

## FACTS: ARCTIC NATIONAL WILDLIFE REFUGE IMPACTS OF OIL DRILLING: WILDLIFE

The Arctic National Wildlife Refuge protects the greatest wildlife diversity of any protected area in the circumpolar north.<sup>1</sup> It is the largest unit of the National Wildlife Refuge System, America's only system of lands dedicated first and foremost to wildlife conservation. The refuge provides essential habitat to millions of migratory birds, caribou, three species of bears (polar, grizzly and black bears), Dall sheep, muskoxen, wolves, arctic and red foxes, and wolverines. The refuge coastal plain "1002 area," where oil drilling is proposed is its "biological heart."

### **The Porcupine Caribou Herd**

The Porcupine Caribou herd migrates seasonally between Canada and the United States and is the largest (about 130,000 animals) international migratory caribou herd in the world. Their 800 mile long migration is second only to the wildebeests of Africa.<sup>2</sup> Most calves are born in the Arctic Refuge. The U.S. Geological Survey Biological Resource Division (USGS/BRD, 2002)<sup>3</sup> found that the "Porcupine caribou herd may be particularly sensitive to development within the 1002 portion of the calving ground" due to:

- The Porcupine caribou has the lowest capacity for growth among Alaska barren-ground herds;
- Caribou have demonstrated moving calving areas away from oil development, placing stress on the herd while their young is most vulnerable;
- 17 years of data predict that calf survival for the Porcupine caribou herd will decline if calving grounds are displaced – in fact when heavy snow prevented the Porcupine herd from calving in the 1002 area, calf survival plummeted almost 20%.

### **Polar Bears**

The Arctic Refuge has the highest concentration of land-denning polar bears on Alaska's North Slope, and its protection is vital to protect the conservation options for polar bears in the U.S.<sup>4</sup> Polar bears are particularly sensitive to oil development:

- Low productivity of females makes polar bear populations highly susceptible to even small reductions in numbers<sup>5</sup>;
- Polar bears den in winter – exactly the time oil companies want to drill. Human disturbance has been correlated with female bears abandoning their dens, producing deadly results for cubs too young to survive without their mothers;
- Polar bears that come in contact with oil would lose the insulation in their fur and likely die.

### **Birds**

Millions of migratory birds journey thousands of miles each spring to nest and feed in the wetlands on the coastal plain of the Arctic Refuge. The birds travel from six continents and every state in America. Oil drilling, with its associated roads, pipelines, processing plants, airstrips, and other industrial facilities would disturb these species' nesting and foraging habitats as well as potentially have toxic effects felt in the Arctic Refuge and wherever the birds travel. Increased predators in oil fields would reduce nesting success. Of course, any declines of these migratory birds in Alaska would be felt on these birds' wintering grounds and migratory habitat in the rest of the country and beyond.

### **Muskox**

Muskox live year-round in the refuge. Major impacts would include displacement from preferred feeding areas and reduced calving rates, according to Arctic Refuge and USGS biologists.

## References

---

<sup>1</sup> U.S. Fish and Wildlife Service, 2000. Arctic National Wildlife Refuge informational brochure. Available at <http://www.defenders.org/wildlife/arctic/fws/brochure.pdf>.

<sup>2</sup> U.S. Fish and Wildlife Service. 2004. Frequently asked questions about Caribou. (Accessed 2/26/05) <http://alaska.fws.gov/nwr/arctic/carcon.htm>. The distance between winter and summer ranges is 400 miles and some animals have been radio-tracked to travel 3,000 miles in a year.

<sup>3</sup> Griffith, B., D. C. Douglas, N. E. Walsh, D. D. Young, T. R. McCabe, D. E. Russell, R. G. White, R. D. Cameron, and K. R. Whitten. 2002. The Porcupine caribou herd. Pages 8-37 in D. C. Douglas, P. E. Reynolds, and E. B. Rhode, editors. Arctic Refuge coastal plain terrestrial wildlife research summaries. U. S. Geological Survey, Biological Resources Division, Biological Science Report USGS/BRD/BSR-2002-0001.

<sup>4</sup> Steven C. Amstrup. 2002. Polar Bears. Pages 65-69 in D. C. Douglas, P. E. Reynolds, and E. B. Rhode, editors. Arctic Refuge coastal plain terrestrial wildlife research summaries. U. S. Geological Survey, Biological Resources Division, Biological Science Report USGS/BRD/BSR-2002-0001.

<sup>5</sup> Servheen, C., S. Herrero and B. Peyton. 1999. Bears, Status Survey and Conservation Action Plan. IUCN/SSC Bear and Polar Bear Specialist Groups. IUCN, Gland, Switzerland and Cambridge, UK. 309 pp.

*February 2005*