

Caribou Trails



News From the Western Arctic Caribou Herd Working Group

Summer 2023, Issue 23

Western Arctic Caribou Herd Working Group

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Working Group proposes large reduction in caribou harvest

In last December's meeting, the Working Group voted to support a proposal limiting the harvest of Western Arctic caribou to four per regulatory year, only one of which could be a cow. This recommendation came after one theme dominated the discussion: the continued decline in the herd.

Caribou have been difficult to find for most communities within the herd's range, so this discussion was no surprise. "The people [of White Mountain] have been traveling a long, long ways to get caribou," said Tom Gray, who resides in Nome but previously lived in White Mountain. "Like 200 miles. And you know, guys have gone out of White Mountain 150 miles one way, then back home at night. And it's been devastating. Our people have gotten used to the caribou."

Vern Cleveland, the Working Group chair who lives in Noorvik, agreed. "I haven't seen caribou in three years... I'm a hunter. I hunt all the time, and I live right smack where the caribou are. And I haven't seen one in three years. That's a drastic change."

Alex Hansen, Fish and Game biologist in Kotzebue, presented the latest data on the status of the herd, as well as the Working Group's Technical Committee recommendations. The herd census from 2022 was 164,000 caribou, down nearly 13% from the last census. Calving rates and adult cow survival were below average. The causes for the low survival rates remain largely unknown but predation and hunting likely contributed to them (see "2022 Census" on p. 3 for more details).

The Technical Committee recommended keeping the herd at "preservative, declining" under the Management Plan. They also suggested reducing harvest, especially cows, which are critical for growth of the herd. Hansen referenced the Management Plan, which suggests limiting total harvest to 6,000-10,000 animals under "preservative, declining."

"Now, it's also important to bear in mind that we've been declining continuously, and if we see another 13% decline next year, this [harvest recommendation] is going be lower," Hansen said. "You know, back in the days when there was 400,000, 500,000 caribou, we couldn't harvest enough to do much harm, at least for local consumption. However, we're in a situation right now where excessive harvest, especially of cows, can be serious."

Why all the focus on harvest? While other factors influence the herd, managers have to focus on what they can control. "We will, of course, do our best to understand all mortality causes, and if there is any way to mitigate them, we will do that," Hansen offered. "However, as the case is currently, there is not a whole lot we can control except our own harvest. We can't change the weather patterns; we can't change large-scale

vegetation issues." The Working Group did discuss predator control, though it could be difficult to implement across the region, and a significant amount of WAH range is federal land. While non-resident harvest over the past years was very small (about fifty animals last year), the Working Group also agreed that non-resident hunting should not be allowed at all (see "Working Group Motions Summary" on p. 1).

Cyrus Harris, vice-chair of the Working Group based in Kotzebue, explained that the Kotzebue Advisory Committee (AC) had already discussed reducing resident harvest. "Once we get in a situation such as this, we should try to do something to help the caribou population. We really don't want to be going back to the early 70s to where the population was down to about 75,000," Harris said. "Those were tough, hard days."

Harris explained that in looking at the Management Plan, it was clear that current hunting regulations should be updated. While the herd continues to decline, hunters are still allowed to harvest five caribou per day, with no annual limit - a regulation set when the herd was much larger. To take action, the Kotzebue AC drafted a proposal to limit the harvest to four caribou per regulatory year, only one of which could be a cow.

The Working Group discussed and debated various elements of the proposal, including its impact to those who depend on caribou for subsistence. The common sentiment was that if bold action was not taken this year, even more restrictions might be necessary in future years, harming both the herd and those who rely upon it. Those potential restrictions would likely be more harmful than limiting harvest now.

After a lengthy discussion, the Working Group voted unanimously to draft a proposal limiting harvest to four caribou per year, only one of which could be a cow. This proposal will go to the Board of Game and the Federal Subsistence Board for consideration.

While not an easy decision, Working Group members seemed confident that it was the right one. "The bottom line is that we have to manage this herd accordingly while we're here," Tom Gray said.

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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.

The 2023 Working Group Meeting



Guest Elder Austin Swan Sr. with his wife, Nelda Swan

Elder Austin Swan Sr.

The Guest Elder at the 2022 Working Group meeting was Austin Swan Sr. of Kivalina. Austin is the son of the late Quintin and Charlotte Swan, and was born in 1948. He is married to Nelda, has 6 children, and numerous grandchildren and great-grandchildren. Mr. Swan represents the community of Kivalina on the Northwest Arctic Borough Assembly, and is also the Kivalina mayor, in addition to being a respected elder who lives a subsistence way of life.

Mr. Swan started off by sharing his early memories of growing up with caribou hunting. “I would like to bring you back to 1959 – 1960. I was 11 years old then. Someone came over to my dad and let him know that the caribou were migrating. This was in the latter part of September. My two older brothers and my brother-in-law and I, we all got in a boat and headed up the river about seven miles. It was a pretty good-sized herd, maybe about a hundred caribou, and they got a bunch of them. I stood there watching.

After the herd ran off, I saw a young caribou. [My brother-in-law] handed me his rifle and said, ‘here, you go after that one.’ I’d never shot that rifle before. I walked back 10 feet, I aimed, and I missed, and I looked at the rifle and I said, “what’s wrong with this thing?” But the second shot, I got him. My very first caribou.”

Mr. Swan continued to hunt caribou after he returned to the region from high school, throughout the 1980s and 1990s. “Normally, in the Western Arctic between the mid-80s and the mid-90s, we would see caribou [near Kivalina] in mid-July. Then they started coming later – way later – after freeze-up. Then the numbers started to drop.”

Mr. Swan shared his concern about the current state of the herd. “Sometimes, it is really difficult to subsist – you have to live with what you are able to get. When you harvest from the land,

“Conservation is important and subsistence users are really good at that.”

-Austin Swan, Guest Elder

you try and keep from over-hunting. Our people like to share the meat. We share the meat. Conservation is important and subsistence users are really good at that.”

Lastly, Austin closed with the following advice for the Working Group and all in attendance: “None of us probably know what happened to our herd, but it’s really dire right now. We have to be careful with our caribou, because if we’re not careful, we’re gonna lose them. Whatever regulations we put out there, they need to work. Whatever the regulations are, remember that we are not able to really control wildlife. My advice to you: do your best to take care of the caribou.”

Highlights and actions from the Working Group

- “ Alaska Department of Fish and Game and National Park Service biologists shared updates on current population estimates and trends. The Working Group voted unanimously afterwards to keep the herd management level at “Preservative, Declining” under the Cooperative Management Plan.
- “ The Working Group voted unanimously to submit a proposal to both the Federal Subsistence Board and the Alaska Board of Game to change regulations from a bag limit of five caribou per hunter per day, to a bag limit of four caribou per hunter per annual year, only one of which may be a cow. Later in the meeting the Working Group also voted against motion to submit an emergency petition to the Alaska Board of Game to hear this proposal next year, rather than two years from now, when Western and Northern Alaska proposals will be heard.
- “ The Working Group voted to send a representative to the North American Caribou Workshop and Arctic Ungulate Conference (see p. 7).
- “ The Working Group discussed updates to the proposed Ambler Mining Road (see p. 10). The Working Group already voted in 2018 to oppose the road; there were no motions made or voted on regarding the Ambler road.
- “ After a presentation from the Alaska Division of Subsistence on how household surveys were used to obtain much-needed caribou harvest data (see p. 4), the Working Group voted to encourage agencies to come up with a comprehensive solution to obtain accurate harvest data from communities, which would expand outside of the RC907 and RC800 registration hunt reports.
- “ The Working Group voted to draft a letter to the Department of the Interior to add permanent protections to the calving grounds in the National Petroleum Reserve Alaska, including increasing the northern boundary to where the protection applies.

Letter From the Chair - Vern Cleveland

I hope people hear that the caribou count is low, both here in the Noorvik area, as well as the southern side of the WAH range. I ask that people take only what they need. I have not seen caribou in a few years, and I love to hunt, and so I am always looking for caribou.

This summer, I hope we get another census count. The weather has been really difficult, and I don't know how the caribou survive with all of the rain we have had. Right now (April 2023), in Noorvik, we have three or four inches of ice on top of the snow. It must be difficult for the caribou to dig through.

The main thing is that we take what we need, and not waste. We should especially target bulls only, not females, because that is what is going to be the best for the herd.

I look forward to talking to you at the next Working Group meeting, or elsewhere in our communities. I would like to thank all the Working Group board members, and staff from member agencies who keep the Working Group going. I would also like to thank the Working Group for allowing me to chair the group for another term. I hope I can do a good job for everyone involved.

Sincerely,

Vern Cleveland



2022 Census Reports Only 164,000 WAH Caribou

164,000 is the lowest count since early 1980's

During July of 2022, biologists with Alaska Department of Fish and Game took advantage of favorable weather conditions to photograph the Western Arctic Herd. During warm weather, caribou often gather into large groups around snow fields, providing an opportunity to photograph and count the herd. This last photocensus indicated a continuation of the decline that has afflicted the herd in recent years. The final count of 164,000 caribou was almost a 13% reduction from the 2021 number of 188,000. This census marks the lowest population estimate in 40 years.

What else do we know about this herd, beyond the count? In addition to photographing and counting caribou, biologists also monitor the calving rate, calf survival, bull-to-cow ratio, and adult caribou survival as indicators of overall herd health. Recent surveys indicate that calving rates are down slightly, the number of calves that survive their first year is average, and that the bull-to-cow ratio is at a healthy level. However, one important factor that is troubling for managers is the current adult cow survival rate.

Adult cow survival can be a telling indicator of population growth or decline. Since cows are responsible for producing the next generation of caribou, they must survive at a reasonably high rate for population growth to occur. During past periods of growth in the Western Arctic Herd, cow survival rates have hovered around 85% or higher. Compare that to recent years, when cow survival has averaged around 75%. This is too low for growth to occur, and is concerning.

Why is the cow survival rate down? So far, biologists have been unable to identify a single cause. When a collared cow dies, biologists examine evidence left at the mortality site. From what they have been able to determine, predation, hunter harvest, natural mortality due to weather, and other causes are all factors in cow deaths, but none of these seem to be happening at exceptionally high rates. Biologists also monitor for disease, and there is no evidence that sickness is behind the decline, either.

What can be done? One important thing to consider is that caribou populations normally cycle up and down. In 1975, the population estimate for the Western Arctic Herd was 75,000 - this is less than half the number ADF&G counted last summer. Then only 10 years later, the

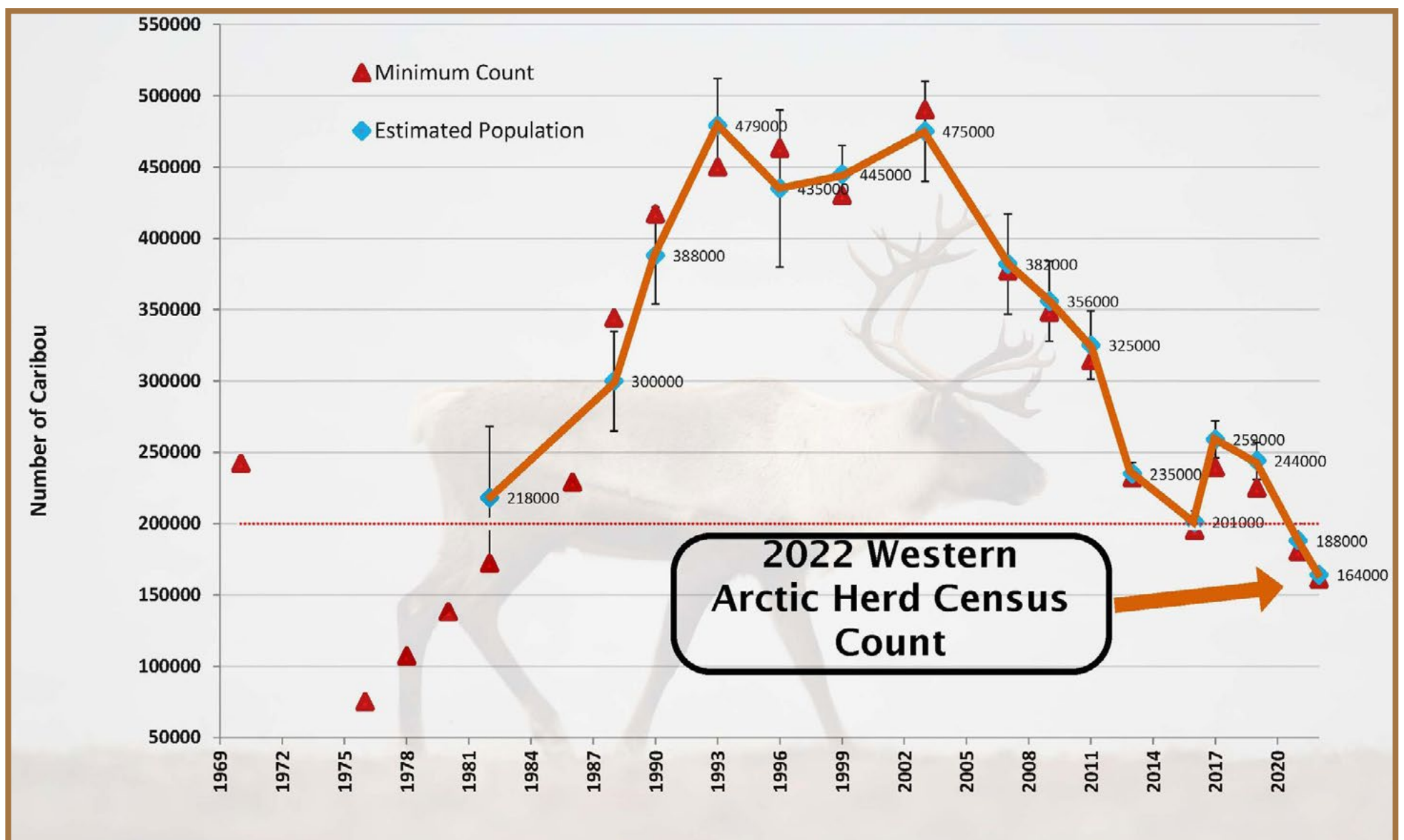
herd grew to 343,000, demonstrating the capacity for this herd's population to rebound. Unfortunately, none of the tools biologists use can predict if, or when, the decline might reverse its course.

This leads us to focus on one of the few things that we can change: a concerted effort to improve caribou survival, especially cow survival, by reducing human harvest. If hunters and biologists can work together to track and reduce the harvest, the chances of a population rebound may increase.

Improve the chances of the WAH rebounding by harvesting bulls instead of cows.



Above: the 2022 ADF&G Western Arctic Herd census team.



Help the Herd: Report Your Harvest

Hunter harvest data in much need, but short supply

Caribou harvesters are busy. Beyond the work of hunting and processing game, there is equipment to maintain and hunting licenses to keep current. And hunters, like most folks, have families, jobs, and everything else. Why is it important that hunters take the time to report their caribou harvests?

Harvest reporting helps the herd: knowing how many caribou are being harvested, and whether those animals are bulls or cows, is a crucial part of understanding a caribou herd's overall condition. In biological terms, there is a concept called "harvestable surplus," meaning the number of animals that can be harvested without reducing the herd's ability to sustain itself. If hunters are currently taking more animals than the harvestable surplus, the herd population will be unable to recover, and will continue to decline. Right now, because we don't know the total harvest from the Western Arctic Herd, it's hard to get a clear picture of everything influencing the decline in the herd's numbers. By reporting harvest, you are helping the herd, and those who depend on it.

Harvest reporting helps managers: the Working Group's Management Plan for the Western Arctic Caribou Herd is based around three main pieces of information – population (how many caribou there are), trend (whether the number of caribou has been going up or down), and harvest (number of caribou taken by hunters). Additional data such as cow and calf survival is

part of the picture, but these three are the biggest factors in the Working Group's management recommendations. Based on the population and trend, managers can calculate a sustainable harvest target.

After comparing actual harvest to the sustainable level, managers decide if changes are needed. Hunting regulations, such as bag limit and season dates, can be adjusted to either reduce the number of caribou being taken, or allow for more harvest when times are good. Without knowing what the actual harvest is, managers have to operate on partial information, and may end up being more conservative with their recommended actions in order to avoid overharvest. This, in turn, impacts hunters and users of caribou.

At their 2022 annual meeting, one of the major points that Working Group members emphasized was that they really need solid harvest data to do their job well, and to be effective in their mission (to ensure the long-term conservation of the herd for the benefit of all people now and in the future).

Harvest reporting helps the community: when hunters report their caribou harvests, this creates a written record to document their community's combined use of caribou. This information is useful to biologists but also can help the community.

In times when a wildlife population drops,

managers sometimes have to divide up how many animals can be harvested by different users. There are laws that prioritize subsistence uses above other types of use. In these situations, available recorded data on subsistence harvests is what guides managers on how to divide up who gets what proportion of the available harvest. A full and accurate record of a community's needs will help to ensure they get a fair share.

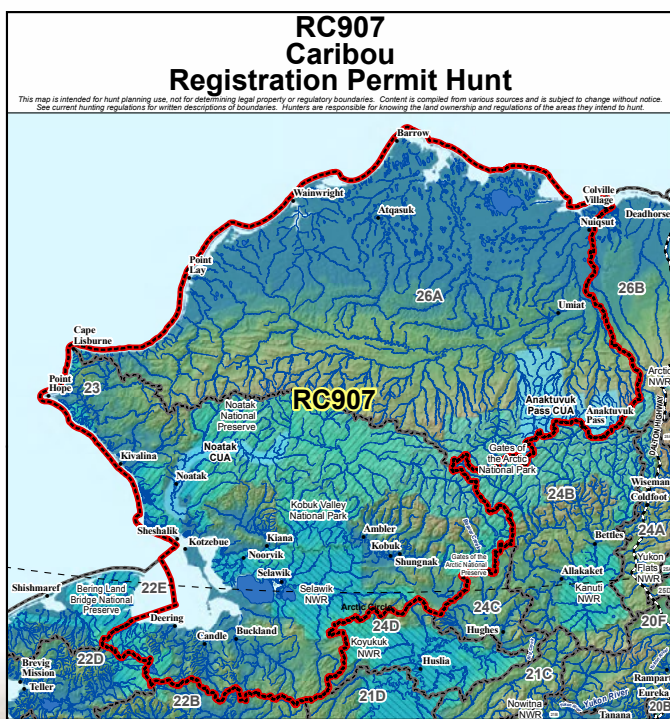
At the 2022 meeting, Working Group member Eli Nukapigak from Nuiqsut described

Not enough harvest reports are returned each year by hunters to detect short-term changes in harvest

how his community has a system of harvest reporting in place to track their subsistence uses. This is important for Nuiqsut to monitor and to advocate for their needs when they are surrounded by increasing amounts of development activity. Mr. Nukapigak spoke up to encourage other subsistence users to record their harvests for the benefit of their communities.

Hopefully, this information helps you understand why you should take the time to report on your caribou harvest. You can do this via the RC907 caribou permit from the Alaska Department of Fish and Game, through the mail or online, and by participating in harvest survey interviews that take place in your community.

Caribou Hunting? Grab Your Free Permit!

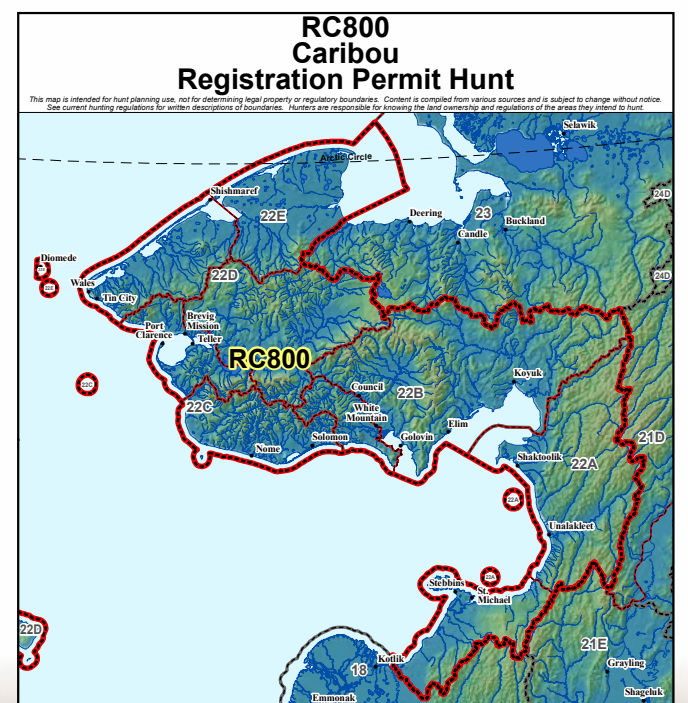


Obtaining an RC800 or RC907 caribou permit, and reporting your harvest, is the easiest way for ADF&G to understand how many caribou are being harvested. This is critical for the proper management of the herd.

To obtain a free permit, scan the QR code below or visit www.adfg.alaska.gov and search "hunting permits." If you need to buy a hunting license first, you can click "Buy Licenses and Locking Tags."



Scan the QR code to obtain your hunt permit



Where Are the Caribou?

Locals and scientists document changing caribou movement patterns

Where are the caribou? With the Western Arctic herd in decline, this is perhaps the most common question asked by rural Alaskan hunters within the herd's range. The area the Western Arctic Herd uses is related to the size of the herd itself: larger herds tend to use more area, and smaller herds tend to use less.

In the late 1990's, the WAH was expanding and ranged south of Unalakleet. Today, with the herd at just 1/3 the size it was at its peak in 2003, the WAH's range is much smaller. This means more and more villages are not seeing caribou and are wondering where the caribou are. For example, 3/4 of the herd spent the winter of 2015-2016 on the central Seward Peninsula, but not a single collared WAH caribou has been there for the last five winters. The lack of available caribou has greatly impacted the subsistence harvest of many villages in the region.

Meanwhile, in other areas, it can feel like there are still plenty of caribou. During the winter of 2021-2022, WAH caribou were just outside, and sometimes right in, Kobuk. When this happens, it can be hard to think the herd is in decline, but the increasing number of villages asking "where are the caribou?" tells the real story.

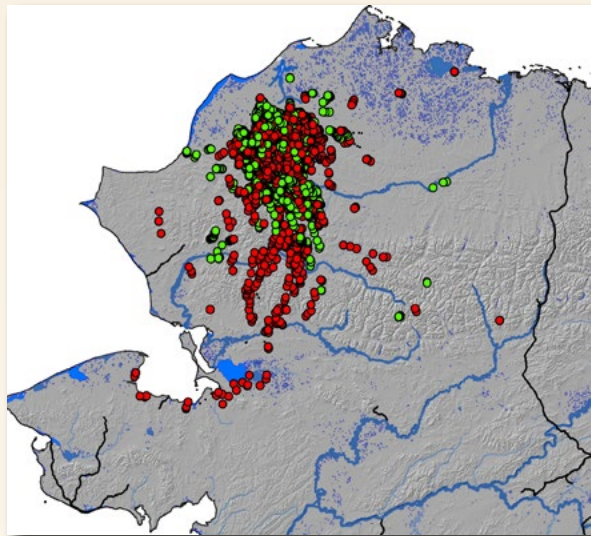
Fewer caribou are migrating across the Kobuk River during their fall migration. For years, over 80% of the collared caribou would cross the Kobuk heading south to their wintering grounds. In recent years, only about 1/3 have crossed the river, with less than 6% of collared caribou

crossing in 2020. Most WAH caribou have remained in the Brooks Range during winter where they are difficult to access. Besides fewer caribou migrating, the caribou are also migrating later in the year. Just ten years ago, the first caribou often crossed the Kobuk River in late August. In 2020, the first collared caribou did not cross until the beginning of November (more than a 2-month delay in the span of a decade). This remarkable change also impacts how, when, and what hunters harvest.

Biologists believe caribou choose different winter ranges largely due to food abundance: which is supported by local knowledge. Lichens, the primary winter food for caribou, are slow growing and can get depleted, so caribou may move to different areas with more lichen. Changes in winter range may also be related to changes in the herd's size and climate change. As Traditional Knowledge and Western science have documented, accumulating snow and dropping temperatures help trigger fall migration. With temperatures climbing four times faster in the Arctic than the rest of the planet, snow and cold temperatures are coming later and later. Snow patterns and vegetation are changing as well, both of which can impact where caribou go.

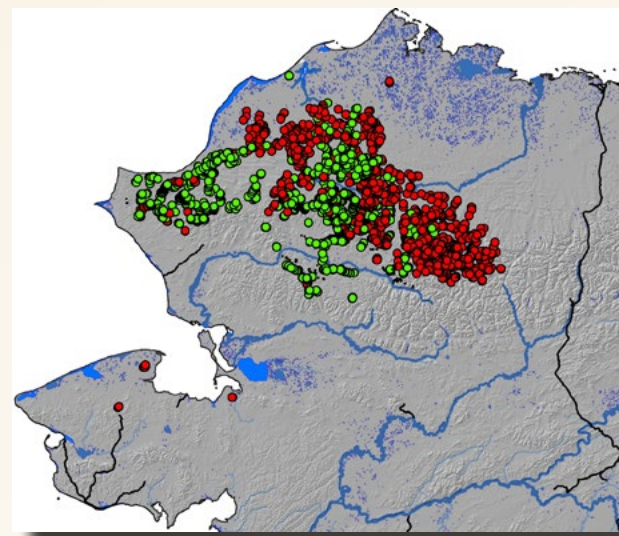
Caribou are world-class movers: they can be here today and gone tomorrow. With the WAH in decline, it will be up to all of us to do our part to ensure they keep returning generation after generation.

Calving



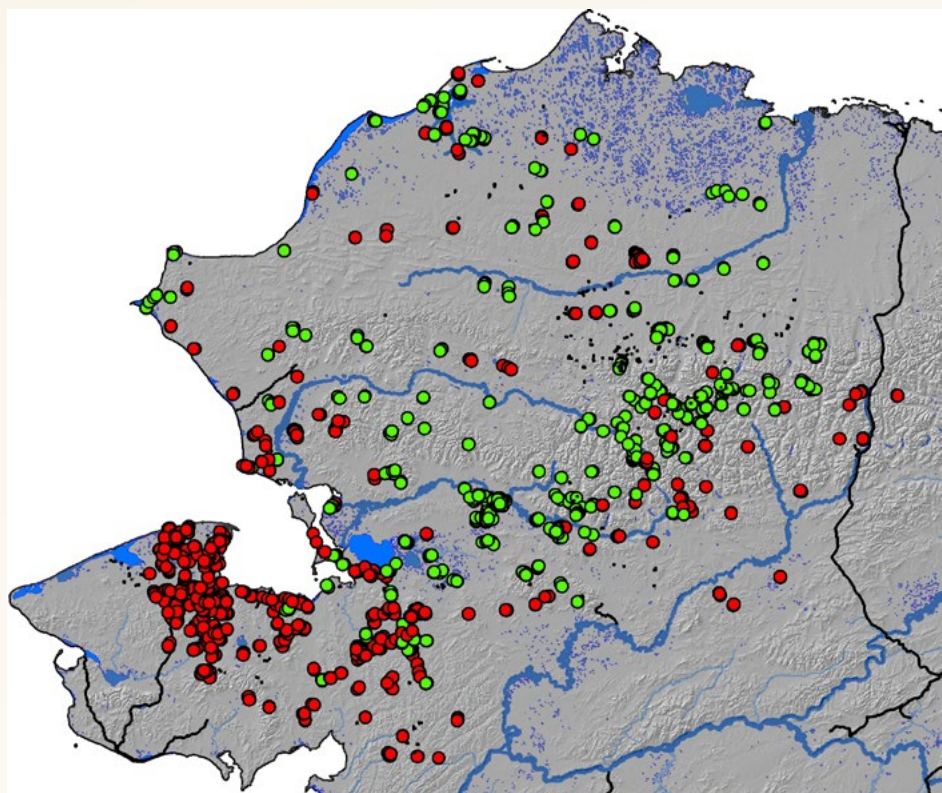
Due to various factors, Western Arctic herd caribou locations during calving are not consistent year to year. In this image, red dots show collar locations during calving over the years 2010-2017. Note locations during calving season range from the upper Koyukuk, eastern Teshepuk Lake, and as far south as the northern Seward Peninsula. Collar locations from 2018-2022 (green) still congregate mostly around the Colville River headwaters, but there are fewer outliers, and those outliers are closer to the bulk of the herd.

Summer



The summer collar locations of Western Arctic Herd caribou, comparing 2010-2017 summer collar locations (red) and 2018-2022 summer collar locations (green). Note that some Western Arctic Herd caribou in past years spent summers as far south as the Seward Peninsula, and the bulk of the herd stayed farther east than in 2022. Note that about a third of collared caribou migrated to the western side of the North Slope in 2022.

Winter



While there are some differences between 2010-2017 and 2018-2022 summer and calving collar locations, we see differences pop up immediately when comparing winter collar locations. While the bulk of the Western Arctic Herd used to overwinter south of the Brooks Range on the Seward Peninsula - near communities like Deering, Buckland, and Shishmaref - most of the herd stayed north of the Brooks Range from 2018-2022. There was no centralized group, with many different smaller portions of the herd scattered across the North Slope and Brooks Range.

Below: Kyle Joly, caribou biologist with the National Park Service, puts a collar on a caribou at Onion Portage on the Kobuk River.



- Collar locations from 2010-2017
- Collar locations from 2018-2022

Bull or Cow? Test Your Skills on the ADF&G Website!

With the Western Arctic Caribou Herd in continued decline, it is increasingly important to target bulls for harvest. A reproducing cow only produces one calf per year, but a single bull can breed with many cows. This means more bulls can be harvested from a population without impact to what wildlife biologists call “recruitment,” the number of calves born each year.

While some hunters already successfully practice identifying the sex of caribou, learning the skill can be challenging. Both male and female caribou have antlers during some of the year, and small bulls and large cows are about the same size. To help hunters make the distinction, the Alaska Department of Fish and Game prepared an online guide and quiz to complement the existing “Bull or Cow?” caribou sex identification guide.



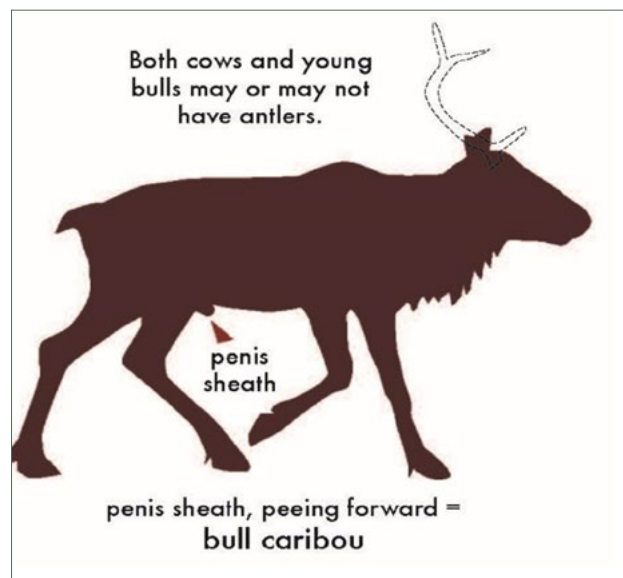
The guide and quiz are available at <https://www.adfg.alaska.gov/index.cfm?adfg=caribouidentification.bull>, and are similar to other wildlife sex / age pages on the ADF&G website, such as the muskox identification page and quiz.

The guide focuses on the most practical and conclusive ways to identify caribou genders. Bull and cow caribou usually have differently shaped white rump patches; bulls have a narrower, heart shaped patch, while cows have a broader, rectangular shaped patch. When viewed from the side or rear, bulls should have visible genitalia – testicles in the rear and a penis sheaf if viewed from the side. Cows must be viewed from the rear and usually show a dark vulva patch.

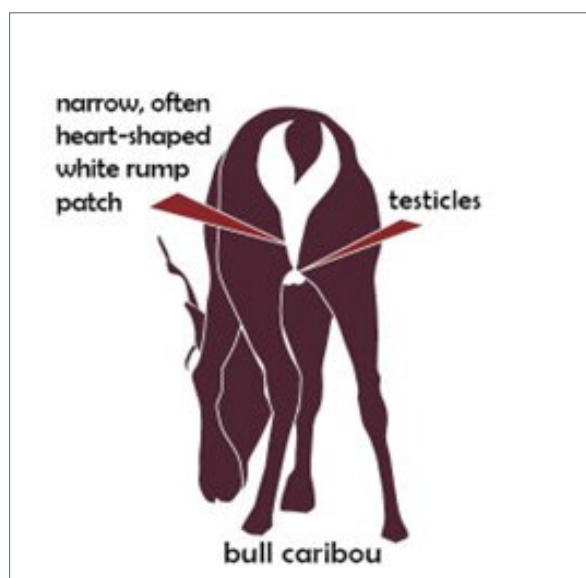
It is important to try to make a “positive identification,” looking for the presence, in addition to absence, of reproductive organs. For example, a cow’s vulva is not always obvious, leading some to mistake a cow as a bull when viewed from the rear. If viewing the animal from the side or rear is inconclusive, wait until the animal turns. Using a combination of characteristics, like the rump patch, antler growth, and absence or presence of genitalia, can be helpful when making a decision.

Identifying caribou genders does take time, patience, and usually, decent optics. It’s likely hunters will have to be a couple of hundred yards away or closer before a positive identification is possible through medium-power binoculars. This means hunting in a slower, more practiced fashion that allows time to get closer. However, taking the time and care to select bull caribou for harvest will protect the health of the herd in the long run, meaning generations to come can continue to use these animals as an important resource.

Bulls from the side



Bulls from the rear



ABOVE: bulls. Note the penis sheath in both caribou.



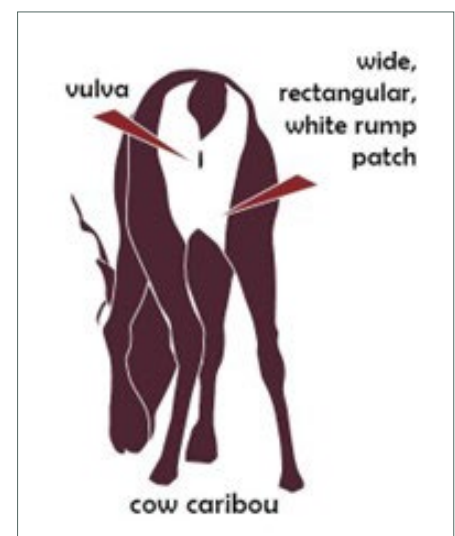
ABOVE: A bull. Note heart-shaped rump patch, and no vulva.

Cows from the side



ABOVE: a cow. No penis sheath is visible.

Cows from the rear



BELOW: a cow. The vulva is clear against the wide, white rump patch.



Use the graphics and pictures on the previous page to brush up on your skills, then try to ID the caribou below! (Check answers at the bottom.)



Answers: 1. Two antlerless bulls (note penis sheaths). 2. Center: a bull (note penis sheath in front of left rear leg). Caribou on right is probably a bull (stocky antlers) but we would need a better look to be sure. The caribou behind is probably a cow, due to small antlers. 3. Left: a cow (no penis sheath). Right: a bull (note vulva, wide rump patch). 5. A cow (no penis sheath). 6. A bull (note penis sheath just visible). 7. Left to right: bull, cow, bull, cow (note presence or absence of vulva and rump patch shapes). 8. Left to right: cow (note vulva and wider rump patch); the caribou to the right is young and can't be conclusively identified from this angle.

KIDS' CARIBOU CORNER

WORD SCRAMBLE

E E D N E I R R

The domesticated version of caribou

H L C I N E

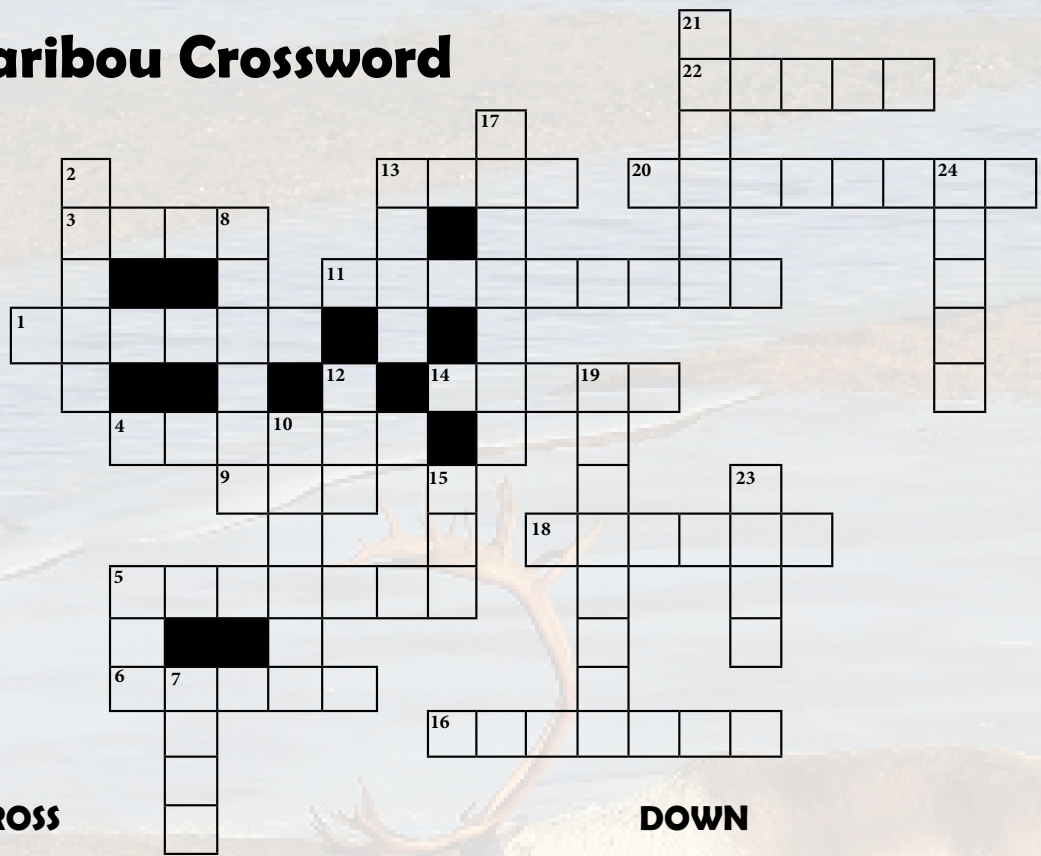
Grows slowly and is a food source for caribou

D A R T N U

The tree-less land on which caribou roam

Answers: 1. Reindeer, 2. Lichen, 3. Tundra.

Caribou Crossword



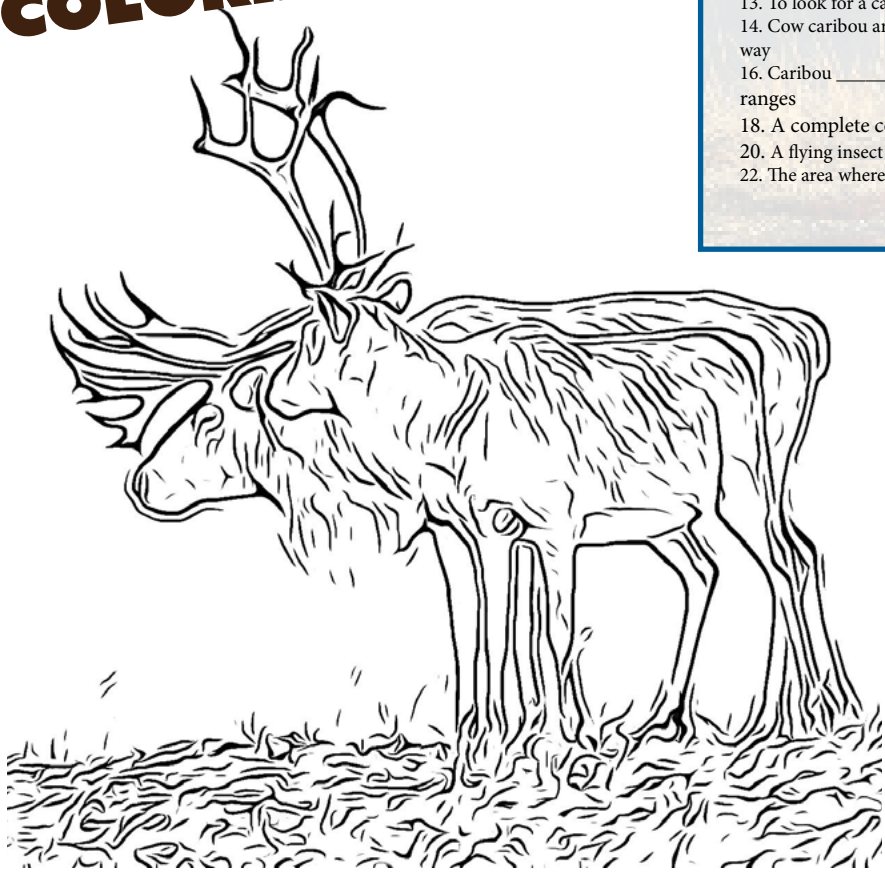
ACROSS

1. A type of fly whose larva live inside caribou skin in the spring
3. Another word for "trail" - a herd of caribou might make many of these after passing through an area
4. Caribou hooves act like this tool, digging into the snow to find food below
5. The _____ ground is where caribou go to give birth and raise their young
6. Bull caribou often have more of this color on their sides in spring
9. Where caribou live, the tundra is often _____ in the summer and spring ("soggy")
11. A scientist who studies animals like caribou
13. To look for a caribou for food
14. Cow caribou are usually at the _____ of the herd when it is traveling, leading the way
16. Caribou _____ (travel) each year to visit their winter, summer, and calving ranges
18. A complete count of all caribou in a herd (see page 3)
20. A flying insect that feeds on caribou blood (and sometimes your blood!)
22. The area where a herd of caribou lives over the course of a year

DOWN

2. A term describing how caribou hooves spread apart
5. A female caribou
7. The hard part of a caribou's feet
8. Caribou hair in winter is _____, or empty, so it traps lots of air and keeps caribou warm
10. The fine fur that covers caribou antlers when they are growing
12. When attaching radio collars, biologists sometimes use this tool to keep young caribou still. It's the same word for a tool that catches salmon.
13. Another word for fur (see 2 down)
15. Caribou use their sharp hooves to _____ through snow for food
17. Caribou are the only members of the deer family where both bulls and cows grow _____
19. The caribou rut has ended by this month
21. The large mountain range that the Western Arctic Caribou Herd migrates over each year
23. A male caribou
24. Inupiaq word for "caribou"

CARIBOU COLORING



Crossword answers: ACROSS. 1. Warble, 3. Path, 4. Shovel, 5. Calving, 6. White, 9. Wet, DOWN. 2. Splay, 5. Cow, 7. Hoof, 8. Hollow, 10. Velvet, 12. Net, 13. Hair, 15 Dig, 17. Antlers, 19. November, 21. Brooks, 23. Bull, 24. Tuttu.

How many caribou can you find?
(Answer below)



Original photographs above by Jim Dau.

Answer: Nine

New Caribou Kit For Educators!

The Alaska Department of Fish and Game has assembled an educational kit for educators, with a focus on Western Arctic Caribou.

The kit will contain a tanned summer and winter caribou hide, caribou, moose, and muskox hooves, caribou antlers, and a teacher's guide with a series of caribou-related activities.

All educational kits from Fish and Game are free to check out; school districts only need to pay for return shipping. The Caribou Kit will be in addition to a Skull Kit, Tracks and Sign Kit, Bear Kit, Furs Kit, Trail Cam Kit, and Permafrost Kit.

To reserve a kit, use the QR code at the right to link to the Fish and Game Region 5 kit checkout page, or visit www.adfg.alaska.gov and search "Teaching Kits."

Use your phone's camera to scan the QR code on the right and link to the Fish and Game Region 5 educational kit checkout page!



Above: real caribou, moose, and muskox feet are part of the caribou kit. Students can compare a muskox hoof (left) with a caribou hoof (right).

Right: students can observe how caribou feet "splay" (spread apart), making them unique in terms of their weight distribution on snow. Which do you think is more likely to sink into the snowpack - a caribou, a moose, a muskox, or you? Students can use real hooves, plus their own feet, to figure out who will stay on top!



BEAR KIT



TRACKS KIT



PERMAFROST KIT



SKULL KIT



NEW! CARIBOU KIT



FURS KIT

Northern Alaska Caribou Herds

Northern Alaska Caribou Herds

- Central Arctic Annual Range
- calving area
- Porcupine Annual Range
- calving area
- Teshekpuk Annual Range*
- calving area
- Western Arctic Annual Range*
- calving area
- major roads

*Annual range based on female locations only



What makes a caribou herd unique? In Northern Alaska, there are four caribou herds: The Western Arctic herd, Teshekpuk herd, Central Arctic herd, and Porcupine herd. Each herd overlaps with at least one other herd's annual range (the places where these caribou can be found each year). The calving areas distinguish one herd from another.

Note that each herd has a largely distinct calving area. These areas help to separate one herd from another, even when caribou from separate herds might forage side by side at other parts of the year.

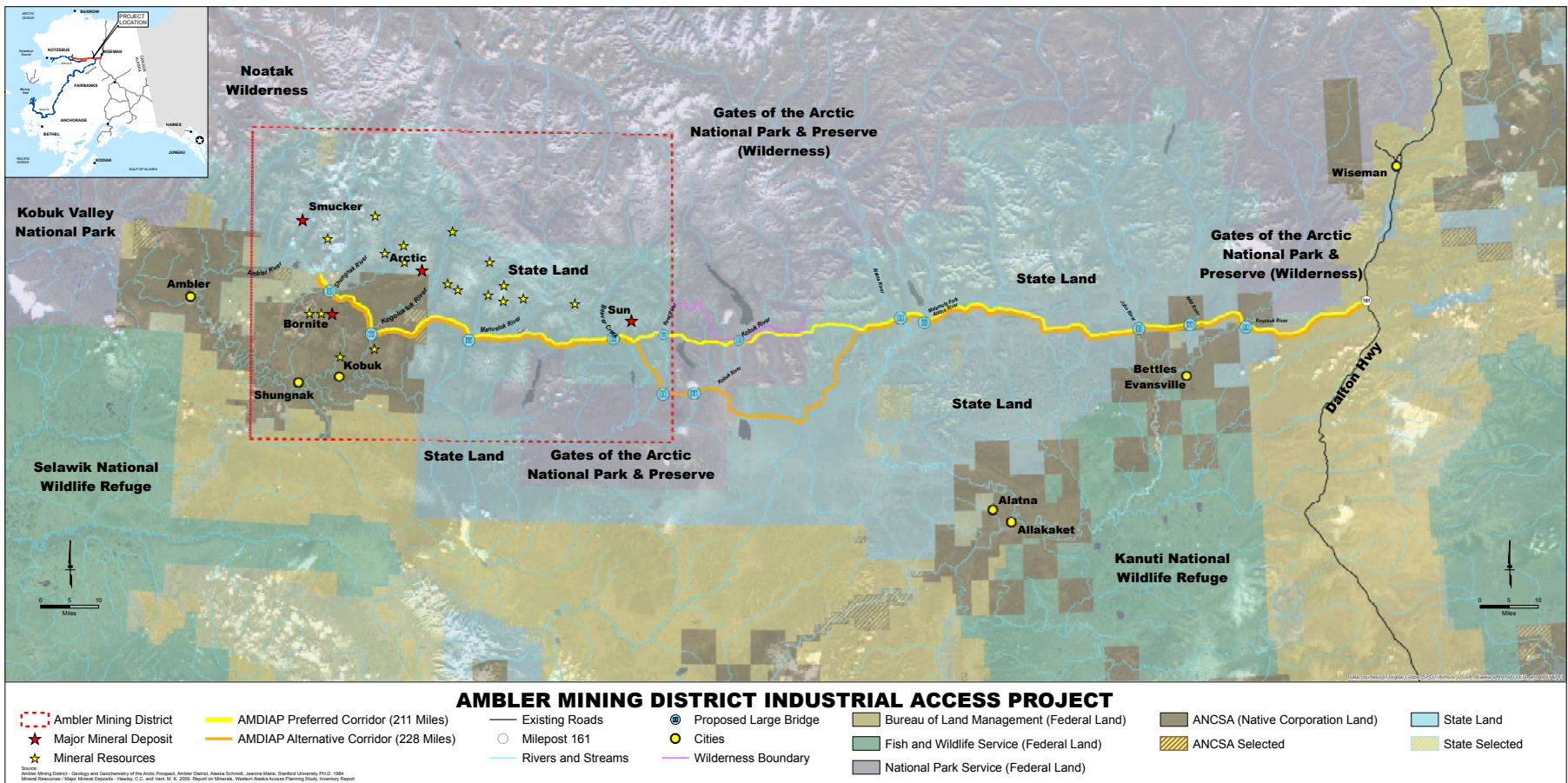
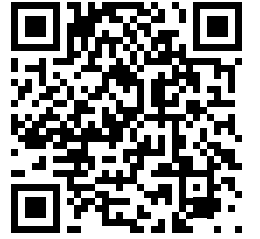
Ambler Mining Road Update

The Bureau of Land Management (BLM) is working on a Supplemental Environmental Impact Statement (SEIS) for the Ambler Mining Road and opportunities for public comment are coming.

In 2020, the BLM approved permitting of an Ambler access road. However, two lawsuits challenged this decision, one by the Tanana Chiefs Conference and several villages in the region, and another by conservation groups. In May 2022, the US District Court for Alaska identified problems with the BLM's Ambler Road analysis and ordered BLM to conduct additional analyses to address the issues. This resulted in the current SEIS process.

Scoping for the SEIS was conducted from September 20 – November 4, 2022, providing an opportunity for the public to provide input on additional topics and information that should be considered in the SEIS. The BLM is now working on a draft SEIS document, which it plans to release in September 2023. This will include an opportunity in October 2023 for further public comment on the draft document.

The Working Group voted in 2018 to oppose creation of the Ambler Road out of concern for the impacts it will have on the herd and its users. Since that time, the Working Group has consistently submitted comments in opposition to the road and plans to continue to engage in the SEIS process. Scan the QR code at the right for more information on the project and opportunities to comment.



2023 Ungulate Conference Update



The joint meeting of the North American Caribou Workshop & Arctic Ungulate Conference took place in Anchorage May 8-12, 2023. Around 600 people gathered from 10 countries, including over 100 Indigenous participants and representatives of Indigenous organizations and advisory groups. Several Western Arctic Herd Working Group members took part in panel discussions or presentations.

Conference participants and activities embodied the theme of *Crossing Boundaries*, which reflects not only that arctic ungulates (caribou, moose, musk oxen, Dall sheep, and reindeer) cross landscape and management boundaries, but also that the knowledge and value of these species crosses the boundaries of Western science and Indigenous Knowledge. Thus, it is crucial for us all to work together and share knowledge.

Declining caribou herds dominated the discussion at the conference. Vern Cleveland, WAH chair, participated in a panel, “Caribou Stewardship in a Changing Arctic.” Many of the 270 contributed talks and posters shared during the week addressed examples of innovative work with Indigenous-led research and management.



Above: Vern Cleveland, WAH Chair, speaks during the 2023 North American Caribou Workshop and Arctic Ungulate Conference.

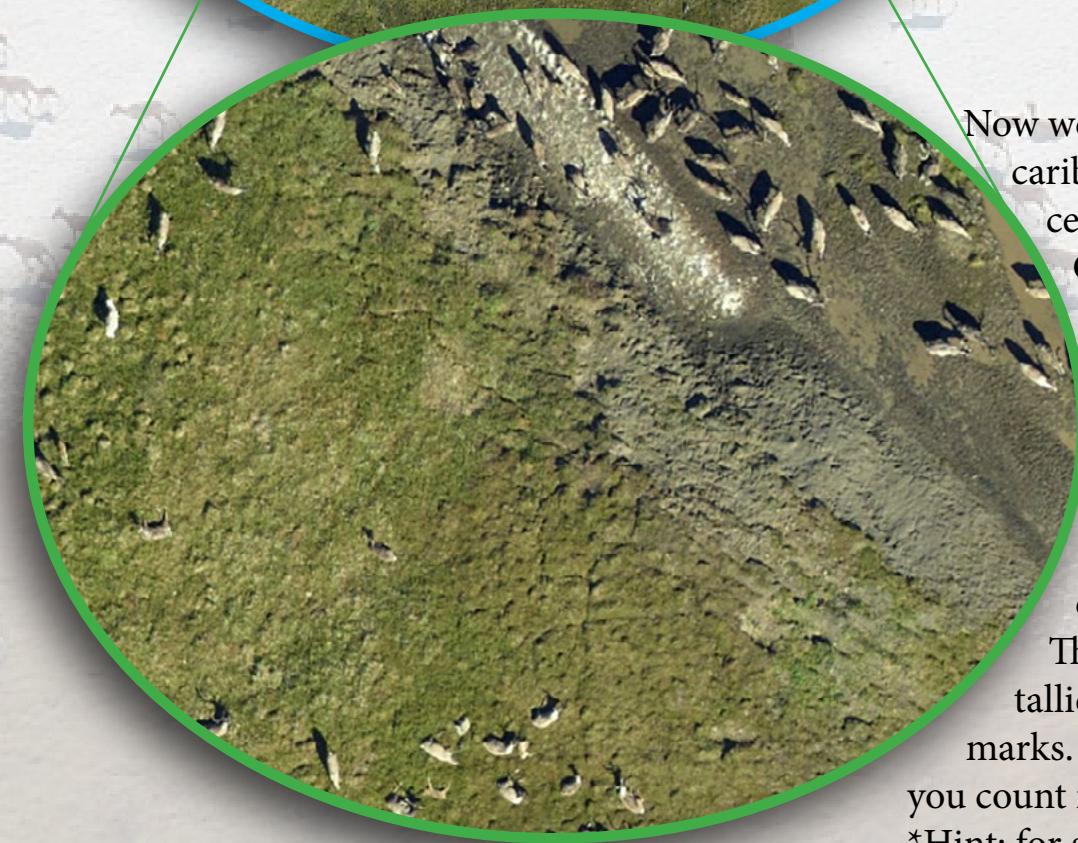
Zoom In... How Many Caribou Can You Count?



Left: the 2023 WAH Census was conducted with high-resolution photography. Biologists fly across the herd range, finding all groups that are visible. They take pictures of each group, to be counted later. This first image, on the left, is from high altitude - the caribou are hardly visible. Follow the pictures to see what happens when you zoom in!



In this second image (left) we can start to make out the bodies of caribou. They appear as tiny dots against the green tundra.



There are at least 63 caribou in this lower image.

Now we can count some caribou! For the census, a Fish and Game technician looking over hundreds of images uses a computer program to put a marker on each caribou. The program tallies the total marks. How many can you count in this picture? *Hint: for standing caribou, look for shadows against the ground.

Below: warm, buggy weather is best for counting caribou. The census is usually done in July, when high temperatures during peak bug season coincide to drive caribou toward the last snow fields. Against the white background, the caribou are also easier to count reliably.



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Want to learn more?
Follow us!
@ADFGWildlifeNorthwestAlaska
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@GatesOfTheArcticNPS
@BeringLandNPS

Western Arctic Caribou Herd Working Group



L-R: Bill Barnhardt, Morris Nassuk, Jake Jacobson, Johnson Eningowuk, Pollock Simon, Neil DeWitt, Enoch Mitchell, David Kilbourn, Tim Fullman, Vida Coaltrain, Charlie Lean, Tom Gray, Cyrus Harris, Morris Nakaruk.

Working for you and caribou!

Contact your local Working Group representative or one of the agencies to share comments, concerns or to get involved.

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

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
- Oscar Griest, Sr.
- vacant

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Please send questions regarding Caribou Trails to:

Alaska Dept. of Fish & Game Wildlife Education - Sierra Doherty
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To Report Violations call:
1-800-478-3377



Run on down to the next caribou meeting:

December 13-14, 2023

Anchorage, AK

Check the website soon for details!

www.westernarcticcaribou.net



This publication was released by the Alaska Department of Fish & Game to support the Western Arctic Caribou Herd Working Group and is printed in Anchorage, Alaska.