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Arctic National Wildlife Refuge Backgrounder

Summary of Issue

The coastal plain of the Arctic National Wildlife Refuge located in the remote northeast corner of Alaska is a key part of an ecoregion with globally outstanding biodiversity values. This area of gently rolling tundra, wedged between the Arctic Ocean and the foothills of the Brooks Range, is the biological heart of the Arctic Refuge. It is the centre of activity for caribou, migratory birds, polar bears and many other wildlife species, together with two Canadian national parks adjoining the refuge – Ivvavik (formerly North Yukon) and Vuntut. This intact ecosystem protects the sensitive birthing and nursery grounds of the Porcupine caribou herd. Most of this 129,000 strong herd calves in the coastal plain of the Arctic National Wildlife Refuge. For the late fall and winter, most of the herd moves to Canada, the Yukon and western NWT.

Many oil companies continue to press the US congress to open the refuge coastal plain to oil and gas exploration and development. The coastal plain of the refuge is the only area of the Arctic coastal tundra ecoregion in Alaska that is protected by law from Oil and gas exploration and development. (More than 96 per cent of Alaska's North Slope is already available to the oil and gas industry for exploration and development.) Yet this critical 607,288 hectares (1.5 million acres) in the Arctic Refuge is vulnerable to pressure from the industry, as it is not yet fully protected as wilderness. Greater protection is needed to ensure a future for the full migratory cycle of the Porcupine caribou herd and effective management of the existing protected areas – the Arctic Refuge wilderness and adjacent Canadian national parks.

Under a global conservation strategy, permanent protection for the refuge's coastal plain is a necessary step to ensure conservation of the biological integrity of the Arctic coastal tundra ecoregion. WWF's global network opposes oil and gas development in the Arctic Refuge and supports designation of the coastal plain as wilderness to permanently protect this special place.

Location of the Arctic National Wildlife Refuge

In the remote northeastern corner of Alaska lies one of America's greatest natural treasures, the Arctic National Wildlife Refuge. Its 8 million hectares (18.9 million acres) constitute one of the only places on Earth that protects the complete spectrum of subarctic and arctic habitats.

The refuge reaches north from boreal forests (taiga) to the tallest peaks in the Brooks Range, which arch toward the ice-filled Beaufort Sea. The foothills along the North Slope of the mountains sweep down to the coastal plain, which narrows dramatically within the refuge, thereby increasing its habitat diversity and productivity. The arctic coastal and foothills region is characterized by gently rolling tundra, river corridors, and thaw lake wetlands. The northern boundary of the refuge encompasses lagoons, barrier islands, and large bays.



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This diverse landscape juxtaposes mountains, braided rivers, coastal wetlands, seashore, estuaries, and barrier islands - a zone of exceptional diversity. The coastal plain provides internationally significant habitat for the Porcupine caribou herd, staging areas for snow geese, and over 120 other migratory bird species, and critical over-winter denning sites for polar bears.

History of the Arctic National Wildlife Refuge

In 1960, President Eisenhower established the Arctic National Wildlife Range "to protect its unique wildlife, wilderness and recreational values." In the Alaska National Interest Lands Conservation Act (ANILCA) of 1980, the original range was renamed and greatly enlarged to incorporate the wintering grounds of the Porcupine caribou herd. The purposes of the refuge were expanded to include conservation of natural diversity, to support subsistence uses, and to maintain international treaty obligations. The original refuge was included in the National Wilderness Preservation System, the most protective U.S. land designation, except for a critical 607,288 hectare (1.5 million acre) area of the coastal plain that was coveted by the oil industry. A total of 3 million hectares (8.9 million acres) out of the 8 million hectare (18.9 million acre) refuge is designated wilderness. Yet the critical area of the refuge with the highest biological productivity – the coastal plain - remains inadequately protected. Oil and gas leasing, exploration, and development are prohibited by law, but the oil industry continues to lobby the U.S. Congress to open this area to oil development.

More than 40 years ago, scientists and conservationists who fought to establish the Arctic Refuge envisioned preserving an undisturbed portion of America's arctic that was large enough to be biologically self-sufficient. Of particular concern was protection of the entire range of the Porcupine caribou herd, whose range is partly in the United States and partly in Canada. By 1953, a proposal for an Arctic International Wilderness focused on wildlife, wilderness, and scientific study in this transboundary area, and emphasized the provision of a continued land base for the Inupiat and Gwich'in aboriginal cultures. New conservation proposals followed an Arctic International Wildlife Range conference in 1971.

For more than 20 years, oil companies have been lobbying for the right to build hundreds of miles of pipelines, roads, drilling pads, gravel mines, and other industrial facilities in the coastal plain of the Arctic National Wildlife Refuge. The week before the Exxon Valdez oil spill in 1989, a key U.S. Senate committee passed a bill to open the Arctic Refuge to oil leasing and development. But the legislation died in the aftermath of that tanker disaster in Prince William Sound. After the Persian Gulf War in 1991, President George Bush's National Energy Bill contained Arctic Refuge drilling provisions but a filibuster in the U.S. Senate stopped this initiative. In 1995, a drilling provision for the Arctic Refuge was slipped into the federal budget bill but President Clinton vetoed it.

The American People Oppose Drilling

In the course of these battles over the future of the Arctic Refuge, the American people have become more aware of the vulnerability of this special place. Opinion polls show approximately 70 percent of Americans support protecting the refuge's coastal plain from oil drilling. Currently, a wilderness bill in the U.S. Congress has a record number of co-sponsors endorsing permanent protection for the coastal plain. A 1999 statewide opinion poll conducted by Ivan Moore Research for the Alaska Conservation Alliance shows Alaskans are closely divided on the question of whether "the Arctic National Wildlife Refuge should be protected from oil development plans" (41% agreed, 43% disagreed, and 16% were neutral).



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The Canadian Connection

Today, the first large-scale wilderness reserve for wildlife ranging across international boundaries in the circumpolar arctic comprises the adjoining Arctic Refuge in Alaska, Canada's Ivvavik National Park (formed in 1986), and Canada's Vuntut National Park (established in 1993). Although these areas are managed as separate entities, an international conservation agreement signed by the two countries in 1987 established the International Porcupine Caribou Management Board to further the conservation of the Porcupine caribou herd (the agreement can be found at http://www.dfait-maeci.gc.ca/can-am/main/shared_env/agreement_porcupine_caribou-en.asp). The primary goal of this agreement was to provide proper management of the sensitive habitats used by the herd. The Arctic Refuge also is required to fulfill other international treaty obligations of the United States with respect to fish, wildlife, and their habitats. These include the Agreement on the Conservation of Polar Bears and migratory bird treaties with Canada, Russia, and Japan. The Canadian government has been steadfast in their objection to drilling in the refuge and represent the Canadian people in their view.

More than thirty years ago a Royal Commission (Canada's largest ever, led by Justice Thomas Berger) recommended that a 10-year moratorium on oil and gas development in the NWT be put in place until outstanding land claims were settled, key natural areas were protected, and well-balanced regional land use plans were put into place. Justice Tom Berger also made recommendations that the ANWR not be opened to drilling. The establishment of Ivvavik and Vuntut National Parks in the north Yukon adheres to one of Justice Berger's main recommendations.

Government of Canada statement (Taken from CPAWS new ANWR web site)

Canada's Position on the Arctic Refuge

The Big Picture: Canadian and Alaskan native communities north of the Arctic Circle depend on the Porcupine Caribou Herd for their sustenance and cultural needs. The most successful calving grounds for this migratory herd are in the Arctic Refuge, Alaska. Canada has permanently protected from development the lands in Canada used occasionally by the herd for calving and continue to urge that the U.S. do the same. This would be consistent with the commitment to protect and conserve the herd and its habitat in the 1987 Canada-U.S. Agreement on the Conservation of the Porcupine Caribou Herd.

Key points:

1. Research overwhelmingly shows that oil development in the Arctic Refuge will endanger the Porcupine caribou herd. Unlike some northern caribou, they have no viable alternative calving grounds.
2. The Gwich'in First Nation and other Aboriginal Peoples depend on the herd for their sustenance, culture and way of life.
3. Canada urges the U.S. to fulfill its obligations under the 1987 Agreement on the Conservation of the Porcupine Caribou Herd to permanently protect this sensitive ecosystem, as we have already done on the Canadian side.

Oil Potential

The most likely estimates of commercially recoverable oil from the coastal plain of the refuge predict that the area would yield only less than year's worth of oil for the United States - if oil were found there at all. Alternative energy sources, such as solar energy, offer far greater untapped resources that would have more certainty, lower economic and environmental costs, and much earlier results.



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There have been numerous geological studies of the oil potential in the coastal plain in the past 15 years. A major study mandated by the U.S. Congress included a one-time seismic oil exploration program (Department of the Interior 1987). That study reported a mean estimate of 3.2 billion barrels of economically recoverable oil, if oil was found, in the coastal plain ("1002 area"). In 1998, the U.S. Geological Survey (USGS) published a new petroleum resource assessment and similarly estimated that 3.2 billion barrels of economically recoverable oil may be found in the refuge coastal plain. It provided a mean estimate of 7.7 billion barrels of technically recoverable oil from the refuge coastal plain.

The USGS study concluded that there is NOT a Prudhoe Bay-size oil field in the refuge - the opposite of what the industry claims. Whereas the giant Prudhoe Bay oil field has already pumped more than 10 billion barrels, and the state of Alaska estimates 3 billion more will be produced by 2020, USGS estimated (at 50 percent probability) the largest potential field size that may occur in the refuge at just 1 billion barrels. Most potential fields in the refuge are considerably smaller; if they were developed, the required infrastructure would be scattered in many industrialized zones spread across the area.

To date, all of the North Slope fields together have produced a total of 12.5 billion barrels of oil. The state of Alaska projects that another 5.7 billion barrels of oil will be produced from 1999 to 2020 from Prudhoe Bay, seven other nearby oil fields, and new development of 50 satellite fields. This additional production alone roughly doubles the most likely economically recoverable oil that may be found in the Arctic Refuge. The state's projection does not take into account significant production that may take place from the 15 billion barrels of oil known to exist in-place in the West Sak field overlaying the Kuparuk and other fields (U.S. Department of Energy 1991).

Potential Impacts On People

The Interior Department concluded that oil development in the coastal plain would have serious impacts on the Porcupine caribou herd, muskox, water quality and quantity, subsistence hunting by Inupiat and Gwich'in communities, and wilderness.

Further, the U.S. Congress commissioned a full review of 'Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope', based on 25+ years of development in the Prudhoe Bay area, and this excellent review highlights a range of significant environmental issues and challenges created by the progression of development (National Research Council, Washington D.C. March 2003. www.nap.edu)

Native Alaskan Communities

Gwich'in (Athabaskan Indian) "Oil development in the calving grounds of the Porcupine caribou herd - the coastal plain of the Arctic National Wildlife Refuge - threatens our Gwich'in culture and the ecosystem we depend on. This is a simple issue. We have the right to continue our way of life." -- Faith Gemmill, Gwich'in Steering Committee

For thousands of years, the Gwich'in people of Northeast Alaska and Northwest Canada have depended upon the Porcupine (River) caribou herd to sustain their culture. The 7,000 Gwich'in people live in 14 villages located in strategic places along the herd's migratory route. Central to the Gwich'in way of life, the herd provides food, clothing, and a critical link to traditional ways.



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The Gwich'in are one of the most traditional of surviving native cultures, and to them the coastal plain is a sacred birthplace that should never be disturbed in any way. They are united in support of permanent protection of the coastal plain as wilderness. Their position is endorsed by the National Congress of American Indians, which represents over 200 tribes. Additionally, the Canadian government has staunchly opposed oil drilling in the coastal plain, in support of the Gwich'in and other communities dependent on the Porcupine caribou herd.

Inupiat (Eskimo) The Inupiat living on the North Slope of Alaska are primarily dependent on the bowhead whale and resources of the sea as the basis of their subsistence culture. Therefore, for decades they have strenuously opposed offshore oil and gas development in the Beaufort Sea, including off the coast of the Arctic Refuge, due to the impacts that drilling and seismic exploration have had on the bowhead whale migration and the Inupiat's subsistence harvest. About 250 Inupiat live in the village of Kaktovik, located on an island on the north side of the coastal plain of the Arctic Refuge. Although the Inupiat community of Kaktovik supported wilderness protection for the Arctic Refuge until the early 1980s, many (but by no means all) residents have now come to support onshore drilling. The Kaktovik lands are private, and therefore would not be designated wilderness under proposed legislation.

Fish, Wildlife, And Their Habitats in the ANWR

Caribou

The Arctic Refuge provides critical calving and post-calving habitat for the 129,000 animal Porcupine caribou herd; there is no alternative area. Over the past 25 years, the most consistently and heavily used calving area for the herd has been in the coastal plain area proposed for oil development. Nearly every year, all females and calves in the herd also use the coastal plain area for post-calving, and in most years the majority of males join them.

Polar Bears

The coastal plain of the Arctic Refuge is the most important onshore denning habitat for the entire Beaufort Sea polar bear population in the United States and Canada.

Muskox

Muskox disappeared from Alaska's arctic more than 100 years ago. They were reintroduced to the Arctic Refuge in 1969. Their numbers have grown to approximately 350 in this area and their range has expanded to the east and west. The only large mammals to live year-round in the refuge, they feed along rivers in summer and windblown ridges in winter.

Wolves, Wolverines, Grizzly Bears

These magnificent animals thrive in remote wilderness. Wolves and bears primarily den in the foothills and mountains south of the coastal plain in the refuge. Wolverines are infrequently observed but travel in all types of arctic terrain, and females may use snowdrifts along small tundra streams for dens. During spring, wolves and bears roam out to the coastal tundra where they prey on newborn caribou.



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Migratory Birds

At least 135 species of birds from four continents nest, feed, or migrate to/in the Arctic Refuge's coastal plain. The greatest concentrations occur in coastal lagoons, tundra wetlands, and along rivers.

Vegetation

The arctic coastal tundra consists of thaw lakes and wetlands near the Beaufort Sea coast and along river deltas. The foothills tundra, a transition between this and the Brooks Range, is dominated by sedge tussock (*Eriophorum vaginatum*), which provides the lush, new growth needed to feed caribou calves and energize staging snow geese. Riparian areas have willow shrubs that are important nesting habitat for migratory birds.

Arctic Char, Grayling, and Other Fish

Overwintering habitat for arctic char (*Dolly varden*), arctic grayling, and other fish is extremely limited in rivers and lakes in the refuge. Coastal waters contain marine and anadromous species including arctic char, arctic cisco, and arctic cod.

Water

There are 237 miles of rivers flowing through the refuge coastal plain. Most lakes in the refuge are less than 7 feet deep and freeze to the bottom in winter. There are several springs along the foothills - including Sadlerochit Spring, which has been nominated as a National Natural Landmark.

Coastal/Marine Environment

Lagoons, barrier islands, deltas, shorelines, and coastal waters provide shelter, feeding, and staging areas for migratory fish and wildlife populations, including endangered bowhead whales and millions of migratory birds. There is a critical feeding area in the Beaufort Sea off the coast of the refuge that is used by bowhead whales on their fall migration.

Wilderness

The refuge, including the coastal plain, is a world-class natural area with incomparable and irreplaceable ecological, scientific, historic, and educational values for the North American people.

If oil exploration and development occurred in the wildlife refuge, its wilderness values would be eliminated. Displacement and reduction of wildlife populations and natural processes would cause a major reduction in the value of the area as a pristine, natural scientific laboratory, according to the U.S. Interior Department.

What WWF Has Done to Stop Drilling

For more than 30 years, the WWF global-family has been engaged in protecting wildlife in Alaska. In recent years, WWF-US activists have sent 175,000 letters and made thousands of phone calls to their representatives in Congress urging that the refuge coastal plain be protected in the National Wilderness Preservation System. WWF-Canada and WWF-UK have worked along side WWF-US to help ensure no harm comes to this internationally-significant region.