

Caribou Trails



Western Arctic Caribou Herd Working Group

www.westernarcticcaribou.net

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Herd Moves to “Preservative Declining”

Biologists continue to closely monitor the Western Arctic caribou herd (WAH). In July 2021, the Alaska Department of Fish & Game (ADF&G) successfully carried out a photocensus, revealing a decline in the Western Arctic caribou herd’s population. The 2021 count was 188,000 caribou, down from the last census of 244,000 caribou in 2019. This shows the population of the herd is below the minimum objective of 200,000 caribou and is at its lowest point in the last several decades.

Along with the photocensus, managers use other sources of information to track how the herd is doing. Biologists conduct composition and recruitment surveys to assess the number of bulls, cows, and calves within the herd, parturition surveys that look at how many cows are giving birth, movement data collected from collared caribou, survival estimates, and harvest reports. These indicators are considered together when determining management recommendations for the herd.

The most pressing concern is a decrease in cow survival. While the long-term average of adult cow survival for this herd (from the years 1987-2020) is 81%, between 2017 and 2020 cow survival averaged only 73%. This cow survival rate is too low to support herd growth. Another area of concern is that calving rates have dropped slightly over the past few years.

Prompted by the low census number and concerns over cows, the Western Arctic Caribou Herd Working Group (WACH WG) changed the herd management level from “conservative” to “preservative” (*see recommendations below*).

Working Group members are concerned about where the herd is headed, yet not all news is bad. The number of calves surviving the winter is tracking close to the long-term average and the bull-to-cow ratio is above average at 47 bulls to 100 cows.

The 2021 population estimate for the Western Arctic caribou herd was 188,000. This is a decline from the 2019 population estimate of 244,000 caribou.

While there are real causes for concern, it is important to recognize that the Western Arctic caribou herd has shown a tremendous ability to rebound when conditions are right. Most caribou populations go through periods of decline and increase, as this herd did when growing from a recorded low of 75,000 in 1976 to 490,000 in 2003. Biologists have monitored the herd for more than 60 years and will continue to research the causes of the recent decline and the impact on all users.

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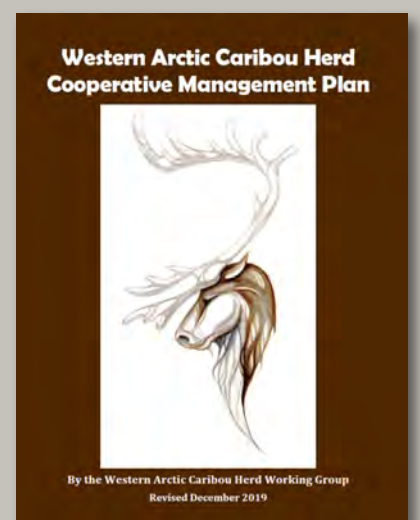
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Working Group’s Recommendations

- 🔊 No harvest of calves
- 🔊 Limit cow harvest
- 🔊 Report your harvest

Recommendations from the Working Group are not a regulatory change. Any suggested changes need to be written as formal proposals, then submitted to the appropriate state or federal board for consideration. For a timeline of upcoming meetings and how to get involved see page 12.

For current regulations affecting hunters of the Western Arctic caribou herd, consult the Subsistence Management Regulations for the Harvest of Wildlife on Federal Public Lands in Alaska and the State of Alaska Hunting Regulations. Learn more about management levels in the Working Group’s management plan at westernarcticcaribou.net/herd-management/.



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QUYANNA

The Western Arctic Caribou Herd Working Group would like to say a big QUYANNA to those who take time to fill out Caribou Registration Permits RC907 (Units 23 and 26A) and RC800 (Unit 22). Permits provide valuable information on harvest, behavior, and caribou distribution. By providing this information you are helping biologists better understand the caribou to support hunting now and for future generations.

Updates from the Working Group



Message from the Chair

In 2021, we had a hard time getting fall caribou due to climate change. The herd came in so late and there was ice on the river. One day we were boating and the next there was ice. We never know about the fall season. We observe the weather and get good reports on how the weather is and how it will affect migration. I hope the weather is good for the 2022 caribou census.

The status of the herd is at the level of preservative management. We have to be careful as hunters to get what you need, don't waste anything. Please try to reduce harvest of cow caribou. Switch your focus to bull caribou. The cow harvest is contributing to the decline.

Hunters should be careful and watch conditions, we never know how it is going to be due to climate change. Do not use high-powered rifles during the fall hunt when caribou are crossing on the river. This is important for the safety of other people on the river. A .22 is all you need when the caribou are swimming.

Everyone has got to have a permit to hunt caribou. Everyone must have a license to hunt caribou. Low-income licenses cost 5 dollars, the permit is free. When I am out hunting, I always bring it up to follow the regulations. The harvest information will help us understand what we got, who is hunting where, and what kind of animals are being killed. Everything that is being killed should be reported. That is part of being careful about what we are shooting.

The Western Arctic Caribou Herd Working Group continues to review information related to the Ambler Mining Road. We understand the economic benefit. Still, we are concerned about the impacts on the caribou herd. From our on-the-ground experience and the caribou collar data, we can see that caribou hit the Red Dog Haul Road and bounce back.

Thank you to the Working Group members and the agencies that contribute to the Working Group. I give a pat on the back to each one of you. We don't thank the agencies enough. I appreciate your work!

-Vern Cleveland
Noorvik Alaska

Working Group and Western Arctic Caribou Herd Updates

The Western Arctic Caribou Herd Working Group is made up of community members from within the Western Arctic caribou herd range and representatives from other interested groups including reindeer herders, Alaskan hunters, hunting guides, transporters, and conservationists.

In December 2021, the Working Group met by teleconference with management agencies to discuss the status of the herd, proposed development within the range of the herd, and provide updates on research projects. Key points of the meeting included:

Herd status changed to Preservative Declining

The Western Arctic Caribou Herd Working Group changed the herd's management level from conservative declining to preservative declining at their December 2021 meeting, indicating more concern over where the herd is headed.

Management level is determined after considering the population of the herd, the population trend (i.e. are numbers going up or down?), and cow and calf survival rates. Most of these measures are trending downward for the herd.

Need for more accurate harvest data

Currently, the amount of harvest reporting that the Alaska Department of Fish & Game

receives from local hunters does not allow for an accurate estimate of local harvest, which makes it difficult to manage the herd. Total harvest is not known. When numbers are low, harvest reporting is especially important. Under current regulations, hunters are required to pick up registration permits before harvesting caribou. Contact your local Fish & Game office with questions or to get a free caribou permit.

For more information contact

ADF&G Utqiagvik (907) 852-3464

ADF&G Kotzebue (907) 442-3420

ADF&G Nome (907) 443-2271

Caribou movements

In the fall of 2021, collared caribou moved south and crossed the Kobuk River very late in the season. Caribou are not going as far south as in previous decades and many caribou aren't crossing the Kobuk River at all.

In 2021, biologists from the National Park Service noted that caribou came south along the coast of Northwest Alaska, encountered roads at either Red Dog Road or Kivalina, and many did not cross them. Animals turned and tried another direction. Research has shown that some caribou that encounter the Red Dog Road can be delayed in their migration by as much as a month.

To keep up with news from the Working Group visit westernarcticcaribou.net.

Caribou in Your Region

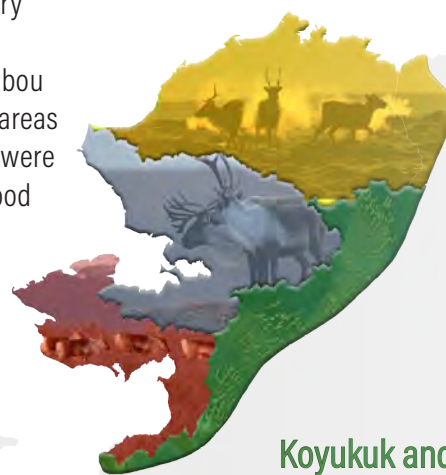
Each year, members of the Western Arctic Caribou Herd Working Group share their observations during the "Caribou Round Table." Below is a summary of the 2021 discussion.

NANA Region

Change of climate! Early breakup, late freeze up. Very wet, dismal days and overcast summer weather. Later and later crossing of Kobuk River every year and no caribou crossed the Red Dog Road soon enough. Caribou didn't show up during the fall in areas usually hunted. The caribou that were caught in early winter were in good shape.

North Slope

Caribou moved into the area during normal times. Caribou were healthy.



Seward Peninsula

Lack of snow prevented hunters from harvesting caribou earlier. The migratory animals have not been in the area for a couple years. Sad, none are around.

Koyukuk and Middle Yukon

The freeze-up is about a month later and break-up is early, too. The first snowfall is later as well. Sometimes it's too warm during winter and sometimes it rains — then there's ice on snow. Tough going for animals and people. Winds strong enough to break healthy spruce trees. There is more bank erosion. There is no caribou for 40 years now.

Caribou Updates

Modeling Fall Caribou Movements

Fall is a season many of us look forward to — a busy season of harvesting and putting away food begins to draw to a close, mosquitoes are gone, and the air gets cooler. Migration of the Western Arctic caribou herd is one of the fall events many look forward to most. Especially in Unit 23, the NANA region, because this has been when caribou are in prime condition and accessible to hunters as they cross rivers. Yet, the herd's migration has been changing in recent years. Caribou are coming later and later, or not coming south before the rivers ice up.

Traditional Ecological Knowledge suggests that caribou migrate with the coming of winter weather and scientists are curious to understand the specific cues of weather caribou use in deciding when to start their fall migration. Is it temperature, daylight, winds, or a combination of factors? In a recent study, researchers from the National Park Service and the University of Alaska

Fairbanks tested what weather conditions influence fall migration. They used GPS data combined with weather models to get nine years of weather conditions each caribou experienced. Then, they used statistical models to tie the weather data to caribou movements to see which types of weather had the biggest influence on fall migration.

Of all the weather variables considered, temperature and snow had the biggest and most consistent influence on migration. In some years, caribou migrated with colder temperatures and no snow. In many years, the presence of snow, such as the first snow event, caused caribou to migrate. One of the most interesting aspects of the results is the indication that caribou are constantly updating their decision to move throughout fall. This means that if caribou move to a warmer area, they may slow down and pause their migration or alternatively, speed up if conditions become colder and snowier.

In other words, caribou migration is not controlled by a single on-off switch but can be altered by local conditions.

Caribou migration is not controlled by a single on-off switch but can be altered by local conditions

Ultimately, migration was over by the time temperatures got really cold and the snow was deep. Northwest Alaska has been experiencing warmer fall seasons and snow has been coming later and later the last few decades. With Traditional Ecological Knowledge, the insights learned from this research, and the climate trends, we can expect fall migration to continue to be delayed in the future. For more information, find the original article here: nps.gov/articles/000/migrationdecisions.htm.



Range Fidelity of Western Arctic Caribou Herd

Caribou “fidelity” means the tendency for individuals to return again and again to the same areas they had used before. The best example of caribou fidelity is returning to the same calving grounds — which is partly why caribou herds are often defined by where they calve.

Less is known about fidelity to place during other seasons. Fidelity is thought to be related to several factors: the predictability of the resources in that area, habitat quality, density and behavior of the species, the presence of predators, human disturbance, and other influences.

Wildlife biologists with the National Park Service, University of Maryland, and Alaska Department of Fish and Game analyzed the movements of adult females from the Western Arctic caribou herd from 2010-2019 to assess how much fidelity the caribou cows showed to various seasonal ranges and how much calving and migration timing varied from year to year. As expected, WAH caribou showed high fidelity to their calving grounds, which local knowledge has documented going back for over 100 years. The herd also showed high fidelity every year to places where they could reduce insect harassment, which can be extreme in Northwest Alaska.

The amount of fidelity varied with spatial scale. At the largest scale, caribou showed very high fidelity, but individual caribou calved relatively far from where they calved the previous year—an average of 35 miles. Calving takes place where abundant, high-quality forage becomes available predictably

every year. Likewise, cool, windy, barren habitats that tend to reduce insect harassment are also more predictable from year to year. Fidelity was lower at the end of summer and winter, seasons that are less predictable due to variability in weather conditions.

Caribou showed higher fidelity during spring migrations than fall migrations, perhaps due to the demand of calving. Over 90% of the females had a calf within seven days of when they had a calf the previous year, a remarkable consistency given that they range over such a large area and all the variability they encounter in terms of weather and habitat. A better understanding of fidelity can help us better manage and conserve caribou for this and future generations. For more information, find the original article here: nps.gov/articles/000/bouseasonalfidelity.htm.

Over 90% of the females had a calf within seven days of when they had a calf the previous year



Caribou Updates Continued

Federal Wildlife Harvest Regulations Update

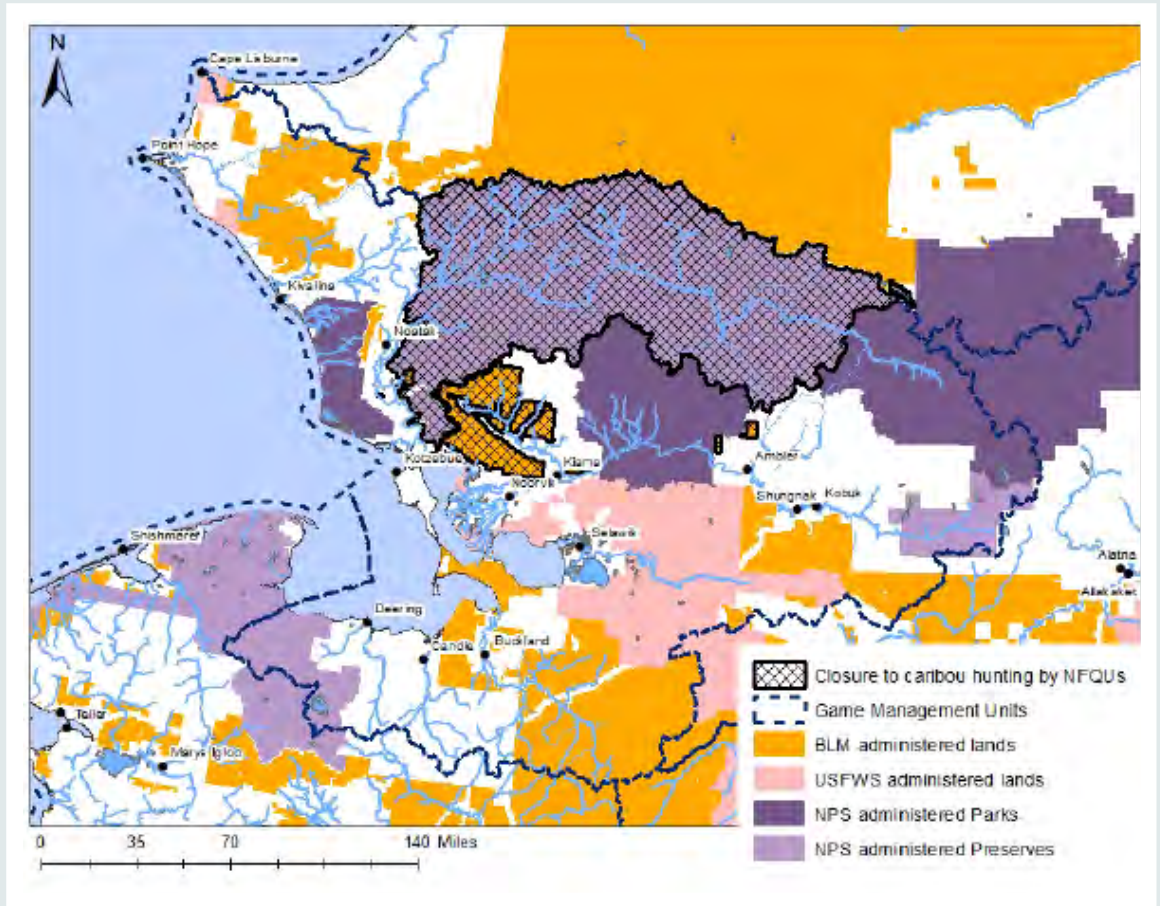
The Federal Subsistence Board has approved a closure to certain federal lands in Northwest Alaska for caribou and moose hunting by non-federally qualified users. Federally qualified subsistence users are rural residents who have been determined by the Federal Subsistence Board to have customary and traditional use of caribou and moose in Units 23 and 26A.

The closure area is Noatak National Preserve (most of which is in Unit 23, but the Board included the Nigu River portion of the preserve in Unit 26A) and BLM-managed lands between the Noatak and Kobuk Rivers in Unit 23. The closure applies from August 1 - September 30 and includes both the 2022-23 and 2023-24 regulatory years.

At the Working Group's meeting in December 2021, the Western Arctic Caribou Herd Working Group voted to not support the closure (Vote: 3 Yes; 11 No). As presented to the public, the special action request WSA21 - 01 addressed both caribou and moose.

The Working Group determined that they needed to comment on WSA21 - 01 as it had been presented to the public and in the Federal Subsistence Board record which addresses both caribou and moose. The Working Group did not vote on the question of a closure for caribou only.

For more information on the closure visit doi.gov/subsistence/wildlife



Subsistence Surveys and Interviews

Last spring, the Alaska Department of Fish & Game's Subsistence Division conducted harvest surveys in four regional communities: Golovin, Selawik, Shungnak, and White Mountain. ADF&G Subsistence staff worked alongside local research assistants to survey households about their harvests during 2021-22. These same communities were last surveyed in 2019. While there, researchers also interviewed hunters and community members to document local knowledge and observations about the herd, in addition to other local concerns.

The Division of Subsistence would like to remind interested parties that the annual Western Arctic caribou herd subsistence harvest monitoring project, which began in 1999, will not be publishing yearly reports for the study years beyond 2017-2018. Data for years 2018-2023 will be published in a larger combined report. Traditional and local knowledge from interviews conducted in study communities will be included there, in addition to harvest data. Anyone needing access to harvest data before this report is published can contact the Division of Subsistence in Fairbanks at (907) 459-7320.

Local and Traditional Knowledge provides many valuable insights for caribou management, and we thank everyone that has shared their knowledge. Division of Subsistence staff look forward to surveying and interviewing more people during 2022 and 2023.

What people are seeing:

Caribou migration routes are changing and fall migration is delayed. These changes have negative effects on subsistence users and cause hunters to travel farther.

I think they haven't passed through in over, I'd say about 15 years, almost. I took some videos of them passing through here, it was a pretty good herd of 'em, hundreds, thousands of 'em. Right, right out of town, yeah. But, not anymore. Nowadays, we'd be lucky to have, get a few that pass by. The last couple years, there's only a couple small bucks that pass by, yeah. You gotta go up, either Good Hope or Kivalik or towards Buckland there.

-Deering Respondent, 2021

Environmental changes are affecting the ways that households harvest caribou in many locations.

Normally this time of the year we're already out cruising around and hunting 'em, you know. But now you sit you worry about if you can get out there January, February. Usually November, December we're already on the snowmachines out hunting 'em, and they're normally just roaming around, not too far away. Now they're not near the water now. Especially, as you, as you witnessed yesterday, we had frozen ground and more snow and then you wake up the next morning and you're full of water and most of the snow blew away. So, it's definitely changing and hunting it, yeah, it's just becoming later and ending earlier as far as getting out there on a snowmachine, this type of hunting.

-Deering Respondent, 2021

Proposed Development in the Range

1. Ambler Road Project

If constructed, the Ambler Road would cover over 200 miles across state, federal, and Native Corporation lands between the proposed Ambler Mining District and the Dalton Highway, crossing WAH migration and wintering areas. In February 2022, the federal government decided to reconsider the right-of-way agreement signed in 2021. This will likely lead to future opportunities for public comment. The State of Alaska held listening sessions and a comment period in March on granting an easement for the proposed road to cross state lands. The Working Group voted to oppose the project in 2019 and has since submitted multiple letters reiterating the group's opposition to a road.

2. National Petroleum Reserve in AK Integrated Activity Plan Revisor

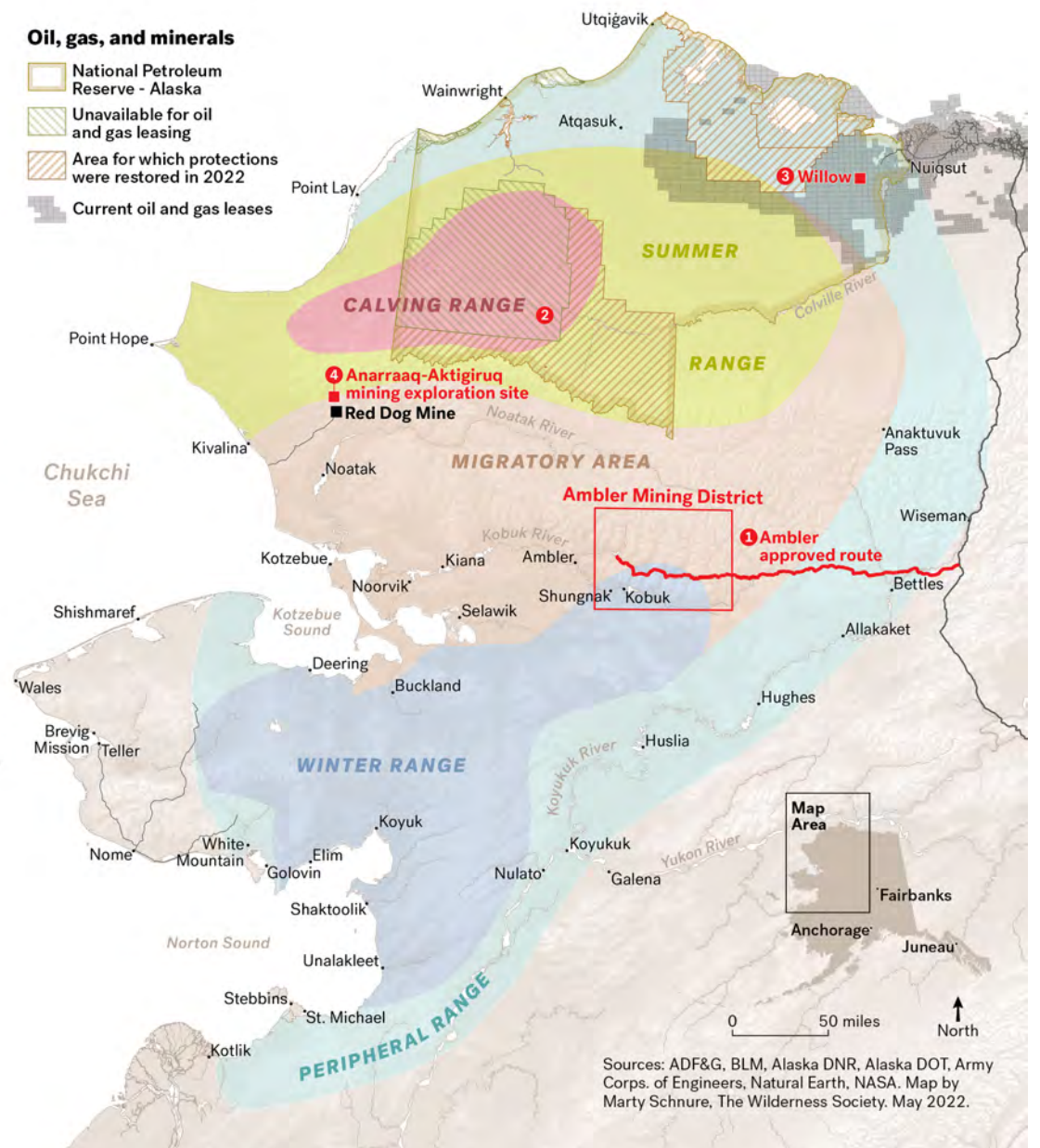
In 2020, the Bureau of Land Management (BLM) altered the Integrated Activity Plan that governs land use in the National Petroleum Reserve – Alaska. This opened new areas for oil and gas leasing and development in calving and other important habitat for the WAH and Teshekpuk caribou herds. However, in 2022 BLM changed its selected alternative, maintaining previous protections, with some additional measures. This better aligns with the Working Group's request that BLM maintain protections for caribou calving grounds and other critical habitat.

3. Willow Master Development Plan

A court ruling in 2021 halted development of the Willow project, which would expand development west in the NPR-A, closer to core Teshekpuk caribou herd calving areas. BLM is now conducting a Supplemental Environmental Impact Statement (SEIS) review of the project. Scoping was completed in March and a draft SEIS later this year will provide opportunity for public comment.

4. Red Dog Mine

Teck America, Inc. filed a new application in March 2022 for exploration of the Anarraaq – Aktigirug mineral deposits about 8 miles north of the current Red Dog Mine. The proposed construction includes six gravel pads, four material sites, and a little over twelve miles of gravel roads. The Working Group commented on this application and on earlier applications for exploration in this area.



Modeling Potential Impacts of Infrastructure

Land managers are responsible for the balance of protecting species and habitat while allowing responsible use and development of areas. But how can managers best determine where development should be allowed and where it may hurt wildlife, especially before specific project applications are submitted?

Scientists from The Wilderness Society, the National Park Service, and Audubon Alaska worked together, using computer simulation models to explore potential impacts of infrastructure on caribou under different management options. They used possible infrastructure locations, along with previous research results on how caribou respond to development, to predict impacts. The research focused on management options that had been proposed for the National

Petroleum Reserve – Alaska, a large area on the western half of the North Slope that includes the calving grounds of the Western Arctic caribou herd. Uncertainty in exactly where development might take place and the exact impacts was accounted for in the research by repeating simulations many times and looking at the patterns of how caribou were affected.

Researchers found that impacts to calving habitat increased when more land was made available for development

The researchers found that the impacts to calving habitat for the Teshekpuk caribou herd increased when more land was made available for development. For the Western Arctic caribou herd, a proposed management

option which came from the Western Arctic Caribou Herd Working Group led to the greatest protections. Results emphasized the importance of protecting the northern portions of the Western Arctic caribou herd's calving grounds in the Utukok Uplands and pointed to opportunities to build upon protections of the 2013 plan.

To learn more, visit: esajournalonlinelibrary.wiley.com/doi/full/10.1002/ecs2.3530

Also see: New tools to better understand the potential impacts of Arctic development from the U.S. National Park Service at nps.gov/articles/000/toolstoassessimpacts.htm.



Caribou Populations

Understanding Caribou Populations

Biologists conduct research and work with local communities to understand caribou population trends through time. This section highlights the efforts made by biologists throughout the year and the key pieces of information that managers, the public, and decision-making boards use to monitor the health of the Western Arctic caribou herd.

Collaring Caribou

Biologists place collars on caribou to assist with surveys and studies. Collars track the location and movements of the collared animal. The goal is to maintain at least 100 active collars in the herd.



Understanding Harvest

Currently, there is not enough harvest information to help understand how the herd is doing. Without harvest data, managers are not certain if there needs to be a concern for harvest.

Harvest information provides how many, when, and what type of caribou are harvested each year. Hunters are required to have a registration permit and to report harvest to Fish and Game.



Cow Mortality

Biologists track the number of collared adult cows that die compared to those that survive. The adult cow survival rate from 2017-2020 was 73%, which is below the long-term average of 81% (1987-2020). This is a concern — cows produce the future of the herd.



Movement Data

Biologists monitor caribou movements by gathering location information from the collared caribou.

For the last three winters, no caribou have wintered in Bering Land Bridge National Preserve, while 5-6 years ago, 75% of the collared animals wintered there.

Similarly, from 2010 to 2015 over 80% of the collared caribou crossed the Kobuk River to winter farther south. From 2016 to 2020, only an average of 34% crossed the Kobuk River, with a low of just 6% of the herd crossing in 2020.

Herd Size 1970-2021

— Preservative level at 200,000 or below

1970
242,000

1976
75,000

1980
138,000

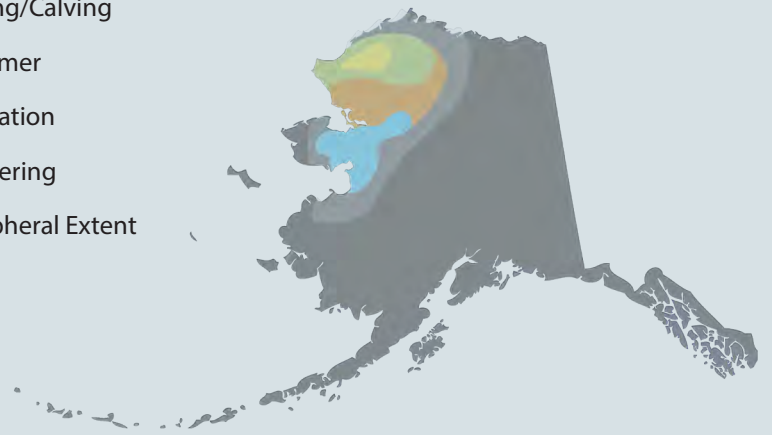
1986
229,000

1990
417,000

1996
463,000

The Western Arctic Caribou Herd Range

- Spring/Calving
- Summer
- Migration
- Wintering
- Peripheral Extent



Short-Yearling Recruitment

In April and May, biologists estimate the number of calves that have made it through their first winter compared to the number of adults in the herd. This metric helps managers understand how many calves are surviving and growing up as part of the herd.



Calving Surveys

In the spring, biologists complete a parturition survey to determine how many collared cows are having calves each year. The 2021 survey showed that 68% of collared cows had calves, compared to 67% in 2020, 81% in 2019, 86% in 2018, and 83% in 2017. The long-term average calving rate is 70% (1992-2021).

Abundance: Photocensus of the Herd

In the summer, biologists track caribou collars to locate groups of caribou. Once groups are located, they are photographed and the number of caribou are counted. This is called a photocensus and takes place during the hottest time of the year, when caribou form large groups in attempt to avoid insects. Since 2005, the photocensus count has declined more often than showing stability or growth.

Herd Composition: Bull to Cow Ratio

In the fall, biologists observe a portion of the caribou population to determine the composition of the herd. This survey estimates the number of bulls, cows and calves. The number of bulls to the number of cows provides a bull to cow ratio and helps determine the level of harvest a herd can endure and still grow. In 2021, the bull to cow ratio was 47 bulls to 100 cows, which is above the target objective of 30 bulls to 100 cows.

2003
490,000

2011
314,000

2017
259,000

2021
188,000

The next photocensus is scheduled for summer 2022

Caribou Populations

Ups and downs

Caribou herds are known for population swings – they are typically either increasing or decreasing, rather than holding steady. Within just a few years, Arctic caribou herds can number in the hundreds of thousands of animals, but then decline by half or even much more. Upon reaching a population low, caribou herds can sharply rebound and grow quickly.

What drives a caribou population?

If there are more births than deaths, then the population goes up. If there are more deaths than births, then the population goes down. But other factors that drive population increases or decreases can be unclear or hard to determine.

What determines the number of births and deaths?

The number of births depends on the number of adult females in the herd and their physical condition. The bigger the herd, the more females there are and the greater potential for more births. When the herd is very large, the potential number of births is high, but at the same time, there is more competition for food. Without enough food, the body condition of females can decline and not as many will have calves.

The number of deaths can result from a wide range of causes. Caribou are eaten by predators and hunted by humans for food. Caribou can also contract diseases, suffer malnutrition, and die in accidents. Weather and insects can be additional factors. These causes, separately or together, can make caribou population numbers decline.

As the population declines, there is less competition for food and animals can improve their body condition. Then pregnancy rates and survival rates increase, and the cycle starts all over.

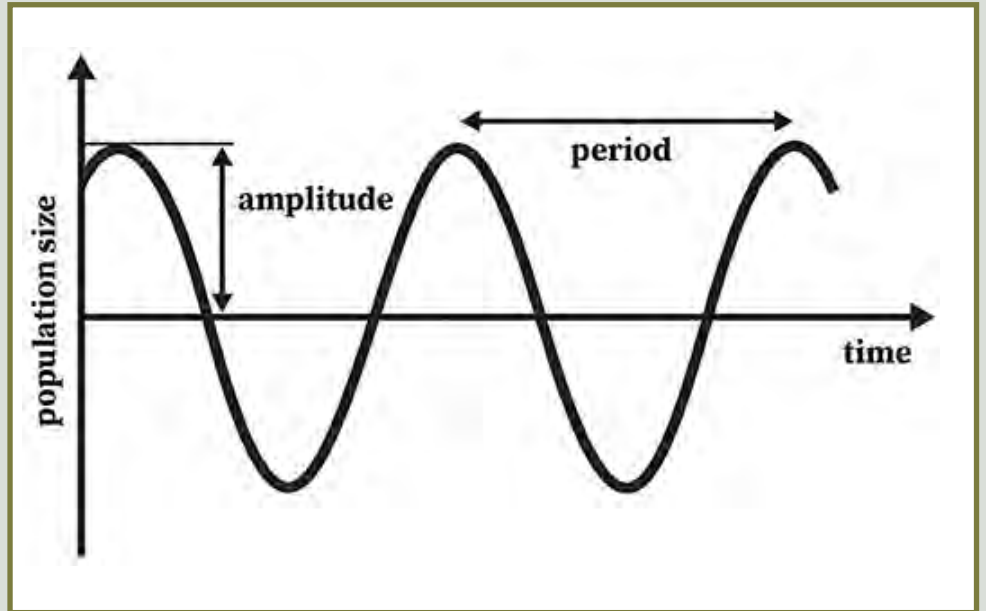
What about changes in their environment?

The relationships between caribou and the environments in which they live can be difficult to decipher. Changes in ocean temperatures can affect the weather over long periods of time and huge areas. Local weather impacts plants that caribou eat. Weather also affects how much energy caribou must use each day to survive.

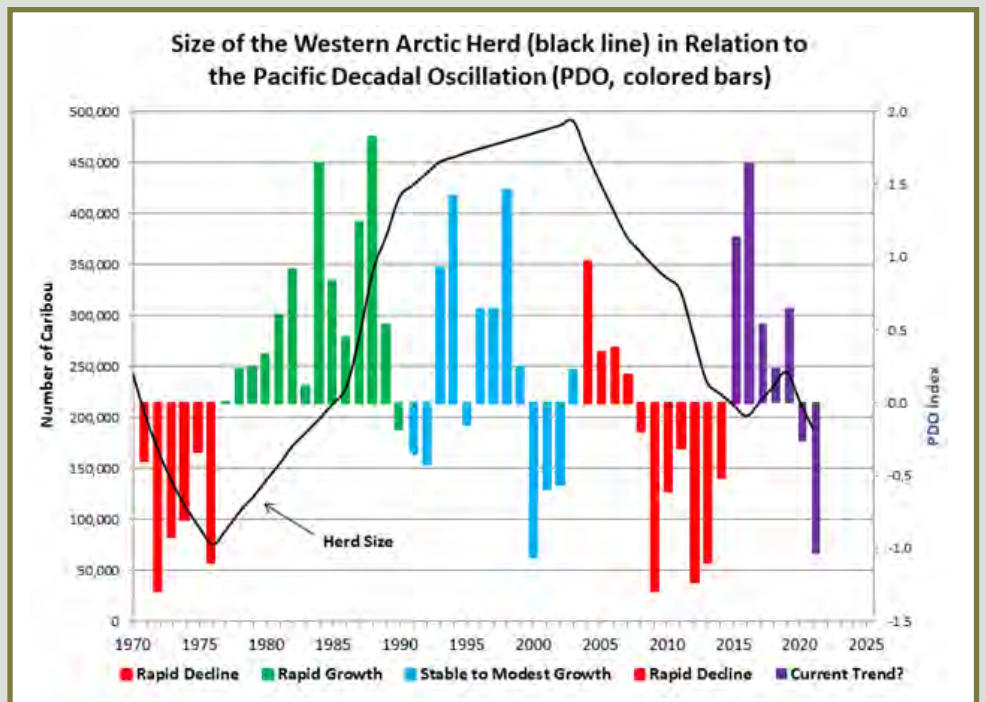
Although there are many factors that impact caribou populations, weather and climate are important. We don't currently have a clear picture of how all these factors are combining to influence the Western Arctic caribou herd. Understanding the relationship between weather and wildlife populations is important to help conserve them in a time when the climate is changing rapidly. There is more work to be done.

Adapted from, "What Goes Up Must Come Down: The Influence of Climate on Caribou Populations." *Frontiers for Young Minds Journal*.

To view the original article, visit: kids.frontiersin.org/articles/10.3389/frym.2021.631372

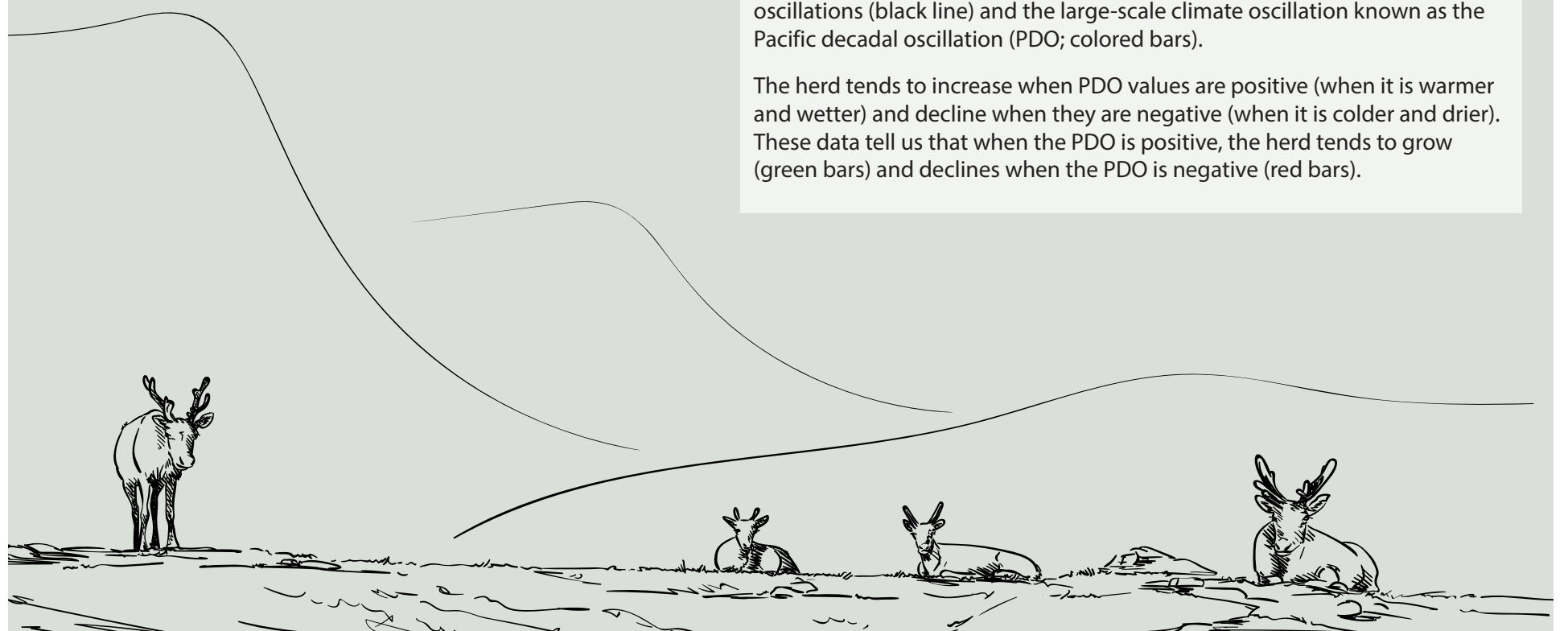


The y- (vertical) axis shows the size (for example, the number of animals in a population) and the x- (horizontal) axis represents time. The amount of time between peaks is known as the period of the oscillation. The height of the increase is known as the amplitude of the oscillation.



Relationship between the Western Arctic caribou herd population oscillations (black line) and the large-scale climate oscillation known as the Pacific decadal oscillation (PDO; colored bars).

The herd tends to increase when PDO values are positive (when it is warmer and wetter) and decline when they are negative (when it is colder and drier). These data tell us that when the PDO is positive, the herd tends to grow (green bars) and declines when the PDO is negative (red bars).



Sharing Caribou Knowledge

Students Sharing Knowledge

A series of short films was created in support of the Northwest Arctic's Caribou Hunter Success Working Group.

Tiahna Capelle, a senior at Mt. Edgecumbe High School, interned with Maniilaq and the National Park Service (NPS) over the summer of 2021 and completed interviews with Elders and youth about caribou hunting values. The short films Tiahna produced combine footage from those interviews along with others done by a previous NPS intern, Kayla Booth, and NPS footage of the Western Arctic caribou herd.

Tiahna and the Caribou Hunter Success Working Group hope that this project can be a useful tool in working with youth on traditional hunting values. Speaking to the Mount Edgecumbe news crew, Tiahna shared, "My biggest inspiration for this project was to educate the youth, especially our youth in the Iñupiaq region, and to educate them on climate change and how the changes in social media and different technology are changing our land in general. And what I've thought is that if the land goes away so does our culture."

The Caribou Hunter Success Working Group brings together the Tribes of Northwest Alaska, Maniilaq Tribal Government Services, NANA, National Park Service, Selawik National Wildlife Refuge, Alaska Department of Fish and Game, and Regional/Local Elders Councils to promote safe hunting and traditional hunting values.

"As the caribou runs throughout our land, our way of life lives on. If the caribou stops, we do too."

To view the videos visit:
nps.gov/noat/learn/historyculture/tuttuniaq.htm

For information on the Caribou Hunter Success Working Group contact:
Hannah Atkinson, hannah_atkinson@nps.gov.

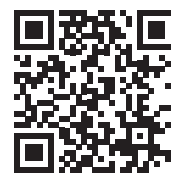
Caribou Trails Virtual Series

Join caribou ADF&G biologists as they take a closer look at caribou across Alaska. This series was presented during the winter of 2021 and is available to view online.



Caribou Across the Last Frontier

An overview of caribou in Alaska with ADF&G Research Coordinator Lincoln Parrett
youtu.be/cMQNCQb2LBo



Counting Caribou

A presentation on how ADF&G biologists count herds of caribou with Photocensus Coordinator Nathan Pamperin and Photocensus Pilot Tom Seaton.
youtu.be/jrHAIcuYkAE



Caribou Disease

An in-depth look at caribou diseases in Alaska with State Wildlife Health Veterinarian, Dr. Kimberlee Beckmen.
youtu.be/fejzFG81wYU



Sharing Caribou Knowledge Continued

Ungulate Knowledge Exchange Coming to Alaska Next Year!

A large, international conference to share information, knowledge, and management ideas about Arctic ungulates (caribou, reindeer, muskoxen, sheep, and moose) is coming to Alaska next year. The joint meeting of the North American Caribou Workshop and the Arctic Ungulate Conference is scheduled for May 2023 in Anchorage.

The conference theme is Crossing Boundaries. Arctic ungulates cross landscape and management boundaries, and the knowledge and value of these species cross the boundaries of Western science and Indigenous Knowledge. The conference seeks to weave these various ways of knowing to identify creative opportunities to manage and sustain arctic ungulate populations in a changing world.

If you would like to share your knowledge of these species or changes to their habitat, or know someone else who would, please let us know. The conference is open to all. Please contact us if you have recommendations for speakers, topics, sessions, activities, or if you need assistance to attend. We hope to see you there!

For more information:
 Email: Kyle_Joly@nps.gov
 Webpage: nacw-auc-2023.org
 Facebook: facebook.com/nacw.auc.2023



2023 NORTH AMERICAN CARIBOU WORKSHOP & ARCTIC UNGULATE CONFERENCE

Caribou Health and Disease: A Pocket Guide



Caribou Health and Disease: A Pocket Guide

A pocket guide is available to assist in identifying common caribou health conditions. The guide was developed by ADF&G's Wildlife Education staff, State Wildlife Health Veterinarian Dr. Kimberlee Beckmen and reviewed by the department's caribou biologists.

If you harvested an animal that appears to be sick or diseased, you are still required by Alaska Statute to salvage the meat. If you have questions or concerns about the caribou's health condition, contact your local Fish and Game office.

To view the guide, visit adfg.alaska.gov or pick up a guide at your local ADF&G office.



Farewells

Susan Georgette

Susan Georgette retired as the manager of Selawik National Wildlife Refuge. In her time as Refuge Manager, Susan did a great deal of behind-the-scenes work to support the WACH WG. She worked on the annual inter-agency funding agreements, helped coordinate guest Elder invitations, and most notably was key in pulling together the Working Group’s updated management plan.

Susan started at Selawik National Wildlife Refuge in 2005, working on outreach and education before becoming manager in 2015. Her history in Northwest Alaska goes back much further—she moved to Kotzebue in 1986 to take a job with the Subsistence Division of the ADF&G. Working closely with mentor Paniyavluk Hannah Loon, Susan spent time on the land and in camps and homes across the region, recording

Indigenous Knowledge of resources, documenting subsistence uses through harvest surveys, and helping shape regulations more suited to traditional practices.

In her retirement, Susan plans to continue living in Kotzebue and visiting friends throughout the region, and looks forward to having more time to spend on the land and at their family cabin in the upper Kobuk.

“I want to send my heartfelt gratitude to all the Elders who opened their doors and lives to me, sharing their stories, knowledge, meals, and friendship for more than three decades. My time with them has not only been the highlight of my work, but is one of the highlights of my life.”

-Susan Georgette



Lincoln Parrett



We would like to extend a sincere thank you to Lincoln Parrett as he shifts to a new role within the Alaska Department of Fish & Game.

Lincoln grew up on the North Slope living in Kaktovik, Atkasuk, and Utiagvik and has worked professionally with caribou for over twenty years. For many, he was an influential and familiar face at public meetings, collaring caribou at Onion Portage, and he has been an integral part of monitoring and surveying the Western Arctic caribou herd.

In 2017, Lincoln was the first Research Coordinator hired for ADF&G Region V. As a research coordinator, he organized and supervised all ADF&G wildlife research activities taking place throughout Northwest Alaska. Lincoln’s contributions, enthusiasm, and expertise will be greatly missed, and we wish him the best in his new role as the ADF&G’s Region III Management Coordinator.

Jan Caulfield



Jan Caulfield will be retiring this summer. Anyone who has served on the Working Group or attended an annual meeting will recognize the important role Jan has played as the Working Group’s facilitator. Serving in this role for over 10 years, Jan has been involved in everything: crafting meeting agendas, making sure members have the materials they need, record keeping, helping the chair to run meetings, and more. Jan’s skill, kindness, and understanding of key issues was a big part of many things the Working Group has been able to accomplish. We would like to offer both gratitude and best wishes to Jan in her retirement.

Heather Jameson



Heather Jameson, Alaska Department of Fish and Game’s Wildlife Education & Outreach Specialist for Northwest Alaska will be moving from the region. For the past four years, she has served as editor of Caribou Trails and lead of the WACH WG’s Communications Committee. We thank her for spearheading the production of these outstanding, educational, and approachable newsletters. Her enthusiasm, professionalism, and inclusive style will be greatly missed. We wish her the best in the next stage of her career.



Thoughts on regulations surrounding caribou hunting?

Any individual or organization can contribute to the management of the Western Arctic caribou herd. The following are opportunities to be a part of the State and Federal regulatory processes:

Alaska Board of Game

The Alaska Board of Game meeting cycle for the Western Arctic / Western Region is 2023-2024. A call for proposals will take place in early 2023 with a May 1st deadline.

Contact ADF&G Board Support at advisory.adfg.alaska.gov or attend an Advisory Committee meeting in your area to get involved.

Boards Support
(907) 465-4110

Federal Subsistence Board

The Federal Subsistence Board will call for proposals to change federal hunting regulations in early 2023 for the 2024-2026 regulatory cycle.

Attend a Regional Advisory Council meeting in your area or contact the Council Coordinator for more information on how to get involved.

Office of Subsistence Management
(907) 786-3888

State Advisory Committees and Federal Regional Advisory Councils are local citizens that meet to discuss wildlife concerns. They submit and comment on proposals and provide testimony to the Boards.



For upcoming meetings or how to get involved check the State and Federal meeting schedules at:

State: boardofgame.adfg.alaska.gov
Federal: doi.gov/subsistence/board

WACH WG Voting Chairs

- Anchorage Fish & Game Advisory Committee
- Buckland, Deering, Selawik
- Anaktuvuk Pass & Nuiqsut
- Elim, Golovin, White Mountain
- Fairbanks Hunters
- Hunting Guides
- Kivalina & Noatak
- Kotzebue
- Koyukuk River (Huslia, Hughes, Allakaket, Bettles, Wiseman)
- Lower Kobuk River (Noorvik & Kiana)
- Middle Yukon River (Galena, Koyukuk, Nulato, Kaltag)
- Point Hope & Point Lay
- Nome
- Conservationists
- N. Seward Peninsula (Teller, Brevig, Wales, Shishmaref)
- Reindeer Herders Association
- S. Seward Peninsula (Koyuk, Shaktoolik, Unalakleet, Stebbins, St. Michael, Kotlik)
- Transporters
- Upper Kobuk River (Ambler, Shungnak, Kobuk)
- Atqasuk, Utqiagvik & Wainwright

* to be approved at 2022 meeting

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

Alaska Department of Fish & Game, Arctic/ Western Region, Nome Regional Supervisor- Tony Gorn
(907) 443-8189, tony.gorn@alaska.gov

US Bureau of Land Management, Anchorage Field Manager Nome- Tom Sparks
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US National Park Service, Western Arctic National Parklands Superintendent- Ray McPadden
(907) 442-8301, Raymond_McPadden@nps.gov

US Fish & Wildlife, Selawik National Wildlife Refuge, Kotzebue Assistant Refuge Manager- Will Wiese
1-800-492-8848 or (907) 442-5065, wilhelm_wiese@fws.gov

**To Report Violations call:
1-800-478-3377**



Representatives

- Neil DeWitt
- Vida Coaltrain
- Eli Nukapigak
- Charles Saccheus
- David Kilbourn
- Jake Jacobson
- Enoch Mitchell
- Cyrus Harris (Vice-Chair)
- Pollock Simon, Sr.
- Vern Cleveland Sr. (Chairman)
- Michael Stickman
- Steve Oomittuk
- Charlie Lean
- Tim Fullman
- Elmer Seetot, Jr.
- Tom Gray
- Morris Nassuk
- Brad Saalsaa
- Bill Bernhardt
- Wanda Kippi

Alternates

- Matt Moore
- Raymond Lee, Jr
- Mary Hugo
- Morris Nakaruk
- John Siegfried
- John (Thor) Stacey
- Daniel Foster, Sr.
- Willie Goodwin
- Jack Reakoff
- Kirk Sampson
- Arnold Demoski
- Caroline Cannon
- Jacob Martin
- Alex Johnson
- Johnson Eningowuk *
- Harry Karmun
- Leo Charles, Sr.
- Brian Alberts
- vacant*
- vacant*

Please bring questions regarding the Working Group to:

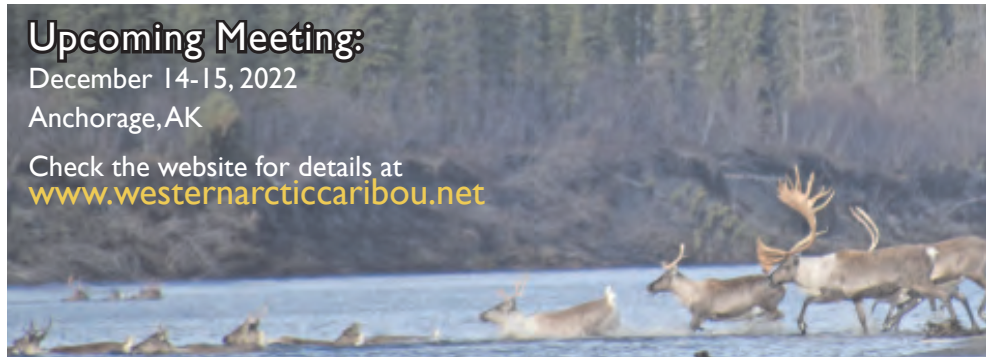
Chair, Vern Cleveland
(907) 636-2261, vern_cleveland75@hotmail.com

Vice-Chair, Cyrus Harris
(907) 442-7914, charris@maniilaq.org

New Facilitator, Holly Spoth-Torres
(907) 223-0136, holly@huddleak.com

Please send questions regarding Caribou Trails to:

Alaska Department of Fish & Game
Kristen Romanoff - kristen.romanoff@alaska.gov



Upcoming Meeting:

December 14-15, 2022
Anchorage, AK

Check the website for details at
www.westernarcticcaribou.net

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