

MARINE MAMMAL COMMISSION
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25 November 2003

Mr. Michael Payne, Chief
Marine Mammal Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3226

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the draft 2003 stock assessment reports for marine mammals in the U.S. Atlantic, Pacific, and Alaska regions. As we have noted in previous comments on stock assessment reports, these are very useful documents and we encourage the Service to continue developing and improving them. To that end, we make the following recommendations and general comments (below) and stock-specific comments (appended).

Recommendations

Based on our review of the draft 2003 stock assessment reports for marine mammals in the U.S. Atlantic, Pacific, and Alaska regions, the Marine Mammal Commission recommends that the Service:

- work with the scientific review groups from each region and the Marine Mammal Commission to investigate means to update the data in the stock assessment reports in a more timely fashion, and to better coordinate the review process for the reports.
- develop a more systematic approach for reporting information on fisheries interactions based on consistent application of data standards for observer coverage and quantitative assessment of our ability to detect mortality and serious injury of marine mammals.
- review its interpretation of population parameters and status in the absence of adequate information, identify measures that can be used to convey the associated uncertainty, and incorporate those measures in the stock assessment reports.
- prepare stock assessment reports on prospective stocks, or at the least incorporate information on the applicable parameters (*e.g.*, minimum population estimate,

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potential biological removal level, mortality estimate, and status) in the current stock assessment report. The available information on harbor seals in Alaska has not been updated while stock structure is being determined. Sufficient information is available to identify prospective stocks and report their potential biological removal levels and associated parameters.

- use the stock assessment reports as a basis for an overall assessment of key issues/problems, and use that assessment to facilitate planning and setting of priorities for future research.
- review and revise its approach for determining when right whales have been seriously injured. The current approach assumes the best-case scenario in the absence of evidence of death, even in cases where significant injuries are likely to have occurred.

Updating Stock Assessment Reports

Draft 2003 stock assessment reports have been submitted to the Commission and the public for comment. At the same time, the regional scientific review groups are reviewing draft 2004 stock assessment reports. Thus, the Commission and the public are commenting on some reports that are soon to become outdated and that may not be adjusted in response to comments because the authors are focusing on the next year's draft.

In addition, the reports are often out-of-date on key issues where important data have been collected but not reported. For example, abundance estimates on Cook Inlet beluga whales over the past several years indicate that these whales are not recovering as expected after the reduction of subsistence harvests. That information is not conveyed in the 2003 reports. Similarly, counts of gray whales have declined considerably in recent years and the numbers in the 2003 report do not reveal or discuss the potential implications of the decline. Because such information may have important management implications, timelier reporting is needed. For that reason, the Marine Mammal Commission recommends that the Service work with the scientific review groups and the Marine Mammal Commission to incorporate the most up-to-date information on these stocks.

Fishery Information

The stock assessment reports require considerable fisheries information that often must be repeated in multiple reports. Several regions are using appendices to describe information on the fisheries in a single place. That solution is effective as long as it is clear which species interact with which fisheries. It would be useful to address a specific set of questions with regard to fisheries interactions. Such questions should include: (1) Which fisheries might interact with the stock? (2) Which of those fisheries are monitored for interactions? (3) How effective are the monitoring efforts? and (4) How many individuals from the stock are killed or seriously injured? The information relevant to these basic questions is often not available or clear from the stock assessment reports. For example, a report might indicate that six fisheries were monitored for possible interactions, but fail to

inform the reader as to whether those are the only fisheries that might interact or if there are other fisheries that might interact but were not monitored.

In addition, monitoring standards are needed to assist the reader in gauging the reliability of mortality and serious injury estimates, and to distinguish those cases where mortality and serious injury are actually low from those cases where they may appear to be low due to inadequate monitoring. At least two approaches are available for setting monitoring standards. The first is to set lower limits for observer coverage. At present, reports from the different regions are not consistent with regard to their reporting and use of observer coverage. For example, the report for humpback whales in the central North Pacific does not include an observed take of a humpback whale in the mortality estimate because observer coverage was less than 1 percent in the pertinent fishery. However, the Atlantic region consistently uses observer coverage of less than 1 percent to estimate mortality. The Pacific region is exceptionally thorough in that it consistently includes strandings with evidence of fisheries interaction to generate mortality estimates.

Mortality is difficult to estimate when observer coverage is too low. In the Atlantic mid-water trawl fishery targeting *Loligo* squid, observer coverage ranges from 0.02 percent to 2.10 percent over five years, resulting in widely varying mortality estimates of long-finned pilot whales and common dolphins. The use of a five-year average dampens some of the year-to-year variability, but the apparent lack of precision and accuracy does not inspire confidence in the existing monitoring scheme for fisheries with exceptionally low observer coverage. As was seen with the mid-Atlantic bottlenose dolphin take reduction team, the large coefficients of variation around the mortality estimates hampered the ability of the team to develop management recommendations and will hamper the Service's ability to evaluate those measures after implementation. Reporting the efficacy of observer coverage to accurately estimate mortality would help the Service evaluate whether coverage needs to be increased or if alternative means of estimating mortality need to be pursued. Useful alternatives may include use of strandings or alternative observer platforms.

The lack of fisheries information in some reports, especially for the Gulf of Mexico region, makes the evaluation of potential mortality especially difficult. For example, the report for the rough-toothed dolphin Northern Gulf of Mexico stock notes that two animals stranded with "evidence of fishery interaction." However, the only fishery listed in the report is the pelagic longline fishery, which has no observed takes. Without more information on the strandings, the fisheries in the region, and their potential overlap, it is impossible to determine whether the observer coverage in the longline fishery is adequate and if other fisheries need observer programs.

Finally, all the reports need to be reviewed for consistency in numbers presented in the tables and in the text. Mortality estimates for 2001 often are given in the tables but not in the text. In addition, "0" is often reported in the text when the table indicates "NA." It is not clear whether or how such discrepancies may have affected estimates of mortality.

Absence of Evidence

A number of reports assumed that the absence of evidence for mortality and serious injury reasonably could be construed as evidence that mortality and serious injury did not occur, even without effective monitoring. For example, reports of some beluga whale stocks in Alaska suggested that there was no evidence that the stocks were declining even if abundance and trends could not be characterized reliably. In such cases, it is important to distinguish real evidence that no decline is occurring and the possibility that an unmonitored decline is occurring. Rather than stating that there is no evidence of decline, a more objective statement would be that the available evidence is not sufficient to determine trends.

Harbor Seals in Alaska and Prospective Stocks

Stock assessment reports for harbor seals in Alaska date back to 1998, with only editorial revisions since then. Changes to these reports have been delayed pending revision of stock structure and the information contained in these reports is becoming outdated. Although decisions about revisions of stock structure have been delayed, the available scientific information is sufficient to identify prospective stocks (*Federal Register* 67:54792 and 67:62698). Several of these may be vulnerable to human-related mortality and serious injury. We understand that participants at the last Guidelines for Assessing Marine Mammal Stocks (GAMMS) meeting agreed with a recommendation to prepare stock assessment reports for prospective stocks or at least include data for prospective stocks in the current stock assessment reports. We concur with that recommendation.

Identification of Key Issues and Research Priorities

The complete set of stock assessment reports provides a very useful basis for identifying key research needs and conservation issues. It is likely that the Service already uses them for that purpose, but the issues and priorities identified by the Service are not reported. The Marine Mammal Commission recommends that the Service consider adding an appendix to these reports to list and prioritize research needs and conservation issues.

Assessing Serious Injury

In multiple letters to the Service on North Atlantic right whales, the Marine Mammal Commission has recommended the development of a more reasonable interpretation of the seriousness of observed injuries. The requirement that mortality of an injured animal be confirmed before it can be considered a "serious injury" clearly biases estimates of "mortality and serious injury" downward. Therefore, it underestimates the need to address the sources of injury. This interpretation by the Service results in an approach that is particularly serious because our ability to determine the outcome of injuries is low and the risks stemming from inaction are particularly high. Other regions and science centers consider an animal "seriously injured" when it is entangled in fishing gear, particularly when gear is wrapped around the animal's rostrum. Trained members of the disentanglement team in New England regularly assess and report the degree of entanglement and the

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likelihood of serious injury and/or mortality if a whale is not disentangled. For those reasons, the Marine Mammal Commission recommends that the Service be more cautious in determining "serious injury and mortality," utilizing reports by trained observers and disentanglement team members and noting in the stock assessment reports where seriousness of injury could not be determined.

Please call if you have questions about the above general recommendations or the appended specific comments.

Sincerely,

A handwritten signature in black ink that reads "David Cottingham". The signature is written in a cursive, flowing style with a long horizontal stroke extending to the right.

David Cottingham
Executive Director

cc: Brendan Kelly, Ph.D., Chairman, Alaska Scientific Review Group
Robert Kenney, Ph.D., Chairman, Atlantic Scientific Review Group
Michael Scott, Ph.D., Chairman, Pacific Scientific Review Group