

Frequently asked questions: The Porcupine caribou and development in the Arctic National Wildlife Refuge

Why is development in the refuge an issue to the Porcupine caribou herd?

Development in Arctic National Wildlife Refuge, on the calving, post-calving and summer range of the Porcupine caribou herd, poses significant risks for one of the last, healthy, large-migratory caribou herds in the world and the people who depend on it.

While we recognize the importance of both caribou conservation and economic development for northerners, current experience and evidence provided in the Final Environmental Impact Statement (EIS) does not provide confidence that these risks can be effectively mitigated if development proceeds in Arctic National Wildlife Refuge.

The Arctic National Wildlife
Refuge includes parts of the
Coastal Plains of the Western
Arctic. Within it – an area
known as the 1002 lands –
represent the core of the
Porcupine caribou herd's
critical calving and post-calving
grounds.

Comprehensive scientific assessment by internationally recognized experts shows oil and gas development in the Arctic National Wildlife Refuge will increase the probability that the Porcupine caribou herd will decline. The likelihood of a decline increases as development becomes less restrictive.

The greatest impact from development on the Porcupine caribou herd will occur during the post-

calving period when cows and calves are most vulnerable; calf survival will very likely decrease as a result of development.

Development of calving and post-calving habitats in the Arctic National Wildlife Refuge, and a decline in the Porcupine caribou herd – as anticipated based on the science analysis – will very likely have serious, unavoidable and far-reaching impacts on the Gwich'in, Na-cho Nyak Dün, Tr'ondëk Hwëch'in, Inuvialuit and Inupiat in the Western Arctic who depend on these animals for food, clothing, and cultural identity.

These Indigenous rights are legally protected in land claims agreements and the Canadian Constitution. While many of these rights stop at the border, caribou do not, which is why Canada and the U.S. signed the International Porcupine Caribou Agreement in 1987. This agreement states "The Parties will ensure that the Porcupine



Caribou Herd, its habitat and the interests of users of Porcupine Caribou are given effective consideration in evaluating proposed activities within the range of the herd." After decades of development in some areas with caribou, the effectiveness of many proposed mitigations remain unproven and documented effects of development are still occurring.

What does the science tell us?

Development of the 1002 lands in the Arctic National Wildlife Refuge will result in decreases in calf survival, overall herd size and resilience.

Calving, post-calving and early summer periods are critical for this herd's survival. The greatest impact from development is expected to occur during the post-calving period when a cow's energy and protein demand doubles. Based on several independent scientific analyses, calf survival will likely decline significantly with development in any of the habitats that are critical for the herd.

The herd is currently at a historic high (218,000); eventually, it will naturally decline to a population low (possibly as low as100,000) as part of its multi-decadal cycle. There is a very good chance, based on scientific assessment, the herd will suffer an unprecedented, major decline with full development of the 1002 lands described in the EIS. A major decline outside the normal range could mean that the herd is unable to recover and rebuild their population.

Caribou populations are known to fluctuate over time; however, the Porcupine caribou herd is one of the slowest growing migratory caribou herds in the world. This has meant that, in the absence of development in their critical range, fluctuations have been less dramatic than other caribou herds. Lower productivity means that the smallest impact from development will come from slow herd growth. At worst, development will make population declines more rapid.

If the herd is unable to rebuild its population by having enough calves survive past the first two critical months of life, the herd will not be able to sustain itself and eventually will decline to population sizes below the herd's natural range of variability. Once this occurs, it will be very difficult for the herd to recover.



An independent, defensible scientific analysis was conducted by internationally-respected experts using more than 40 years of scientific monitoring and comanagement data from the Porcupine caribou herd. This analysis was done under contract to the Government of Yukon's Department of Environment, the Canadian Wildlife Service, and the Government of the Northwest

Read the independent analysis based on more than 40 years of scientific monitoring and comanagement data of the Porcupine caribou herd at Yukon.ca

Territories' Department of Environment and Natural Resources.

What does the Environmental Impact Assessment issued by the Bureau of Land Management suggest?

The Environmental Impact Statement (EIS) is inadequate in describing the Porcupine caribou herd's biology, ecology and impacts from leasing to both the herd and the people who rely on it.

For example, the EIS doesn't consider the full lifecycle of the caribou and it underestimates the importance of the 1002 lands during both the calving and post-calving season.

The EIS does not adequately assess the impact on subsistence harvest and associated impacts on Indigenous Peoples, especially in Canada.

When discussing options and actions, the EIS does not:

- contemplate monitoring or adaptive management,
- assess cumulative impacts,
- provide scientific support that indicates the mitigations would be effective; and
- consider the herd's super groups (unique groups of thousands of animals that form as a result of insect harassment in late June and early July) in the mitigations.

Adaptive management is the process of adjusting mitigation requirements based on monitoring results. The EIS took a qualitative approach, rather than a fulsome quantitative analysis, which would be expected in an environmental assessment process.

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Yukon's Department of Environment, the Canadian Wildlife Service, and the Government of the Northwest Territories' Department of Environment and Natural Resources. You can read the full scientific report.

Can't we manage development so the impacts won't cause a decline in the herd's population?

We recognize the importance of both caribou conservation and economic opportunities for development. This important balance is achieved by finding ways to effectively mitigate the impacts of potential development on critical caribou habitat, behavior and health.

The risks of continued development, the effectiveness of mitigation of oil and gas infrastructure, and the long-term impacts of climate change on other caribou impacted by petroleum development such as the Central Arctic herd remain unclear. With the differences between the Central Arctic herd and the Porcupine caribou herd described in the <u>scientific report</u>, the level of risk for the Porcupine caribou herd is even higher.

Even with mitigations in place for the first round of leasing, future impacts could push closer to a full-development scenario. In addition, the EIS does not mention adaptive management or monitoring of mitigation measures so there is no confidence that development will adjust or stop if the Porcupine caribou is put at risk due to development.

Why can't the herd just move somewhere else?

Most of the Alaskan North Slope is already open for oil and gas development. The Arctic National Wildlife Refuge has been protected as public lands for wildlife and biodiversity for the benefit of all Americans.

Like salmon swimming against the current to their spawning grounds, caribou have an innate drive to return to their calving and post-calving grounds. They will always try to return.

Porcupine caribou have calved in Canada many times over the years when late snow melt has prevented them from reaching the Alaskan North Slope where the 1002 lands are located. However, vegetation is known to be less digestible and predation rates are thought to be higher on the Canadian North Slope. As soon as possible, the herd always moves west into the Arctic National Wildlife Refuge and into the 1002 lands in particular. Development would prevent caribou from fully using these lands, preventing



them from getting the high-quality forage they need in areas where they are at lower risk of predation. Science shows calves do better when they are born in the 1002 lands.

Ultimately, caribou need space: space to respond to a changing climate, space to react to variability between years, space to move away from threats. The Arctic National Wildlife Refuge provides this space – without it, Porcupine caribou have fewer options in our quickly changing world. All climate models and observations collected over the past decades show that the North Slope is warming earlier each season, and caribou are likely to calve more frequently in the 1002 lands as a result, increasing the area's importance.

Why is this herd important to conserve?

This herd is one of the last healthy large-migratory herds in the world. It has inherent cultural, spiritual, and ecological values and provides food for many communities.

The cultural importance of caribou to Indigenous Peoples in Canada and the United States goes well beyond their value as a food resource, and this cannot be understated.

Legally, Canada and the United States signed a treaty in 1987 aiming to ensure that caribou remain available to Indigenous Peoples for their cultures and subsistence. We must support those objectives.

Based on the results of the rigorous scientific assessment, it is highly likely that subsistence harvest for Indigenous Peoples in both Canada and the United States will decline because of this development. The agreements we have signed confirm that this is unacceptable.

If development goes forward, what mitigation efforts do you recommend trying?

The single most important mitigation is to keep development out of areas used by caribou during their critical calving and post-calving periods. The EIS is flawed in the way it identifies habitat that is critical for the Porcupine caribou herd (e.g. selection of only a portion of the calving and post-calving range that does not capture inter-annual variation in these behaviours) and this key factor needs to be properly considered.

Mitigation measures need to be monitored over time to ensure accountability and effectiveness. Adaptive management is currently not mentioned in any detail in the EIS but is an important element of most North American wildlife management systems.



What are Canada/Yukon/Indigenous Peoples doing?

The herd's calving and post-calving range in Canada is already protected by national and territorial parks, and protected areas.

Territorial, First Nation, Inuvialuit and Canada's Federal governments are in the process of protecting even more of the herd's range in Canada, including winter ranges through the Peel Watershed Regional Land Use Plan.

The herd is collaboratively managed in Canada under the Porcupine Caribou Management Agreement. All Parties to this agreement have membership on the Porcupine Caribou Management Board and have developed a Harvest Management Plan for the herd in Canada.

For more than 40 years, we have worked in partnership with Alaska to monitor this herd, learn as much as we can about it, and manage it sustainably.

Our experts, including community members, will continue this work and ensure all of this important information is available to the United States.

What can I do?

Visit the <u>Porcupine Caribou Management Board's website</u> (<u>www.pcmb.ca</u>) to find a lot more information about this important herd and why it should be protected.