



Oceana Observer Comments on Protecting Biodiversity in the Arctic

Rovaniemi, Finland

November 2, 2018

Thank you for the opportunity to provide information on Oceana's work to preserve biodiversity in the Arctic. Oceana is a new Observer to the Arctic Council, and is the largest international conservation organization dedicated solely to the protection of the world's oceans. We use science, law, and the public to affect policy and achieve in-the-water protections in the world's oceans.

Part of protecting biodiversity in the oceans is knowing what is in the oceans, including the diversity of marine life as well as what possible threats may exist. Once this information is gathered and analyzed, it is imperative to put in place management measures that include precautionary protections and shore up the resilience of marine ecosystems and ocean species.

As an example, in the United States Arctic, Oceana developed an approach to protect living seafloor habitat from destructive bottom trawling. The approach is straightforward: gather and map all available information on locations of corals, sponges and other living seafloor habitat; gather and map all information on existing bottom trawl fisheries; "freeze the footprint" of bottom trawling to prevent expansion into new areas unless and until it can be shown that bottom trawling would not harm the health of seafloor; and protect hotspots within the footprint such as coral gardens, seamounts, canyons, and pinnacles.

Oceana engaged with a number of partners to advocate for this change, including other conservation organizations, local communities, and commercial fishermen. Our approach in the United States Arctic can serve as a model that can be replicated anywhere in the world to protect important living seafloor habitat.

For example, using this same approach we worked with partners in the Northern Bering Sea who shared our concerns about bottom trawl impacts on areas of the seafloor that are critical foraging spots for marine mammals and seabirds.

All told, through our work at the North Pacific Fishery Management Council and other forums Oceana and our partners successfully protected more than 1.9 million square kilometers of seafloor in the Aleutians Islands, Bering Sea, Chukchi Sea, and Beaufort Sea from destructive bottom trawling.

In the process, we were struck by the lack of communication between experts, and consequently how little of an overall picture existed of resources at risk in the US Arctic. Polar bear researchers, seal researchers, fisheries scientists, and local communities with Indigenous Knowledge, to name a few, did not have a way to communicate and share data to establish a "big picture" view.

Acknowledging that there are different kinds of science, and clearly seeing the need for a transparent, reproduceable way to combine Indigenous Knowledge with other science data sets, we developed a mathematical analysis using standard deviations to integrate data sets. During this process it quickly became apparent that some areas on the map jumped out as being disproportionately important for the health and functioning of the ecosystem.

Working with partners including the Northwest Arctic Borough in Kotzebue, Alaska; Kawerak Inc., in Nome, Alaska, and Audubon Alaska, we developed a series of syntheses and atlases that capture a snapshot of known marine biodiversity and resources in specific geographic areas of the US Arctic. We gathered and integrated data about the presence and abundance of marine mammals, seabirds, fishes, primary productivity and other elements of the marine ecosystem into easy to understand maps that can be shared with policymakers, stakeholders and the public. This information can be used by Oceana and others to make informed decisions about conservation, management and development in the Arctic.

Additionally, Oceana has developed a free, globally available tool called Global Fishing Watch, which tracks all fishing vessels around the globe that are using Automatic Identification System (AIS technology). As the Arctic becomes more and more accessible as sea ice recedes, this tool may prove valuable in ensuring fishing fleets are abiding by the recent treaty to protect the high seas of the Arctic from industrial fishing, and potentially be useful for monitoring other vessel traffic across the top of the globe.

To preserve marine biodiversity, you have to know what is in the ocean, what the threats are, and what you are at risk of losing. Oceana has developed tools and methodologies to help answer those questions. We look forward to continuing to bring this expertise to the PAME Working Group of the Arctic Council to help preserve the health of the marine ecosystems of the Arctic for generations to come.