The Porcupine Caribou herd is in decline.

What's next?

The PCTC reviewed photocensus results, recent indicators, and observations from hunters and biologists to provide their technical opinion on the herd's status. Their findings show the herd has declined from 2017, and the last two years appear to have had the largest declines.

Lower survival across age groups and low birth rates in young cows are contributing factors. It remains unclear when the decline will end.

The PCTC recommends continued careful monitoring and maintaining the current collaborative program. They also encourage hunters and community members to report observations of herd health to support ongoing management and research.

Porcupine Caribou Management Board

pcmb.ca

Peter Mather

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Porcupine Caribou Herd Monitoring Update

from the Porcupine Caribou Technical Committee (PCTC) Annual Summary Report 2024-25

How and why are we gathering knowledge about the Porcupine Caribou herd?

The users of Porcupine Caribou have been following and learning about the herd and its yearly cycle for generations.

Scientists and managers are also finding ways to track and learn more about the herd.

The information helps the Porcupine Caribou Management Board make recommendations on conservation and management of the herd and its habitat.

WHAT IS AN INDICATOR?

- Indicators are pieces of information that can be studied over time to track changes in the Porcupine Caribou herd's numbers, health, and habitat. They are updated each year using measurements, analysis, and comparison tools.
- Each year, we make an annual report of all the measured "indicators" for stakeholders.
- Monitoring the Porcupine Caribou helps us watch for changes with the herd.

PORCUPINE CARIBOU INDICATORS:

A photocensus was done in 2025. The survey found the herd was likely between 140,000 and 150,000 caribou with the best estimate being 143,000 animals.

Our computer population model uses other monitoring data to estimate the population size and also predicted a significant decline in the herd.

Both the population model and the photocensus clearly show a significant decline from the population peak of 218,000 caribou in 2017. We know the herd is much smaller, but are also confident that the herd remains in the Green Zone as identified in the PCMB's Harvest Management Plan.

Adult and yearling caribou wearing collars are tracked throughout a year to find an annual survival rate, and calves with collared females are monitored to learn their early life survival.

This year, adult female caribou survival (80%) was lower than average. Generally, the herd needs at least 85% of its adult females surviving each year for a stable or increasing population.

Male caribou and calf survival (to three weeks old) were also lower than we'd expect.

The calving rate for all female caribou was 88%, which is above average for the herd. This may be because many females in summer 2024 did not have calves, allowing them to be in good enough condition to get pregnant the following year.

At 3-weeks post-calving, surveys showed 55 calves for every 100 cows, which is below the long-term average.

Community and biologist observations combined with monitoring data indicate that fewer calves are surviving to their first birthday. We have been recording the weights of nine-month-old female calves as an indicator of food quality, overall maternal condition, and environmental conditions. Recent data suggests these conditions are not as positive as in the early 2000's.

Each year, hunters are asked to take samples from some of the caribou they harvest in the fall and measure the depth of backfat on the animals. Hunters can also rate the condition of caribou at that time of year.

In the fall and winter of 2024-2025, Porcupine Caribou were available to hunters around Old Crow. Caribou were generally not available to hunters in NWT. Not many samples were collected, but this year, hunters indicated the caribou were in generally good condition.

In 2024, wildfires burned an area of about 120 square kilometers (km^2) in the Porcupine Caribou herd's range, which is well below the 5-year average of 845 km^2. There were 10 wildfires in the herd's Yukon range in 2024, 5 fires in Alaska and none in the NWT.

None of the fires in 2024 were considered large. The 15 fires that burned in 2024 are well below the 5-year average of 28, and slightly above the long-term average of 13 fires. In 2025, lower snowpack and rapid spring melt led to early fire activity, but wet weather resulted in generally fewer smaller fires. Complete wildfire data for 2025 are not yet available.

Fires are a concern for caribou as they remove lichen, which is a primary food for caribou.

Harassment by mosquitos and parasitic flies (warble or bot flies) impacts the health and behaviour of caribou. It causes blood loss and spreads disease and the caribou use energy scratching and running away to seek relief. This affects their eating and time spent in good food habitats.

We use wind speed, how hot the days have been, and the timing of snow melt to predict the levels of insect harassment.

In 2025 the insect harassment models showed the highest number of days of mosquito and parasitic fly harassment in 76 years. Also, the intensity of the parasitic fly harassment was the highest in 76 years. Recent hot summers are resulting in earlier and worse parasitic fly conditions than in the past.

We study snow depth and hardness because when snow is deep or hardened by wind, caribou use more energy digging through it. This may affect the condition of the caribou and their unborn calves.

Snow in the Yukon was generally deeper than average near Old Crow and south toward Ogilvie. North of Old Crow, snow was less than average in Vuntut National Park with the exception of in the north of the park. Reports from Alaska described snow as deep and soft west of Arctic Village, while snow was shallow and hard from wind to the east of Arctic Village towards the Yukon border.

Snow lasted late into the calving period and migration from south of Old Crow was delayed.

The new United States federal government which took power in January 2025 is allowing more development of oil and gas in the herd's calving and post-calving grounds. They have gone back to a 2020 Environmental Impact Statement for upcoming lease sales, which removes restrictions and terms meant to be protective of caribou.

If coastal plains oil and gas lease sales and development occur in Alaska, major new disturbances and footprint will affect the Porcupine Caribou calving, post-calving, and summer ranges.

An application to do oil and gas work near Eagle Plains has also been received in the Yukon and is currently under consultation.

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