



ENDANGERED SPECIES: U.S. Weighs Protection for Polar Bears

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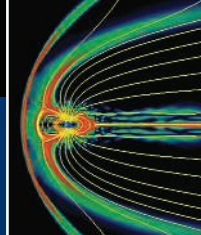
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says that “if we decide to put out a solicitation, it will be a lot smaller.”

With so much on the line, some science lobbyists are hoping that legislators will allow some melting around the edges in the year-long budget freeze they are expected to pass before the current spending resolution expires on 15 February. But most are setting their sights on the 2008

budget cycle, which begins at the end of the month with the president’s State of the Union address and, a few days later, his budget request to Congress. Toward that end, three Senate advocates of legislation to authorize ACI spending levels have asked President Bush “to continue to make this issue a top priority in your budget and for your administration.” The 21 Decem-

ber letter from Senators Pete Domenici and Lamar Alexander, Republicans from New Mexico and Tennessee, respectively, and Senator Jeff Bingaman, a Democrat also from New Mexico, could well have been written by the scientific community itself: “If America is going to continue to be the global economic leader, we can not afford to let this wait.” —JEFFREY MERVIS

ENDANGERED SPECIES

U.S. Weighs Protection for Polar Bears

Weighing up to 800 kilograms, the polar bear is king of the Arctic. And last week, the U.S. government made it the poster child for global warming.

Citing warming temperatures that are melting the sea ice that polar bears call home, the U.S. Fish and Wildlife Service announced that within the next year it will decide whether to protect these animals under the Endangered Species Act. The move represents the latest in a multidecade international effort to maintain the species. And for environmental groups, it’s a belated recognition by the U.S. government that global warming is affecting biodiversity and ecosystem health. “It’s a really watershed moment,” says Andrew Wetzler, an attorney at the National Resources Defense Council (NRDC) in Washington, D.C., which has been pushing for polar bear preservation.

The world’s 20,000 to 25,000 polar bears are divided into 19 populations distributed across the Arctic. Throughout the winter, they hunt seals from sea ice that expands southward each winter and contracts as the temperature rises. Often stranded on land in the summer, the animals fast.

Arctic nations have worked for decades to control the hunting of polar bears. But the dangers to the bears’ habitat are a more recent concern. In 2005, the Center for Biological Diversity, an environmental advocacy group based in California, asked the Fish and Wildlife

Service to add polar bears to the list of threatened species because of fear that continued habitat loss might drive them into extinction. Last week’s announcement came after the center, Greenpeace, and NRDC took the agency to court for not responding to the request.

There is growing evidence that polar bear habitat—sea ice—is declining, with less of it forming every year. In 2004, the eight-nation Arctic Climate Impact Assessment concluded that the Arctic was warming twice as fast as the rest of the world, that the average annual sea-ice coverage had shrunk by 1 million km², and that summer

reported that satellite data showed sea-ice coverage had reached an all-time low and was shrinking at an annual rate of about 8%.

A 2004 study of polar bears in Canada’s Western Hudson Bay—where sea ice is breaking up 3 weeks earlier than it had 30 years ago—highlights the problem for the bears. It found fewer than 1000 bears, down from 1200 a decade ago. The bears are also thinner, and fewer cubs are surviving. “As sea ice melts, bears are having a much more difficult time,” says Andrew Derocher, a

population ecologist at the University of Alberta, Edmonton.

Researchers don’t have firm numbers on the population of bears in the southern Beaufort Sea, which extends across Canada and the United States, but the bears there are also thinner and have fewer cubs, suggesting they, too, are in trouble. In June 2005, these findings prompted the World Conservation Union (IUCN) to list polar bears as “vulnerable” on its Red List of endangered species.

The U.S. announcement provides for a 3-month comment period. Only if the agency decides to list the polar bear as threatened will it examine how best to care for the species. Wetzler says that’s a necessary first step to controlling the greenhouse gas emissions that

are the real cause of the bears’ plight. “The polar bears’ survival is going to depend on our ability to come to grips with global warming,” he says. —ELIZABETH PENNISI



Slipping away. As the extent of sea ice (white) declines, the two populations of U.S.-based polar bears (red lines) will have a harder time surviving.

sea ice could disappear by 2100 (*Science*, 5 November 2004, p. 955). In September 2005, Julienne Stroeve of the National Snow and Ice Data Center in Boulder, Colorado,