

MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 905
BETHESDA, MD 20814

25 January 2006

H. Dale Hall, Director
U.S. Fish and Wildlife Service
Department of the Interior
1849 C Street, N.W.
Washington D.C. 20240

Dear Mr. Hall:

At its 12–14 October 2005 annual meeting in Anchorage, Alaska, the Marine Mammal Commission and its Committee of Scientific Advisors on Marine Mammals reviewed conservation programs for three species of marine mammals in Alaska (Pacific walruses, polar bears, and sea otters) that fall under the jurisdiction of the Fish and Wildlife Service. All three species constitute important subsistence resources for Alaska Natives and all face an uncertain future due to dramatic ecological changes being brought about by global warming. As a result, conservation programs for each of these species will require especially close attention in coming years. Representatives of the Service, as well as the U.S. Geological Survey and the Alaska Native community, provided helpful information on recent research and management activities for the three species. It was apparent that substantial progress is being made to build constructive partnerships between the Service, the Survey, the Native community, and other concerned parties in both the United States and Russia. These partnerships bode well for improving capabilities to address critical issues that arise as the ecosystems on which these species depend continue to undergo major change. Based on the results of our meeting, we offer the following comments and recommendations to help ensure that the evolving conservation programs for Pacific walruses, polar bears, and sea otters are as effective as possible.

Pacific Walruses

The most pressing information need for managing Pacific walruses is a reliable abundance estimate to provide a benchmark for assessing population trends. The last population estimate was based on a range-wide survey in 1990 and is badly out of date. Furthermore, research techniques used in previous population surveys provided abundance estimates with such high variation that they are of almost no value for assessing population trends. With dramatic changes in sea ice upon which walruses depend and in light of ongoing harvests in Alaska and Russia, it is possible that walrus abundance has declined. Given the infrequent opportunity for range-wide surveys, it also is important to monitor changes in body condition, reproduction rates, and other vital parameters to assess possible population changes between surveys.

Over the past five years, scientists with the Service, the U.S. Geological Survey, and Russian agencies and institutes have made great progress in developing and testing new techniques for

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counting walrus and developing a correction factor to account for walrus in the water and not visible on the ice during the aerial surveys. Their efforts have resulted in a solid survey protocol to apply these techniques. Complex logistic arrangements are now being finalized to carry out a range-wide survey this coming spring. The Marine Mammal Commission commends the staffs of the Service's Alaska Region and the U.S. Geological Survey for an exceptional effort to design and coordinate this logistically complex and scientifically sophisticated international research project

During our meeting, the Service also discussed cooperative work with Alaska Native communities to continue monitoring subsistence walrus harvests. Accurate information on harvest levels is crucial for an effective walrus conservation program. In this regard, cooperative efforts by the Service and Native communities in both Alaska and Russia have continued to yield essential data on catch levels as well as biological samples. The Marine Mammal Commission commends the Service for its continuing attention to the collection of harvest data and tissue samples throughout the range of the Pacific walrus. In this regard, the Marine Mammal Commission recommends that the Service continue working closely with the Eskimo Walrus Commission and individual Native hunters to carry out the biosampling program, to implement requirements for tagging walrus ivory gathered in the subsistence harvest, and to enforce restrictions on wasteful taking. In addition, with regard to the biosampling program, the Marine Mammal Commission recommends that the Service provide funding for related walrus health assessment studies, including analyses for contaminant loads, zoonoses, and the collection of condition indices.

Polar Bears

The most immediate need for polar bear conservation in Alaska is implementing the agreement between the United States and the Russian Federation on the conservation of the Chukchi-Bering Seas polar bear population that straddles the boundary of the two countries. Given uncertainty about the status of this population, changes in their sea ice habitat due to changes in the arctic climate, and the combined level of Alaska and Russia harvests (including exceptionally high catch levels recently in Russia), there is a growing sense of urgency within both the Alaska Native community and concerned government agencies to implement this agreement as quickly as possible. Its provisions will provide a much-needed framework for joint U.S.-Russian research and management actions, including the establishment of harvest limits, harvest monitoring programs, and an expansion of cooperative research and data sharing. Although it was signed nearly five years ago, the agreement has yet to enter into force due to delays in U.S. ratification and passage of related implementing legislation. We share the Service's sense of urgency for implementing the agreement. The Marine Mammal Commission commends the Service and the Alaska Nanuuq Commission for efforts to encourage ratification and adoption of implementing legislation. The Commission also has been doing all it can in this regard. We trust that the Service and the Nanuuq Commission will continue to push for completion of this process as quickly as possible. If the Commission can provide any assistance in this regard, please let us know.

The Service and various partners, particularly the U.S. Geological Survey, the Alaska Native community, and the oil and gas industry, have been implementing and jointly funding a useful

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research and monitoring program, especially for the southern Beaufort Sea polar bear stock. Components of the program have included satellite telemetry to track bear movements, infrared sensors to detect polar bear dens, aerial surveys to document abundance and distribution, bio-sampling in cooperation with Native hunters to collect tissue samples, and marking and tagging of harvested bears to monitor catch levels and characteristics. The Marine Mammal Commission commends the Service and its partners for maintaining these research and monitoring activities and for pooling funds or otherwise assisting in carrying out the various projects.

Notwithstanding these efforts, funding has not been adequate to carry out some needed studies, particularly the development of a program to estimate abundance and trends for the Chukchi-Bering Seas polar bear population. Given that there is no recent reliable abundance estimate for this population, the Marine Mammal Commission recommends that, as one of its first priorities after the agreement enters into force, the Service develop plans in consultation with Russian scientists, the Native community, and other appropriate groups for a survey to produce such an estimate. Studies to assess the "status" of polar bear populations, however, should focus on more than simply counting living animals and accounting for dead ones. The work by Ian Stirling and his colleagues provide a useful model of the type of studies that would help. Their studies, which have documented trends and relationships in body mass, fasting and foraging patterns, seasonal movements, and reproduction rates, have provided a valuable basis for detecting impacts of lengthening ice-free seasons on bears in western Hudson Bay. Among other things, their results indicate that lengthening ice-free periods are limiting foraging opportunities, imposing nutritional stress, and reducing reproductive success. To detect and judge such impacts in Alaska, the Marine Mammal Commission recommends that the Service institute a similar long-term research program to assess the condition and demography of polar bear populations in Alaska.

At our annual meeting, Service representatives and Native participants advised us that they are finding polar bears more frequently on land during non-winter months and that there have been reports of some bears apparently drowning when a storm occurred while they were swimming in open water. These observations appear to coincide with increases in the length of ice-free seasons and the distance that the pack ice now recedes from shore in the Beaufort Sea during non-winter months. With more bears staying on land, interactions between bears and people in and around Native villages in northern Alaska have also increased. In response, the North Slope Borough has established polar bear patrols to detect and deal with animals in villages to protect local residents and prevent situations that might otherwise result in bears being shot as nuisance animals or to protect human safety. The Commission commends the Borough for this initiative. The Commission recommends that the Service provide funding to encourage and expand these efforts as necessary.

Finally, we understand that the Service is reviewing recent changes to management regimes and, in turn, harvest quotas for several polar bear populations in Canada to determine when trophies from polar bears shot by U.S. citizens can be imported from those populations consistent with provisions of the Marine Mammal Protection Act. Of particular concern are proposed increases in harvest limits by the government of Nunavut, Canada. Those increases have been based on increased sightings of bears near Native villages and hunting camps. As the Marine Mammal

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Commission pointed out in its 4 February 2005 letter on this matter, several different factors could cause changes in the frequency of bear sightings that may not reflect actual changes in the abundance of bears. Other possible explanations include changes in the distribution of the polar bear population, which might occur if the bears are attracted to inhabited sites in search of food, if there are changes in the availability of sea ice as a hunting habitat for polar bears, or if availability of prey decreases for other reasons. The Marine Mammal Commission encourages the Service to complete a thorough review of the scientific basis for population estimates and harvest quotas for all Canadian polar bear management units and then carefully consider which units meet the required standards for allowing imports, including the required finding that “Canada has a sport hunting program based on scientifically sound quotas ensuring the maintenance of the affected population stock at sustainable levels.”

Southwest Alaska Sea Otters

Like some other marine mammals, sea otters in southwest Alaska have undergone a dramatic decline in recent decades. In the late 1980s, it was estimated that approximately 74,000 sea otters inhabited the Aleutian Islands. The most recent abundance estimate, based on an archipelago-wide survey in 2000, was about 8,700 animals—nearly a 90 percent reduction. Although the causes of the decline are uncertain, the best-supported hypothesis at the current time is that it is due to increased predation by killer whales.

In response to results of the 2000 survey, the Service published a *Federal Register* notice on 9 August 2005 designating the southwest Alaska sea otter population as threatened under the Endangered Species Act. Since then, the Service has taken steps to convene a recovery team to help develop a recovery plan for the population. These actions are well justified, and the Marine Mammal Commission commends the Service for taking them. We look forward to seeing the recovery plan developed and approved and would be pleased to help that process in any way we can. Among other things, the recovery plan should describe an appropriate monitoring scheme for the population, identify key factors to be investigated as possible causes of the decline, consider the need for establishing critical habitat, and identify the resources needed to carry out the research and management activities essential for facilitating recovery. With regard to establishing a recovery team for southwest Alaska sea otters, the Marine Mammal Commission recommends that the Service give careful consideration to the competing needs for (a) including broad-based representation by stakeholder groups and knowledgeable scientists and (b) limiting the number of members to a manageable size.

With regard to population monitoring, a limited survey in the eastern Aleutian Islands conducted in poor weather in 2004 suggests that sea otter numbers may have continued to decline in that area. Given these sharp declines and the small number of otters remaining in the Aleutian Islands, we are concerned that sea otters in this population may soon be eliminated from parts of their former range. Accurate information in this regard will be essential for the development of a responsive recovery plan. Accordingly, the Marine Mammal Commission recommends that the Service complete a plan and provide funding for another range-wide population survey for

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southwest Alaska sea otters in 2006. This survey should not be deferred until after a recovery plan is adopted, but rather should be done soon so that the results are available to assist the recovery team in developing that plan. The Marine Mammal Commission also recommends that additional funding be provided over the next several years to assess possible causes of the population decline.

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In conclusion, the Marine Mammal Commission commends the Service's marine mammal staff in Alaska for making significant progress on many important marine mammal conservation issues. Your staff's demonstrated ability to forge cooperative partnerships to overcome difficult scientific and administrative challenges is a great credit to the Service. We hope that these recommendations and comments are helpful to you. I will contact your office to arrange a time in the near future that Commission Chair John Reynolds and I can meet with you and your staff to discuss these recommendations.

Sincerely,

A handwritten signature in black ink that reads "David Cottingham". The signature is written in a cursive style with a long horizontal flourish extending to the right.

David Cottingham
Executive Director