

TUTTUT TUMAI
(Inupiaq)

BEDZEYH TENE
(Koyukon Athabaskan)

TUNTUT TUMAIT
(Yup'ik)

CARIBOU TRAILS



M. Nedwick

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NEWS FROM THE WESTERN ARCTIC CARIBOU HERD WORKING GROUP

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ATQASUK, BARROW & WAINWRIGHT

Enoch Oktollik, Wainwright

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CURRENT CARIBOU COUNT! 401,000

WESTERN ARCTIC HERD CARIBOU

The Western Arctic Herd (WAH) is the largest caribou herd in Alaska and one of the largest in the world. A herd of caribou is defined by the repeated use of discrete calving grounds. The WAH ranges over approximately 140,000 square miles (363,000 km²) of northwestern Alaska. In spring, caribou travel north toward calving grounds and summer range, including the Brooks Range and its northern foothills. During summer, movement is initially westward toward the Lisburne Hills and then switches eastward through the Brooks Range. WAH caribou disperse during the fall as they move south and west toward wintering grounds. The WAH winters in the Nulato Hills as far south as the Unalakleet River drainage and on the eastern half of the Seward Peninsula. The WAH has been hunted for thousands of years and remains an important resource to the subsistence users of Northwest Alaska. Many factors could impact the range, population, and health of the herd, including alterations in climate, industrial developments, and changes in the number of people hunting caribou. For the continued prosperity of the WAH, a collaborative effort between concerned parties is essential in making important decisions regarding the success of the herd.

WORKING TOGETHER

The Western Arctic Caribou Herd Working Group (WG) includes subsistence users, other Alaskan hunters, reindeer herders, hunting guides, transporters, conservationists, biologists, and natural resources managers. The group meets once or twice a year, with additional sub-committee meetings throughout the year, as specific needs arise. During meetings, biologists report on the current health and population status, range condition, and other biological factors affecting the herd. Invited specialists present information on topics that may impact the herd, such as climate, statewide transportation, and public land use planning. Elders address the group, sharing knowledge passed down for generations. The group identifies concerns, requests information, and advocates for actions that will conserve and benefit the herd, including habitat studies or protections from the impacts of development. The group provides public information through this newsletter, *Caribou Trails*, and welcomes comments from the public.

The WG encourages you to involve yourself in issues surrounding the future of WAH caribou. It is important to be involved and have an active voice in how caribou are managed to ensure long term conservation of this precious resource. Contact your local representative to see how you can voice your opinion, share your perspectives, or volunteer your time as a representative or alternate to your region.

THE MISSION OF THE WORKING GROUP

“To work together to ensure the long term conservation of the Western Arctic Caribou Herd and the ecosystem on which it depends, and to maintain traditional and other uses for the benefit of all people now and in the future.”



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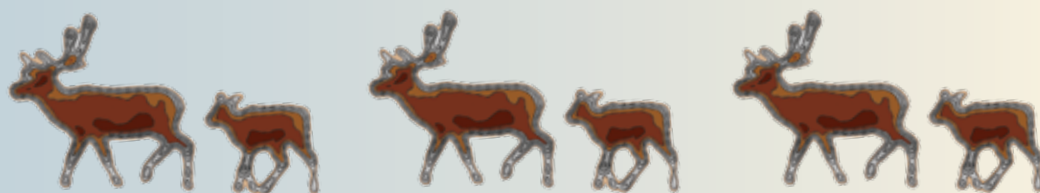
CARIBOU WORKING GROUP
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ABRAHAM ANASOGAK SR.

A Koyuk elder shares experience, knowledge, and appreciation of reindeer and caribou



RECALLING THE PAST

Abraham Anasogak Sr. remembers life on the Northern Seward Peninsula and along the banks of the Koyuk River, long before airplanes supplied villages. He recalls a time when basic necessities were hard to come by and remembers caribou being scarce, and his family traveling long and far to find them. People relied on caribou for food and clothing, and when caribou were scarce, people suffered.

RECEIVING REINDEER

Abraham is forever appreciative to Sheldon Jackson and the great contribution he made to the Inupiaq people by introducing reindeer. He recalls,

“Inupiaq people were getting low on caribou, low on food and things to eat so in 1892 Sheldon Jackson requested reindeer be brought to Alaska. This helped the Inupiaq way of life by providing a necessary source of food. The whalers brought seven whale boats from Siberia, and unloaded the reindeer in Teller. They brought 1,200 reindeers to Alaska and so many reindeer went to each village. The Laplanders came and showed the Inupiaq how to take care of the herd. They got many more reindeer and then there were companies for the herds.”

Traditionally, caribou and eventually reindeer, were used for winter clothing. The women sewed leggings and boots, made mattresses, and parkas. They even used caribou and reindeer sinew to sew the skins together. Basic household items were also crafted from the caribou and reindeer; toys, tools, clothing, and

equipment were made from the skin, bones, antlers, and hooves. Antlers were used to make spears, knife handles, ulu handles, paddles, and fishing poles, spear heads, and arrow heads. Bleached skins were used for parka trim, string, and to make designs with dark and white bleached skin together. In addition to clothing, reindeer and caribou provided important food resources: panuktuk, akutuq, and quaq just to name a few.

“It was best to get caribou in the fall time, they get fat before mating. It was also good to get calves in the summer so the skin could be used for calf skin parkas.”

After the introduction of reindeer, the Inupiaq people had a large reliable source of food and clothing. Then the reindeer population began to decline, but fortunately the caribou population began to increase.

“In 1942 there were no more reindeer here, because of wolves and caribou. They (reindeer) all went with the caribou, the wolves, the foxes, crows, and people. Too many predators here in Alaska, everyone wants the caribou and reindeer.”

It was easy in the past to tell reindeer and caribou apart.

“Reindeer have round hooves and caribou have long and slender hooves. Reindeer have shorter legs and caribou have long legs. Reindeer antlers are up and caribou antler are down.” Now according to Abraham, *“reindeer are all mixed up with caribou, and it is not easy to determine which is which.”*



ONE DAY AT A TIME

Today Abraham loves to talk about the old days and time spent outside. He is willing to share his stories with anyone and doesn't want his grandchildren to forget what their people have experienced. He says he loves the outdoors but can't see too well anymore. He was excited because one Saturday last January, his wife brought fresh caribou meat home. She said, “look over there, there are caribou.” He couldn't see them so she went after them and got one.

“Ha Ha, that was great” said Abraham, “we had fresh meat and that was so good.”



BEULAH BALLOT

A Buckland elder speaks about traditional use of caribou and edible meat



ENTERTAINING THE WORKING GROUP

In light of recent debates over the definition of edible meat, an interesting perspective was offered by Beulah Ballot, a highly respected elder from Buckland.

Beulah captured the audience at the WG meeting this past December. Beulah will turn ninety this April and has seen many changes in her life. Speaking in her native tongue, Beulah talked about how caribou were traditionally handled in her native villages of Selawik and Buckland. She spoke to the working group about how caribou were traditionally used and the changes she has seen in caribou health. She described an elder's view point on use and edibility of caribou.

TRADITIONAL USE OF CARIBOU

Traditionally all the parts of the caribou were used, and meat was not wasted. The hunters had to travel great distances to harvest caribou and would be gone for extended periods of time. Because caribou and other goods were scarce, all parts of the caribou were used and very little was wasted.

After skinning the caribou and butchering it, nothing was wasted not even the hide. There were many uses for the hide; seats, bags, parkas and mukluks. There are also many uses for the antlers,



Lisa Slayton

cut into different sizes, antlers could be used as sinkers for fish nets, making 'snaps' on dog harnesses, and also as big needles for sewing sinew for snowshoes. Even the shin bones was used to make needles."

She was taught by elders, and is now teaching others how to handle caribou carcasses.

The carcasses could not be handled roughly, or bones were damaged. When women were

taught how to butcher, they had to be careful when removing difficult parts such as the neck and tail bone. Damaged bones could not be used to make necessary tools and household items. Young boys and girls were taught how to butcher, and often all the bones were kept in place so the kids could learn the names of caribou body parts, a traditional lesson in caribou anatomy. Beulah stated,

"Nothing was wasted from the caribou; antler, hide, and head all had their uses; food, clothing, tools, everything."

NOTICING CHANGE IN CARIBOU

Beulah sees changes in caribou health that traditionally have not been as prevalent. In the past, the only signs of poor health had to do with bone marrow,

"There are three types of bone marrow... good, not so good, and the kind with blood in it." Beulah stated.

Now Beulah sees different types of parasites in caribou that she doesn't traditionally remember seeing including white spots on the meat and liver.

Beulah advises local hunters on how to handle harvested caribou and provides a unique perspective that one can only obtain after a lifetime of hunting, skinning, butchering, cooking and sewing with caribou.

The WG greatly appreciates the traditional knowledge shared by Beulah. Elders perspectives help us all understand and appreciate the value caribou have to the people of our region.



COUNTING THE WESTERN ARCTIC HERD: Census 2009



Matt Van Daele

POPULATION DYNAMICS

The WAH, Alaska's largest caribou herd, **was approximately 401,000 animals strong as of July 2009**, according to a recent census completed by the Alaska Department of Fish and Game (ADF&G). Although this is a slight increase from 2007 when the herd was estimated to number 377,000 caribou, ADF&G biologists interpret the 2009 estimate as evidence that the herd has been relatively stable during this time.

Jim Dau, the Department's lead biologist for the WAH since 1988 said,

"A difference of 24,000 caribou is within our ability to accurately count a caribou herd of this size in such a remote portion of the state"

This herd last peaked around 2003 when it numbered 490,000 caribou.

ECOLOGICAL IMPORTANCE

The WAH ranges over a 140,000 square-mile area bounded by the Arctic Ocean, the lower Yukon River and the trans-Alaska pipeline. About 40 communities and 13,000 people live within its range. For the indigenous people of these communities, the herd is both a vital link to cultural heritage and a dietary staple. The WAH is also important to visiting resident and nonresident hunters, and is an important source of income for commercial service operators. Because of its tremendous size,

the ecological importance of the WAH to Northwest Alaska is incalculable. Although caribou are important prey for wolves and bears, the WAH directly and indirectly impacts the entire food web through nutrient cycling, affecting organisms from bacteria to moose.

COMPARING THE 2007 AND 2009 CENSUS RESULTS

This most recent count, combined with annual estimates of adult mortality and calf survival, suggest that the 2007 population estimate may have been conservative.

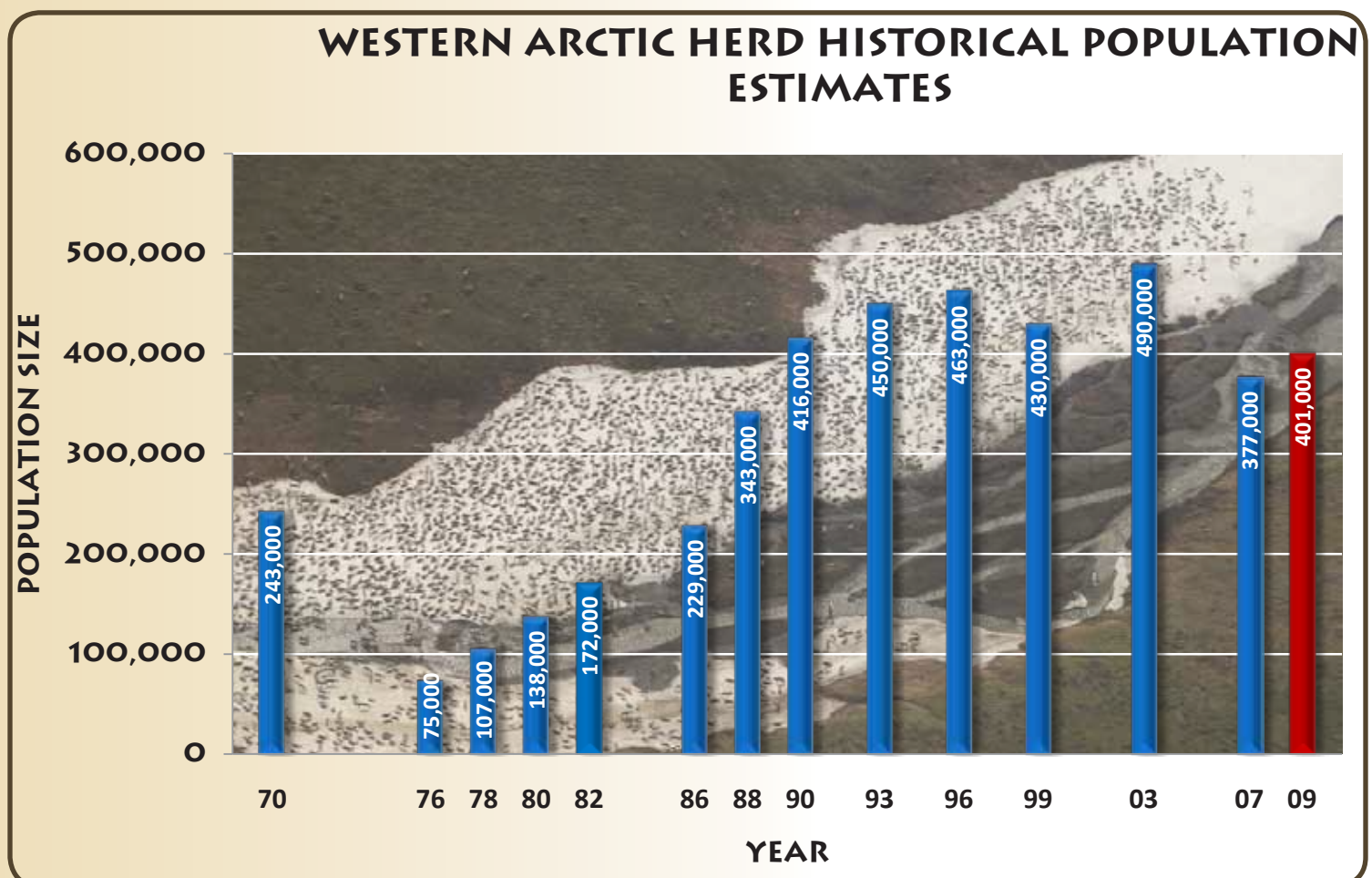
"In 2007 we found 99% of the collared caribou in the aggregations we photographed and are confident that we didn't miss substantial segments of the herd. However, we may have undercounted caribou in some of the photos that had long shadows and missed small groups of caribou that lacked radio collared individuals near the main aggregations. In 2009 the caribou were more completely aggregated than I've ever seen during a photo census. Lighting was excellent so the prints were clear."

All of these things increase the Departments' confidence in the accuracy of this count.

INFLUENCES ON POPULATION

Biologists classify factors that limit the size of caribou herds into two categories: density dependent and density independent factors. Density dependent factors are those that exert a greater negative force on the caribou population as it grows. Examples of density dependent factors are range condition, predation and disease. As a caribou herd increases, it (1) puts greater pressure on the vegetation that caribou eat and range quality declines, (2) provides food for predators, such as wolves and bears, which causes their numbers to increase, and (3) increases contact among caribou thus increasing opportunities for the spread of disease.

Density independent factors are not related to caribou herd size. Examples of density independent factors are severe weather that prevents caribou from accessing food or causes reductions in nutritional content of



range lands, or ill-advised large scale development project that destroy or limit access to critical habitats. Density independent factors can significantly reduce herd size, regardless of whether the population is high or low.

Of course, density dependent and independent factors may affect caribou herds simultaneously, and predators can shift their dependence from one prey species to another. This complex web of interactions makes it difficult to understand what causes caribou numbers to change. According to Dau,

“The WAH has probably numbered over or around 400,000 caribou since roughly 1990. That’s a long time to sustain such a high population level without seeing some form of density dependent limitation kick in. Although the BLM has found measurable changes in vegetation in parts of the WAH winter range over the past 30 years, these caribou have generally been in good body condition during recent years.”

“The body condition of caribou is the ultimate expression of their habitat in terms of quantity, quality and availability of their food. Although caribou habitat has changed within the range of this herd, there is still enough food available for them to deposit adequate fat reserves for survival and reproduction.”

OVERALL HEALTH

ADF&G has collected blood samples annually since 1992, and has found no evidence that disease is prevalent. There are too few estimates of wolf and brown bear numbers within the range of this herd to determine whether their numbers have increased in response to large numbers of caribou.

The decline of the WAH from 2003 to 2007 may have been attributable to severe icing, a density independent event, during the winter of 2005-2006. During December 2005, temperatures warmed for three or four days and rain soaked the snow for two days in Northwest Alaska. When deep cold returned the herd’s winter range was coated in a layer of near impenetrable ice.

Dau explains,

“Caribou died in droves, and those that survived the winter were generally in terrible body condition the following spring.”

In January 2007, coastal portions of northwest Alaska again experienced warm temperatures and several days of rain, and Dau anticipated another large die-off. Instead, in the area where most of the herd wintered that year, the prolonged warmth and rain coupled with days of high winds virtually eliminated the snow cover and dried the vegetation so that no ice crust formed. Rather than sealing off food under ice, this thaw increased the caribou’s access to lichen. As a result, calf survival was high and adult cow mortality was relatively low.

In contrast, the winter and spring of 2008-2009 were hard on WAH caribou, with high adult cow mortality and low calf survival. It wasn’t clear what had caused these effects, but they almost certainly negated the population growth that likely occurred the previous year.

FUTURE RESEARCH

Although ADF&G has developed a comprehensive population monitoring program for the WAH over the past 25 years, there are still many things the department does not have the staff or funding to assess annually.



“We have very little information about the abundance of predators, annual variations in seasonal range condition, levels of insect activity during summer, snow and weather conditions in remote portions of caribou range, or even comprehensive harvest data over the entire range of this herd” Dau said.

Population stability or even a slow decline is preferable to continued growth. In 1970, the WAH numbered 242,000 caribou but then declined to roughly 75,000 individuals by 1976. No one involved in managing this herd or who depends on it for food wants to experience such an abrupt population decline again.

The next census is scheduled for 2011.



SHUNGNAK WOMEN: Sewing the gap between the past and present

OUT WITH THE NEW, IN WITH THE OLD

Inuit culture is changing rapidly. As access to commodities increase, traditional items once important are often forgotten.

In Shungnak, a group of women are bridging the gap between the past and present by maintaining cultural practices and using a superior traditional

commodity, caribou skin sleeping bags.

On most Tuesday evenings, women in Shungnak gather together to sew, tell stories, and laugh.

The Shungnak

Women's Night has been going on for many years, probably since the 50s. It is a time for women to get away from home, work on projects they are otherwise too distracted to do, and visit with their friends. Generally women gather and sew whatever suits them; some women are there to learn, some to teach, and some to just sit, visit, and admire the work of others.

Tired of sewing the same old things, the women wanted a new project that was challenging and rewarding. They decided to make a caribou skin sleeping bag, sewn in the traditional way, for their local search and rescue crew.

USING CARIBOU BAGS

Ask anyone who spends time camping out in the winter or in northern climates what type of bedding they use, and the common response would probably be goose down or primaloft® with a water resistant exterior and rated to -40°F. Long before goose feathers were plucked and high loft plastics were manufactured, Eskimos slept in the warmest and most water resistant beds of all, caribou!

Caribou skin bags and caribou skin parkas are in some ways superior to modern synthetic materials. The most noticeable difference is that they provide warmth almost immediately. In extremely cold temperatures, when you put on a heavy parka or climb into a sleeping bag with several inches of synthetic insulation, it sucks the heat out of you for several minutes until your body starts to warm it up. A caribou hide, with its hollow hair, feels warm almost immediately.



Shungnak Women's Sewing Group
Isiqnami agnat killaiyaqtit

Geoff Carroll from Barrow describes the benefits of a caribou skins after traveling to the North Pole.

"Caribou skin parkas and bags don't collect moisture, which turns to ice in the insulation of synthetic bags. Some of our bags had about 30 pounds of ice in the insulation from perspiration while sleeping. We had to beat the bags with a stick to break up the ice before crawling in. That can be avoided if you use a vapor-barrier bag around your body, but then the moisture ends up in your clothing. With a caribou skin bag the moisture ends up in the hair, so you can let it freeze and then brush the frost out of the hair."

Caribou skin bags and parkas do have a few drawbacks. One is that caribou bags shed hair, and you end up with caribou hairs in food, tea, eyes, mouth, and underwear. Animals like to eat items made of caribou skin, it is important not to let your dogs get close to the skins or leave them in areas easily accessible to wildlife. Caribou skins are fragile and tear relatively easily, so proper handling and storage are a must, along with having the necessary sewing equipment handy for repairs.

A BENEFIT FOR EVERYONE

The caribou skin bags provided to the search and rescue will be a vital addition to their equipment. In a day and age when manufactured goods are abundant, it is refreshing to know that sometimes traditional technology is superior.

MAKING CARIBOU SKIN SLEEPING BAGS:

Skin winter caribou and hang skin up until dry.

Use an ulu and scraper to clean the caribou skins.

After the skin is sufficiently scraped, use a special solution to soften the skin. This solution can be made from many things but the best is a combination of sourdough or fish water, salt, and soap.

Once the solution is made, scrape the solution gently into the skin. If the skin is nice and dry, you will actually hear the skin membrane snapping and crackling as the solution is added.

After the skin has been scraped gently with the solution, let the skin dry again.

Cut the skins into oval sleeping bag shapes and then begin sewing. Sewing takes place with as many women as can fit around the bag. Two skins are together and the third skin acts as an extension to make the bag longer with a hood. The bag is sewn together with caribou sinew.

Sinew is taken from the caribou along the back strap. After the sinew is dried, pull small strings, similar to dental floss off the main strip. Twist the sinews strings to make them into thread. The sinew is very strong and does not stretch out like thread and makes the seams waterproof.

Isiqnami Aġnat: Katitaksraq aippaani inuuniaġliq suli pakma

Pakma nutaaq inuuniaġliq itkaluaŋŋaan, iŋuuniaġliġruaġmun utiqta

Inupiat iŋuuniaġlihat sukasripluni atlaġuqtuq sum matuma savautaa qanaqsivagiġluni. Taimanisun iŋuuniaġliq unnii anniqsuutiksraq puuyugaat uvva pakma.

Isiqnami, aġnat katiraġaqhutiŋ tamanna puipchaġaat aippaani iŋuuniaġliq pakma iŋuuniaġliptitnun. Iġsautrirut qanuq tuttu amiqitŋik puuksraaliġimik.

Malġuŋuiġimmi unnukman aġnat katiraqtut Isiqnami killaiyaqhutiŋ, unipchaaqhutiŋ, uqaaqtuqhutiŋ suli alaisrunġitlutiŋ. Taimakŋa taatna aġnat katiraġaġuuniqsuat 1950-miŋ aġlaa. Inimikniŋ piisaallaaraqniqsut taatna kitiraġaqamiŋ, killaiyaaksranik aasrii painitlaikkagmiknik naatchiaqsipġlutiŋ suli takupqaŋaplutiŋ. Supayaanik suliplutiŋ, aġnat iġaŋich iġisaqhutiŋ, iġaŋich iġisautriruat. Iġaŋich tautuktuaġaqtut nangaġlugich suliaŋich tamatkua. Supayaanik suliyaluaqamiŋ uuktuaguliaqsiniġaat puuksrarriġiq tuttu amiqitniŋ.

Makunua pakaktinun atuqplugu taamna amminiŋ puuksrarriaq

Apiqsruġupsiuŋ iŋuk uvva pakma sumik uqummatiqaqmaŋaan avaniqsuiqman itrimi. Kiuniagaatin naluagmiutamik puuksraaqagŋiġluni. Tamatkua puuksraat piiŋŋaitŋik, Iŋupiat uqqiraqniqsuat tuttu amiqitŋik. Tuttu amiqitniŋ puuksrarriat suli atikġiat uqutluktut naluagmiutaniŋ, akkuvak uunnaġuġnaqtut qanutun unnii itriliqsuq. Naluagmiutanik paqnammirum unni avani itrimi qiqisrianaqtuq. Takku nalnaġmiut suliaŋich mullaġiksut timimiŋ kisianik uunnaġuġniuraaġaqtut.

Geoff Carroll North Pole-muŋniqsuq Barrow-min Iġitchuġiniġaa qanuq itilaŋa suġusriqaqtuni tuttu amiqitŋik.

“Tuttutguuq amiqitŋik atiqiqaqtuni suli puuksraaġiplugich aiġatliatchutguuq naluagmiutatun. Tatqaaniguuq naluagmiutat puuksraat 30 pounds itna uqumaisilaanigaktut siŋŋagmiŋ siiqsukkaqtuni. Anauliġlugitguuq. Sikuiyaasiraġigaich puuksraatiŋ. Tuttu aasrii amianik puuksrarriaq itna iŋitchuq, aiġ aġġuuq nutqaġaqtuq mitquanum.”

Mitqiluaqigaluġaqtut sugutchich amminiŋ niviplutiŋ atnuġaanun, nuchanun; unnii niqinun. Suli aŋŋutit maŋiguurut iġ iqniġnik, qipminiŋ qaunaginaksraurut unnii aŋŋugauraniŋ. Tuvvaġlautaqrut suli amminiŋ suliat aliyarut.

Tamarra aliktuqpata killaiyautiksrat saagaġlugich taavua iġliġniagupsi.

Kaipayaaq Ikayuutiksraŋa

Taamna tuttu amianiŋ puuksrarriaq atuġisipiagaat pakaktit taavani atlanun anniqsuutiksraġmiknun iġaliitilugu.

Sua qaġanaġaluaqtuq pakma taimakŋaqaqtuq nakuutluktuq.

~Sikġim Mumiksia

Qanuq puuksraaksriuliq tuttu amianik:

Ukiullich tuttu amiqich puusraaksraġiksut naktisrimalugich pallutmun paniqtillugich.

Ulumiglu, itchuutimiglu ammich savagaġigaich.

Itchuanigataqqaqġlugu amiq, imaġlugu aasrii. Atlaġiiksut aġnat imausri’amiŋ. Siigŋaqsiaq suli qaluim imiġauraŋa taġiulik, miullalik nakuutluktuq.

Imautiksriuqqaqhuni, imaqtigŋaqtuq amiq. Itchuktamun ammimun tamanna imautigiruni mapkulauraġaqtuq.

Imaġutiayaġnaqtuq suli amiq itchukġlugu, aasrii paniqsiaqsilġitlugu.

Piġaktuġnaqtut ammich takinaaqsipġlugich iġirġuiġaat puuksraaksratun iġiplugich killaiyaaqsipġlugich aasrii. Qapsich aġnat killaiyaġaqtut atautchikun iniqaniŋaamiŋ. Kaivraaqġlugu puuksraaksraq. Ammik malġuk katittaġigaich, aasrii piŋayuak takġiġlaaġutaupluni nasraksraqtummaġmi. Tuttu ivaluanik ivalliqhutiŋ puuksrarriatut tamatkuniŋa ammiŋik.

Ivalliraqtut tuttu uliutikniŋ. Uliutik paniqsiaqqaqġlugik paniqmagik qupriġlaapluni qipriaqsiaqtuq. Ivalupiaq saŋŋiruq tasriraġatlaitmiuq aġisiqtuni immaŋnaitmiuq.



Josephine Woods holding a skin scraper, Mildred Black holding caribou sinew, Mildred scraping with an ulu. Qupilġuq tiġummiruq itchuutmik, Uluqsik tiġummiruq ivalupianik, Uluqsik kiġiuqtuqtuq ulumik.

MINES



GOLD EXPLORATION ON OMAR-SQUIRREL RIVERS

Potential for mining development. Currently inactive.

WESTERN ARCTIC COAL PROJECT

Development of this coal resource could lead to several possibilities:

A deep-water port construction at Cape Sabine, a road to Red Dog Mine and increased travel to Red Dog Port and a high voltage powerline to Red Dog Mine.

INDEPENDENCE MINE DEERING

Potential for mining development. Currently inactive.

RED DOG MINE AND PORT

Possible mining of additional deposits and port expansion.

ROCK CREEK & BIG HURRAH MINES

Gold mine operation in suspension.

URANIUM EXPLORATION FOR POSSIBLE MINE

Exploration could lead to development of world class uranium mine and associated roads and transportation infrastructure just north of Elim's lands.

HARD ROCK MINING

Additional mining prospects exist across the western Brooks Range and just north of Kivalina and in Deering.

AMBLER MINING DISTRICT

Mining prospects include mines and roads to Nome, Red Dog, and the Dalton Highway.

OIL & GAS



NPR-A NORTHEAST & TESHEKPUK LAKE

Currently, BLM leases are in effect and plans will allow significant new 2010 lease sales in this area. 10-yr deferral of lands north and east of Teshekpuk Lake.

NPR-A NORTHWEST

Currently, BLM leases are in effect and plans will allow some 2010 lease sales in the eastern portion of this area. Deferral of lands in the western portion.

NPR-A SOUTH

This area includes WAH calving grounds, summer range, and insect relief areas. BLM has no existing plans for any resource extraction (oil, gas, coal, hard rock) in the area. An area wide planning process affecting this area may begin in 2011 for entire NPR-A.

NATURAL GAS ESPENBURG, NIMIUK, AND WOLF CREEK

Tinto Petroleum and NANA Regional Corporation natural gas exploration with a possible pipeline to Nome.

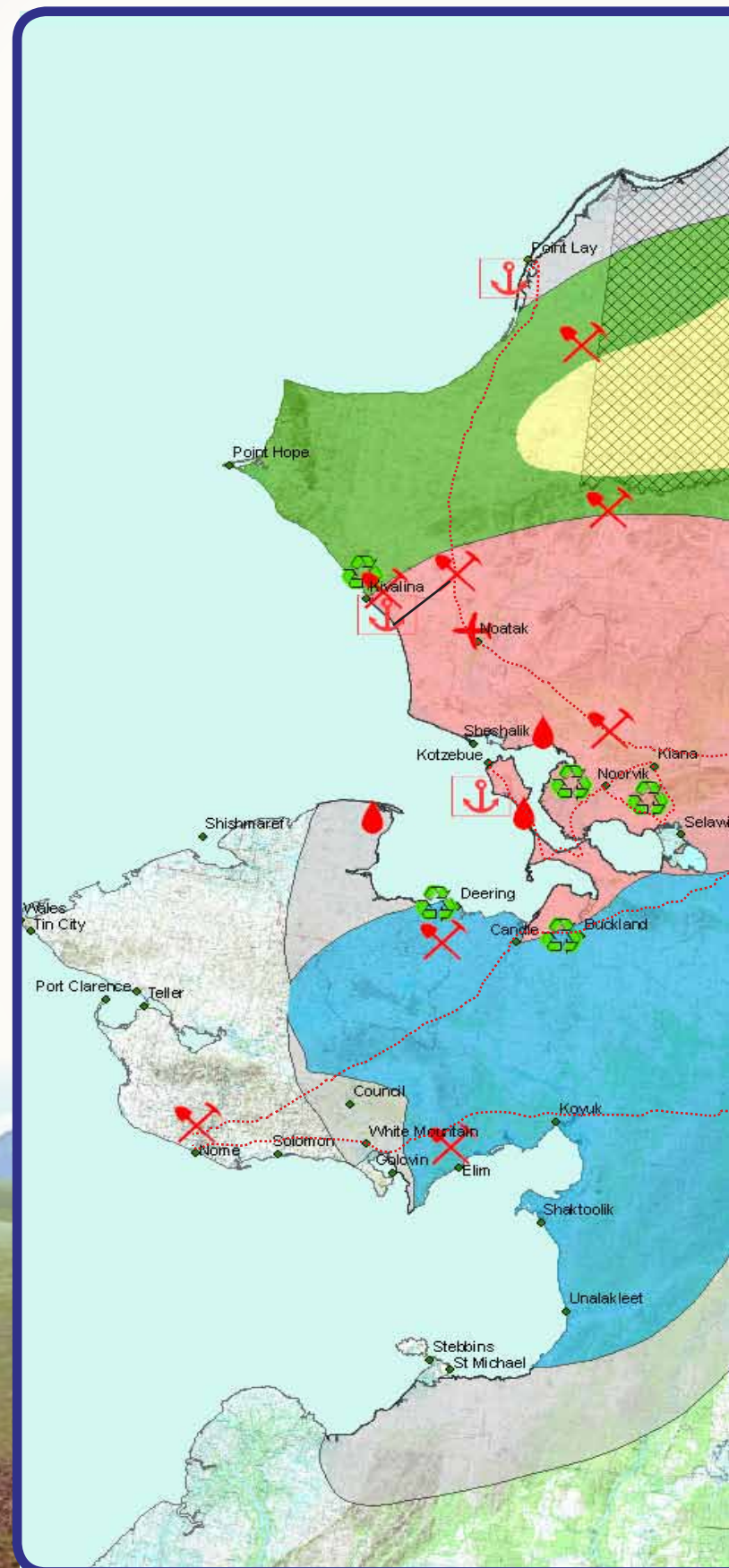
BEAUFORT AND CHUCKCHI SEAS

Shell Oil drilling in the the Beaufort and Chuckchi Seas.

PROPOSED DEVELOPMENT WESTERN ARCTIC

Possible development projects within

Generally, one project alone would not do. The combined impacts of several projects—called cumulative impacts—could seriously affect the health of the herd. The map shows potential projects that need to be considered for the future of the herd.

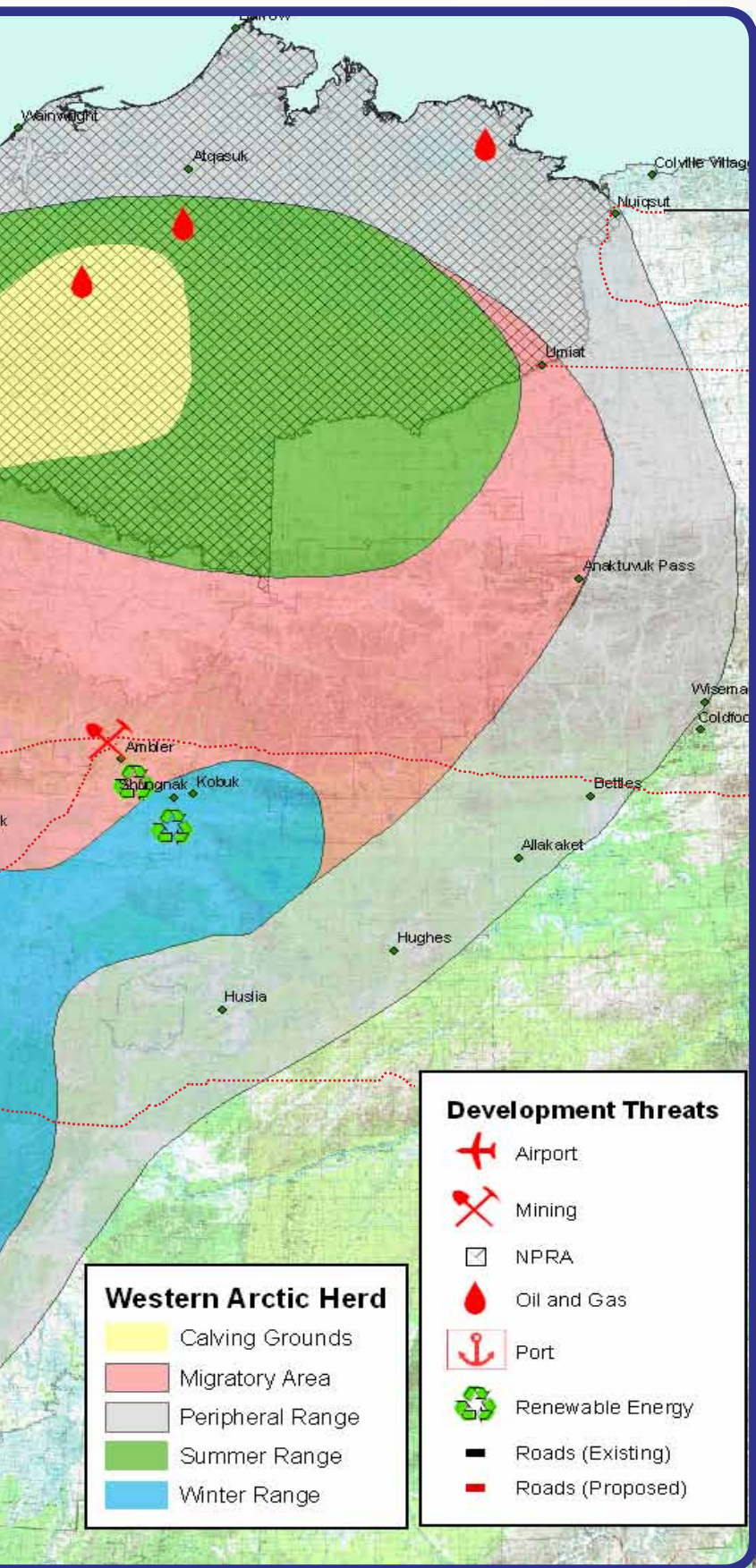


ADF&G

DEVELOPMENT PROJECTS IN THE WESTERN ARCTIC HERD'S RANGE

Development projects in the range of the herd keep growing!

Development projects can disrupt the health of the entire herd. But the **direct and cumulative impacts**—within the range of the herd and future subsistence uses. These impacts need to be studied in combination in order to protect our caribou.



OTHER



NANA REGIONAL CORPORATION ALTERNATIVE ENERGY PLANS

Plans to develop alternative energy for wind, hydroelectric, solar, geothermal biomass, and fossil fuel power.

NOATAK AIRPORT EXPANSION

Jet sized runway north of the village for increased air traffic.

CAPE BLOSSOM PORT

The City of Kotzebue proposes port development at Cape Blossom on the Baldwin Peninsula.

BUCKLAND BRIDGE

The Native Village of Buckland proposes a bridge over the Buckland River.

KOTZEBUE AIRPORT AND AREA IMPROVEMENTS

ROADS



OILFIELD ROADS & DALTON HWY EXTENSION TO NUIQSUT & UMIAT

There are plans to connect the Prudhoe Bay road system to the NPR-A across Colville River near Nuiqsut and to Umiat from the Dalton Hwy.

ROAD BETWEEN KOTZEBUE, KIANA, NOORVIK, AND SELAWIK

Possible intervillage road.

NOATAK ROAD

Noatak to Red Dog.

ROAD OVER COLVILLE RIVER INCLUDING BRIDGE AND PIPELINE

Possible road, bridge, and pipeline to cross Colville River, Conoco Phillips.

ROAD TO NOME: YUKON CORRIDOR

The State of Alaska is making plans and conducting studies on a road from Manley Hot Springs along the Yukon River to Nome.

POSSIBLE ROAD DEVELOPMENT OF AMBLER MINING DISTRICT

A road or railroad from Dalton Highway to mine; a road from Ambler mine to Red Dog; or a road to Nome's road system near Council.

ROAD FROM SELAWIK TO SPUD FARM

POSSIBLE ROAD FROM NOME TO DEERING

POINT HOPE EVACUATION ROAD EXTENSION

AMBLER SEWAGE LAGOON ROAD

WAH WORKING GROUP: Annual Meeting 2009



Western Arctic Herd Working Group

MEETING HIGHLIGHTS

The WG received an opening message from Siikauraq Whiting, Mayor of the Northwest Arctic Borough, about the nature and value of caribou in Inupiat life and culture. And Guest Elder Beulah Ballot kept members captivated as she told stories of her experiences with caribou from decades ago.



Sally Custer and Beulah Ballot

Reports were presented by Alaska Department of Fish and Game (ADF&G), National Park Service (NPS), U.S. Fish and Wildlife Service (FWS), and Bureau of Land Management (BLM). Michael Brubaker reported on climate and health; Buckland and Deering students presented their summary of the Onion Portage caribou collaring experience; Pat Pourchot, Department of Interior, (DOI), Special Assistant to Alaska, provided a summary of DOI plans in Alaska. Alex Prichard explained a preliminary population model of the WAH. ADF&G Subsistence Division summarized the community harvest surveys in northwest Alaska; Alexa Greene, Alaska Department of Transportation (ADOT) Project Manager, provided a handout that summarized ADOT projects within the range of the herd. Dave Yokel explained the planning schedule by BLM for the National Petroleum Reserve Alaska.

ACTION ITEMS

The WG passed a motion to support the Game Management Unit (GMU) 23 community harvest plan and action to comment on Board of Game Proposal 41 for the January 2010 Statewide meeting. WG members will use NPS information on weather stations and exclosures to comment during the anticipated environmental assessment comment period that will open and close before the next meeting. Updates to the Cooperative Management Plan will be condensed and summarized for the members at the next meeting; and a web site will be explored and presented for discussion when the WG meets next December.

STUDENT PARTICIPATION

Buckland & Deering students traveled to Anchorage for the annual meeting. Students shared their experiences at Onion Portage using video documentary to capture their experiences collaring caribou on the Kobuk. The students also participated in discussions and interacted with the members. Inclusion of youth is seen as essential for the continued success of the WG and efforts are underway to obtain a student seat on the member board.



Melvin Jones



Top: Christopher Moto, Jesse Hadley, Linus Ballot
 Middle: Bobbie Iyuatunguk, Preston Thomas, Travis Armstrong, Darlon Barr
 Bottom: Becky Dixon, William Lie, Melvin Jones

RANGIFER ATLAS: Caribou and Reindeer Anatomy

OPENING THE LINES OF COMMUNICATION

A caribou anatomy atlas, developed by the University of Saskatchewan and University of Calgary, is opening lines of communication about caribou. Books, posters, and digital resources have been developed to facilitate discussion and share traditional and scientific knowledge.

Dr. Ryan Brook, a professor at the University of Saskatchewan, one of the project's leaders, says this project is opening up lines of communication:

“One of the most significant barriers to caribou conservation right now is communication. Currently, caribou users and researchers often use different terms when speaking about the animals. We need to get communities, managers, and scientists talking together more often and more effectively. Resources like this atlas, with the posters and pictures, encourage conversations about caribou. What does a healthy caribou look like, what does a normal liver look like? These are challenging things to discuss without appropriate resources.”

ATLAS DEVELOPMENT

One approach used in developing the atlas involved high school students meeting with local elders. The elders told stories of their experiences with caribou and explained how animals were used and named. Students then labeled the pictures in the local language and English. Anatomical dissections were conducted in a hunting camp where curious students and elders shared their knowledge with scientists. Scientists also shared images and knowledge from scientific dissections with the elders and students.



Elders and students sharing knowledge Nasivvik School Pond Inlet, Nunavut

“The forthcoming books, posters, and digital resources that summarize our findings will include information about the importance of caribou to Indigenous cultures including details on traditional and contemporary methods of hunting and butchering as well as traditional uses of caribou parts,” says Brook.

ATLAS APPLICATION

Sharina Dodsworth, Government of Nunavut Environmental Education Specialist, says this resources will be beneficial for Nunavut communities and is excited to use the atlas. She states,

“The dialogue that the book will spark between harvesters, scientists, educators and students, is critical to ensuring the conservation of this vital wildlife species to Inuit. We see the book as an integral way to bring diverse perspectives and knowledge together to create a far greater understanding of caribou.”

The developers hope to partner with other northern communities, including Alaska, as a way to compile traditional practices from a variety of locations.

The program is supported by the Faculty of Veterinary Medicine, the Nasivvik Centre for Inuit Health and Changing Environments, Natural Sciences and Engineering Research Council of Canada PromoScience, an International Polar Year grant to the CircumArctic Rangifer Monitoring and Assessment Network, and the Governments of Nunavut and the Northwest Territories. The research team will be continuing to work with northern communities this year and plan to have a first book geared toward Nunavut youth to be published this coming spring.

For info contact: Dr. Ryan Brook
University of Saskatchewan
email: ryan.brook@usask.ca
Facebook: Rangifer Anatomy Project



CONTRIBUTIONS: Taiku - Quyanna - Baasee - Thank You



Raymond Stoney Former Working Group Chair

Raymond has spent most of his life helping subsistence users and the WG would like to extend their appreciation to Raymond for all the contributions he has made. Raymond's desire to help subsistence users came from a time when he was young. *"We lived off the country and I learned how to live from my grandparents. We would hunt caribou every year by dog team and travel up to 100 miles over the Brooks Range."*

Raymond remembers a time when people came in airplanes and started arresting caribou hunters and taking away their rifles. This was a terrible thing for families and he made the decision then to help prevent this from happening in the future. *"I want to be involved with as many agencies as possible, so I can help make and change regulations that benefit subsistence users."*

Old traditions involved being away from home for months at a time. People might take six or eight caribou because they wanted to take them when they are in the area. *"Prior to the regulations I learned from my grandparents that 'you only take what you can use' this is the tradition; you must bring it home and use and only take what you can carry and eat."*

True to his promise to help subsistence users, Raymond has been very involved in subsistence policies. He feels it is important to volunteer his time because his voice can make a difference on how regulations impact subsistence users. Raymond was the Chair for the WG, and is currently serving as an alternate. Raymond enjoys participation with the WG because it allows him to help agencies make regulations that are based on recommendations from the group. Raymond worked as the Regional Protection Officer for NANA Regional Corporation for 17 years, and also served on the Labors Union and State Advisory Council beginning in 1986. In 1993 he was appointed to the Regional Advisory Council by Secretary of the Interior Bruce Babbitt. In 2003 Raymond accepted BLM's Directors 4 C's award on behalf of the WG in recognition of their work on innovative and cooperative management for the WAH. He works with the NPS on the Subsistence Resource Commission and is currently been appointed to the Big Game Commercial Service Board. By participating on the Big Game Commercial Service Board Raymond helps make valuable decisions that protect the people of Alaska.

Raymond views game management of the WAH as beneficial. *"If the herd drops down again, we go to villages and tell people to decrease hunting. This way closures don't occur without notification. Today, myself and many others, are involved in helping make regulations. People are comfortable with management decisions as long as Native people are there helping to make the decisions."*



Sue Steinacher Former ADF&G Employee and Editor of *Caribou Trails*

The WG would like to thank Sue Steinacher and the wonderful contributions she has made to subsistence users, and *Caribou Trails*. Sue's work with *Caribou Trails* was outstanding and the publication has increased communication and awareness for the working efforts of the group.

Sue would also like to express her appreciation to the WG and for the kindness shown to her by all of the participants. Ending her working relationship with the WG and *Caribou Trails* was the hardest part about Sue's decision to retire from ADF&G. It was more than just a job to Sue, and she misses it immensely.

"I have just been blown away by the Western Arctic Caribou Herd Working Group and how well everyone works together. When I first attended a meeting I was totally enthralled. I wrote articles about the Group and felt blessed with the opportunity to work on the publication, Caribou Trails."

Sue is passionate about advocating for subsistence, and views *Caribou Trails* as a tool for empowerment that gives people the information they need to protect the resources so important to them. She sees the WG as an effective way for everyone invested in the welfare of the herd to communicate and *Caribou Trails* as a great tool for sharing those discussions and issues with everyone in NW Alaska.

Since retiring from ADF&G, Sue has further developed her passion for painting, photography, and writing about Western Alaska. One particular project that is proving to be fun and rewarding for Sue is producing oil paintings on the theme of 'Subsistence as a Natural Part of the Landscape' for the Nome Youth Facility. The paintings are a perfect fit for Sue's skilled artistic hand and her heart-felt passion for subsistence. Sue has also been active with the cold weather homeless shelter in Nome and enjoys getting out in the country with her husband and dogs at every opportunity she can find.

CARIBOU BITS: News and Information

ADF&G NEEDS YOUR HELP WITH JAW COLLECTION

Biologists have collected caribou jaws from the WAH several times since the 1950s. The teeth and bone from jaws provides information on trends in body size, body condition, and general caribou “health”.

If another dramatic decline in caribou numbers occurs, biologists will have baseline data from caribou jaws to help determine the cause of the population decline.

To help with this project, please send caribou jaws to your nearest ADF&G office, freight collect. This could be a good project for kids and students to assist with. If you call our local office in Kotzebue (800)478-3420 and let us know you are sending them. ADF&G will be sure to collect jaws and pay the postage.

There is some additional information that needs to be included with the jaws:

- Sex of the animal
- Time of kill (month if possible)
- Location of kill (river, drainage, area)
- Hunter kill or natural mortality
- Full jaws (Both sides)

Your assistance in this project is essential, with your help we can work together to learn more about our caribou. Thank you!

NORTHWEST ARCTIC HERITAGE CENTER

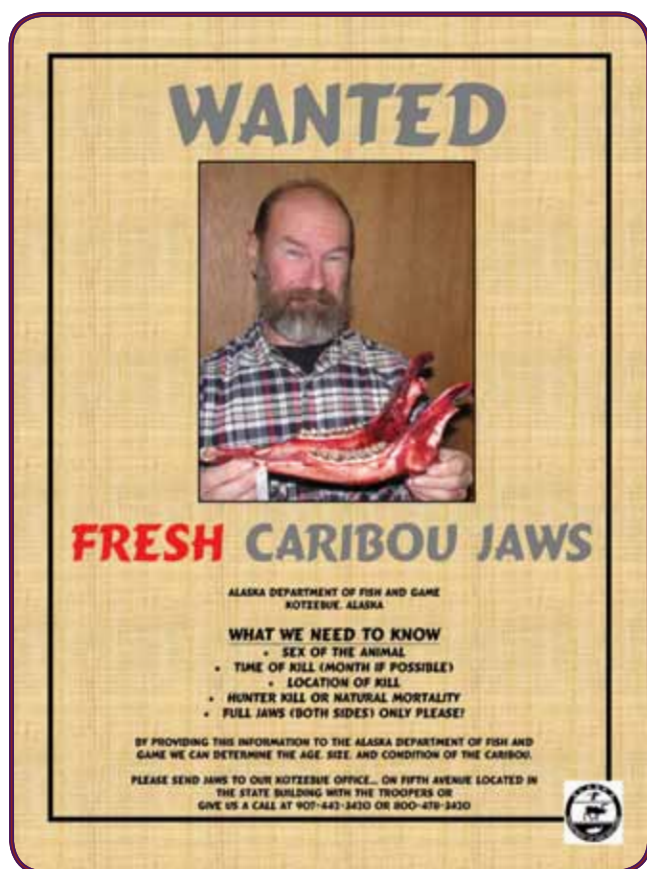


The National Park Service and the NANA Regional Corporation hosted a community opening of the Northwest Arctic Heritage Center in Kotzebue this past December.

The Heritage Center offers people of the region and visitors from around the world a high-quality interpretive experience of the natural and cultural history of the region, a variety of educational programs, and administrative services. The 90-person multipurpose room is being used for programs ranging from Junior Rangers, to research presentations, to native dances.

The Heritage Center was designed by Results with Imagination (RIM) Architects and constructed by Ukpeagvik Inupiat Corporation (UIC Construction). The exhibits were designed by AldrichPears Associates and produced and installed by Formations, Incorporated.

The NPS and NANA are planning a larger “grand opening” for June 2010.



ALASKA BOARD OF GAME UPDATES

The Board extended the dates of the Noatak Controlled Use Area (CUA) along the Noatak River. Dates were August 25 to September 15 and are **NOW August 15 to September 30**.

The Board approved a mandatory pilot orientation in GMU 23 for any pilots transporting game meat in unit 23, local or non-local. The pilot test will be offered online or via paper and will be a one-time test and pilots must possess a card showing they have passed the test. **This will be available in summer of 2010.**

The Board increased the bag limit for non-resident hunters **from one caribou to two caribou** a year. The Board had limited non-resident hunters to one caribou because of problems with user conflicts. The Board said other factors are now working to reduce those problems, including;

- Board actions to extend the CUA;
- Institution of a mandatory pilot orientation;
- Efforts by NPS, BLM, DNR to address the same problems;
- More rigorous enforcement of wanton waste laws;
- Effective education effort by ADF&G ;
- The Unit 23 Working Group will continue to meet and to respond to problems.

The Board rejected a request to extend same day airborne take of caribou in Unit 22; same day airborne caribou hunting remains open January 1st through April 15 in Unit 22.

A proposal to allow diseased meat to be left in the field was deferred to the statewide BOG meeting. This proposal failed.

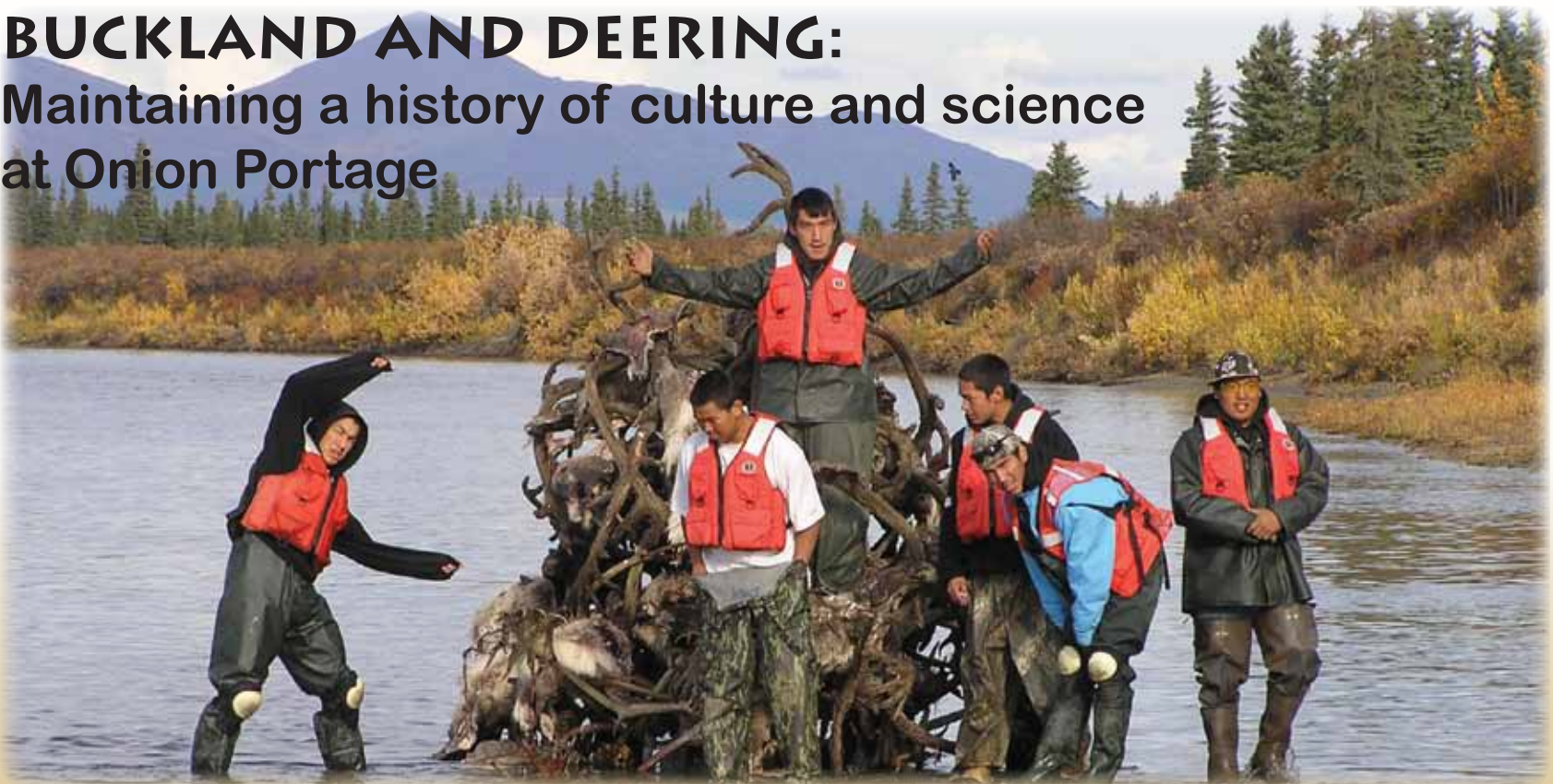
“The prohibitions against waste are originally statutory, as is the definition of edible meat. The Board is not authorized to change statutory provisions.” – State of Alaska Department of Law

The next Arctic and Western Regional BOG meeting will be fall of 2011, location to be determined.

TAIKU

The Alaska Department of Fish and Game would like to say a big TAIKU to those who take time to fill out Harvest Reports, participate in harvest surveys, and provide information reports on body condition, disease, and caribou behavior. By providing this information you are helping biologists better understand the caribou.

BUCKLAND AND DEERING: Maintaining a history of culture and science at Onion Portage



Buckland Boys and the Tower of Tuttu



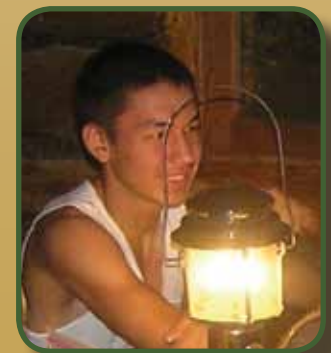
Ken Phillips



Melvin Jones



Bobbie Sue & Becky Sue



Linus Ballot



Preston Thomas & Travis Armstrong



William Lee



Darlon Barr



Deering Campers



Jesse Hadley



Gilford Barr



Top: Gilford Barr, Lincoln Parrett, Jim Lawler, Tony Gorn, Charlotte Westing, Patrick Jones, Jim Dau, Erica Craig, Brandon Saito
Bottom: Becky Sue Dixon, Alex Tobiason, Darlon Barr, Melvin Jones, Bobbie Sue Iyatunguk, Christopher Moto, Robert Iyatunguk, Robert Moto

Photos courtesy of: Buckland and Deering Schools, USFWS, ADF&G, BLM, and NPS

PAATITAAQ, ONION PORTAGE

Along the banks of the Kobuk River, half way from its headwaters to the sea, is a place called Onion Portage. Onion Portage is known for abundant wildlife, particularly caribou, and one of the oldest uncovered areas of human habitation in North America. Paatitaaq, Inupiaq for Onion Portage, means “wild chives.” The name “Onion”, given for the same reason the Inupiaq name suggests, and “Portage” for the overland haul. With caribou plentiful during the migrating periods, Onion Portage, inside the Kobuk Valley National Park, was an indispensable location for food gathering in ancient societies and remains so today.

CARIBOU

Caribou have been migrating through the Paatitaaq region for thousands and thousands of years. Kuuvanmiut, or people of the Kobuk, historically and presently use the location to hunt caribou. Just as the Kuuvanmiut rely on Paatitaaq for obtaining caribou, so too do wildlife managers.

WILDLIFE BIOLOGY AT ONION PORTAGE

For the past thirty years, the ADF&G biologists have gone to Onion Portage each fall to deploy radio collars on caribou. Since the early 1990s federal agency staff and students from schools within the range of the WAH, have accompanied department biologist to learn about caribou.

As caribou swim the river, a boat drives alongside a chosen group where agency staff and students catch and hold an adult caribou and adorn it with a collar, take a blood sample, and record its body condition. If the chosen caribou is a female with a calf, a second boat captures the calf to weigh it and release it near its mother. A third boat ensures that those caribou not being handled swim to the South side of the river to continue their migration. Additionally, using boats to capture caribou is quick and efficient, safe for caribou, uses no immobilization drugs, and is more widely accepted than aerial capture techniques used on other wildlife collaring projects.

WHEN TRADITION AND WESTERN SCIENCE COINCIDE

It is common for elders to join students and biologists at Onion Portage. When elders travel with students to Onion Portage, students learn subsistence skills such as how to hunt, butcher, cut, and cook caribou. They also learn skills for camping and about traditional hunting values. The Onion Portage collaring project continues to be successful from both a scientific standpoint as well as being a great hands-on learning experience for students. Including elders in students groups while working with biologists is a wonderful way to meld western science with traditional practices. Onion Portage continues to be a location where history and western science coincide for the continued care and prosperity of the WAH.



Buckland Boys Weighing a Calf



Preston Thomas, Tony Gorn, and Travis Armstrong Catching a cow



Erica Craig

WESTERN ARCTIC CARIBOU HERD WORKING GROUP 2010



Mike McCreary
(nominated)
Anchorage



Ron Moto
Buckland, Deering,
& Selawik



vacant
Anaktuvuk Pass
& Nuiqsut



Charles Saccheus
Elim, Golovin,
& White Mountain



Larry Bartlett
Fairbanks Hunters



Phil Driver
Vice Chair
Hunting Guides



Mike Adams
Kivalina & Noatak



Willie Goodwin
Kotzebue



Pollock Simon Sr.
Koyukuk River



Vern Cleveland Sr.
Lower Kobuk River



Benedict Jones
Middle Yukon River



Ted Frankson
Point Hope



Roy Ashenfelter
Chair
Nome



John Schoen
Conservationists



Elmer Seetot Jr.
Northern Seward
Peninsula



Tom Gray
Reindeer Herders
Association



Frank Kavairlook
Southern Seward
Peninsula



Vacant
Transporters



Sally Custer
Upper Kobuk River



Enoch Oktollik
Atkasuk, Barrow,
Wainwright

Alternates in order: vacant, Roger Clark, vacant, Maurice Nakaruk, Rod Arno/Dick Bishop, Bob Hannon, vacant, Cyrus Harris, Jack Reakoff, Ramond Stoney, vacant, Steve Oomituk, Ralph Anungazuk, Wendy Loya, Christine Komanaseak, Herb Karmun, Al Unok, Joe Schuster, William Bernhardt, Oliver Peetook



**NEXT MEETING
DEC 9 & 10, 2010
DIMOND CENTER
ANCHORAGE**

**The Western Arctic Caribou Herd Working
Group, representing you and caribou!**

Alternates needed!

**Please contact your local representative
or one of the agencies to see how you
can become involved.**

**The following agencies support the Caribou Working Group, but are
not voting members:**

Alaska Dept. of Fish and Game, Nome Peter Bente, 1-800-560-2271 or 443-2271, peter.bente@alaska.gov
US Fish & Wildlife, Kotzebue Lee Anne Ayres, 1-800-492.8848 or 442-3799, leeanne_ayres@fws.gov
US Natl. Park Service, Kotzebue George Helfrich, 1-800-478-7252 or 442-3809, george_helfrich@nps.gov
Bureau of Land Mgmt. , Fbks Shelly Jacobson, 1-800-437-7021 or 474-2200, shelly.jacobson@blm.gov

Please bring questions regarding the working group to:

Roy Ashenfelter, Chair, 907-304-1776, roy@nsedc.com
Phil Driver, Vice-Chair, 664-4524 or 442-0379, wulikchar@ak.net

Please send questions regarding Caribou Trails to:

Meghan Nedwick, ADF&G, 442-1714, meghan.nedwick@alaska.gov