



# MARINE MAMMAL COMMISSION

8 September 2011

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

Dear Mr. Schwaab:

In May 2011 the Marine Mammal Commission and its Committee of Scientific Advisors on Marine Mammals met in New Orleans, Louisiana, to review the conservation and management of marine mammals and marine ecosystems in U.S. waters of the Gulf of Mexico. During the meeting, National Marine Fisheries Service representatives provided thorough and helpful presentations on a variety of research and management topics, and the Commission appreciates their contributions to the meeting. Meeting participants discussed a number of fishery management issues that warrant further consideration and action, particularly those related to observer programs, research and relocation trawls, and recreational fishing and boating. Based on the discussions at the meeting, the Commission offers the following recommendations and comments.

## RECOMMENDATIONS

With regard to marine mammals in the Gulf of Mexico, the Marine Mammal Commission recommends that the National Marine Fisheries Service—

- bring together its Office of Sustainable Fisheries and Office of Protected Resources to develop a realistic but aggressive strategy for characterizing the extent and significance of marine mammal mortality and serious injury caused by Gulf of Mexico fisheries;
- develop and implement a framework for determining the level of observer coverage needed to provide reasonably precise estimates of marine mammal take (e.g., coefficient of variation of 0.3 or less) in all Category I and II fisheries in the Gulf of Mexico;
- partner with Gulf states, non-governmental organizations, industry, and other groups to review observer authorities, identify areas of flexibility, and pursue novel ways to fund and conduct fishery observer programs in the Gulf of Mexico;
- review its observer programs to ensure that observers are properly trained to identify marine mammal species, handle them if and when appropriate, document the nature and extent of interactions with fisheries, and carry out all their other responsibilities related to minimizing fishery effects on marine mammals;
- work with the Army Corps of Engineers, Texas Parks and Wildlife, and any other agencies or organizations that take marine mammals incidentally using research gillnets or relocation trawls to review their responsibilities for obtaining letters of authorization for incidental takes of marine mammals and take the steps needed to comply with this requirement, report any takes that occur, and develop and implement best practices for avoiding such takes;
- use its Marine Recreational Fisheries Program and any other means available to expand its collection of data on interactions between recreational fishing and marine mammals,

- including information on geographic and seasonal distributions of interactions, affected stocks, nature and severity of injuries, and mortality and serious injury rates;
- develop and implement a plan, including increased outreach and enforcement efforts, to (1) prevent feeding of marine mammals by fishermen and (2) develop measures to control regulatory and other discards from recreational and commercial fishing so that the discards do not attract dolphins; and
  - (1) seek opportunities to partner with states, waterfront managers, and the recreational boating industry to gather information on dolphin feeding and attraction activities, (2) review its efforts to enforce prohibitions against such activities, and, as necessary, (3) revise its outreach and enforcement strategies to implement and support an effective program for deterring dolphin attraction activities.

## **RATIONALE**

The Commission's rationale for its recommendations is as follows.

### **Fishery observer coverage**

Commercial and recreational fisheries in the Gulf of Mexico have long been recognized as sources of marine mammal injury and mortality, primarily through bycatch or entanglement. In general, information on fishery interactions is most reliably obtained through systematic on-board observer programs. In the Gulf, the significance of fishery-related takes is difficult to assess because the Service has not instituted sufficient monitoring programs to characterize the nature, rate, and frequency of interactions, and it also has not invested sufficiently in identifying and determining the status of the various marine mammal stocks in the Gulf. As a result, the National Marine Fisheries Service knows far less about fishery impacts on marine mammals in the Gulf of Mexico than other U.S. waters where commercial fisheries operate.

The Gulf of Mexico has four fisheries classified as either Category I (frequent incidental mortality and serious injury of marine mammals) or Category II (occasional incidental mortality and serious injury of marine mammals), and one fishery that the Service proposes to elevate to Category II in the List of Fisheries for 2012. The Category I fishery is the Atlantic Ocean, Caribbean, Gulf of Mexico large pelagics longline fishery, which has been subject to a mandatory observer program since 1992. Using reports from this program, sightings, and strandings, the Service has linked this fishery to the mortality or serious injury of Atlantic spotted dolphins, two stocks of bottlenose dolphins, pantropical spotted dolphins, Risso's dolphins, and short-finned pilot whales. This fishery also likely interacts with at least a dozen dolphin and whale stocks in the waters off the southeastern United States. In the Gulf of Mexico, observer coverage rates for the large pelagics longline fishery were 10 percent or less through 2006, 15.5 percent (of sets) in 2007 (reflecting a surge of coverage in the second quarter to document interactions with the bluefin tuna fishery), and increased to 25.5 percent in 2008 and 21.7 percent in 2009.

In the Gulf the Service also has linked gillnet, shrimp trawl, and menhaden purse seine fisheries—all currently classified as Category II—to likely mortality and serious injury of four stocks of bottlenose dolphins and one stock of Atlantic spotted dolphin. The Service has not observed the gillnet fishery to characterize the frequency of takes. However, gillnets are known worldwide to be a

major source of bycatch and, based on observations of gillnet fisheries in other areas and evidence from marine mammals stranded in the Gulf, the Service has classified this fishery as Category II. The Service has not observed the menhaden fishery since 1995. It, however, is known to be a source of substantial marine mammal injury and mortality based on nine observed takes between 1992 and 1995 (the only observed period) and 11 self-reported takes between 2000 and 2005. The Service has observed the shrimp trawl fishery, but at rates of less than 1 percent annually between 1992 and 2006 (when the observer program was voluntary) and in 2007 (when the program was mandatory) and 2 percent from 2008 to the present. Even at these low observer coverage rates, the Service has observed 12 dolphin takes in shrimp fisheries since 1993 (11 since 2002).

The Service proposes to elevate the southeastern Atlantic, Gulf of Mexico stone crab trap/pot fishery from Category III to Category II for the 2012 List of Fisheries. This fishery also has not been observed. Instead, the proposed re-classification is based on analogy to the Category II Atlantic blue crab trap/pot fishery as well as on bottlenose dolphin mortality and serious injury rates estimated from stranding reports. Between 2002 and 2010, the Service reported 10 bottlenose dolphin strandings (three confirmed from the stone crab trap/pot fishery and seven plausibly from that fishery). The stranded dolphins were most likely from six strategic stocks and one non-strategic stock. Unfortunately, the Service has published potential biological removal levels for only two of these seven stocks, and it does not identify the stock for each of the 10 stranded animals. The lack of such information precludes a reliable and accurate quantitative analysis of bycatch effects.

As the Service is aware, the Commission has long been concerned about the lack of observer and other information needed to manage fisheries and their interactions with marine mammals in the Gulf of Mexico. The lack of information undermines efforts to estimate the level of take and assess the consequences for the affected stocks. The Service is the primary body responsible for implementing the Marine Mammal Protection Act and the Magnuson-Stevens Fishery Conservation and Management Act. Given that responsibility, the Service must generate scientifically sound information about fishery interactions to fulfill its mandates. Although the Service might offer a number of explanations for its management shortcomings, it is still responsible for overcoming them to fulfill its responsibilities under these Acts. The Service has stated that collection of information about fishery interactions is a high priority and will occur if resources become available, and it has emphasized the value of fishermen's self-reports and stranding networks. The Service also has noted how, as a result of the BP/Deepwater Horizon oil spill response and restoration efforts, additional surveys and mark-recapture studies have been conducted for some bay, sound, and estuarine stocks. The Commission appreciates these opportunistic efforts, but they do not provide a sufficient basis for managing the fisheries involved or protecting marine mammals as envisioned and required under the Marine Mammal Protection Act.

At the Commission's 2011 annual meeting, staff of the Southeast Fisheries Science Center described the Center's 2008 strategic plan for determining marine mammal stock structure and abundance, potential biological removal levels, and fishery mortality and serious injury rates. However, it is not clear how the Service will accomplish those objectives. Without a larger commitment by the Service to increase observer coverage, the Commission questions whether the Service can make any progress in addressing this longstanding problem. Therefore, to advance marine mammal and fishery management in the Gulf of Mexico, the Marine Mammal Commission recommends that the National Marine Fisheries Service bring together its Office of Sustainable

Fisheries and Office of Protected Resources to develop a realistic but aggressive strategy for characterizing the extent and significance of marine mammal mortality and serious injury caused by Gulf of Mexico fisheries. To accomplish that objective the strategy must describe the existing limitations, the actions to be taken to address them, and the resources needed to take those actions. Clearly, establishing adequate observer coverage must be one of those actions. As the Commission noted in its letter to you on the 2011 List of Fisheries, it would be pleased to work with the Service to help develop this strategy. Further, to ensure that future observer programs are a scientifically sound component of this strategy, the Marine Mammal Commission also recommends that the National Marine Fisheries Service develop and implement a framework for determining the level of observer coverage needed to provide reasonably precise estimates of marine mammal take (e.g., a coefficient of variation of 0.3 or less) in all Category I and II fisheries in the Gulf of Mexico.

The Service has a number of options for developing such a plan, including implementation of an adequate observer strategy. For example, it can form partnerships with interested parties—scientists, managers, and stakeholders in government, non-governmental organizations, and industry sectors—to combine resources for gathering data of common interest and seek innovative ways to reduce bycatch. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service partner with Gulf states, non-governmental organizations, industry, and other groups to review observer authorities, identify areas of flexibility, and pursue novel ways to fund and conduct fishery observer programs in the Gulf of Mexico. To be effective, any observer strategy—whether based on new initiatives or a continuation of existing programs—must obtain and uphold the highest levels of scientific integrity. To that end, any new or continued efforts to observe and document marine mammal interactions must be based on rigorous observer training and reporting systems that ensure effective methods for identifying species, collecting biological samples, promoting safe marine mammal handling and release, and documenting interactions. The Marine Mammal Commission recommends that the National Marine Fisheries Service review its observer programs to ensure that observers are properly trained to identify marine mammal species, handle them if and when appropriate, document the nature and extent of interactions with fisheries, and carry out all their other responsibilities related to minimizing effects on marine mammals.

### **Research and relocation trawls**

At its annual meeting, the Commission also discussed marine mammal serious injury and mortality due to research and relocation trawls. As in commercial fishing, these trawls take dolphins and other marine mammals. The Service has documented this as an issue in its annual list of fisheries and stock assessment reports. Those reports describe how federal and state research trawls and sea turtle relocation trawls conducted in conjunction with research and with dredging and other marine construction activities have seriously injured or killed marine mammals. The Service described 22 bottlenose dolphin takes in research gillnets in the Gulf of Mexico since 1984 (seven since 2002, including three in 2011) and 10 interactions in research and relocation trawls (seven bottlenose dolphin interactions since 2002 and three spotted dolphin deaths in 2011). The Service recognizes these research and relocation trawls as sources of serious injury and mortality, as demonstrated by its decision to use these takes as partial justification to elevate the Southeastern U.S. Atlantic, Gulf of Mexico shrimp trawl fisheries to Category II.

To the Commission's knowledge, the agencies conducting gillnet research and relocation trawls (e.g., the Service, Army Corps of Engineers, Texas Parks and Wildlife) do not obtain incidental take authorizations for those activities. Furthermore, the Commission does not know if any of the agencies has studied its interactions or taken steps to avoid them. If those agencies are taking marine mammals without an incidental take authorization, then they appear to be out of compliance with the Marine Mammal Protection Act. To address that problem, the Marine Mammal Commission recommends that the National Marine Fisheries Service work with the Army Corps of Engineers, Texas Parks and Wildlife, and any other agencies or organizations that take marine mammals incidentally using research gillnets or relocation trawls to review their responsibilities for obtaining letters of authorization for incidental takes of marine mammals and take the steps needed to comply with this requirement, report any takes that occur, and develop and implement best practices for avoiding such takes.

### **Recreational fishing and boating interactions**

The Gulf of Mexico supports substantial recreational fishing, which occurs from shore, party/charter vessels, and private or rental operations. The Service's Web site indicates that in each year of the last decade at least 2.7 million people have taken between 19 and 24 million recreational fishing trips (<http://www.st.nmfs.noaa.gov/st1/recreational/queries/index.html>), and the states bordering the Gulf of Mexico (excluding Texas) account for more than 40 percent of recreational finfish harvest in the United States.

Recreational fishing poses risks to marine mammals and interactions between the two are a reasonable concern. Much of the fishing effort takes place in bays, sounds, estuaries, and other nearshore areas that are habitat for a number of marine mammal species and stocks. Interactions may be difficult to deter, since fishermen, scientists, and managers report that dolphins will take bait or catch and consume discards (including fish released by recreational boaters that are intentionally meant to attract dolphins). All of these conditions may lead to marine mammal injuries or deaths and, indeed, according to recent stock assessment reports, many stranded bottlenose dolphins have been found entangled in fishing line and lures and showing other evidence of interactions with recreational fishing. The lack of information on the frequency and severity of recreational fishery interactions precludes a reliable analysis of their impacts on marine mammal stocks. This is of particular concern because many of the potentially affected stocks are small and may be especially vulnerable to such interactions.

Developing effective and efficient measures to avoid or minimize these takes will be difficult if the Service does not do the work needed to characterize them—that is, the manner and frequency with which they occur and the species or stocks affected. The Commission has encouraged the Service to describe recreational fishing interactions to the fullest extent possible in its marine mammal stock assessment reports, and it appreciates the information the Service has made available to date. The Commission understands that, through the Marine Recreational Information Program, the Service is considering adding questions on bottlenose dolphin interactions. The Commission considers the addition of such information to be essential for managing these interactions. The information should help the Service understand how, when, and where to focus its efforts for addressing recreational fishing interactions. For that reason, the Marine Mammal Commission recommends that the National Marine Fisheries Service use its Marine Recreational Fisheries

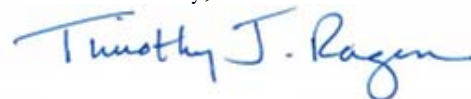
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Program and any other means available to expand its collection of data on interactions between recreational fishing and marine mammals, including information on geographic and seasonal distributions of interactions, affected stocks, nature and severity of injuries, and mortality and serious injury rates.

Until such priorities can be established the Service should take reasonable and prudent steps to minimize one well-documented cause of interactions: the practice of discarding fish overboard and otherwise attracting dolphins to fishing and recreational vessels. The Marine Mammal Commission recommends that the National Marine Fisheries Service develop and implement a plan, including increased outreach and enforcement efforts, to (1) prevent feeding of marine mammals by fishermen and (2) develop measures to control regulatory and other discards from recreational and commercial fishing so that the discards do not attract dolphins. In addition, because similar dolphin feeding activities occur in the recreational boating fleet, including those wishing to promote swim-with-dolphin activities, the Marine Mammal Commission recommends that the National Marine Fisheries Service (1) seek opportunities to partner with states, waterfront managers, and the recreational boating industry to gather information on dolphin feeding and attraction activities, (2) review its efforts to enforce prohibitions against such activities, and, as necessary, (3) revise its outreach and enforcement strategies to implement and support an effective program for deterring dolphin attraction activities.

Please contact me if you have questions about the Commission's recommendations and rationale. I would be pleased to discuss them with you at your convenience.

Sincerely,



Timothy J. Ragen, PhD  
Executive Director

cc: Roy E. Crabtree, Ph.D.  
Mr. James. H. Lecky  
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