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Resource Review

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Alaskans overwhelmingly support opening fraction of ANWR for oil

A new poll of Alaska residents shows overwhelming support across the state for oil and gas development in the Coastal Plain of the Arctic National Wildlife Refuge.

Dittman Research Corporation conducted a statewide telephone poll in January to ask the same question posed over the past eleven years. "Do you

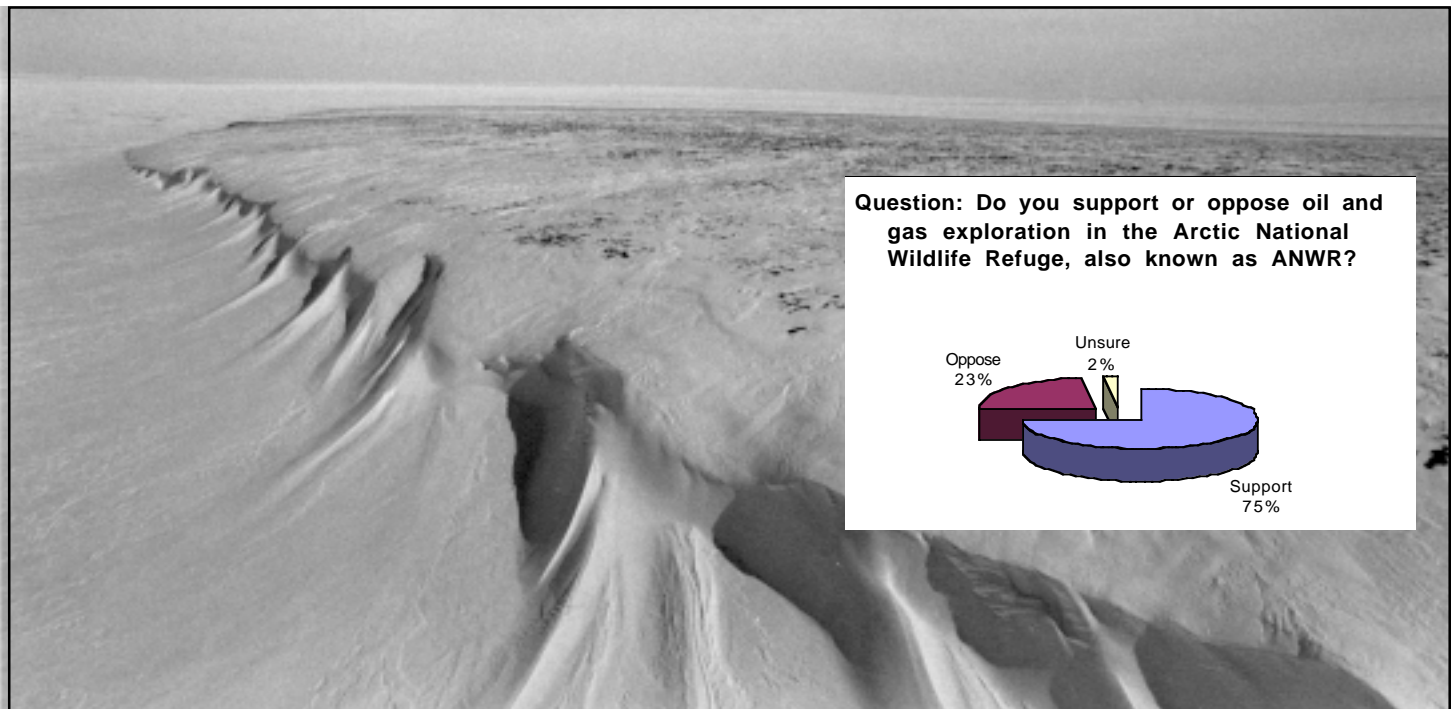
support oil and gas exploration in the Arctic National Wildlife Refuge, also known as ANWR?"

"Public support has consistently exceeded opposition by wide margins over ten years," states the Dittman Research report. With 75 percent favoring development, the 2001 results show the highest approval since the

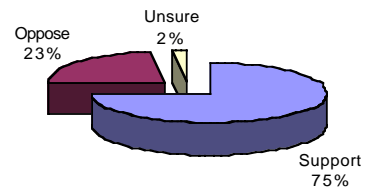
polling question was first posed to Alaskans.

"Oddly enough, our fellow Alaskans don't believe that Alaskans support development in ANWR," said Jerome Selby, Co-Chair of Arctic Power. "The long-term, consistent polling data presented today should end that belief."

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Question: Do you support or oppose oil and gas exploration in the Arctic National Wildlife Refuge, also known as ANWR?



The area within ANWR proposed for oil and gas development is the flat and treeless Coastal Plain which represents eight percent of the 19.6-million acre refuge. Congress specifically excluded this area from ANWR's Wilderness designation in 1980.

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Murkowski's new energy package

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Message from the Executive Director by Tadd Owens

Senators attack ANWR provision of energy bill

Here's what our readers can do to advance ANWR efforts

After spending ten days in Washington, D.C. working with representatives from Arctic Power to lobby for the opening of the coastal plain of ANWR, it is clear to me that Alaskans have a titanic battle on our hands. Senator Murkowski's energy bill, which includes a provision authorizing oil and gas exploration and development within the coastal plain of ANWR, has been vehemently attacked by a powerful group of Senators looking to designate the same area as federal Wilderness.

These Senators, including Senator John Kerry (D-MA), Senator Joseph

Lieberman (D-CT) and Senator Hillary Clinton (D-NY), have pledged to fight to their proverbial deaths in order to protect ANWR. Their rhetoric and blatant manipulation of the national press is shameless. The press conference to introduce their wilderness bill was a cacophony of misdirection, polarizing rhetoric and misinformation.

Here are just a few of the lowlights. Citing a popular and often misinterpreted statistic, Senator Kerry said, "...we could spoil the wilderness to satisfy our national oil demand for only six months."

Not to be out-done, Senator Lieberman stated, "Far from addressing our energy needs now or in the future, the only thing we are certain to achieve by drilling in this magnificent land is to destroy it with a web of industrial sprawl and pollution."

Meanwhile, Senator Clinton proclaimed, "We benefit as a country because the refuge is there, untouched, as God created it. Let us save the refuge from the oil rigs and the environmental damage that will surely follow."

These comments clearly demonstrate the unwillingness of our opponents to debate the ANWR issue on its merits. To them this exercise is not one of sound public policy making, but rather of power politics and crass grandstanding for personal gain. The people of the United States deserve more from our elected officials.

Most reasonable people agree that our country needs a comprehensive energy plan. This plan should consist of three major components — first, energy conservation and fuel efficiency, second, research and development of alternative sources of energy, and finally increased domestic energy production. Senator Murkowski's energy bill takes steps to

achieve each of these goals.

Moreover, Senator Murkowski has stated that he believes the energy bill should be the start of a dialogue in the Senate to craft a balanced national energy program. His opponents have expressed little interest in taking up his offer. They would prefer to shoot holes in the ANWR provision with sound bites for the national news.

Its time for Alaskans to speak out in support of a balanced national energy policy — one that includes oil and gas exploration in the coastal plain of ANWR. Here are a few things you can do to help.

- Write our congressional delegation and thank them for their work on the energy issue and on ANWR in particular.
 - Talk with your friends, family and business associates in other parts of the country and educate them on the facts of the ANWR issue.
 - Send them factual information like this newsletter and other materials from RDC or Arctic Power.
 - Encourage them to write letters to their local newspapers and contact their congressional delegates in support of a responsible, sensible energy policy that includes the ANWR provision.
 - Send an email to everyone in your address book asking them to take a look at Arctic Power's web site — **www.anwr.org**. This website is filled with factual information. It should be a favorite bookmark on your computer throughout the ANWR debate.
- Once again politicians, who believe they gain most from courting the eastern environmental establishment, are holding Alaska hostage. Unfortunately, the interests of the nation are suffering.

Resource Review is the official periodic publication of the Resource Development Council (RDC), Alaska's largest privately funded nonprofit economic development organization working to develop Alaska's natural resources in an orderly manner and to create a broad-based, diversified economy while protecting and enhancing the environment.

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Murkowski's energy bill seeks to reduce reliance on foreign sources, open ANWR

Calling it the first step in reducing America's growing reliance on foreign sources of oil, Senator Frank Murkowski is charging forward with his national energy legislation, "the National Energy Security Act of 2001."

Since introducing the Senate energy legislation in late February, Murkowski has come under fire by environmentalists who bitterly oppose a major element of his bill which allows environmentally-sensitive oil and gas development in ANWR.

"The truth about my national energy legislation is that it is the first comprehensive, bipartisan proposal to boost alternative energy and energy conservation in a decade," Murkowski said. "It is a bill that should be endorsed by real environmentalists everywhere."

The bill seeks to boost energy efficiency and provide aid for renewable energy from biomass and from wind, geothermal, solar and hydropower. It promotes hybrid-electric cars, requires



improvements in automobile gas mileage and provides \$1 billion a year to help the poor afford escalating utility costs.

"Through a broad range of balanced proposals, this bill seeks to increase the use of alternative sources, the efficient use of energy and our own domestic

energy supply," Murkowski said. "At the same time, the bill will help improve the environment through the application of new technologies and lay the groundwork for even greater advances in the future."

Murkowski warned that America is facing a real energy crisis, noting that supply of energy is not keeping up with demand.

"It is going to take a team effort to solve this problem," Murkowski said. "We can't afford to leave our best players on the bench. That means it is necessary to responsibly open certain parts of Alaska's coastal plain, our nation's best hope for new domestic exploration. It can be done in an environmentally thoughtful and careful manner and it can replace the oil we buy from Saudi Arabia for the next 30 years."

Murkowski said the bill is vital to protect America's energy security.

"The lack of a real energy policy has led to higher prices for all forms of energy. That has hit American families and consumers where it hurts, in the wallet or pocketbook. It also has made us more dependent on foreign oil than ever before. We are at an all-time high of 56% dependence and we are projected to be 70% dependent by 2020."

Murkowski said the bill specifically gives the Secretary of the Interior full power to impose environmental protections to prevent adverse effects on fish and wildlife, habitat, subsistence resources or the environment and requires the application of the best commercially available technology for oil and gas exploration, development and production. The bill also earmarks a portion of the federal share of bid bonuses from oil and gas leases for conservation and research into renewable energy research and development.

"Developing a comprehensive energy plan for this nation is a farsighted step to protect both the environment and our economy in the future," Murkowski said.

7 reasons to support ANWR drilling

1. Minimal environmental impact: Advanced technology has greatly reduced the "footprint" of oil development in the Arctic. Less than one-tenth of one percent of ANWR, and less than one percent of the Coastal Plain, would be affected by oil and gas development. No federally designated Wilderness in Alaska would be touched.

2. Best chance for major discovery: The Coastal Plain of ANWR is America's best prospect for the discovery of another giant "Prudhoe Bay-sized" oil and gas discovery in North America. ANWR could supply from 25% to 50% of total future domestic production for decades to come.

3. Lessen dependence on foreign oil: Major discoveries in ANWR would significantly lower our reliance on foreign producers. The U.S. imports over 55% of its needed petroleum, costing more than \$55.1 billion a year. We need to develop our own rich domestic resources where they have the most potential with minimal adverse environmental impact.

4. North Slope production is in decline: These fields currently provide the U.S. with nearly 25% of domestic production and since 1988 this production has been on the decline.

5. Economic benefits: Between 1980 and 1994, North Slope oil field development and production activity contributed over \$50 billion to the nation's economy. ANWR could generate up to 800,000 jobs nationwide and billions of dollars in revenues to the Treasury.

6. No negative impact on animals: Wildlife populations continue to thrive throughout North Slope oil fields. Caribou populations have increased nine-fold in 25 years.

7. Alaskan support: More than 75% of Alaskans support ANWR development, including Inupiat Eskimos who live in and near ANWR.

A case for oil development in ANWR

- The U.S. imports over 57% of the nation's needed petroleum. These oil imports cost more than \$100 billion a year. These figures are rising and could hit 70% imports by the year 2020.

- Beneath a 1.5 million acre tract on the North Slope of Alaska is estimated to be between 6 and 16 billion barrels of recoverable oil (between 11.6 and 31.5 billion barrels in-place). This area is known as the Coastal Plain of the Arctic National Wildlife Refuge (ANWR). This non-park area of ANWR was designated by Congress in 1981 as requiring special study to determine its oil and gas potential and the effects of development on the environment. In 1987, the Department of Interior recommended development. Congressional and presidential authorization is required for the non-park Coastal Plain to be open.



The Coastal Plain is not America's last Wilderness. None of Alaska's 58 million acres of federal Wilderness, including those protected lands inside ANWR, would be touched by development.

- ANWR production could replace imports of Saudi oil for over 30 years.

- Prudhoe Bay, located 60 miles to the west of ANWR, has been operating for over 20 years and has produced in excess of 10 billion barrels of oil during that time. It is among the most environmentally sensitive oil operations in the world. Present output from Prudhoe Bay area fields has declined to 1.1 million barrels per day, and is continuing to decline.

- The Coastal Plain of ANWR is America's best bet for the discovery of another giant "Prudhoe Bay-sized" oil and gas region in North America. Many economic benefits would result:

- The Coastal Plain could produce up to 1.5 million barrels per day for at least 25 years - nearly 25% of current daily U.S. production.

- The U.S. would save \$14 billion per year in oil imports.

- Up to 800,000 jobs are estimated to be created by development of the Coastal Plain.

- Federal revenues would be enhanced by billions of dollars from bonus bids, lease rentals, royalties, and taxes.



New technology is being used at the Alpine oil field to ensure the smallest footprint ever for a field this size. The Alpine field covers more than 40,000 acres, but technology has limited total surface impact to only 97 acres or two-tenths of one percent of the field.



The largest oil field to be discovered in North America in over a decade, Alpine was explored through the use of ice roads. In the spring, the roads and drilling pads melted, leaving no trace of development activity. Alpine set a new standard which can be applied to ANWR exploration.

- Advancing technology has greatly reduced the "footprint" of Arctic oil development. If Prudhoe Bay were built today, the footprint would be 1,526 acres, 64% smaller.



Caribou numbers have increased nine fold at Prudhoe Bay over the past 25 years. Oil and gas development and wildlife set the model for successful coexistence in the Arctic.

- Oil and gas development and wildlife are successfully coexisting in Alaska's Arctic. For example, the Central Arctic caribou herd at Prudhoe Bay has grown from 3,000 to as many as 27,120 during the last 25 years.

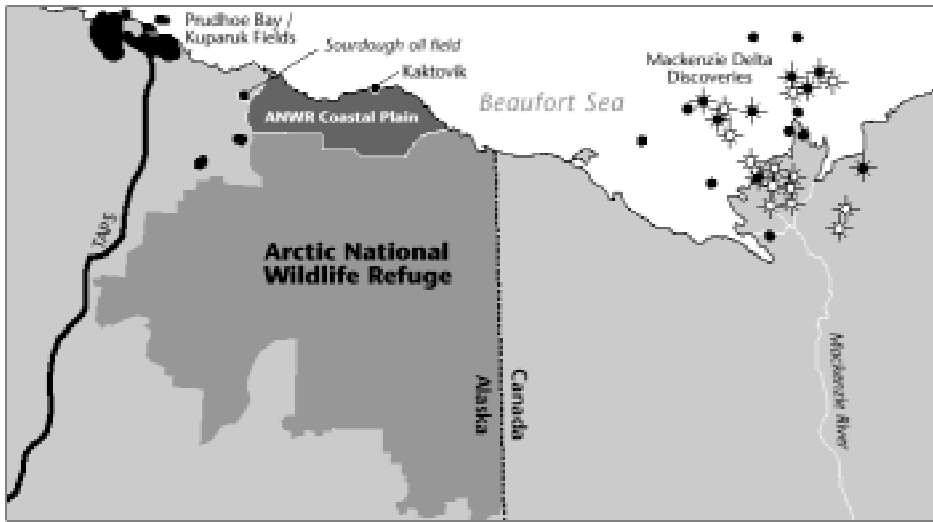


Kaktovik is located on ANWR's coastal plain. America's first and best environmentalists, the Eskimos, are in favor of developing ANWR's Coastal Plain, which is in their back yard.

- More than 74% of Alaskans favor exploration and production in ANWR. (Polling conducted in January 2001). The Inupiat Eskimos who live in and near ANWR strongly support onshore oil development on the Coastal Plain.

For more information, log on to
www.anwr.org

Myths of ANWR



In 1980, the 1.5 million acre Coastal Plain of ANWR was specifically designated by Congress for further study of its oil and gas potential and the effects of development on the refuge. In 1987, the Department of Interior recommended development. Much of the rest of ANWR's 19 million acres is protected from development through a federal Wilderness designation. In their opposition to development, non-development groups present several misleading arguments:

Myth: Development would destroy ANWR -- America's last Arctic wilderness.

Reality: First, oil and gas leasing would occur only on the Coastal Plain, which represents 8 percent of ANWR. With modern technology, development's footprint would be confined to about 2,000 acres, well under one percent of the Coastal Plain. Second, 92 percent of ANWR is closed to development. Nearly half is designated Wilderness, including a section of the refuge's Coastal Plain. Not one acre of ANWR's Wilderness would be developed. Moreover, Alaska's 365 million acres is largely pristine. This total includes 192 million acres of parks and refuges and 58 million acres of federally designated Wilderness, 62 percent of

America's total. In addition, Alaskans have themselves set aside 3.5 million acres of state lands as parks and have closed even more lands as protected critical wildlife habitat. Southwest of ANWR is Gates of the Arctic National Park -- a multi-million acre wilderness preserve that would remain untouched.

Myth: 95% of Alaska's Arctic coastline is open to oil and gas development.

Reality: Only 14 percent of Alaska's Arctic coastal lands are open to oil and gas exploration. These are lands owned by the State of Alaska between the Colville and Canning Rivers. If ANWR's Coastal Plain is opened to exploration, the total would rise to 25%.

Myth: The Coastal Plain is sacred to caribou. Development would destroy the herds.

Reality: The same prediction was made when Prudhoe Bay development was being debated in Congress. Today, North Slope caribou herds along the pipeline and near the oil fields are thriving. The Porcupine caribou herd does use the Coastal Plain for calving. However, in most years, the bulk of the herd uses other areas of the Alaska and Canadian Arctic. State studies show that over the past 18 years, only 43

percent of the Porcupine herd used the Coastal Plain. In 10 out of 19 years, less than 50 percent of the herd calved in the area; in four out of 19 years a large portion calved in the area; but in five out of 19 years, very few, if any, calves were born on the Coastal Plain.

Myth: The North Slope oil industry is damaging to the Arctic environment.

Reality: The industry has an excellent environmental track record in the Arctic. Studies confirm that there has been no decline in wildlife or waterfowl populations in or near North Slope oil fields since development began 25 years ago. The industry is the most clean, most technologically advanced and most heavily regulated in the world. Facilities are designed to minimize environmental impact.

Myth: Only 3.2 billion barrels of oil is likely to be found in ANWR, amounting to a six-month supply of oil for the U.S.

Reality: First, the 3.2 billion figure is from an outdated 1987 report. The U.S. Geological Survey released a new report in 1998 which estimated that between 6 and 16 billion barrels of recoverable reserves are likely to be found in ANWR. The report estimates that in-place oil could reach 30 billion barrels, much larger than Prudhoe Bay. Just a small portion of this South Carolina-sized refuge likely contains enough oil to produce 1.5 to 2 million barrels a day for at least 25 years, about a third of the current daily domestic production. Second, the six-month supply argument is based on the assumption that all the energy America consumes would come from a single oil field. However, our oil comes from hundreds of fields. If the six-month argument was applied to Prudhoe Bay, America's most prolific oil field would have been exhausted in about two years. Like Prudhoe Bay, ANWR can reduce the nation's reliance on foreign sources, creating hundreds of thousands of jobs and saving billions of dollars in oil imports. Its economic benefits will be felt for decades.

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Drilling would not put caribou at risk

By Matthew A. Cronin

Ken Whitten, a retired biologist with the Alaska Department of Fish and game, provided his opinion in the Anchorage Daily News that we should not risk the Porcupine caribou herd in ANWR to find out whether oil and caribou are compatible. I will present information that rebuts Whitten's arguments.

Whitten was selective in presenting information about oil fields and caribou. He stated that caribou avoid the trans-Alaska pipeline and that facilities have blocked movements along the coast.

He did not cite the extensive documentation that thousands of caribou use and move through the North Slope oil fields and along TAPS each summer, and they frequently use oil field structures to escape insects.

He stated that "calving at Prudhoe Bay had already largely ceased by the time oil first flowed south." However, the extent of calving at Prudhoe Bay prior to development, and hence effects on calving, are unknown.

There are data suggesting that caribou avoid roads with traffic during the calving period in June, and that the concentration of calving has shifted away from development areas in the Milne Point and Kuparuk oil fields. However, there have been no consistent differences in the production of calves or numbers of caribou in the oil fields and undeveloped areas.

Whitten acknowledges that the Central Arctic herd grew from 5,000 animals in the mid-1970s to 27,000 in the year 2000, although there was a decline in numbers between 1992 and 1995. He noted that cows that spent more time in the oil field gained less weight and had fewer calves than cows that seldom encountered development.

The implication is that the oil fields were involved with the decline in 1995, although he noted that changes in the herd coincide with weather conditions. If the oil fields were responsible for the decline in 1995, a logical inference is that the oil fields were also responsible for the increases from 1995 to 2000. In fact, no cause-effect relationship, positive or negative, exists between oil fields and herd productivity.

For example, in recent years, there have been more animals and higher calf production in oil field areas than in undeveloped areas. The number of animals in oil field areas declined from 14,842 to 6,327 between 1992 and 1995, and then rebounded to 14,295 in 2000. Also, between 1997 and 2000 there was a range of 79-83 calves per 100 cows in the oil field areas and a range of 64-88 calves per 100 cows in undeveloped areas.

It is likely that the numbers of caribou reflect movements of animals between the developed and undeveloped areas, not oil field impacts on calf production. We do not know enough about other factors that affect the herd, like range condition and population density, because research on the Central Arctic herd has focused on oil field impacts.

Conclusions for caribou and oil fields are:



Contrary to popular belief, in most years, the bulk of the Porcupine caribou herd use other areas of the Arctic to calve. In 2000, very few caribou calved on ANWR's Coastal Plain. Above, caribou graze in the Prudhoe Bay oil field.

1. The herd has grown from 5,000 to 27,000 caribou since the oil fields were developed. The Porcupine herd has declined recently without oil fields in its range.

2. The numbers of caribou and calf production in the oil field areas are as high or higher than in undeveloped areas.

3. Caribou continue to use and travel through oil field habitats each summer.

4. Oil field structures such as pipelines and roads may deflect caribou movements.

5. Cows and calves may move a few kilometers from roads with traffic, and calving distributions may have shifted since development of the oil fields.

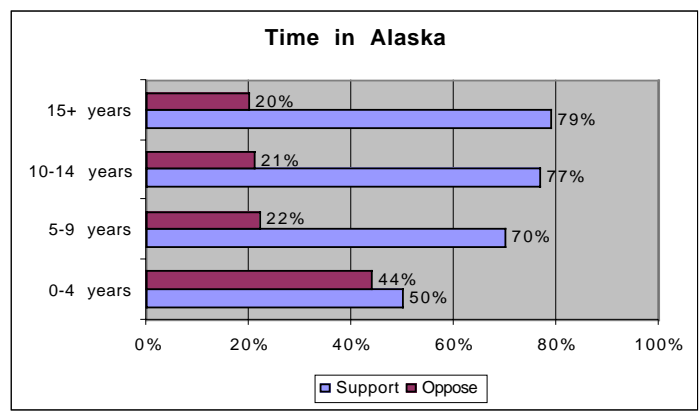
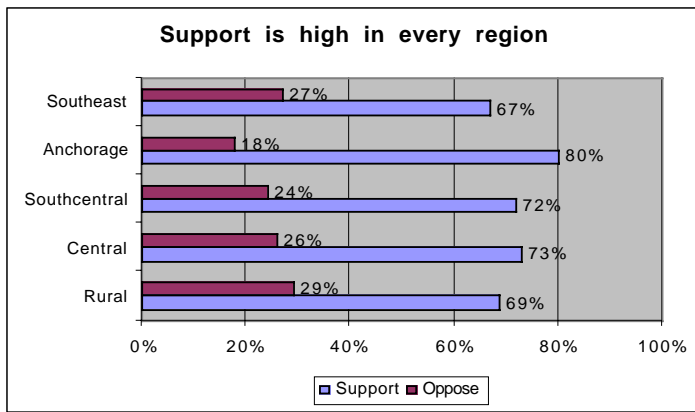
Extending this information to the Porcupine caribou herd in ANWR is speculative. As a scientist, I believe the data for the Central Arctic herd indicate that caribou and oil development can coexist together in ANWR with appropriate management.

For example, restriction of activities during the calving season, buried or elevated pipelines and careful siting of modern facilities with small footprints, could minimize impacts on caribou. However, whether oil should be developed in ANWR is for all citizens and our elected officials to decide.

As a scientist, it is my duty to provide all relevant information. I encourage you to read the scientific literature and assess the situation for yourself. I will be happy to provide a list of all relevant papers and reports to readers (M. Cronin, LGL Alaska research, 1101 East 76th Ave., Suite B, Anchorage, AK 99518).

Finally, it is unreasonable to conclude, as Whitten has, that the Porcupine herd is "at risk" if oil fields are developed in ANWR. There may be some adverse impacts on this herd, but to suggest the entire herd is at risk is not supported by the experience with the Central Arctic herd.

Matthew Cronin is a scientist with LGL Alaska Research Associates in Anchorage and an affiliate professor at the University of Alaska, School of Agriculture and Land Resources Management. He earned his Ph.D., at Yale. His research focuses on molecular genetics, as well as natural resource management.



Poll reveals strong ANWR support

(Continued from page 1)

Polling shows support is high across all regions of Alaska, but highest in Anchorage. Support is also highest among older Alaskans and those living in the state more than 15 years. These residents are more aware of the oil industry's successful efforts to minimize environmental disturbances on the North Slope, as well as its massive contribution to the state's economy. Long-time residents tend to form opinions based on the industry's documented track record in Alaska, rather than on perceptions largely formed by emotional arguments from Lower 48 non-development groups opposing ANWR development.

"To get so many Alaskans agreeing on anything is the most remarkable thing," added Selby. "With the national debate heating up, it becomes critical that we get the message out to the nation that Alaskans support development, and support doing the development right," Selby said.

Senator Frank Murkowski has introduced legislation outlining a national energy policy of which ANWR is a central element. Congressman Don Young has also introduced "open ANWR" legislation.

ANWR development took center stage during last year's Presidential debates and President Bush is actively pushing for ANWR development in his national energy policy. Congressman Don Young has also introduced legislation to open ANWR's Coastal Plain to oil and gas development.

"Congress needs to know that Alaskans are united on ANWR development," noted Senator Murkowski. "Issues favored by huge majorities of Alaskans have always been nail-biters in Congress," Murkowski continued. "Statehood and the pipeline rights-of-way are perfect examples. I don't expect ANWR to be any different."

Myths of ANWR

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Myth: Conservation measures could save more than what could be developed from ANWR

Reality: America needs to push forward with aggressive conservation measures, but even if this nation takes full advantage of potentially-attainable conservation initiatives, it would still far well short of meeting its daily energy needs. America cannot conserve its way to energy independence no more than it can drill its way to such a goal. However, by enacting stronger conservation measures and developing ANWR's reserves to replace declining production at Prudhoe Bay, America can significantly reduce its reliance on foreign sources of oil. By itself, however, conservation is NOT an energy source. A more efficient vehicle engine or home heating system will still require fuel to run.

Myth: ANWR oil development would not provide relief to American consumers today since it would take up to ten years for the oil to reach Lower 48 markets.

Reality: Due to strict environmental regulations and laws, it would take seven or more years to bring ANWR oil to market. At that time, oil from the Coastal Plain would supply America in a time when oil from foreign sources will certainly be more expensive and in shorter supply than today.

Myth: Alaskans are split on ANWR development

Reality: Polls have consistently shown strong support for ANWR development across Alaska. Alaska's Inupiat Eskimos, who live on the North Slope, strongly support onshore development in ANWR. The Alaska Federation of Natives, which represents all Alaska Native groups, has endorsed development. The Gwitchin tribes, who live outside ANWR and well south of the Coastal Plain, oppose development. However, the Gwitchins leased their own lands for oil development, but no oil was found.

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Everett Edwardsen *Inupiat Child*

Cora Leavitt *Inupiat Elder "Aaka"*

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