

MARINE MAMMAL COMMISSION
4340 East-West Highway, Room 700
Bethesda, MD 20814-4447

24 October 2008

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 2008 stock assessment reports (SARs) for marine mammals. The Commission encourages the Service to continue its efforts to improve stock assessments despite limitations imposed by available resources.

To that end, the Commission offers the following recommendations and rationale. Although all of the following recommendations are items the Commission sees as necessary rather than optional, we recognize that limits to funding and staff require some prioritization of effort. With that in mind we suggest that the Service prioritize the first two recommendations for altering the basic underlying processes by which the Service obtains the data it needs to improve stock assessments and trends analyses. We would also be pleased to meet with you to discuss how such priorities might be set in this fiscally restrained climate.

RECOMMENDATIONS

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

- invest in the development of technologies and methods that will help address questions about population status and habitat use and thereby guide management strategies, particularly those aimed at avoiding adverse human effects;
- work with other agencies conducting research related to marine mammals for the purpose of coordinating scientific efforts and sharing data and results;
- convene a comprehensive review of its stock assessment efforts to identify the obstacles to completing stock assessments, assign priorities, and identify needed resources;
- work with federal and state fisheries management agencies and industry to develop a funding strategy that will support more effective observer programs for collecting data on incidental fisheries-related mortality and serious injury of marine mammals;
- proceed with formal recognition of 12 stocks of harbor seals in Alaska and proceed with research and management of those stocks as set forth in the Marine Mammal Protection Act;
- convene a take reduction teams to address pelagic longline fishery interactions with the Hawaii false killer whale stock; and

- develop and implement a systematic and comprehensive approach for incorporating and considering all risk factors into the SARs.

RATIONALE

The Commission offers the following rationale for its recommendations.

Develop or Acquire New Capabilities for Obtaining More and Better Data for Less

A variety of emerging technologies might be used to address some of the stock assessment shortcomings. The report of the 2006 NOAA National Passive Acoustics Workshop: Developing a Strategic Program Plan for NOAA's Passive Acoustics Ocean Observing System (PAOOS) (<http://www.nefsc.noaa.gov/nefsc/publications/tm/tmspo76.pdf>) is a good start in this direction, and an investment in such technology now may greatly expand the quantity and quality of survey data that the Service can collect. The Service already has had some success with passive acoustic detection in surveys conducted by the Northeast, Southeast, and Southwest Fisheries Science Centers. Similarly, the Service may wish to track or actively participate in efforts by the University of St. Andrews to develop population estimation methods from acoustic data, consistent with DISTANCE sampling methods for visual surveys. That effort is being supported by an award from the National Oceanographic Partnership Program.

Stock assessments also are compromised by insufficient information on the distribution and habitat-use patterns of marine mammal populations. As indicated in our 2007 letter commenting on draft SARs, improved tag technology and safety, reduced costs, and the ability to collect more data of different types (physiological, environmental) all suggest that stock assessment efforts could be enhanced through the use of such technology.

For all of these reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service invest in the development of technologies and methods that will help address questions about population status and habitat use and thereby guide management strategies, particularly those aimed at avoiding adverse human effects.

Data Generated by Other Agencies

In 2008 other agencies, including the Navy, Minerals Management Service, and National Science Foundation, increased their research on marine mammals. They did so to anticipate the conservation risks associated with their planned actions or actions that they regulate and to monitor the effects of actions already under way. Some of that research is referenced in the SARs, such as the Minerals Management Service's Sperm Whale Seismic Study in the Gulf of Mexico, but much of it is not included even when it might improve the value of the SARs. Because Service resources for conducting stock assessment research are limited, the Service will need to take full advantage of information collected by other agencies whenever that information can bolster stock assessments. For that reason, the Marine Mammal Commission recommends that the National Marine Fisheries

Service work with other agencies conducting research related to marine mammals for the purpose of coordinating scientific efforts and sharing data and results.

Unavailable or Outdated Data

Despite Service efforts to improve stock assessments, the status of more than 45 stocks (e.g., ice seals, beaked whales, and pelagic dolphins) cannot be adequately assessed due to insufficient data on stock status and trends, mortality, or both. In some cases the necessary data have not been collected, whereas in others the existing data are outdated and unreliable. These shortcomings are exacerbated by the lack of a consistent process across regions for identifying critical data shortfalls and then crafting a tailored programmatic response. The Commission recognizes that stock assessments can be particularly difficult for marine mammals in remote areas and with certain life history traits (e.g., ice-breeding seals and deep-diving pelagic species). Although review by the Scientific Review Groups appears to be helping the Service fill some gaps, many of the important shortcomings remain and are not likely to be addressed without a change in the Service's current approach to stock assessment. For that reason, the Marine Mammal Commission recommends that the National Marine Fisheries Service convene a comprehensive review of its stock assessment efforts to identify the obstacles to completing stock assessments, assign priorities, and identify needed resources. The Commission would be pleased to help sponsor and participate in such a review.

Outdated and Inadequate Fishery Data

Stock assessments also are incomplete for a number of fisheries because of inadequate observer coverage. We have commented annually on this topic (see any of the Commission's 2005, 2006, or 2007 SARs comment letters). Planning efforts to address existing shortcomings would not require extensive resources and could be carried out within existing budgetary limits. In the absence of a productive response from the Service, the Marine Mammal Commission reiterates its recommendation that the National Marine Fisheries Service work with federal and state fisheries management agencies and industry to develop a funding strategy that will support more effective observer programs for collecting data on incidental fisheries-related mortality and serious injury of marine mammals.

Recognition of Harbor Seal Stock Structure

In our previous letters the Commission also has emphasized the importance of investigating stock structure to ensure that management efforts under the Marine Mammal Protection Act are based on the appropriate population stocks. In some cases, the lack of progress is clearly based on a lack of data on stock structure. In others, the availability of data is not a problem, and stocks simply have not been recognized in a timely fashion. Harbor seals in Alaska are an example of the latter. The best scientific evidence available, provided by Service scientists, indicates that the currently recognized stock structure is wrong. We have known that for some time, and the time and resources lost in the prolonged delay could have been better used for other management purposes. Here, again, the Marine Mammal Commission reiterates a previous recommendation that the National

Marine Fisheries Service proceed with formal recognition of 12 stocks of harbor seals in Alaska and proceed with research and management of those stocks as set forth in the Marine Mammal Protection Act.

Take Reduction Efforts for the Hawaii Stock of False Killer Whales

The Commission previously has recommended that the Service convene a take reduction team to address takes of Hawaii false killer whales in the pelagic longline fishery. The fishery was elevated to category I in 2004 because it takes animals from this stock. Since then, the SARs have failed to provide new information on the level of fishing effort, the amount of bycatch, or the effects on the stock. As has long been the case for cetaceans in the central Pacific Ocean, the management of this stock has been neglected in a manner that seems entirely inconsistent with the primary objective of the Marine Mammal Protection Act. For that reason, the Marine Mammal Commission reiterates its recommendation that the National Marine Fisheries Service convene a take reduction teams to address pelagic longline fishery interactions with the Hawaii false killer whale stock.

Non-fishery Sources of Mortality

Society is becoming aware of the potential for human activities other than directed hunting and fisheries to adversely affect marine mammals. Ship strikes, marine debris, oil spills or other chemical releases, climate change, harmful algal blooms, zoonotic diseases, and underwater sound all have such potential. These factors are not treated consistently in the SARs. For example, the 2008 Pacific Ocean SARs mention the potential effects of human-generated sound from ships, military activities, and geophysical exploration and development—but only for selected beaked, sperm, and baleen whales. These species also are at risk from ship strikes, marine debris, and toxins, but these factors are not mentioned. Similarly, sound may have significant effects on species other than those listed (e.g., echolocating delphinids). The 2007 and 2008 Atlantic Ocean SARs do not cite potential risks to *Kogia* species from sonar sound, even though data in the published literature support the concern that military sonar may affect *Kogia* much like it affects beaked whales, and concern has been expressed about the vulnerability of *Kogia* to oil and gas industry activities in the Gulf of Mexico. In all those cases where stock assessment efforts are based on insufficient evidence, the Service must distinguish and report those situations where there is a reasonable basis for concern, even if that concern is only hypothetical because of lack of investigation. Otherwise, certain risk factors may not be addressed simply because of inadequate management attention. Similarly, the Service also should consider the increasing number of estimated takes described in various environmental assessments, environmental impact statements, incidental harassment authorizations, scientific research permits, and similar assessments of the anticipated risk to marine mammals from various proposed human activities. Authorization of such requests typically requires annual reporting of actual takes, which should be incorporated into the SARs. At some point, an ecosystem-based management system will require such information to balance multiple conflicting and interacting factors. For these reasons, the Marine Mammal Commission recommends that the National Marine Fisheries Service develop and implement a systematic and comprehensive approach for incorporating and considering all risk factors into the SARs.

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Please contact me if you have questions about the Commission's recommendations and the accompanying rationale.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a prominent initial "T".

Timothy J. Ragen, Ph.D.
Executive Director