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Melting ice will wreck polar bear populations

WARMING: The seal eaters will be driven ashore or onto shrinking ice floes.

By Doug O'Harra
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Polar bears are facing slow elimination over the next century as their vast frozen habitat melts away, according to a report by a panel of the world's top experts on the subject.

If warming Arctic climate continues to erode sea ice, as predicted by many climate scientists, the expert panel says, the iconic white carnivores will be driven ashore or onto increasingly smaller floes in their endless feast-or-famine hunt for seals to eat.

Many animals will then sicken and starve. Populations will die out.

The 40 members of the polar bear specialist group of the World Conservation Union warned last week that the population of the Arctic's top predator could crash by 30 percent over the next 35 to 50 years and should now be rated as vulnerable on an international "Red List" of threatened species.

"This is the first time that we've evaluated the plight of polar bears (with) respect to climate change, and we found that they were vulnerable to extinction," said the group's outgoing chairman, biologist Scott Schliebe, who oversees management of polar bears in Alaska for the U.S. Fish and Wildlife Service. "Polar bears don't have a place to go if they lose the ice."

"I'm impressed to have a detailed, thoughtful evaluation," said Rosa Meehan, chief of marine mammal management for the agency in Alaska. "The outcome makes my heart sink."

Over the past decades, sea ice has lost thickness, melted faster in spring and re-formed later in fall, according to the international Arctic Climate Impact Assessment. Vast stretches near Alaska have become ice-free during the last three summers, setting a record in 2003 and a near-record in 2004 for least coverage ever measured. The thick multiyear ice essential to polar bears has been shrinking 8 to 10 percent per decade.

Some climate models predict summer ice could disappear from the Arctic Ocean by the end of the century.

"It's now abundantly clear that we're looking at a retraction of the sea ice environment," Schliebe said. "The projection from the climatologists is very grim."

Politicians who could do something about reducing the greenhouse gas emissions that are at least partly responsible for heating the earth have been reluctant to act. While the U.S. Senate passed a nonbinding resolution last week acknowledging the role of human-generated greenhouse gases in causing the climate to warm and suggesting that U.S. emissions should be cut back, Alaska Sens. Ted Stevens and Lisa Murkowski voted against a measure that would have imposed limits on those emissions.

Murkowski told the Daily News earlier that she wanted to see more conclusive evidence tying climate change to man-made releases before taking actions that could hurt the U.S. economy.

"We don't know for sure yet," she said. "And if we don't know for sure yet, then we ought to be very cautious."

The polar bear experts say the loss of ice will devastate the seal-loving carnivores, thought to number up to 25,000 in 19 separate populations, including two off the coast of Arctic Alaska: the Chukchi Sea bears shared with Russia and the Beaufort Sea bears shared with Canada.

Believed to have evolved at least 250,000 years ago from brown bears, polar bears spend their lives stalking seals and an occasional beluga whale or walrus in a frozen wilderness of grinding floes. One or two pounds at birth, male bears can grow

to more than a half-ton by maturity. The much smaller female hibernates when pregnant, digging out winter dens to tend cubs.

They are curious and relentless hunters, with sharp teeth and short claws totally adapted to marine life. Despite a mythic reputation for ferociousness, they often act cautiously around other bears, especially barren-ground grizzlies, and appear reluctant to fight over food.

The bears cannot simply evolve back to living on land over a generation or two, Schliebe said, and will begin disappearing as ice cover shrinks.

Although the group named climate warming and the destruction of the ice habitat as the main threat to the species, it also cited poaching in Russia and threats by contaminants as other problems.

The group, which advises the United States and other Arctic nations on polar bear biology and treaty obligations, last rated the animals in a category of "least concern" in 2001 but had not yet considered the impact of climate change, Schliebe said. Some 40 biologists, Native representatives and others from Alaska, Canada, Russia, Norway, Greenland and Denmark met June 20-24 in Seattle to reconsider new data.

The vulnerable designation will help spur action to help protect the bears, said Charles Johnson, executive director of the Nome-based Alaska Nanuuq Commission, which represents hunters and communities that kill polar bears for subsistence.

"It draws attention to the fact that polar bears will be in jeopardy if we continue to lose the ice," Johnson said. The bears are "a very valuable subsistence resource to Native people."

The most dramatic impact seen so far may be in western Hudson Bay, where sea ice has been breaking up three weeks earlier than it did decades ago. Bears must spend an extra month on shore fasting, waiting for ice to re-form in the fall. As a result, the population has plunged 13 percent in 10 years, from 1,100 in 1995 to fewer than 950 in 2004. Bears have also been killed by people in harvests and defense. The group urged Canada to take immediate action to reduce bear deaths.

Off northeastern Alaska, the Beaufort Sea population appears to be stable, with an estimated 1,800 bears living on the ice off Alaska and Canada, Schliebe said. Federal biologists have spent five years conducting a new population study and expect to release revised figures within a year or so. About 40 bears per year are killed by Alaska and Canadian Natives in well-managed subsistence hunts, Schliebe said.

But there's anecdotal evidence of changes. More individual bears have been seen foraging along the Beaufort shore or barrier islands in recent years, including large congregations gathering at whale-carcass dump sites from Native hunts. This increases the chance that bears will become stressed or come into conflict with people.

"What we're seeing in the Beaufort Sea may be a warning sign of changes" similar to those seen in Hudson Bay, Schliebe said.

In the Chukchi Sea, scientists estimate that at least 2,000 bears roam between Alaska and Russia's Chukotka Peninsula, though Schliebe said the population figure is not considered sound by scientists. Russian Natives may be illegally killing more than 200 bears per year, often for meat, Schliebe said.

"The population can't sustain that," he said.

Alaska Natives harvest about 40 Chukchi bears per year in subsistence hunts authorized by the Marine Mammal Protection Act, Schliebe said.

A treaty signed in 2000 between the United States and Russia was supposed to solve the problem by creating an international commission to study the Chukchi Sea bears, obtain an accurate population count and oversee a sustainable subsistence hunt for Natives on both sides of the Bering Strait.

The Russians have prepared their end, with commissioners and new laws, Schliebe said. But legislation that would set things rolling on the Alaska side has not been introduced yet in the U.S. Senate.

"We really need that treaty put into play so we can control that poaching in Chukotka," Johnson said. "It's the U.S. side that is causing the delay."

Stevens has been an ally, but there was opposition to some aspects of the treaty by the Bush administration, Johnson said. Competition for attention against other measures in the Senate may also explain the delay, Schliebe and Meehan said.

"Sen. Stevens is really interested in the polar bear treaty, but as of now, no implementing language has been introduced," his spokeswoman, Courtney Boone, said Thursday. "It's being worked on."

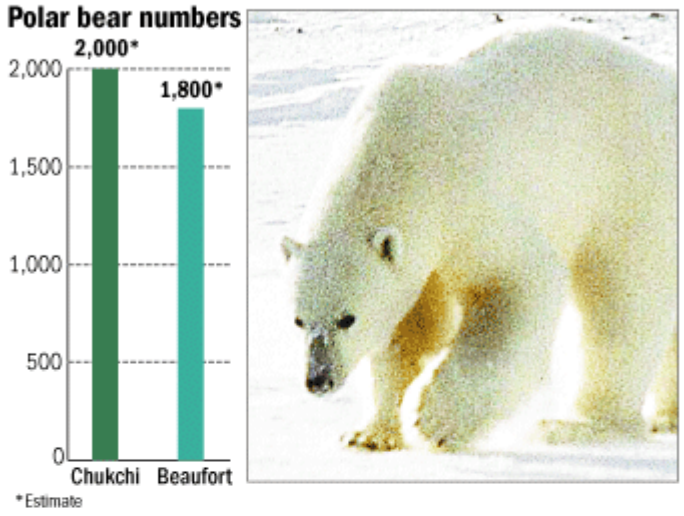
In its report last week, the polar bear group made six recommendations to governments and managers, including one urging the United States and Russia to put the treaty into force immediately.

Alaskans can also act to reduce U.S. energy consumption and releases of the greenhouse gases that contribute to Arctic warming, Schliebe said. And they can educate themselves on polar bear issues.

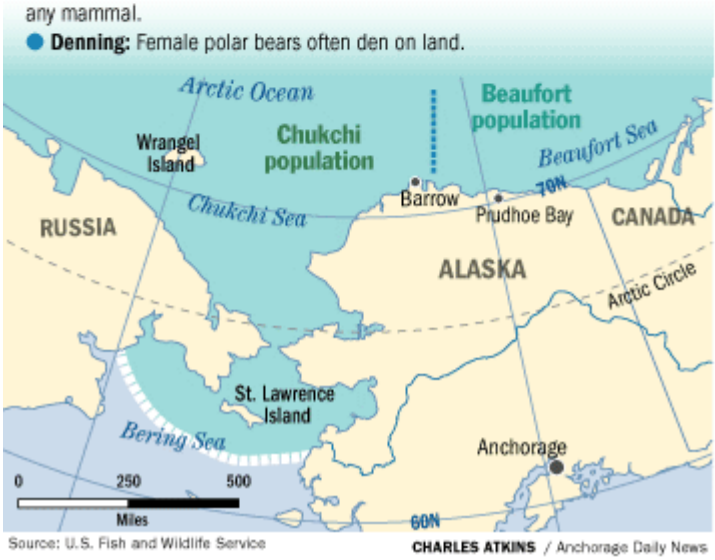
"We're seriously concerned about the plight of the polar bear," he said. "We believe the future is bleak, and we want the public to wake up and help us."

About 3,800 polar bears range off of Alaska

Two distinct populations of Alaska polar bears have a combined population estimated at 3,800 animals. A five-year study of the Beaufort Sea population is nearly done and may offer an update. The Chukchi population, which ranges east to Barrow and south to St. Lawrence Island, is less certain. Some scientists are concerned about poaching in Russia.



- **Size:** Mature males stand more than 12 feet tall on their hind legs, have a 45-inch neck, leave a 10-inch-wide footprint and routinely weigh up to 1,500 pounds. Females are smaller, usually 300 to 700 pounds.
- **Lifespan:** 25 to 30 years.
- **Natural history:** Polar bears follow sea ice and ringed seals, their primary prey. They also eat bearded seals, whales and carrion. Only pregnant females hibernate.
- **Population:** An estimated 3,800 animals in the two areas.
- **Breeding:** Female bears reach breeding age at 6 to 7 years and have one or two cubs every three to four years, one of the slowest reproductive rates of any mammal.
- **Denning:** Female polar bears often den on land.



Source: U.S. Fish and Wildlife Service

CHARLES ATKINS / Anchorage Daily News