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ENVIRONMENT: POLAR BEARS GO HUNGRY AS ICY HABITAT MELTS AWAY

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BROOKLIN, Canada, Nov. 17, 2006 (IPS/GIN) -- The iconic animal of the frozen north, the polar bear, is starving to death because the Arctic Ocean sea ice is melting, scientists say.

Polar bears hunt seals almost exclusively and do so from the sea ice. But in the past five years, summer sea ice coverage has declined by 20 percent due to warming temperatures. Although excellent swimmers, the bears are not very good at catching seals in the water, so changes in the ice are making it difficult for these giant bears to survive: several have recently been found drowned or dead of starvation.

This week scientists announced new findings that the survival rate of polar bear cubs in Alaska's Beaufort Sea has plummeted. In the late 1980s, 65 percent of polar bear cubs in the southern Beaufort Sea survived their first year. That has fallen to an average of 43 percent in the past five years, report scientists at the Canadian Wildlife Service and the U.S. Geological Survey (USGS).

"This is an extremely ominous finding for polar bears," said Kassie Siegel of the Center for Biological Diversity, an environmental non-governmental organization based in Joshua Tree, Calif.

"We've observed massive melting of the sea ice in the Arctic in recent years, and they can't survive without it," Siegel told IPS.

Siegel is the lead author of a 2005 petition seeking to list polar bears as threatened under the U.S. Endangered Species Act, a process that could take several more years.

"There are very serious problems in the Beaufort and the Western Hudson Bay populations," says Andrew Derocher of the University of Alberta, head of the World Conservation Union (IUCN) Polar Bear Specialist Group.

Over the past 10 to 20 years, the total number of bears has declined by roughly 20 percent in both areas, Derocher told IPS from the town of Inuvik, on the Beaufort Sea in Canada's Northwest Territories.

The IUCN estimated in 2001 there were about 22,000 polar bears left in the world, mainly in Canada, Russia, Greenland, and the U.S. state of Alaska.

"Polar bears can't handle rapid changes. If the ice breaks up two or three weeks too soon, or comes too late, there will be a very sudden impact on the population." And two bad years in a row would have a "devastating impact," he said.

An 800-kilogram polar bear -- four times the weight of the average Siberian tiger -- is remarkably adapted to life on ice and in the sea. A thick layer of blubber protects it from the harsh Arctic winter temperatures of minus 45 degrees Celsius, since it is active year round, unlike other bears that hibernate. That vital layer of blubber is essentially consumed seal blubber, without which the polar bear cannot survive.

Seals in the Arctic are also affected by the changing sea ice, but their population numbers appear to be stable, says Derocher, though he added that the available data isn't very good data.

However, the changing ice conditions have forced seals to move and give birth to their pups in different locations and even under ice, rather than deep in a snow bank. And that makes finding and catching seals a bigger challenge for the bears.

"I've seen where a bear had tried to claw through 18 inches of solid ice to a group of seal pups -- unsuccessfully," adds Derocher.

Unlike their grizzly, or brown bear, cousins, polar bears do not have long, powerful claws because they don't have to tear apart logs to find food or deep into the earth to make a den.

Not surprisingly, polar bears are losing weight. Adult bears living in the Beaufort Sea region, the western part of the Arctic Ocean, are much lighter than they were 15 years ago. The species overall is actually shrinking in size, according to one study.

And the skinny-bear problem means that females give birth to smaller cubs and can't provide enough nutrition in their milk. Smaller, weaker cubs have a tough time surviving the harsh Arctic conditions.

The changes in sea ice are limiting polar bears from hunting for food at the ice's edge, said Steven Amstrup of the USGS and lead author from the Beaufort Alaska Science Center.

Although Amstrup won't say this "critical decline" in cub survival is due to climate change, Derocher is convinced.

A few years ago Derocher and colleagues at the IUCN predicted that polar bear populations would decline as Arctic temperatures increased and sea ice melted. "We thought there would be a 30 percent decline in 30 to 50 years, but it's already 20 percent in some areas," he said.

Although there is some sport and indigenous hunting of polar bears in Canada, mostly it is sustainable, he says.

More importantly, it's much easier to manage hunting by limiting the number of licenses than it is to stop the bears' habitat from melting away. "When there is minimal effort to deal with climate change in the South, it's a bit much to tell Arctic people to stop hunting."

Siegel, of the Center for Biological Diversity, agrees: "Polar bears won't survive without their ice habitat."

Setting up protected areas for the bears is useless because the ice is melting beneath their paws.

"There is no easy conservation fix," says Derocher. "Without stabilizing the climate by taking serious and urgent action on climate change, I don't see a future for polar bears at all."