
(Scott Schliebe, US Fish and Wildlife Service)

There was an interesting juxtaposition of news about the polar bear recently, one that illustrates the divide between working research scientists trying to grapple with the impacts of global warming and the skeptics who insist that climate change either is not occurring or is not a problem.

The Polar Bear Specialist Group, launched in the 1960s by the IUCN, met last week in Copenhagen. The Group currently has 19 members, all research scientists from the five arctic nations that are parties to the 1973 International Agreement on the Conservation of Polar Bears. It's not a radical group. Many of its members are government scientists, and it supports sustainable harvest.

At its latest meeting, this group "confirmed its earlier conclusion that unabated global warming will ultimately threaten polar bears everywhere." That conclusion has also been endorsed by the parties to the polar bear treaty (Canada, Greenland, Norway, Russia, and the US). Evaluating the current status of the species, the PBSG concluded that only 1 of 19 recognized populations is increasing, 3 are stable, 8 are declining, and for 7 there are not enough data to assess the trend. As Andrew Revkin notes at DotEarth, only 5 populations were thought to be declining in 2005, when the PBSG last met, and that the data gaps are in important locations including much of Russia and Canada.

Juxtaposed with that news is this commentary by arctic journalist Ed Struzik (author of The Big Thaw) on Environment360. Struzik reports that skeptics without scientific expertise remain stridently opposed to measures to protect the polar bear, and that although their arguments "have been widely discredited" by polar bear specialists like the PBSG

> they seem to have created enough of a gray area to provide cover for the Canadian government not to initiate management plans that might help some polar bear populations weather the warming that is destroying their icy habitat.

One of the interesting things about Struzik's commentary (which is well worth reading in its entirety) is that it documents a new strategy from the skeptics, or at least one that is new to me. In addition to the familiar claims that the earth is not warming and that models mean nothing, opponents of polar bear protection are now arguing that the bear can adapt to life on land as the sea ice disappears, switching their diet from seals to goose eggs and berries.

Those arguments are founded on papers published in the scientific literature, but not by polar bear specialists. The polar bear scientists respond that there are simply not enough calories available on land to support the bears, and that there is little evidence that polar bears, even those faced with starvation, switch foods.

Although it's not especially persuasive, the adaptation argument may provide enough cover to facilitate the typical human behavior of ignoring looming problems to the extent possible. The adaptation hypothesis can't be disproved without doing the experiment, which makes it a great focus for wishful thinking. A bit of logic, though, reveals why it shouldn't be used as a justification for reducing protection from conventional threats like those from overharvest and oil development activities. Even if one believes in the possibility of adaptation, its probability will depend on the size of the population on which selection pressures are acting.

While it's a red herring in the context of many management questions, the adaptation argument provides a concrete context for evaluating conservation goals for the next century. What does it mean to "save" polar bears? If a population of polar bears does adapt to life on land with a new food source, those bears will be very different from the polar bear as it now exists. Should our goal be to save bears that can live on sea ice and hunt seals, or only to ensure to the extent possible that the current polar bear has some evolutionary progeny, that is that it has as much opportunity as possible to adapt and evolve to fit the world of the future, which may not have any summer arctic sea ice? That's not a comfortable question, but it's one that will have to be confronted, not just for polar bears but for many other species, as the world continues to warm in the coming decades.