



Conservation through research and education

Polar Bear Status Report

The Arctic's climate is changing, with a dramatic warming trend that is affecting polar bears. Last summer, the normal ice coverage in the Arctic declined by almost 50%—a loss equal to the size of Alaska and Texas combined. This was followed by a winter melt-off in the permanent pack ice of the Beaufort Sea, leaving expanses of water so wide that ice couldn't be seen on either side. The break-up of the thick slabs of ice clearly rattled climate experts, who did not expect the winter sea ice to diminish for several decades.

Scientists estimate that Arctic summers will be mostly ice-free by 2040 if present trends continue—and could possibly be ice-free in 10 years. The loss of Arctic sea ice threatens the survival of polar bears. Sea ice is important to the bears because they use it as a platform from which to hunt seals, as well as for breeding and denning. Without ice, polar bears are unable to reach their prey.

Scientists now know, with 95% certainty, that greenhouse gases are causing the planet's climate to warm. Although the Arctic has experienced previous warm periods, the region has never undergone such a rapid change.

Polar bears now need to swim farther to reach the sea ice. Some of them drown while attempting to make long, difficult swims so that they can hunt seals.

The loss of sea ice has already affected two representative polar bear populations, Western Hudson Bay and the Southern Beaufort Sea. The Western Hudson Bay population has dropped by 22% since 1987. The Southern Beaufort Sea population has seen a drop in the number of cubs surviving and in the skull size of adult male bears. These same signs of stress were seen in the Western Hudson Bay bears before their numbers plunged.

Scientists believe that polar bears will disappear by the middle of the century from the southern part of their range, including Alaska and Canada's Hudson Bay. They are also likely to disappear from the Polar Basin. Smaller groups are predicted to survive along the coast of Canada's Arctic islands and parts of the coast of northern Greenland.

Hope remains for the bears, however, if we take rapid action. Although greatly reducing carbon emissions would not have an immediate effect, we can save the polar bear as a species. If we take action and reverse climate change, the small group of polar bears that survive will be able to repopulate their original range when the sea ice returns.