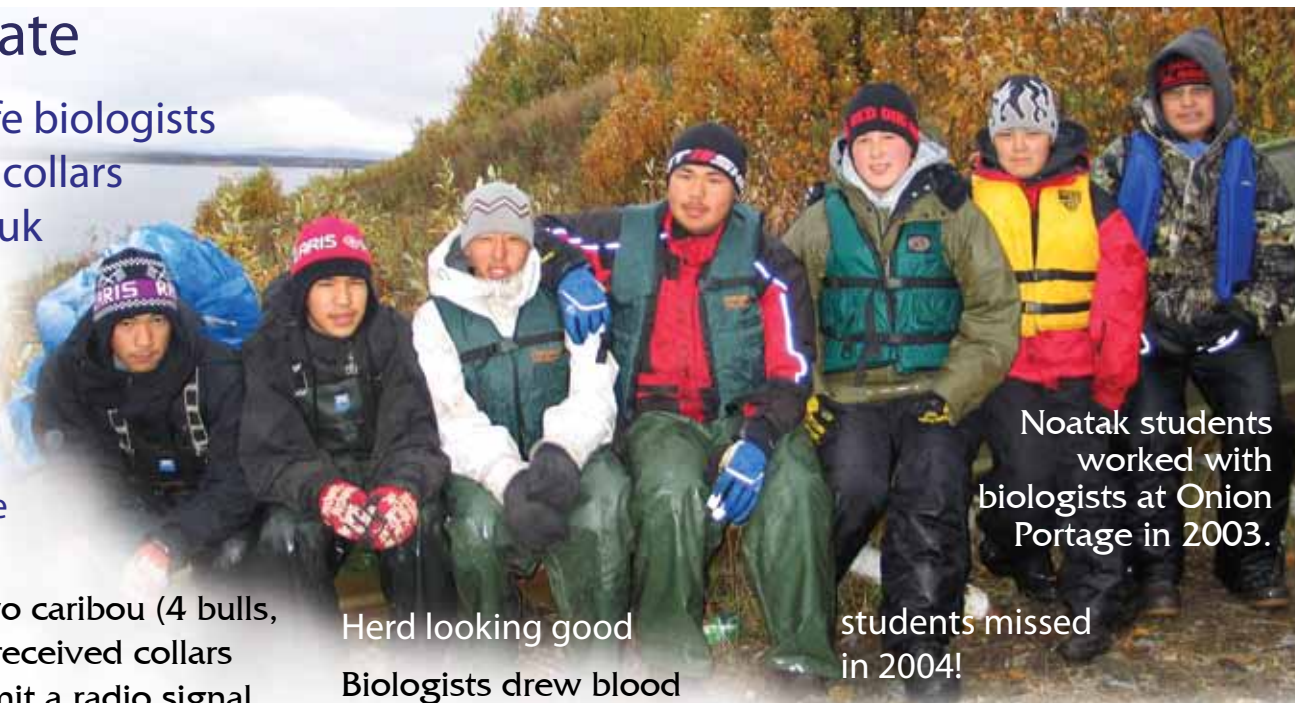
Twenty two caribou (4 bulls, 18 cows) received collars that transmit a radio signal. Biologists must be in line of site (usually in a small plane) of the animal to hear the radio signal, and locate the individual caribou. This helps the biologists locate all the caribou when estimating the size of the herd, and provides information on the herd's migration and location.

Herd looking good

Biologists drew blood samples from 82 caribou (49 bulls, 33 cows). The samples are used to look for any signs of disease in the herd. The blood is analyzed at the University of Alaska Fairbanks, and results have not yet been received. However, hunters and biologists reported that most animals looked to be in good condition.

students missed  
in 2004!

Typically village students assist biologists with the caribou collaring. Unfortunately, teacher and principal turnovers at both 2004 schools led to last minute cancellations. The students were missed, but in 2005, Selawik and Barrow students are expected to attend.



Noatak students worked with biologists at Onion Portage in 2003.

## No sign of Chronic Wasting Disease in Alaska



Photo courtesy of USFWS

### chronic wasting disease?

People in Alaska have been concerned about a condition called Chronic Wasting Disease (CWD) that has been found in deer and Rocky Mountain elk in the Lower 48 and Canada. Caused by lesions in the brain, it leads to severe weight loss, drooling, droopy ears and head, excessive urination and thirst, and abnormal behavior such as stumbling and having no fear of humans. Chronic Wasting Disease causes eventual death in the infected deer or elk, but people eating or handling an infected animal cannot get it.

### Good news for Alaskans!

The good news for Alaskans is—CWD has not been found in any wild or captive members of the deer family in Alaska. This includes caribou, reindeer, moose, Sitka black-tailed deer, and Roosevelt elk. Additional good news is that a highly trained team of Alaskan veterinarians and wildlife biologists is on the lookout for any signs of CWD in Alaska. Jim Dau, ADF&G wildlife biologist in Kotzebue and advisor to the Caribou Working Group is on this team.

### On the lookout for CWD

Even though there have been no signs of CWD in Alaska, southern Alaska's Sitka black-tailed deer and Roosevelt elk are similar to mule deer and Rocky Mountain elk; two Lower 48 species that have developed CWD. Therefore, there is concern that these Alaskan species could become infected if they are exposed to the infectious protein (called a prion) that causes CWD. This could only occur if infected elk or deer were imported into Alaska, and then came in contact with Alaskan caribou, reindeer, moose, deer or elk.

### State bans importation

The State of Alaska has banned all importation of live caribou, reindeer, moose, deer or elk into the state unless they are from a USDA certified CWD-free herd. They also only allow boned-out game meat and mounted or tanned trophies into the state.

### ADF&G is conducting testing

There are about a dozen game farms in Alaska with Rocky Mountain elk. Only the Kodiak Game Farm, on Kodiak Island, is close to wild populations of Sitka black-tailed deer or Roosevelt elk. As a precaution, hunters in these areas are voluntarily donating deer and elk heads to the ADF&G. The brain tissue is tested for CWD, and so far all results have been negative.

When possible, any Alaskan caribou, reindeer, moose, deer or elk that show any signs of CWD, or die of unknown causes, are tested. So far all Alaska game tested has been negative for CWD.

### reindeer are monitored

The UAF Reindeer Research Program and Kawerak's Reindeer Herders Association are working together to test reindeer on the Seward Peninsula. All tests have been negative so far. The State Veterinarian is testing privately-owned animals, and a certification program has been set up to monitor captive reindeer and Rocky Mountain elk.

### [www.wildlife.alaska.gov](http://www.wildlife.alaska.gov)

It is hoped that the numerous testing programs and the importation bans will prevent CWD from becoming a problem in Alaska.

More information about CWD is available at the ADF&G website. Under the 'All About Wildlife' heading there is a link to 'Wildlife Diseases & Parasites.'

You can also contact:

Jim Dau, ADF&G Wildlife Biologist  
Kotzebue, Phone 442-1711  
[jim\\_dau@fishgame.state.ak.us](mailto:jim_dau@fishgame.state.ak.us)

Dr. Kimberlee Beckmen  
ADFG Wildlife Veterinarian Fairbanks  
Phone 459-7257, Fax 452-6410  
[cwinfo@fishgame.state.ak.us](mailto:cwinfo@fishgame.state.ak.us)

# Is our land, air and water polluted?

## We asked the National Park Service about their contaminant study in northwestern Alaska



Researchers arrive to set up a sampling station on Matcharak Lake in Gates of the Arctic National Park.

Photo by Neil Rose

Photo at right: Core samples being collected from lake bottom.

### We live far from any urban centers. How could we have a problem with contamination?

Contaminants may be produced thousands of miles away, often in countries other than the United States. They are carried around the globe in the atmosphere, and tend to drop out of the air in rain, or in snow in colder climates. Lichens, aquatic plants and other vegetation absorb these contaminants from the soil and water. These plants are then eaten by caribou, moose, fish and other animals, and the contaminants become concentrated in their meat and organs. These are then eaten by people.



Photo above: Tissue samples of fish being collected to test for contaminants.

### Could I be affected?

Large amounts of these toxins can impact animal and human growth, behavior, disease, and reproduction - but we don't know yet if these toxins are present in large amounts in Alaska.

### Where in Alaska is this study being done?

Four lakes are being used: Burial Lake in Noatak National Preserve; Matcharak Lake in Gates of the Arctic National Park; and Wonder Lake and McLeod Lake in Denali National Park.

### How is this study being done?

Researchers have collected snow samples, lake water, lake sediments, and fish from the lakes. They also collected lichens, spruce needles, and willow bark from around the lakes. Tissue samples from two moose in the Denali area were collected by subsistence hunters and given to the scientists to analyze. Only moose are being tested because they feed in more localized areas than caribou which migrate long distances.

### What have you learned so far?

So far we only have information from the snow samples collected in Alaska in 2003. It takes months for the labs to prepare and process the samples, so we are still waiting for results from the 2004 Alaska samples. The 2003 snow samples showed only low levels of contaminants, but there is still concern that these toxins may become concentrated farther up the food chain.

### Want to have your moose meat tested?

Willie Goodwin, with the National Park Service in Kotzebue, can provide you with sampling kits and instructions on how to have your moose meat tested. His phone is 442-8304.

### Want more information?

Bud Rice, an Environmental Protection Specialist with the NPS in Anchorage, can answer questions about the project. Phone 907-644-3530, Fax 907-644-3814, bud\_rice@nps.gov

### Just what are these contaminants?

Some of these contaminants, like DDT, come from pesticides that are now banned in the US but are still used in other countries. Other pesticides still in use in the US are also showing up. Chemicals used in flame retardants are showing up, as are PCBs, HCHs and mercury.

### Should I stop eating wild game?

Until more is known—hopefully by the summer of 2005—continue to eat the foods you have always enjoyed. Even if low levels of contaminants are present, wild-grown foods are packed full of nutrition not present in many processed foods. But there are reasons to be concerned. Learn all you can about how pollution is getting concentrated in the Arctic.



# Getting to know Sally Custer

upper kobuk representative  
on the  
caribou working group

*“Caribou is one of the main foods of our diet. We need to make sure they are healthy and their numbers are high.”*

*Sally Custer, Shungnak*



Sally Custer’s love for her people and her respect for their traditional relationship with caribou is as obvious as her smile. A resident of Shungnak, she is a recent member of the Caribou Working Group, representing the Upper Kobuk villages of Shungnak, Ambler and Kobuk.

Sally is deeply concerned that her people will always be able to hunt and eat caribou. *“Caribou is one of the main foods of our diet. We need to make sure that they are healthy and their numbers are high. Although I am not a hunter, I skin and butcher the caribou, dry it, and store it. It is something that has always been close to my heart.”*

The Caribou Working Group will benefit from the 4 ½ years Sally worked as a Resource Specialist for NANA. She assisted the Upper Kobuk Fish and Game Advisory Committee (AC), which gave her practical experience with both the biological and political processes of wildlife management in Alaska.

As a fluent Inupiaq speaker Sally plans to keep the Upper Kobuk Elders Council informed on all matters discussed at the Caribou Working Group meetings. She eagerly explains, *“I just love talking with Elders. I learned from them how my Inupiaq people were nomads, always following the caribou at certain times of the year,”*

Sally also plans to share information with the Upper Kobuk AC, city councils, and all interested people. She wants her region to have strong representation and will bring people’s concerns back to the Caribou Working Group.

Besides being a wife and mother, Sally is the communications person for the Shungnak Search and Rescue. She stays tuned to community’s needs by monitoring the radio which is kept in her home. She is a strong representative for her people on the Caribou Working Group because, as she explains, *“I’m always listening to the hunters.”*



Russian Eskimo and Chukchi women butchering reindeer. Photos by Sue Steinacher

*“Although I am not a hunter, I skin and butcher the caribou, dry it, and store it. It is something that has always been close to my heart.”*

*Sally Custer, Shungnak*



# Quyanna - Baasee' - Quyana - thank you!

to some friends of caribou hunters  
who have moved on



## John Trent recognized

By John Coady, Retired ADF&G Regional Supervisor for Northwestern Alaska

The vision of a Caribou Working Group had its beginnings 1985, when John Trent, other Fish & Game staff, and representatives of Maniilaq Association met to discuss whether hunters and scientists could work together, build trust and confidence in each other, and jointly help manage caribou. John knew it was possible, and three years later his vision was realized when the Western Arctic Caribou Herd Working Group was formed. John became the agency representative to the Caribou Working Group, which he held until his retirement in 2004.

In 2003, with John's assistance, the Working Group completed a Western Arctic Caribou Herd Management Plan that was endorsed by both the Alaska Board of Game and the Federal Subsistence Board. John also initiated the Caribou Trails newsletter, which you are reading, and which is distributed to all box holders within the range of the caribou herd.

Now, almost 20 years after John and others first proposed forming a caribou working group, it has become an effective management body. John often said, ***"Time will tell if this ship is seaworthy and will stand the storms of time."*** My bet is that the Caribou Working Group is not only seaworthy, but that it will be critical to protecting caribou and their habitat in the 21<sup>st</sup> century.

Thanks John, for a job well done.



## In memory of Aqqaluk

- Dave Spirtes -

### A friend to subsistence hunters

When Dave Spirtes (Aqqaluk) passed away most unexpectedly last year he left behind more than one family. There is the family that included his wife, Kathy, their young daughter, Alexandra, and their many relatives. There is the family of National Park Services employees that Dave served with for thirty years. And there is the family of people in northwestern Alaska who grew to trust, respect and deeply value Dave in his years as superintendent of the Western Arctic National Parklands, and supporter of the Caribou Working Group.

Dave first came to western Alaska in 1994 when he was hired as the superintendent for the Bering Land Bridge National Preserve, based in Nome. Two years later he relocated to Kotzebue. Staff member Willie Goodwin recalled, ***"Eight years ago the whole region felt a difference. At first we were at odds with the National Park Service. Dave changed that by making an effort to work with us."***

This is the same approach Dave brought to his work supporting the Caribou Working Group, where he is fondly remembered. Earl Kingik of Pt. Hope said, ***"It was good working with Dave. We wouldn't be here if it wasn't for Dave's efforts."*** Attamuk Shiedt agreed. ***"Dave helped a lot to get the working group started, especially in Kotzebue. He's in our thoughts."*** Raymond Stoney, chairman of the Caribou Working Group, summed up the group's sentiments. ***"Dave always had time to communicate to the group. We have high respect for Dave and the efforts he contributed. His passing is a great loss."***



## A quiet leader retires

thank you to John Coady

By Jim Dau, ADF&G Wildlife Biologist

John Coady would be the first person to emphasize that the Western Arctic Caribou Herd Working Group is the product of the effort of numerous individuals across a spectrum of users and agencies. But it was John—more than any other single individual—who enabled its development.

No Alaska Dept. of Fish and Game staff person has been involved with this caribou herd longer than John Coady. He began working with the herd in the early 1970s as a newly hired wildlife biologist, and quickly became a survey pilot as well. He eventually became the ADF&G Regional Supervisor for northwest Alaska until he retired last year after a career of 32 years. As a result, John's depth of experience with the Western Arctic Herd and the people who depend on it gave him a unique perspective about management of this herd

By 1995 it had become very clear to John that rural people were passionate about agencies and the public formally co-managing populations of wildlife together. As a result, he moved the concept of co-management from a topic of discussion to a reality with the formation of the Western Arctic Caribou Herd Working Group.

Early meetings were challenging and sometimes tense. Despite their differences, John recognized that everyone who attended these early meetings shared a common desire to conserve the Western Arctic Herd for the future. He made sure that groups which might have felt threatened by co-management knew they were welcome at the table. He secured funding to support the process when there was no guarantee of success, and dedicated a large portion of John Trent's time to facilitate the process.

John Coady's foresight and open-mindedness have paid off: a recently-revised management plan and a diverse group of highly qualified individuals are now in place to cooperatively manage this herd.

***Thanks, John, from all of us!***

# Selawik students learn about caribou hunting from Elder Roy Smith

By Clyde Ramoth, Refuge Information Technician for Selawik National Wildlife Refuge

On an awesome fall day at our 2nd annual Culture/Science Camp, the majority of the boys and other high school students from the Subsistence Class paid serious attention to our local Elder Roy Smith, as he talked to the children of his lifetime of knowledge on 'How to hunt Caribou.'

He explained to the students about the big herd that is expected to migrate through our Selawik Area. He talked about how to



carefully plan your trip. He talked about respecting the animals, the land and other hunters and campers, and many other conservation reminders.

I couldn't help but notice the students sipping on their hot chocolate and keeping their eyes and ears open to what Roy was saying. He shared a lot of his stories that are passed on from one generation to another. Many children returned to Selawik with great advice to pass on to others.

Here are samples of what the students wrote that they learned from Roy. They are good reminders for us all!

## Willie Mitchell:

- Shoot only what you need.
- Don't shoot more than you can take.
- Don't leave any fur or guts on the tundra.
- Don't shoot unless everyone is behind you.
- Tell someone where you are going hunting before you go.

## Evelyn Ballot II:

- Carry a hand-held VHF.
- Always take extra clothes in a waterproof bag.

## Lester Sampson:

- Always carry extra food in case you have to stay away longer.
- Always carry matches in a Ziploc bag.
- Always carry extra boots in a plastic bag.
- Always carry tin foil.
- Always carry a sleeping bag.

## Suzanna Mitchell:

- Let a big herd pass by first. Then you start hunting from the second herd.

## Augustina Clark:

- Don't shoot unless you see an animal.
- When you go boating watch where you are going because you never know what the driver will do.
- Never go by yourself. Always take someone with you.
- Don't leave fur or extra meat on the tundra.

## Byron Savok:

- NEVER keep your gun loaded unless you are ready to shoot.
- When you take someone out hunting with you, always share with the person you go hunting with.
- Never talk bad about any kind of bear because they have good ears.

## Katie Greist:

- Never go in front of people when they are shooting – they might shoot you.
- If you talk about an animal in a bad way, the animal can hear you.

## Archie Brown, Jr.:

- Shoot only what you need. Don't shoot more than you can take.
- Keep your gun on safety until you are ready to shoot.
- Always carry a sharp knife.
- If you catch your first animal, give it away to an elder who doesn't hunt.

## Nina Oviok:

- Watch where you are going so you won't get lost.
- When holding your gun, make sure your safety is on so you won't shoot your partner.
- Take extra gas because you might need it if you go a long ways.
- Go in the morning so you can see - don't go at night.
- Always carry a first aid kit in case you or your partner get hurt.

Many thanks to the joint agreement between the Selawik National Wildlife Refuge, the Northwest Arctic Borough School District, NANA, and the Selawik IRA. We had a week we will never forget!

We also thank Selawik Refuge Manager, Lee Anne Ayres, and Fairbanks fisheries folks, Ray Hander and Randy Brown for their assistance.

Thanks also to the planning and brainstorming of bilingual teacher, Norma Ballot, and others like Louis Skin, and Hannah Loon from NANA, for bringing Elders to the camp to share their knowledge and traditional values, which are so valuable and priceless.

Thank you Roy and all of our Elders who shared!

**TAIKUULAPAAQ!!!**