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## United States Department of the Interior

U.S. FISH AND WILDLIFE SERVICE  
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FWS/AFES

Report # B-6: U.S. Fish and Wildlife Service Report to the North Pacific Fisheries Management Council, December 2016.

The following information is a summary of the major updates from the U.S. Fish and Wildlife Service (Service) that the Service is involved in related to the affairs of the North Pacific Fisheries Management Council.

### **I. Migratory Bird Management Issues:**

#### *Pribilof Islands Seabird Die-off*

Biologists at the Aleut Community of St. Paul Island Tribal Government Ecosystem Conservation Office (ACSPI ECO) have counted nearly 300 beached seabird carcasses since October 17, 2016. The species found are mostly tufted puffins, but also horned puffins, murre, and recently, crested auklets. The current encounter rate (carcasses/kilometer) of puffin carcasses in the past three weeks has been more than 350 times the normal rate based on surveys conducted at St. Paul over the past ten years (2006-2015) according to the Coastal Observation And Seabird Survey Team (COASST) and ACSPI ECO. An estimated 6,000 tufted puffins and over 30,000 horned puffins breed at the Pribilof Islands. When breeding season is over, the birds make their living at sea and have no need to come to land. Therefore, the large number of puffins near the Pribilof Islands at this time of the year is unusual and likely includes birds from other breeding colonies. Are we seeing the full extent of the die-off? Because only a fraction of birds that die at sea will become beached, and even fewer counted prior to removal by scavengers, the report of over 250 seabirds (adults and juveniles) washed up on four monitored beaches at St. Paul Island raises concern.

The U.S. Geological Survey's (USGS) National Wildlife Health Center in Madison, WI performed necropsies to determine cause of death(s) on eight of the beached puffins. All puffins showed severe emaciation characterized by severe atrophy of muscles of the breast and thighs, and complete absence of body fat. At this time, no pathogenic bacteria, viruses, or parasites have been identified and the current cause of death of seabirds at St. Paul Island appears to be starvation. The results of these examination and laboratory

tests are similar to those from 106 murrelets examined during the 2015-2016 Alaskan seabird die-off, where 100,000s of murrelets were estimated dead state-wide, with the greatest number observed in the Gulf of Alaska.

The causes of the seabird starvation, both of murrelets in the Gulf of Alaska and puffins at St. Paul Island, remains unknown but may be linked to changes in prey distribution or abundance due to above average sea surface temperatures (SST). Abnormally high SST were recorded in the Bering, Beaufort and Chukchi Seas in October 2016, as well as record low levels of Arctic sea ice extent. The resulting warm water temperatures allow harmful algae to bloom, which can have cascading effects throughout marine food webs.

The U.S. Fish and Wildlife Service, USGS Alaska Science Center, USGS National Wildlife Health Center, COASST, ACSPI ECO, National Oceanic and Atmospheric Administration, and the Alaska Department of Fish and Game are working together to examine carcasses and share available information on forage fish, algal blooms, and ocean conditions. We will continue to monitor the seabird die-offs, studying the body condition, age, and sex of carcasses found in order to better understand causes of starvation and potential population level impacts on seabirds in the Bering Sea.

For further information, contact Kathy Kuletz, Seabird Coordinator, at [kathy\\_kuletz@fws.gov](mailto:kathy_kuletz@fws.gov) or Robb Kaler, Seabird Specialist, at [robert\\_kaler@fws.gov](mailto:robert_kaler@fws.gov) (907-786-3984) within the Division of Migratory Bird Management.