

Theme 1: The Arctic

Theme 1 focused on understanding and managing the impacts of climate change and increased human activities on Arctic marine mammals and subsistence activities. The ongoing decrease in seasonal summer sea ice area, the loss of multi-year ice and a 75% loss of the overall volume of sea ice are associated with increases in ocean heat storage and mega-storms. This represents a “new normal” in the Arctic. We are not going to return to the former condition.

In this new system, ice-dependent marine mammals, such as ice seals, walruses and polar bears are generally the losers as they have lost the ice platform they depend on for much of the year, but there are strong regional differences. Some polar bear populations are doing well while others are in poor condition. Some whale species on the other hand may be finding more opportunities in the increasingly open-water system. We need to study the health of individual animals and the ecology, movements, and dynamics of marine mammal populations to better understand the consequences of these changes to them.

Climate change is also bringing an increase in human activities, including oil and gas exploration, development, and production and increased shipping. Development in the arctic is already occurring and doing so faster than state and federal agencies can accommodate. In particular the Commissioners raised the concern that the capacity to deal with large spills is absolutely lacking. Getting around is very difficult, deploying materiel very difficult, even housing difficult. Locals need help; training, supply depots, infrastructure, etc. The Marine Mammal Commission can alert others to these needs.

Studies to understand and manage the impact of human activities exemplify the spirit of collaboration in the Arctic, but more is needed. In one such effort, marine mammal hunting groups have formed the Arctic Marine Mammal Coalition to work with the Coast Guard on means to ensure hunter safety in the face of increased shipping in their hunting areas.

Discussion pertaining to climate change, subsistence, and marine mammals in the Arctic must involve the direct involvement of indigenous peoples. The traditional knowledge of Arctic peoples is a knowledge system which can provide long-term, circumpolar observations complementing western science research techniques when pursuing an integrated, adaptive, and ecosystem- based approach to the management of marine mammal resources.

Finally a large portion of the international work of the Arctic Council is focused on the marine environment. In developing its plans to assume the Chairmanship in 2015, the United States has an opportunity to increase the Arctic Council’s focus on climate change, the marine environment and other issues of importance to marine mammals and the Arctic communities who depend upon them.