

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

25 January 2006

William T. Hogarth, Ph.D.  
Assistant Administrator for Fisheries  
National Marine Fisheries Service  
1315 East–West Highway, Room 14564  
Silver Spring, MD 20910

Dear Dr. Hogarth:

During the 12–14 October 2005 annual meeting of the Marine Mammal Commission, representatives of the National Marine Fisheries Service provided very helpful reviews of recent developments concerning the conservation of several Alaska marine mammal species under the Service’s jurisdiction. Included were Steller sea lions, northern fur seals, harbor seals, ice-associated seals (i.e., ringed, bearded, ribbon, and spotted seals), bowhead whales, Cook Inlet beluga whales, and North Pacific right whales. Some species or populations have experienced alarming declines over recent decades, whereas others have been so poorly studied that we do not know enough about their abundance and trends to make a judgment about status. The reliance of Alaska Natives on some of these species or populations emphasizes the importance of cooperation between the Service and Alaska Native communities and organizations and imposes an added sense of urgency to assess their status and to restore those that are depleted to their optimum sustainable levels. The Commission was reassured and encouraged to see that the Service’s staff recognizes these needs and is building constructive co-management partnerships with Native organizations. As discussed below and in additional letters to you and other officials, information presented at our meeting suggests a number of further actions needed to meet conservation objectives.

### **Steller Sea Lions**

The principal task to be accomplished regarding Steller sea lions is to recover the western population from the major decline that has occurred since the 1960s. The Commission is encouraged by data showing that since 2000 there may have been a slight increase in overall abundance. However, we note that although recent trends may mark the beginning of this population’s recovery and may be seen as a measure of success of the management actions put in place over the past decade, the population remains less than a quarter of its size in the early 1980s. At this reduced size, the western population remains vulnerable to a number of threats including prey depletion, disease, predation, and chemical contamination.

Research over the past decade has identified some factors that may have contributed to the population’s decline (e.g., reductions in prey availability and killer whale predation) and others that were relatively minor or insignificant factors or were poorly understood (e.g., entanglement in debris, incidental take in commercial fisheries, and contaminants). Nevertheless, the cause or causes

of the decline remains uncertain and controversial. A well-conceived, long-term research and management program is needed to resolve uncertainties where possible and to guide recovery efforts. Service representatives advised the Commission that the Steller Sea Lion Recovery Team is revising the Steller Sea Lion Recovery Plan and the revision will include an assessment of threats as well as a long-term research and management plan. This is a constructive and appropriate step for which the Marine Mammal Commission commends the Service and the team. We trust that the revised plan will provide a comprehensive and objective assessment of risk factors and a progressive schedule for taking the actions needed to promote recovery. As a related matter, the Marine Mammal Commission commends the Service for recent work to refine understanding of the stock structure of Steller sea lions in Russian and Alaskan waters. The results, which indicate that sea lions in Russian waters constitute a separate stock, will be helpful in assessing both the status and trends of Steller sea lions and their recovery needs.

With regard to research priorities, the population's depleted status makes it essential that its abundance and trends be monitored closely. In this regard, the Service has initiated a long-term marking program in which more than 5,800 pups have been branded throughout the species' range since 2000. We believe that these efforts are warranted and that the research must be completed to provide essential information on vital rates and other demographic parameters. Therefore, the Marine Mammal Commission recommends that the Service continue this program for at least five years and that sufficient resighting effort is done to yield meaningful results. As results of the monitoring program become available, the Marine Mammal Commission also recommends that information on sea lion demography be integrated with regional ecosystem analyses of climatic and oceanographic conditions, as well as fishing patterns. Correlations emerging from such analyses may help identify factors affecting the recovery of the western population and help direct management efforts. In making these recommendations, the Commission notes recent difficulties concerning the issuance of permits for these and other studies on Steller sea lions. The Commission continues to believe that the various permit holders conducting research on this species need to coordinate their activities so that these studies do not individually or cumulatively have adverse impacts on the sea lion population or any local subpopulations and are conducted in a humane manner.

Based on information reviewed at our meeting, it was apparent that extensive research (e.g., fatty acid studies, scat analyses, physiological studies, telemetry studies, and metabolic studies) has been initiated to assess indirect effects of fishing on prey availability and the survival of sea lions, particularly juveniles and females. As discussed in a companion letter on marine mammal/fishery interactions in Alaska, we consider studies to elucidate possible effects of fisheries on prey availability to marine mammals to be an essential line of research. Accordingly, the Marine Mammal Commission recommends that the Service assign a high priority to the development and support of a long-term research program to investigate the indirect effects of fishing on marine mammals and marine ecosystems.

The slight increase in recent survey counts of the western population of Steller sea lions may reflect a measure of success of recent management actions. Those actions have included limits on commercial fishing in designated critical habitat near major sea lion rookeries and haul-out areas. The effectiveness of those limits, however, depends on similar measures in state waters between the

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rookery and haul-out sites and the shoreward boundary of federal jurisdiction. In this regard, we understand that the Alaska Board of Fisheries is reexamining management measures for fisheries in some state waters. The Marine Mammal Commission recommends that the Service consult carefully with state fishery managers to ensure that any new fishery management measures for state waters do not conflict with measures adopted by the Service to protect Steller sea lions in adjacent federal waters. Any changes to fishing effort in sea lion critical habitat may require that the Service reinitiate consultation under section 7 of the Endangered Species Act.

Finally, federal funding for Steller sea lion research and management has been highly variable in recent years. Partly because of this variability and uncertainty, tens of millions of dollars have been spent with relatively little progress in developing the infrastructure and expertise needed to support careful, long-term studies of the factors influencing the decline of the western population. In view of the large amount of funding directed to this issue, it is reasonable to ask if the funding has been well spent and if proportional gains have been made in the information needed to recover the population. Furthermore, the process for coordinating research and obtaining research permits has raised questions about the Service's overlapping roles as the agency responsible for dispersing research funds, conducting research, and regulating Steller sea lion researchers both within and outside the agency to assure that they meet the requirements of the Marine Mammal Protection Act and other statutes. These questions suggest the need for a careful, measured review to identify how recent funding was allocated, the research topics on which future funding would be best spent, and the Service's procedures for coordinating related studies and issuing new research permits. We are considering the possibility of carrying out such a review and would welcome your thoughts as to how it might be conducted in an informative and productive way.

### **Northern Fur Seals**

Like western Steller sea lions, the Pribilof Islands population of northern fur seals has experienced a major decline in recent years. The initial phase of this decline occurred in the late 1960s and 1970s due to a change in harvest practices (i.e., switching from a harvest of juvenile males only to one that included adult females) when the species was taken commercially. A second phase of the decline occurred in the late 1970s and early 1980s for reasons that are uncertain. For the most part, the population was roughly stable until the late 1990s when it began another period of decline, again for reasons that are uncertain. As a result of these declines, the population is now less than a third of its size in the late 1950s.

In response to the current situation, Service representatives advised the Commission that they are updating the Northern Fur Seal Conservation Plan and reinitiating a long-term monitoring program to determine population vital rates. These are appropriate and necessary responses to the current decline, and the Marine Mammal Commission commends the Service for taking these actions. The Service also has initiated studies to assess foraging behavior and diet, determine at-sea movements through the deployment of more than 100 satellite-linked tags on pups and adult females, and compare vital rates and foraging patterns of seals, particularly juveniles, on the Pribilof Islands and Bogoslof Island. These efforts are directed at the most important research needs, but research funding has been both insufficient and inconsistent in recent years and greater attention

must be given to mitigating factors that are likely contributing to the decline. In our view, the low and inconsistent levels of funding for critical work on this depleted species are not acceptable. The Marine Mammal Commission recommends that the Service provide a consistent, adequate level of funding for northern fur seal research and recovery work for at least the next five years. Funding levels must be sufficient both to closely monitor the population's trends and to carry out work necessary to identify and mitigate factors limiting its recovery.

## **Harbor Seals**

Harbor seals in some parts of Alaska also have experienced long-term declines in abundance for largely unknown reasons. In recent years, the Service has made substantial progress in developing cooperative efforts with Native hunters and has worked with the Alaska Department of Fish and Game and the Alaska SeaLife Center on a variety of studies to assess and monitor harbor seal abundance and investigate factors that may be affecting the population. Those efforts have produced important advances in our understanding of harbor seals in Alaska. The Marine Mammal Commission commends the Service and its collaborators for the substantial progress they have made. Nonetheless, continued close attention to population trends is needed given ongoing declines in some areas and the greatly reduced number of seals in others (e.g., the Aleutian Islands, Glacier Bay, and Prince William Sound). As with northern fur seals, specific attention is urgently needed to identify and mitigate causes of these declines. For that reason, the Marine Mammal Commission recommends that further research emphasize studies in areas where populations are declining or greatly reduced so that causes of the decline can be identified and, as possible, eliminated, or mitigated.

Conservation of marine mammals under the Marine Mammal Protection Act is based on management of population stocks and may be seriously compromised if stocks are not correctly identified. The Service's Southwest Fisheries Science Center has collaborated with the Alaska Department of Fish and Game and the Alaska Native Harbor Seal Commission to conduct a thorough study of genetic characteristics of harbor seals throughout Alaska. The results demonstrate that each of the three stocks now recognized in the Service's stock assessment reports for harbor seals in Alaska is actually composed of multiple stocks that, in some cases, are showing different population trends. For example, within the current Gulf of Alaska stock, abundance is increasing near Kodiak Island but decreasing in Prince William Sound. Similarly, within the current southeastern Alaska stock, abundance is increasing in the Ketchikan area but decreasing in Glacier Bay. Based on the genetic analyses, Service scientists have proposed designating 12 harbor seal stocks, rather than the three now recognized in Alaska. Genetic analyses provide a scientifically sound approach for identifying discrete population units, and the Marine Mammal Commission commends the Service and its collaborators for completing this useful work.

Despite the fact that the genetics results have been presented and reviewed numerous times by experts, the Service has not proceeded to designate new stocks based on the best available science. The Commission understands that a main reason for this delay is that the Alaska Native Harbor Seal Commission has expressed concern about possible impacts on subsistence use if the proposed population units were designated. As is evident from discussions regarding Cook Inlet

beluga whale management, the Commission is very concerned about the long-term availability of wildlife resources for use by subsistence communities. However, the Commission believes that the best available information is sufficient to recognize the new stock structure and that delaying designation of stocks may lead to local over-harvesting. Although we understand that the Service has a co-management agreement with the Alaska Native Harbor Seal Commission, both the Service and the Natives must recognize that subsistence hunting is not the only factor that may affect harbor seal conservation. For example, if the correct stock structure is not being used, the Service cannot properly evaluate stock status and determine whether incidental takes by commercial fisheries are within acceptable limits. On this point the Alaska Regional Scientific Review Group has repeatedly recommended that the Service revise the Alaska harbor seal stock structure determinations in its stock assessment report. Accordingly, the Marine Mammal Commission recommends that the Service proceed expeditiously to establish biologically meaningful stock boundaries for harbor seals in Alaska.

### **Ice-associated Seals**

Ice-associated seals (i.e., ringed, bearded, ribbon, and spotted seals) may be among the marine mammal species most vulnerable to the effects of climate change. These species depend on ice for denning, rearing of young, resting, molting, and social behavior, and they are adapted for foraging on the food webs associated with ice. The effects of global warming on the extent, condition, and seasonal changes in sea ice cover could have significant influence on their status. In view of ongoing and projected reductions in arctic ice, the status of these species, their roles in future arctic ecosystems, and their availability as subsistence resources for Alaska Natives are highly uncertain.

Despite their ecological importance, little is known about the abundance and trends of ice-associated seal species. In part, this is due to their extensive range and association with sea ice, which makes studies logistically challenging and costly. At its annual meeting in Alaska in 2002, the Marine Mammal Commission recommended that the Service take steps to form a co-management agreement with Alaska Native ice seal hunters and initiate an ice seal research program. Since that meeting, the Service, Native hunters, and the Alaska Department of Fish and Game have formed an Ice Seal Committee, which has drafted a co-management agreement and a research plan. The Marine Mammal Commission commends all involved parties for the progress in this regard and recommends that the Service and the Ice Seal Committee finalize and adopt a co-management agreement as soon as possible.

Since 2002 the Service also has funded, participated in, or initiated several research projects that are providing important insights into ice seal ecology. These projects include cooperative studies with the Alaska Department of Fish and Game, University of Alaska, Russian scientists, and Native hunters. These studies are significant, constructive steps for which the Marine Mammal Commission commends the Service and its partners.

Despite those recent studies, information on the status and trends of ice-associated seals remains among the poorest for any marine mammal species in Alaska. Given apparent changes in

the Bering, Chukchi, and Beaufort Seas and the declines of many other Alaska marine mammals, we are concerned that significant changes in the status of these seal species might go undetected and that the need for management actions would not be recognized in time to assure their conservation and continued function in these ecosystems, as well as their availability for subsistence use. Accordingly, we believe much more must be done to obtain information on the abundance, movements, demographic parameters, ecology, and trends of ice-associated seals in Alaska. Therefore, the Marine Mammal Commission recommends that the Service develop a comprehensive research program for acquiring the needed information. Such a program will require substantial logistical support from aircraft and ice-strengthened vessels and also will require coordination with Russian scientists, other U.S. agencies, Alaska Native hunters, and other partners. To develop and implement this program, the Marine Mammal Commission recommends that funding for ice seal research be greatly increased.

### **Bowhead Whales**

The western Arctic (Bering-Chukchi-Beaufort) bowhead whale population is the only population examined at the Commission's annual meeting that has increased steadily in recent years. Through extensive cooperative efforts by the Service, the Alaska Eskimo Whaling Commission, and North Slope Borough's Department of Wildlife Management, this population has become one of the best-studied large whale populations in the world. Nevertheless, there are a number of reasons that the population should continue to be regarded as a high priority for both research and management attention. These include their importance as a subsistence resource for Alaska Natives and their close association with sea ice in the rapidly changing arctic environment. In recent years, the Service and the Borough have undertaken several new studies to assess and monitor bowhead whales, including new genetic analyses to resolve questions about stock structure, new photo identification and mark/recapture studies to better estimate and monitor population trends, and satellite telemetry studies to help detect changes in habitat-use patterns. The resulting information will be used to develop and support a request for a new Alaska subsistence whaling quota from the International Whaling Commission in 2007.

These studies are addressing important information needs, and the Marine Mammal Commission commends the Service and its collaborators for their initiative and support for conducting them in a timely fashion. The Marine Mammal Commission recommends that (1) funding be maintained for ongoing studies, (2) additional work be undertaken to document health and disease factors, body condition, and age-specific life history parameters of whales in the western bowhead whale populations, and (3) as results of ongoing work become available, analyses be undertaken to correlate trends in bowhead whale abundance and habitat-use patterns with data on climatic and oceanographic conditions in the western Arctic. Also, the Marine Mammal Commission recommends that the Service continue working closely with the Alaska Eskimo Whaling Commission to develop the scientific and socio-cultural rationale for a new bowhead whale quota request at the 2007 IWC meeting.

## **Cook Inlet Beluga Whale**

Between 1994 and 1998 the Cook Inlet beluga whale population declined by nearly 50 percent to about 360 whales, primarily because of excessive levels of subsistence hunting by Alaska Natives. As a result of that decline, in 1999 the Service designated the population as depleted under the Marine Mammal Protection Act. Since then, harvest levels have been limited to no more than two whales per year. Although the Service expected that such harvest limits would allow the population to grow by 2 to 6 percent per year, survey results do not indicate such growth and there is a reasonably large probability that the population may still be declining. The population's failure to increase is a serious concern. It is inconsistent with earlier expectations, suggests that factors other than subsistence hunting are impeding recovery (see enclosed letter to Regional Administrator Balsiger on coastal development), and indicates that the risks to this population are greater than previously thought.

The Service has continued to conduct annual surveys to monitor population trends and has initiated new studies to assess changes in habitat use and prey preferences. Those efforts are appropriate and the Marine Mammal Commission commends the Service for them. However, we understand that the Service reduced funding for Cook Inlet beluga whales from about \$260,000 per year in 2002 and 2003 to about \$85,000 in 2004 and 2005. The reduced funding level is not adequate to monitor the population and investigate factors limiting population growth. Accordingly, the Marine Mammal Commission recommends that the Service increase funding for Cook Inlet beluga whale research to a level that allows annual population monitoring, investigation of risk factors that may impede recovery, and management of those factors where necessary. Among other things, those studies should include aerial surveys, foraging and habitat-use studies, satellite telemetry, analyses of contaminant levels, and an effective stranding response and necropsy program to collect as much information as possible from live and dead stranded whales.

Upon designating Cook Inlet beluga whales as depleted, the Service initiated efforts to develop a conservation plan. By letter of 27 June 2005, the Commission recommended a number of substantial changes in the draft plan. The Marine Mammal Commission recommends that the plan be completed as quickly as possible and that the suggestions in its earlier letter be incorporated. As a related matter, we understand that the Service also is developing a proposal to list Cook Inlet beluga whales as endangered or threatened under the Endangered Species Act. Doing so would provide additional protection for the population by requiring all federal agencies to use their respective authorities to promote the population's recovery and consult with the Service to ensure that actions they fund, conduct, or authorize do not jeopardize the continued existence of the stock or destroy or adversely modify its critical habitat, and by authorizing funding to develop and implement a recovery plan. If the population is listed, a well-conceived conservation plan for Cook Inlet beluga whales should make it relatively easy to prepare a recovery plan under the Endangered Species Act.

The Marine Mammal Commission recommends that the Service expedite the development and publication of its Endangered Species Act listing proposal for this population. At about 360 whales, this is one of the smallest marine mammal populations under U.S. jurisdiction, and it faces a very real possibility of extinction if its recovery is not properly managed. The Cook Inlet beluga

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whale situation is one where it is reasonable to expect that management would be effective, as the population occurs in a very restricted area and is faced with a limited range of possible threats. Recovery of this population should be achievable if the Service is willing to commit the needed resources to conduct essential research and implement essential protective measures.

### **North Pacific Right Whales**

After a pulse of illegal whaling by Russia in the 1960s, the eastern population of North Pacific right whales was close to extinction, with only scattered individuals and pairs observed during the 1970s, 1980s, and early 1990s. In the summer of 1996 a small group of right whales was discovered in the southeastern Bering Sea. Since then, the Service has undertaken a series of studies to more rigorously assess the status of right whales in the eastern North Pacific and Bering Sea. Those studies have included efforts to identify individual whales by photographic and genetic analyses, track movements and habitat-use patterns using satellite telemetry, and determine their distribution using aerial, shipboard, and acoustic surveys. Collectively, these studies are providing a crucial description of the remaining population, which is essential for guiding recovery efforts. The Marine Mammal Commission commends the Service for its efforts to document the status and biological characteristics of this highly endangered whale population.

The most immediate need for protecting this population is to document the activities and movements of the remaining whales so that potential human-related threats in the areas they occupy and need for recovery can be properly identified and managed. To date, all sightings in Alaska waters have been in the summer and early fall. Although individuals have been observed in winter months on rare occasions around Hawaii and along the west coast of North America from Washington southward, the population's winter and spring distribution is virtually unknown. In particular, we do not know where North Pacific right whales give birth and breed. A number of approaches should be used to investigate their movements and distribution, including aerial, shipboard, and acoustic surveys, sightings from platforms of opportunity, satellite telemetry, and a review of historical records. The Marine Mammal Commission recommends that the Service give high priority to this research to gather the information needed to develop all necessary protection measures and facilitate the recovery of this population. In this regard, the Service is in the process of designating critical habitat for right whales in the North Pacific. The Commission believes that designation of critical habitat will provide an essential tool for mitigating possible human impacts that could prevent recovery of this population or even cause its extinction. Our specific comments and recommendations on this matter were recently provided to the Service in the enclosed letter to Ms. Kaja Brix.

With regard to management needs, the recovery of right whales in the North Atlantic has been greatly impeded by deaths due to entanglement in fishing gear and collisions with ships. Over 70 percent of all living right whales in the North Atlantic bear scars from entanglements in fishing gear, and each year a number of whales are killed when they are struck by a vessel. These same factors are of concern for right whales in the North Pacific. To help assess the occurrence of such interactions, the Marine Mammal Commission recommends that, if it has not already been done, the

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Service examine all photographs of North Pacific right whales for evidence of interactions with fishing gear or ships. We would be grateful if you would advise us as to the results of that effort.

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As indicated above, the Service has made substantial progress in recent years to address critical marine mammal conservation issues in Alaska. As the Service considers further ways to improve its Alaska marine mammal programs, we trust these comments and recommendations will be helpful. I will be contacting your office in the near future to arrange a time when Commission Chair John Reynolds and I can meet with you and your staff to discuss these issues. If you or your staff has questions, please call.

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

Enclosures