

POLAR BEARS IN A CHANGING ARCTIC : NEW SCIENTIFIC RESEARCH FROM THE SOUTHERN BEAUFORT AND CHUKCHI SEAS

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Polar bears (Ursus maritimus) depend on sea ice for most aspects of their life history, including access to ice-associated seals. In this presentation, Dr Eric REGEHR (IUCN Polar Bear Specialist Group) reviews new research from two polar bear subpopulations that have exhibited different responses to sea-ice loss. In the Southern Beaufort Sea subpopulation - located north of Alaska, USA and shared with Canada - polar bears have exhibited declines in nutritional condition and reproduction, and recently in survival and abundance. In the Chukchi Sea subpopulation - located west of Alaska, USA and shared with Russia - polar bears appear to have maintained positive nutritional condition and reproduction despite sea-ice loss. Habitat loss due to anthropogenic climate change is the primary long-term threat to polar bears throughout their circumpolar range. Global action to address climate change is the single most important factor determining the longterm survival of the species. However, as demonstrated by new research in Alaska and elsewhere, the current status of the world's 19 polar bear subpopulations varies as a function of regional differences in sea-ice dynamics, ecology, human activity, and other factors. Understanding this variability through scientific research and other studies is critical to developing management plans for polar bears that support both wildlife conservation and the well-being of humans who harvest, interact, and live with this iconic species.