

## **OIL vs. WILDLIFE Views on the ANWR Caribou Issue**

Since the beginning the issue of caribou and oil has been a highly emotional and often misrepresented topic with regard to Alaskan North Slope oil exploration. When Prudhoe Bay was first considered for development census studies on the caribou of the Central Arctic Herd showed the population to be just over 3,000 animals. Many environmentalists claimed if production were allowed anywhere on the Arctic Coastal Plain that the caribou would be wiped out or scared away never to return. Gone would be a traditional source of food for Alaskan Natives and the amazing migration natural wonder to see. Gone forever would be the pristine wilderness. Not surprising to many Alaskans and people who know caribou, what happened turned out to be the exact opposite. Caribou numbers have sky rocketed and at the latest count in 2002 the Central Arctic Herd reached 32,000 animals! Indeed the caribou seemed to pretty much ignore the development there and carry on their migration as normal.



Caribou near well pad facility at Prudhoe Bay

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About the only change that has happened is that the caribou have taken advantage of development in passing through the fields by using roads as shelters from the swarms of mosquitoes that plague them on their journey.



Central Arctic Caribou Herd migration through Prudhoe Bay

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Visiting groups and the workers at Prudhoe Bay comment that the caribou seem pretty much to tend to ignore production facilities and carry on their way without trouble.

The current debate about oil exploration on the ANWR Coast Plain rings very much the same environmental arguments of long ago. Through ANWR and Northern Canada migrates the 123,000 strong Porcupine Caribou Herd. Environmentalists again claim oil development will decimate these caribou, and the wilderness will be ruined by any development. Once again the reality, Alaskan's know will be all too different. With 28 years of environmentally sensitive oil development to back it up, companies operating on the North Slope have proven without question that Alaskans have put in place measures to allow the oil industry and the environment to successfully co-exist. Strict environmental controls, reduced development footprints, and use of elevated pipelines will all ensure the Porcupine Caribou Herd, like their Central Herd cousins next door will not be harmed. Alaskans are very proud of this fact and this view is most echoed by the Native populations that live on the North Slope of Alaska and particular those in Kaktovik, the only village in ANWR. The industry and the caribou can, do, and will co-exist successfully.

In response to some of the recent controversy on the Porcupine Caribou Herd in

ANWR and the possible effects exploration could have on their migration the following article was written by one of the foremost experts of Alaskan caribou, Matthew Cronin. It is with kind permission from him and RANGE magazine where the original article was published that we reprint it here.

**Magazine in Winter 2004 Vol. 12 No. 4 ([www.rangemagazine.com](http://www.rangemagazine.com) tel: 1-800-**

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## **Oil Development and Wildlife in Alaska**

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ANWR (the Arctic National Wildlife Refuge), in the northeast corner of Alaska, is considered the best on-shore prospect in the U.S. for a major oil discovery. Yet, exploration for oil and gas has not occurred. Exploration has been controversial and has been contested by environmental groups and government agency biologists because of environmental concerns, particularly concerns about wildlife. As with many other environmental issues, these groups present biased, negative appraisals of the impacts of oil fields on wildlife. This serves to misinform the public and elected officials.

To assess the potential environmental concerns about ANWR, it is instructive to review the experience in the existing Alaska oil fields at Prudhoe Bay. Anti-development advocates claim that the Prudhoe Bay oil fields have had serious impacts on wildlife. However, the fact is that after 30 years of development of the Alaska oil fields at Prudhoe Bay and surrounding areas, wildlife populations have not experienced major impacts. Populations of caribou, grizzly bears, polar bears, arctic foxes, and musk ox, have all grown or remained stable over the period of oil exploration and development.

A particularly important example is caribou of the Central Arctic Herd, that occurs in the Prudhoe Bay region. This caribou herd has grown from fewer than 5,000 to 32,000 animals since the oil fields were developed. Caribou in the oil field areas frequently have had higher calf/cow ratios than in undeveloped areas, continue to calve in oil field areas, and use oil field habitats extensively during the summer. This includes frequent use of oil field roads and structures for travel and to escape from insects. These findings have been published in scientific journals (see the list of references below), but they are frequently ignored or downplayed by government biologists and environmental groups. This has been most apparent in the last few years as government biologists published documents continuing to claim significant impacts of the oil fields on caribou, despite the steady growth of the herd.



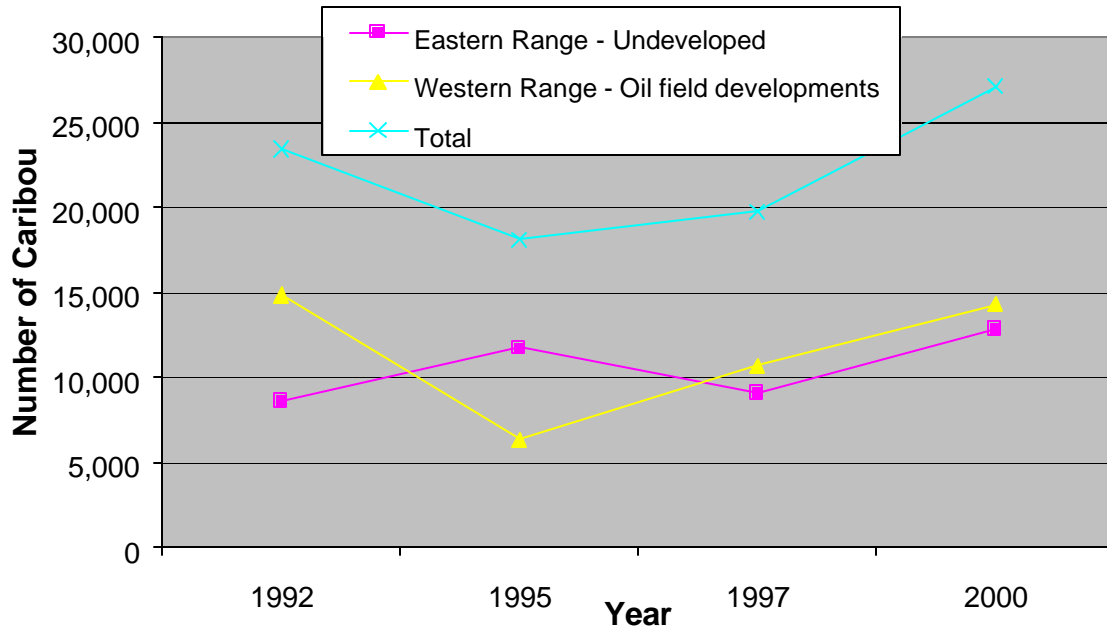
Central Caribou Herd on its way through the oil fields

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The selective use of information by the anti-development groups is readily apparent in the recent National Research Council's (NRC, 2003) report "Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope". During the caribou herd's overall growth from 5,000 to 32,000 animals between the 1970's and 2002, there was a decline in the herd between 1992 and 1995. The decline was most apparent in the western part of the herd's range that contains the oil fields. This was followed by an increase between 1995 and 2000. These trends are shown in the graph. The NRC report (in 2003) incredibly ignored the overall herd increase, and attributed the decline between 1992-1995 to the oil fields combined with increased harassment by mosquitoes and flies. In 2001, the U.S. Fish and Wildlife Service also attributed the decline to the oil fields, but this time it was in combination with bad winter weather. It would be obviously biased to say the oil fields caused a decline only in some years and ignore the overall growth of the herd. The biologists therefore came up with secondary impacts, weather or insects, to support their claims. The NRC report also ignored the fact that a neighboring herd, without oil field development in its range, had the same trend of an increase with a slight decrease in the mid-1990's, followed by another increase. This suggests environmental factors, not oil fields, determines the herd numbers. In papers published in *The Journal of Wildlife Research* (Cronin et al. 1997) and *The Wildlife Society Bulletin* (Cronin et al. 2000, 2001) my co-authors and I suggested that the decline in caribou numbers between 1992 and 1995 was likely due to movements between oil field ranges and undeveloped ranges, and not impacts from the oil fields. The graph shows that as numbers in the developed areas numbers went down, numbers in the undeveloped areas went up by about the same amount. Clearly, simple movements of the highly mobile caribou between areas is a reasonable interpretation. These papers were ignored in the

NRC report.

Figure 1. Central Arctic caribou herd estimates for developed (Western Range) and undeveloped (Eastern Range) areas of the central Arctic Slope of Alaska , 1992-2000.



Perhaps the most important point regarding Prudhoe Bay is that the management objectives for the Central Arctic caribou herd and other wildlife populations have been met during the period of oil field development and operation. Although there may be some subtle impacts on individual animals, the herd, which is the unit of management, has grown. These points were emphasized in a paper published in the journal *Biological Conservation* (Cronin et al. 1998a), but ignored in the NRC report.

With regard to ANWR, it must be acknowledged that the caribou herd that calves in ANWR (the Porcupine Caribou Herd) differs from the Central Arctic Herd near Prudhoe Bay in several ways. The Porcupine herd migrates over a larger range in Alaska and Canada. Calves are often born on

the coastal plain of ANWR where the best oil prospects are thought to be. Caribou of the porcupine herd can occur in groups numbering tens of thousands, much larger than the groups of hundreds to thousands of the Central Arctic herd at Prudhoe Bay. These factors suggest that the Porcupine Herd may be more vulnerable to disturbance and displacement than the Central Arctic herd. However, depending on the year, calving occurs from the Yukon Territory, Canada in the east, to the western edge of the refuge. There is potentially alternative calving habitat should parts of the ANWR be developed. In addition, avoidance of existing oil fields is not absolute. Caribou continue to calve in areas with oil fields, and avoidance of the roads and facilities is limited to a few weeks around the calving period.

I believe the experience at Prudhoe Bay indicates that we could achieve the multiple objectives of oil and gas development and maintenance of wildlife populations in ANWR. The most obvious point is that impacts from oil development could be mitigated by the simple measures such as minimizing infrastructure and restricting industrial activity during the calving period. However, we must give the public and elected representatives the truth about potential environmental impacts. This has not been happening because of biased reporting by biologists and environmental groups. Clearly this is not unique to the ANWR issue. The Fall 2004 issue of Range Magazine had an alarming article by Steve Rich, documenting similar negative bias by biologists throughout the west. Scientists and stakeholders in the resource industries must continue to aggressively present factual information, and correct biased reporting. It is apparent that different industries, including ranching, oil, mining, fishing, and timber, face the same bias in dealing with environmental issues. Perhaps increased communication and coordinated approaches among industry groups can help deal with these serious issues.

Caribou calf under pipeline at Prudhoe Bay



Caribou calf under feeder pipeline Prudhoe Bay

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**Selected papers on caribou and Alaskan oil fields that were not cited in the U.S. Fish and Wildlife Service's letter to Secretary Norton**

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