



MARINE MAMMAL COMMISSION

2 November 2010

Mr. David Cottingham, Chief
Marine Mammal and Sea Turtle Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring MD 20910-3226

Dear Mr. Cottingham:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the draft 2010 stock assessment reports for marine mammals. When done well, these reports provide valuable information needed to resolve important marine mammal conservation issues.

That being said, many of these reports continue to fall well short of Marine Mammal Protection Act requirements. Time and again, the lack of assessment information has sorely confounded efforts to evaluate and/or resolve significant conservation issues such as fishery bycatch (e.g., in the central and western Pacific), climate change (e.g., in the Arctic), and oil spills (e.g., in the Gulf of Mexico). Furthermore, inadequate assessment information impedes management of not only the species of concern but also ecosystem-based management, which is at the heart of the Administration's new ocean policy.

RECOMMENDATIONS

To improve stock assessment efforts generally, the Marine Mammal Commission recommends that the National Marine Fisheries Service—

- review its observer programs nationwide, set standards for observer coverage, identify gaps in existing coverage, and determine the resources needed to (1) observe all fisheries that do or may directly interact with marine mammals and (2) provide reasonably accurate and precise estimates of serious injury and mortality levels;
- work with federal and state fishery management agencies and the industry to develop a funding strategy that will support adequate observer programs for collecting data on incidental serious injury and mortality of marine mammals and other protected species;
- develop a strategy to collaborate with other nations to expand existing surveys and assessments for stocks that move into international or foreign waters and may be subject to fisheries or other human-related risk factors; priority should be given to those stocks that are hunted in other parts of their range or are known to interact significantly with fisheries or other marine activities that are domestic, foreign, or international; and
- develop and implement a systematic approach for integrating all human-related risk factors into stock assessment reports

To improve stock assessment efforts in the Atlantic and Gulf of Mexico, the Marine Mammal Commission recommends that the National Marine Fisheries Service—

- conduct the necessary surveys of North Atlantic pinniped stocks and incorporate the results in their stock assessment reports;
- improve stock assessments for bottlenose dolphins in both the Atlantic and the Gulf of Mexico by conducting the research needed to describe stock structure, provide more accurate and precise estimates of the abundance and trends of the various stocks, and provide more accurate and precise estimates of the level of dolphin serious injury and mortality from fisheries and other human activities in those regions; and
- develop a stock assessment plan for the Gulf of Mexico that describes (1) a feasible strategy for assessing the Gulf's marine mammal stocks, (2) the infrastructure needed to support that plan, (3) the expertise required to carry out the plan, and (4) the funding needed to implement the plan.

To improve stock assessment efforts in the Alaska region, the Marine Mammal Commission recommends that the National Marine Fisheries Service—

- proceed with formal recognition of 12 stocks of harbor seals in Alaska and then proceed with the necessary research and management of those stocks as required by the Marine Mammal Protection Act;
- continue to seek the additional support needed to develop and implement an ice seal research and management strategy that is commensurate with the grave threats that those species face;
- ensure that funding for research on the eastern stock of North Pacific right whales is incorporated into the Administration's fiscal year 2012 budget, whether that funding is provided to the Service or to the Bureau of Ocean Energy Management, Regulation, and Enforcement; and
- provide, in the 2011 stock assessment reports, updated estimates of serious injury and mortality for the 11 stocks identified in the 2009 stock assessment reports but not addressed in the 2010 drafts, or at least explain why that information is not available.

To improve stock assessment efforts in the Pacific, the Marine Mammal Commission recommends that the National Marine Fisheries Service—

- investigate possible sources of fishery-related mortality of harbor porpoises from central California to the Washington coast and ensure adequate observer coverage on vessels in fisheries that may be taking harbor porpoises so that the total bycatch can be estimated more accurately; and
- conduct the necessary surveys to update stock assessment reports for harbor seals along the Oregon/Washington coast and in Washington inland waters.

RATIONALE

General comments

Observer effort: The 2010 draft stock assessments continue to reveal a number of shortcomings with regard to assessment of marine mammal bycatch. In Alaska, fishery managers use two observer programs—the Alaska groundfish observer program and the Alaska marine mammal observer program—to monitor fishery bycatch. The groundfish observer program is well funded, primarily by the fishing industry, and provides adequate coverage of those federally managed fisheries. Observer data for Alaska groundfish fisheries indicate a marked reduction in marine mammal bycatch compared with earlier decades when the fisheries were developing.

In contrast, managers use the Alaska marine mammal observer program to monitor the state's nearshore fisheries and record interactions with marine mammals. Funding for this program is inconsistent, covering (sometimes inadequately) only one fishery at a time. The nearshore fisheries that are likely to interact with marine mammals are observed at intervals of 10 years or more, which is inconsistent with the Service's own stock assessment guidelines. In fact, some fisheries have not been observed since enactment of the 1994 amendments to the Marine Mammal Protection Act. As a result, the available data on marine mammal bycatch are not sufficient to characterize or manage interactions with these fisheries.

In Hawaii, too, nearshore state-managed fisheries are not adequately observed. Those fisheries are small in terms of numbers of fishermen and distribution of effort, but they are likely to interact with a number of species described in the 2010 draft stock assessment reports. Here, again, lack of information about those fisheries undermines efforts to protect and recover stocks that overlap and may interact with Hawaiian nearshore fisheries, such as the insular stock of false killer whales, which appears to have declined markedly in recent decades, and the Hawaiian monk seal. For unknown reasons, the Hawaiian monk seal population has declined overall but is increasing in the main Hawaiian Islands, where it is at high risk of interacting with nearshore fisheries. The 2010 draft stock assessment reports also note that nearshore Hawaiian fisheries may affect common bottlenose and spinner dolphins.

Observer coverage also is inadequate in the Gulf of Mexico. There, the lack of reported and documented interactions could lead the reader to conclude that no interactions occur. Without a stronger basis for that conclusion, it would depend on a faulty "absence of evidence" argument, which is not a reasonable basis for responsible fishery management if the fisheries of concern have not been observed adequately. In fact, historical records provide compelling evidence that fishery interactions have killed substantial numbers of cetaceans in the past, but some key fisheries (e.g., the menhaden purse seine fishery) currently are not observed to determine whether they continue to take cetaceans.

In summary, inadequate observer coverage remains a significant issue in most U.S. waters. To address this shortcoming, the Marine Mammal Commission repeats its 2009 recommendation that the National Marine Fisheries Service review its observer programs nationwide, set standards

for observer coverage, identify gaps in existing coverage, and determine the resources needed to (1) observe all fisheries that do or may directly interact with marine mammals and (2) provide reasonably accurate and precise estimates of serious injury and mortality levels. The Commission recognizes that the cost of adequate observer programs is not trivial, but it believes that the industry should be responsible for demonstrating that its activities do not adversely affect marine mammals and other non-target species. With that in mind, the Commission has recommended repeatedly that the Service require the fishing industry to provide at least partial funding for observer programs. To address the need for increased and better observer effort, the Marine Mammal Commission repeats its 2005, 2006, and 2009 recommendations that the National Marine Fisheries Service work with federal and state fishery management agencies and the industry to develop a funding strategy that will support adequate observer programs for collecting data on incidental serious injury and mortality of marine mammals and other protected species.

Transboundary stocks: Many stocks that occur in U.S. waters also range into foreign or international waters. Assessing transboundary stocks is particularly challenging because they may range widely and may be taken by fisheries and subject to other human threats both within and outside U.S. waters. Estimation of abundance requires greater survey capacity, and estimation of fishery interactions requires exchange of information with appropriate foreign or international organizations or government agencies. Nonetheless, assessing transboundary stocks is essential if our national conservation strategy for marine mammals is to be complete and responsive to the directives of the Marine Mammal Protection Act. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service also develop a strategy to collaborate with other nations to expand existing surveys and assessments for stocks that move into international or foreign waters and may be subject to fisheries or other human-related risk factors. Priority should be given to those stocks that are hunted in other parts of their range or are known to interact significantly with fisheries or other marine activities that are domestic, foreign, or international. The goal should be to manage transboundary stocks using a potential biological removal level calculated for the entire stock, which has been suggested in the proposed revisions to the stock assessment guidelines.

Addressing all human-related risk factors: The death of an individual animal has the same consequences for its stock regardless of the source of mortality; that is, whether it was killed as a result of commercial or recreational fishing, a subsistence harvest, entanglement in debris, research activities, a stranding associated with anthropogenic sound, a vessel strike, or some other risk factor. Section 117 of the Marine Mammal Protection Act requires, among other things, that in completing stock assessments, the responsible agencies “estimate the annual human-caused mortality and serious injury of the stock by source and, for a strategic stock, other factors that may be causing a decline or impeding recovery of the stock, including effects on marine mammal habitat and prey.” Despite this guidance, the draft stock assessments are inconsistent in their treatment of risk factors other than fisheries, which confounds the full assessment of an individual stock and full evaluation of specific risk factors. To ensure that the impact of all human-related risk factors is being considered for a particular stock, the Marine Mammal Commission recommends that the National Marine Fisheries Service develop and implement a systematic approach for integrating all human-related risk factors into stock assessment reports.

Atlantic and Gulf of Mexico stock assessment reports

Pinniped surveys: The 2010 draft stock assessment reports do not include up-to-date estimates of pinniped abundance in the northwest Atlantic. Intermittent visits by researchers to breeding sites like Muskeget and Monomoy Islands suggest that gray and harbor seal populations have changed at those sites in recent years. The Service should update assessments of those stocks with new information on their abundance, distribution, and relationship with the Canadian populations of these species. Doing so is necessary to provide a basis for evaluating, among other things, the impact of gillnet and trawl fishery bycatch and the causes and significance of unusual mortality events (e.g., harbor seal mortality events in the Gulf of Maine in 2003, 2004, and 2006). To ensure that managers are working with up-to-date information, the Marine Mammal Commission recommends that the National Marine Fisheries Service conduct the necessary surveys of North Atlantic pinniped stocks and incorporate the results in their stock assessment reports.

Bottlenose dolphins and other cetacean stocks: The stock structure of bottlenose dolphins in the Atlantic and Gulf of Mexico is undoubtedly complex and difficult to study but has important implications for their management and conservation. The Service has made considerable progress investigating stock structure in the Atlantic, primarily to inform a take reduction effort. On the other hand, the Service has neglected investigation of stock structure in the Gulf of Mexico where Service scientists are capable of conducting the necessary studies but have not been given the resources to do so. For more than a decade, the Commission has been recommending a more aggressive approach to research and management of stocks in both regions, but particularly in the Gulf. Further work is needed in the Atlantic to ensure that take reduction measures are appropriately targeted at the fisheries that take dolphins in excess of Marine Mammal Protection Act standards. Additional work also is needed in the Gulf, where the best available information indicates separate inshore stocks throughout the northern Gulf, although such separation has not been confirmed with genetic studies. In both areas, the interactions between bottlenose dolphins and human activities are almost certainly going to increase in the foreseeable future as a function of fishing (commercial and recreational), oil and gas operations, shipping, military activities, tourism, and coastal development. These activities may injure or kill dolphins, compete with them for prey and space, and degrade their habitat. The Deepwater Horizon oil spill was a resounding reminder of the need to collect baseline information, and it drew particular attention to bottlenose dolphins that may be at elevated risk from such events because the dolphins depend on shallow coastal regions easily degraded by both spilled oil and oil spill response measures. Therefore, the Marine Mammal Commission repeats its long-standing recommendation that the National Marine Fisheries Service improve stock assessments for bottlenose dolphins in both the Atlantic and the Gulf of Mexico by conducting the research needed to describe stock structure, provide more accurate and precise estimates of the abundance and trends of the various stocks, and provide more accurate and precise estimates of the level of dolphin serious injury and mortality in fisheries and from other human activities in those regions.

Other cetacean stocks: Efforts to respond to and assess the damage from the Deepwater Horizon oil spill also highlighted the current lack of information on other cetacean stocks in the Gulf of Mexico. With regard to marine mammals, virtually all attention after the spill focused on bottlenose dolphins and sperm whales, with some later attention given to Bryde's whales. Those are

but 3 of the 21 species listed by the Service as occurring in the Gulf of Mexico. Furthermore, there is no basis for assuming that those three species serve as reliable indicators of the effects of the spill or other human activities on the remaining 18 species. Clearly, those 18 species include some that are difficult to assess, but the lack of progress over the past decades cannot in any way be construed as meeting the intent of the Marine Mammal Protection Act. The Commission believes the first thing that must be done is for the Service to develop a plan that would provide the necessary information so that decision-makers have a clear rationale for providing the resources needed. With that in mind, the Marine Mammal Commission recommends that the National Marine Fisheries Service develop a stock assessment plan for the Gulf of Mexico that describes (1) a feasible strategy for assessing the Gulf's marine mammal stocks, (2) the infrastructure needed to support that plan, (3) the expertise required to carry out the plan, and (4) the funding needed to implement the plan.

Information discrepancies: The text for the updated 2010 stock assessment report for Risso's dolphins is missing, despite there being updated information on mortality in the summary table. Also, the text for the Gulf of Maine/Bay of Fundy stock of harbor porpoises is included twice.

Alaska stock assessment reports

Harbor seal stock structure and status: In numerous previous letters, the Commission has emphasized the importance of investigating stock structure to ensure that management efforts under the Marine Mammal Protection Act are based on the appropriate conservation units. With regard to harbor seals in Alaska waters, the best scientific evidence available demonstrates that each of the three stocks currently recognized in the Service's stock assessment reports is actually composed of multiple stocks with variable status. More than six years ago, Service scientists proposed the designation of 12 harbor seal stocks in Alaska, but those stocks have yet to be recognized. The main reason for the delay was concern among members of the Alaska Native Harbor Seal Commission about possible implications for subsistence harvests if the proposed stocks were designated. The Commission understands that their concern has been addressed and that the new stocks will be recognized in the 2011 stock assessment reports.

Meeting that objective is important. The existing evidence clearly indicates that those stocks vary in status and trends, with some already significantly reduced in number and others experiencing significant declining trends (e.g., the Aleutian Islands, Glacier Bay, and Prince William Sound stocks). Such findings warrant more responsive research and management. Therefore, the Marine Mammal Commission again recommends that the National Marine Fisheries Service proceed with formal recognition of 12 stocks of harbor seals in Alaska and then proceed with the necessary research and management of those stocks as required by the Marine Mammal Protection Act.

Ice seals: Climate disruption likely is having significant effects on ringed, bearded, ribbon, and spotted seals. Assessments of these stocks remain among the poorest in the Alaska region and, indeed, in all U.S. waters. The lack of information is due in part to their extensive range and the logistical difficulty and cost of studying them. Although the Service has initiated studies to assess

them and included funding in the fiscal year 2010 budget for ice seal species, much more could and should be done. To contribute meaningfully to the conservation of these species, scientists and managers will need to increase their understanding of the distribution and movements, demographic parameters, natural history, and ecology of these ice seal species. In certain areas, more recent and representative information also will be needed to manage subsistence harvests. To gather such information, the Service will need to work closely with Alaska Native communities and organizations and the Alaska Department of Fish and Game. Until that time, the Marine Mammal Commission recommends that the National Marine Fisheries Service continue to seek the additional support needed to develop and implement an ice seal research and management strategy that is commensurate with the grave threats that these species face.

Eastern North Pacific right whale stock: The draft assessment for this stock states that it is "...arguably the most endangered stock of large whales in the world," but it rarely receives the attention that it warrants, probably because of its small population size, the difficulty in finding the remaining individuals, and the fact that it is not known to interact with or impede any significant human activity, at least for the time being. That may change in the near future with increasing effort to find oil and gas in regions where right whales do or may occur. At least for now, the Secretary of the Interior has decided not to open the North Aleutian Basin for leasing. The Marine Mammal Commission concurs with that decision, in part, because of the potential for harm to this highly endangered stock. However, given the Secretary's decision, the Bureau of Ocean Energy Management, Regulation, and Enforcement may reduce support for research on this species. The National Marine Fisheries Service, which has primary responsibility for recovery and conservation of this stock, should be prepared to provide the necessary support for research and recovery efforts. Although the draft assessment states that "[t]here are no known current threats to the habitat of this population," it also recognizes that "this [statement] partly reflects a lack of information about the current distribution and habitat requirements of right whales in the eastern North Pacific, as well as about the location and nature of any potential threats to the animal or its environment." Because of the grave status of this stock, the Marine Mammal Commission recommends that if it has not already done so, the National Marine Fisheries Service ensure that funding for research on the eastern stock of North Pacific right whales is incorporated into the Administration's fiscal year 2012 budget, whether that funding is provided to the Service or to the Bureau of Ocean Energy Management, Regulation, and Enforcement.

Serious injury and mortality estimates for fisheries: The 2009 stock assessment reports for the Alaska region stated that, for 18 stocks, "[m]ore current data on estimated fishery related serious injury and mortality are being analyzed and will be available for inclusion in the 2010 SARs." The draft 2010 assessment reports include updated data for 7 of those 18 stocks but not the other 11. In addition, the 11 draft reports that were not updated do not explain why the information was not included but merely remove reference to expected updates. It would be useful for the Commission and others who use these stock assessment reports to know why the updates were not included and when they might be expected. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service provide, in the 2011 stock assessment reports, updated estimates of serious injury and mortality for the 11 stocks identified in the 2009 stock assessment reports but not addressed in the 2010 drafts, or at least explain why that information is not available.

Information discrepancies: The report for the western stock of Stellar sea lions cites the 2008 aerial survey non-pup count as 31,246 but then indicates that this number is the sum of 6,522 non-pups counted in the Gulf of Alaska and 14,274 counted in the Aleutian Islands region. Presumably, the count for the Gulf of Alaska was actually 16,522. If that is not the case, then the calculations for this stock may be incorrect. With regard to the Alaska resident killer whale stock, the draft report text states that the minimum population estimate is 1,123, whereas the calculation of potential biological removal level and the summary table (Appendix 2) use the number 2,084. Presumably, the text is still based on 2001/2004 data and has not been updated.

Pacific stock assessment reports

West Coast harbor porpoise: Between 2003 and 2007 five harbor porpoises that stranded in Monterey Bay showed evidence of fishery interaction. The 2002 ban on gillnets inshore of the 60-fathom isobath was intended to eliminate or markedly reduce the potential for harbor porpoise bycatch in commercial fisheries, but that may not have been the case. Indeed, from May through November 2008 at least 74 harbor porpoise strandings were reported in northern and central California. Although many of these were attributed to interactions with bottlenose dolphins and none showed evidence of fishery interaction, the increase in strandings relative to previous years is a cause for concern regarding the Monterey Bay and other California harbor porpoise stocks.

The draft assessment of the northern Oregon/Washington coast harbor porpoise stock noted a total of 114 harbor porpoise strandings in 2006 and 2007, leading the National Marine Fisheries Service to declare an unusual mortality event. The report noted that investigators conducted detailed examinations of 81 stranded porpoises and attributed the cause of death to trauma and infectious disease for 48 animals. The cause of death for the remaining animals has not been determined, although contaminants, environmental conditions, and possible genetic anomalies are still being investigated. Of those animals thought to have died from trauma, the report noted that “suspected or confirmed fishery interactions were the primary cause of adult/subadult traumatic injuries, while birth-related trauma was responsible for the neonate deaths.” The report did not indicate the total number of deaths attributed to fishery interactions so the information is not yet conclusive. Nonetheless, the fact that fishery interactions were considered the primary cause of death in cases involving trauma suggests that fisheries are becoming a more serious risk factor for these stocks. To prevent this situation from deteriorating further, the Marine Mammal Commission repeats its 2009 recommendation that the National Marine Fisheries Service investigate the possible sources of fishery-related mortality from central California to the Washington coast and ensure adequate observer coverage on vessels in fisheries that may be taking harbor porpoises so that the total bycatch can be estimated more accurately.

Harbor seal surveys: Abundance estimates for harbor seals in the northeast Pacific currently are more than eight years old and outdated based on standards that the Service has set and the Commission supports. Harbor seals from those stocks are taken in both gillnet and trawl fisheries, and new surveys are needed to evaluate the significance of the level of take. For that reason, the Marine Mammal Commission recommends that the National Marine Fisheries Service conduct the

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necessary surveys to update stock assessment reports for harbor seals along the Oregon/Washington coast and in Washington inland waters.

Pacific Islands cetaceans: On 11 May 2010 the Commission wrote the National Marine Fisheries Service (enclosed) to urge the Service to develop and implement a plan for meeting its management and conservation responsibilities for cetaceans in its Pacific Islands region. The Commission is aware that the Service is planning a fall/winter survey for Pacific cetaceans. The Commission supports that effort but, as indicated in its 11 May 2010 letter, much more work remains to be done to meet the intent of the Marine Mammal Protection Act. The Commission requests that its 11 May 2010 letter be incorporated here, as much of the work described in that letter pertains to identification and assessment of cetacean stocks.

The Marine Mammal Commission has no doubt that the National Marine Fisheries Service is aware of and concerned about the many shortcomings in marine mammal stock assessment efforts. Please contact me if, in any way, the Commission can support your efforts to improve these assessments.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Gork" followed by a flourish and the letters "for".

Timothy J. Ragen, Ph.D.
Executive Director

Enclosure