

The Caribou Debate

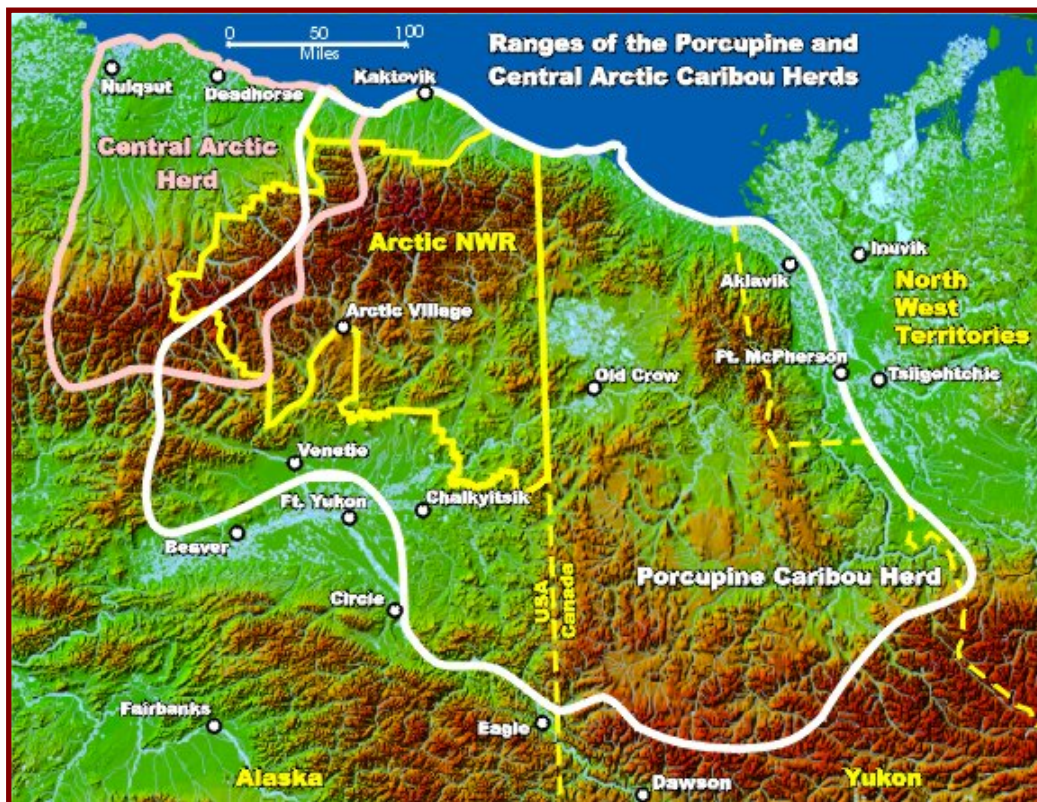
Gwich'in Steering Committee
122 First Avenue, Box 2
Fairbanks, AK 99701
907-458-8264 www.alaska.net/~gwichin

Effects of Oil and Gas Activities on Alaska's North Slope

- 1.) The Prudhoe Bay Oilfield complex has caused changes in the calving areas of the caribou.
- 2.) Contributed to the loss of preferred habitats which could accompany the spread of industrial activity. Likely outcome includes lower energy and nutrient status and summer weight loss of lactating females.
- 3.) Unless changes are made, exploitation of oil and gas reserves within the calving and summer ranges of caribou herds on the North Slope will likely have show similar effects.

– The National Research Council, 2003; sponsored by the National Academy of Sciences.

It's not just about caribou. It's about people... An Interior Department report in 1987 concluded that oil development would have a “major” impact on the herd, defined by “widespread, long-term change in habitat availability or quality which would likely modify natural abundance or distribution” of the species. Oil development will directly affect the lives of the Gwich'in, whose villages lie along the current Porcupine Caribou Herd migration paths.



One common misunderstanding about oil drilling in the Arctic Refuge is to compare the fate of the Porcupine Caribou Herd with the Central Arctic Herd. Below is a chart highlighting the differences between the herds.

	Central Arctic Herd	Porcupine Caribou Herd
Range	Summer range of 27,000 square miles from the Colville River on the eastern edge of the National Petroleum Reserve-Alaska to the eastern Arctic Refuge border defined by the Canning River.	Spans 155,000 square miles from northeastern Alaska across the northern Yukon to the Mackenzie Delta in the Northwest Territories.
Migration	Herd travels up to 120 miles	Herd travels up to 350 miles—the herd is larger and must travel longer to find enough vegetation; largest migration of any land mammal on earth
Coastal Plain	100-150 miles from ocean to mountains	10-40 miles from ocean to mountains
Population	32,000 caribou	Currently 123,000 caribou, but can reach 180,000 (5 times larger than the Central Arctic Herd); 7 th largest herd in North America
Dispersal from oil complex	Disperse to other coastal habitat with minimal predators	Disperse to foothills and mountains with higher predators and lower quality forage. The coastal plain is bracketed by the Beaufort Sea on one side, Brooks Mt. Range on the other—leaves herd with nowhere else to go
Calving Grounds	May birth up to 10,000 calves each June. Calving grounds in two different geographic areas: East of the Colville River to just East of the Kuparuk River and mostly south of the oilfield infrastructure (~15-30 mi from sea); also from Kadleroshilik River to the Canning River, where caribou are generally closer to the coast (inland 6-15 miles). Displacement from calving grounds occurred within 2.5 mi of pipelines, increasing habitat loss from 2 to 29 percent in 2000. A network of roads, pipelines, and facilities has interfered with their movements between coastal insect-relief and inland feeding areas.	May birth up to 40,000 calves each June in 1.5 million-acre coastal plain. A reduction in calf survival as little as five percent would be enough to prevent population growth in the Porcupine Caribou Herd. If more than five percent, the herd may not recover from a natural decline. The Porcupine Caribou Herd is already under pressures because it is, chased by predators, harassed by insects, challenged by river crossings, hunted and faced with difficult terrain and weather. The US Geological Survey predicts full development in the coastal plain would reduce calf survival by 8 percent. *

*As a result of conflicts with Prudhoe Bay industrial activity during calving and an interaction of disturbance with the stress of summer insect harassment, reproductive success of Central Arctic Herd female caribou in contact with oil development from 1988 through 2001 was lower than for undisturbed females.