



COSEWIC Assessment Summary

Assessment Summary – April 2008

Common name

Polar bear

Scientific name

Ursus maritimus

Status

Special Concern

Reason for designation

The species is an apex predator adapted to hunting seals on the sea ice and is highly sensitive to over harvest. Although there are some genetic differences among bears from different parts of the Arctic, movement and genetic data support a single designatable unit in Canada. It is useful, however, to report trends by subpopulation because harvest rates, threats, and, hence, predicted population viability, vary substantially over the species' range. Some subpopulations are over harvested and current management mostly seeks the maximum sustainable harvest, which may cause declines if population monitoring is inadequate. Until 2006, some shared subpopulations were subject to harvest in Greenland that was not based on quotas. Population models project that 4 of 13 subpopulations (including approximately 28% of 15,500 polar bears in Canada) have a high risk of declining by 30% or more over the next 3 bear generations (36 years). Declines are partly attributed to climate change for Western Hudson Bay and Southern Beaufort Sea, but are mostly due to unsustainable harvest in Kane Basin and Baffin Bay. Seven subpopulations (about 43% of the total population) are projected to be stable or increasing. Trends currently cannot be projected for 2 subpopulations (29% of the total population). Bears in some subpopulations show declining body condition and changes in denning location linked to decreased availability of sea ice. For most subpopulations with repeated censuses, data suggest a slight increase in the last 10-25 years. All estimates of current population growth rates are based on currently available data and do not account for the possible effects of climate change. The species cannot persist without seasonal sea ice. Continuing decline in seasonal availability of sea ice makes it likely that a range contraction will occur in parts of the species range. Decreasing ice thickness in parts of the High Arctic may provide better habitat for the bears. Although there is uncertainty over the overall impact of climate change on the species' distribution and numbers, considerable concern exists over the future of this species in Canada.

Occurrence

Yukon, Northwest Territories, Nunavut, Manitoba, Ontario, Quebec, Newfoundland and Labrador.

Status history

Designated Not at Risk in April 1986. Status re-examined and designated Special Concern in April 1991. Status re-examined and confirmed in April 1999, November 2002, and April 2008.