



MARINE MAMMAL COMMISSION

6 September 2011

Mr. Eric C. Schwaab
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, Maryland 20910

Dear Mr. Schwaab:

In May of this year the Marine Mammal Commission and its Committee of Scientific Advisors on Marine Mammals met in New Orleans, Louisiana, to review the management of marine mammals and marine ecosystems in the Gulf of Mexico. During the meeting, National Marine Fisheries Service staff provided thorough and helpful presentations on a variety of research and management topics, and the Commission appreciates their participation. The increasing frequency of unusual mortality events in the Gulf of Mexico was one of those topics. Such events pose a substantial risk to marine mammals, particularly the many small bottlenose dolphin stocks that occur in the northern Gulf's bays, sounds, and estuaries. The Commission offers the following recommendations to increase support for the research and management activities needed to determine the causes of such unusual mortality events and prevent or minimize their effects on the coastal ecosystems of the northern Gulf.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service takes the necessary steps to—

- review its responsibilities for addressing marine mammal unusual mortality events in the Gulf of Mexico and elsewhere, and develop a five-year plan that establishes assessment and remediation objectives, sets forth the Service's strategy for meeting those objectives, and identifies the resources needed to do so;
- work with the Fish and Wildlife Service and the Marine Mammal Commission to plan and conduct a review of the Marine Mammal Health and Stranding Response Program, including stranding networks in the Gulf of Mexico;
- work with coastal states to promote their involvement in the Marine Mammal Health and Stranding Response Program generally and in stranding networks specifically;
- expand funding or other forms of support for its Marine Mammal Health and Stranding Response Program, Prescott Grant Program, and Unusual Mortality Event Fund to improve the Service's response to unusual mortality events; and
- increase its efforts to determine the stock structure, abundance, trends, and vital rates for bottlenose dolphin stocks in the Gulf.

RATIONALE

Congress clearly recognized the value of marine mammals as indicators of marine ecosystem health when it added Title IV to the Marine Mammal Protection Act. Title IV directs the National Marine Fisheries Service to establish and implement the Marine Mammal Health and Stranding Response Program, the purposes of which are to—

- (1) facilitate the collection and dissemination of reference data on the health of marine mammals and health trends of marine mammal populations in the wild;
- (2) correlate the health of marine mammals and marine mammal populations, in the wild, with available data on physical, chemical, and biological environmental parameters; and
- (3) coordinate effective responses to unusual mortality events by establishing a process in the Department of Commerce in accordance with section 404.

Section 404 of the Marine Mammal Protection Act contains the provisions for responding to unusual mortality events. The Service has documented 52 such events since inception of the program in the early 1990s. Of those, 18 have occurred in the Gulf of Mexico and have involved either manatees (9) or bottlenose dolphins (11). For example, bottlenose dolphin mortality was elevated along the Florida Panhandle in 1999–2000, 2004 and 2005–2006. In each of those cases, investigators identified or suspected brevetoxin as the cause. However, about 40 percent of the recognized unusual mortality events in the Gulf remain undetermined. These events pose a serious risk to marine mammals; since 1991, recurring unusual mortality events have caused the deaths of thousands of marine mammals in U.S. waters. In addition, the occurrence of recognized endemic diseases appears to be increasing in marine mammals. Such observations certainly are not consistent with a vision of healthy marine ecosystems. If, as a society, we intend to maintain healthy marine ecosystems, then the responsible agencies must work together to identify the root causes of these problems and take the necessary steps to address them.

Given its responsibility for managing many of the human activities occurring in our marine ecosystems, the duty of leading remediation efforts falls heavily on the National Marine Fisheries Service. The Commission recognizes that the Service has made some progress in this direction but, clearly, much more remains to be done. To that end, the Marine Mammal Commission recommends that the National Marine Fisheries Service review its responsibilities for addressing marine mammal unusual mortality events in the Gulf of Mexico and elsewhere, and develop a five-year plan that establishes assessment and remediation objectives, sets forth the Service's strategy for meeting those objectives, and identifies the resources needed to do so. The plan should focus on identifying the underlying causes of these events. It also should focus on bottlenose dolphins, which appear to be at much higher risk of being involved in these events.

The most recent unusual mortality event to affect bottlenose dolphins in the northern Gulf began in February 2010 and continues today. Over 500 cetaceans have stranded during this event and determining its cause(s) has been greatly complicated by the BP oil spill. At least 113 cetaceans stranded before the spill (1 February 2010 to 29 April 2010). Another 115 stranded during the initial

spill response phase and over 290 have stranded since (3 November 2010 to 21 August 2011). The Marine Mammal Health and Stranding Response Program is responsible for detecting, characterizing, and guiding the response to this (and similar) events. The program's work generally is executed by regional networks of stranding responders coordinated by the Service but consisting of state, academic and non-governmental partners. Such networks generate vital information on the numbers and species of sick or stranding animals and are the source of tissue samples or other data that ultimately help determine cause(s).

At the Commission's annual meeting, Service staff described the program's efforts to respond to both the unusual mortality event and the oil spill. For example, they described how the program established an incident command structure to coordinate spill response efforts. They also provided general descriptions of their findings to date, activities still underway, and lessons learned and to be applied during the next spill, unusual mortality event, or similar emergency. The Commission commends the program and its staff for its work.

Despite all good efforts by the program, early response efforts clearly indicate that the stranding network in the Gulf region requires more support and development. During the initial phase of the spill, one of the main challenges faced by the program was to enlist, train, and coordinate networks that could cover the coastal areas of concern. This was no small task given that some of the states did not have developed networks and others appeared to have regulations that actually impeded network development (e.g., prevented participation by veterinarians from other states).

These problems are not unique to the Gulf and are a clear reminder that the Marine Mammal Health and Response Program needs additional support and development. The program is vital because it provides an essential source of information on marine mammals, particularly in coastal waters where marine mammals are subjected to a variety of risks from coastal development and the activities of a growing human population. However, the program is understaffed, underfunded, and well behind in its analyses and reporting of past events. As a result, a substantial portion of past unusual mortality events are poorly characterized, which undermines our collective efforts to understand the impacts of human activities on the marine environment. The Service and the Commission have long discussed the need for a review of the program, and circumstances in the Gulf indicated that a review would be timely. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service work with the Fish and Wildlife Service and the Marine Mammal Commission to plan and conduct a review of the Marine Mammal Health and Stranding Response Program, including stranding networks in the Gulf of Mexico.

As is becoming evident throughout U.S. waters, the success of such programs will depend on better coordination of federal, state, and regional organizations. Such coordination was certainly important during the Gulf spill and has been important in virtually all unusual mortality events. To foster better coordination, the Marine Mammal Commission recommends that the National Marine Fisheries Service work with coastal states to promote their involvement in the Marine Mammal Health and Stranding Response Program generally and in stranding networks specifically. In the Gulf, development of stranding networks would be particularly helpful in Mississippi and Alabama,

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both of which have expressed interest in participating. Mississippi has developed the capacity to contribute, although Alabama has not. Clearly, developing and maintaining such programs at the state and national levels will require additional resources to administer the programs, train and support their staffs, and provide the necessary materials and supplies. To that end, the Marine Mammal Commission recommends that the National Marine Fisheries Service expand funding or other forms of support for its Marine Mammal Health and Stranding Response Program, Prescott Grant Program, and Unusual Mortality Event Fund to improve the Service's response to unusual mortality events. The Commission recognizes that finding additional funds will be a challenge in the current budget climate, but the Service should be able to expand its resources by working collaboratively with state and regional agencies and organizations, academia, non-governmental groups, industry groups, and private organizations with the capacity to house marine mammals or provide veterinary or other expertise.

Finally, bottlenose dolphins have been involved in 11 of the 52 recognized unusual mortality events since 1992, including the current event in the northern Gulf of Mexico. However, the Service is not able to assess the impacts of those events because it has population estimates for only six of the 37 recognized bottlenose dolphin stocks in the Gulf of Mexico. A small number of bay, sound, and estuarine stocks, primarily in Louisiana, are getting more attention since the spill, but determining the cause(s) of the ongoing mortality event and the impacts of the oil spill is severely hampered by the lack of baseline information. Accordingly the Marine Mammal Commission repeats a recommendation that it has made numerous times; that is, that the National Marine Fisheries Service increase its efforts to determine the stock structure, abundance, trends, and vital rates for bottlenose dolphin stocks in the Gulf.

I hope the Commission's recommendations and rationale prove helpful. Please contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a large, stylized "T" and "R".

Timothy J. Ragen, Ph. D.
Executive Director

cc: Mr. Dan Ashe
Howard Braham, Ph.D.
Roy Crabtree, Ph.D.
Mr. Jim Lecky
Bonnie Ponwith, Ph.D.