

MARINE MAMMAL COMMISSION
4340 EAST-WEST HIGHWAY, ROOM 905
BETHESDA, MD 20814

26 October 2006

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

Dear Mr. Cottingham:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors, has reviewed the draft 2006 stock assessment reports for marine mammals. In recent years, the National Marine Fisheries Service has conducted surveys providing substantial new information on stocks that previously were poorly known (e.g., small cetaceans around the Hawaiian Islands). The Service also has updated information on some stocks (e.g., small cetaceans along the Atlantic coast) and enhanced its analyses to provide more accurate estimates of population size and mortality for others. The Marine Mammal Commission commends the Service for these efforts.

Nonetheless, the stock assessment reports highlight several important shortcomings. Assessments are incomplete for many stocks because essential data and estimates are unavailable or outdated. In addition, the zero mortality rate goal has been achieved for many stocks but not for others, and mortality still exceeds the potential biological removal level for a few stocks. Also, the process for classifying strategic stocks is inconsistent among the Service's regions and regional scientific review groups. Based on its review of the draft stock assessment reports, the Commission provides the following comments and recommendations regarding these and related shortcomings.

RECOMMENDATIONS

The Marine Mammal Commission recommends that—

- the National Marine Fisheries Service work with federal and state fisheries management agencies and industry to develop a fair and sustainable funding strategy to support effective observer programs for collecting information on incidental mortality and serious injury;
- the Service proceed expeditiously to establish biologically meaningful stock boundaries for harbor seals in Alaska;
- the Service convene a take reduction team for false killer whales in the Pacific Islands region, including at least the U.S. waters surrounding Hawaii and Palmyra Atoll; and
- the Service adjust stock assessment guidelines to ensure consistent methods for identifying strategic stocks.

RATIONALE

Unavailable or outdated data

In recent years, the Service has improved stock assessments by providing new information for a number of marine mammal stocks. Nevertheless, much work remains to be done to fully implement the stock assessment approach established in the Marine Mammal Protection Act. In addition to the fact that stock structure is not well known for a number of species, estimates of minimum population size and potential biological removal are not available or are outdated for more than 15 percent of known marine mammal stocks. Similarly, estimates of incidental mortality are not available or are outdated for almost 15 percent of known stocks. Preparation of adequate stock assessments is a challenge, particularly in remote areas (e.g., Pacific islands, Alaska) where assessment efforts are confounded by logistical difficulties and the natural history of some species (e.g., deep-diving pelagic species). Nonetheless, the status of a number of stocks has not been assessed and the lack of such information encumbers management and may pose unnecessary risks to those stocks. As this situation has persisted for some years, a review of stock assessment efforts may be appropriate to consider the hurdles in completing stock assessments, assign priorities for bringing assessments up-to-date, and identify resources to support comprehensive stock assessment efforts. The Service's 2004 technical memorandum entitled "A requirements plan for improving the understanding of the status of U.S. protected marine species" should provide a useful starting point for such a review. To that end, the Marine Mammal Commission requests a meeting with the Service to discuss means for both enhancing stock assessment efforts and securing adequate funding for those efforts.

Stock assessment efforts are incomplete due, in part, to insufficient observer coverage for a number of fisheries. In the absence of suitable observer coverage, mortality estimates may be unavailable, imprecise (coefficients of variation > 0.3), or inaccurate. For example, most nearshore fisheries in Alaska state waters are observed rarely or not at all because of insufficient funding for the Alaska Marine Mammal Observer program. At current funding levels this program will require over 20 years to observe fisheries in which incidental mortality is known to occur. In a 26 September 2005 letter the Commission recommended that the Service review current levels of observer coverage, set appropriate standards for such coverage, and implement the changes needed to achieve those standards. In a 25 January 2006 letter the Commission stated its view that at least partial funding for observer programs should be provided by the fishing industry, which bears a degree of responsibility for demonstrating that its activities do not adversely affect marine mammals and other non-target species. In view of the lack of funding for observer programs, the Marine Mammal Commission recommends that the Service work with federal and state fisheries management organizations and industry representatives to develop a fair and sustainable funding strategy to support effective observer programs.

Stock assessment efforts also fall short because stock structure is not well known for a number of species. In recent years, the Service has made substantial progress in elucidating stock structure based on studies of genetic and movement patterns throughout the range of individual species. Such studies are providing new insights into the demography and ecology of these species and should be continued. When such structure is revealed, it should be incorporated into the

management framework established in the Marine Mammal Protection Act. Harbor seals in Alaska are an example where such adjustments have not been made. The best scientific evidence available, provided by Service scientists, indicates that harbor seals in Alaska comprise at least 12 stocks, but new stocks have yet to be recognized by the Service and its co-management partners. In the same 25 January 2006 letter the Commission recommended that the Service proceed expeditiously to establish biologically meaningful stock boundaries for harbor seals in Alaska. The Commission reiterates that recommendation here.

Incidental mortality with respect to zero mortality rate goal and potential biological removal

The draft stock assessment reports indicate that incidental mortality and serious injury in fisheries is at or below the zero mortality rate goal (10 percent of potential biological removal) for more than half of all stocks. Although the zero mortality rate goal originally was to be achieved for all stocks by April 2001 (Marine Mammal Protection Act §118(b)(1)) and that goal has not been met, the Service has made progress in ensuring that the majority of marine mammal stocks are not at risk from incidental mortality in commercial fisheries. However, because of insufficient information, status with respect to the zero mortality rate goal cannot be evaluated for more than 20 percent of stocks. Further, as a result of insufficient observer coverage, some incidental mortality may be unreported, which could affect the status of some stocks with respect to this goal.

Four marine mammal stocks are known to be subject to fisheries-related incidental mortality that exceeds their potential biological removal levels: western North Atlantic northern right whale, Gulf of Maine humpback whale, western North Atlantic pygmy sperm whale, and Hawaii false killer whale. The Commission recently has undertaken a review of the Service's protection program for North Atlantic right whales and will defer comments until a report of that review is complete. We do note here that both North Atlantic right whales and Gulf of Maine humpback whales are addressed by the Atlantic large whale take reduction team, which has been unsuccessful in reducing mortalities of those stocks below their respective potential biological removal levels. The Service declared an unusual mortality event involving Gulf of Maine humpback whales on 4 October 2006, which increases the concerns regarding this stock.

Western North Atlantic pygmy sperm whales are known to be taken incidental to the Atlantic pelagic longline fishery, but mitigation measures for them are not included in the draft pelagic longline take reduction plan, which currently focuses on short-finned pilot whales, long-finned pilot whales, and Risso's dolphins. Only one pygmy sperm whale serious injury has been observed in the longline fishery in recent years, and it is not clear whether that observation was an anomaly. If the observed serious injury was not anomalous, then the level of take is cause for concern because it results in a mortality estimate greater than the combined potential biological removal estimate for the western North Atlantic stocks of dwarf and pygmy sperm whales. In addition, dwarf and pygmy sperm whales were involved in an unusual mortality event along the U.S. Atlantic coast in 2004, suggesting that the Service should closely monitor the status of both species.

The Hawaii stock of false killer whales has experienced increasing levels of incidental mortality and serious injury in the Hawaii longline fishery in the past few years. False killer whales around Palmyra Atoll also may be experiencing incidental mortality and serious injury in excess of

their potential biological removal. A recent survey of marine mammals that included the waters of Palmyra Atoll may clarify the stock structure of these animals and provide the abundance estimates necessary to estimate potential biological removal level(s). Following its annual meeting in Hawaii in 2004, the Commission recommended that the Service convene a take reduction team for false killer whales in the Pacific Islands region to develop a broad range of options for reducing take levels. The Service suggested that the pelagic longline take reduction team that was convened for similar fisheries in the Atlantic might provide useful information to address the problem with false killer whales in the Pacific Islands region. However, the primary mitigation options developed by the team involve mainline length reduction and creation of a special area to promote research to better understand the problem. It is not clear that either of these actions will be useful in the Pacific Islands region, nor is it clear that the interactions with longline fisheries and measures needed to mitigate those interactions are similar in the two oceans. Because the work of the Atlantic pelagic longline take reduction team does not appear to adequately address the incidental mortality and serious injury of false killer whales in the Pacific Islands region, the Marine Mammal Commission reiterates its recommendation that the National Marine Fisheries Service convene a take reduction team for false killer whales in the Pacific Islands region, including at least the U.S. waters surrounding Hawaii and Palmyra Atoll.

In addition to the four stocks for which incidental takes exceed potential biological removal, several other stocks face increasing takes that may exceed potential biological removal in the near future unless preventative actions are taken. Harbor porpoises from the Gulf of Maine/Bay of Fundy stock are of particular concern because incidental takes have increased substantially in the Northeast sink gillnet fishery, apparently from lack of compliance with bycatch regulations. The Commission is aware that the Service has undertaken some efforts to improve compliance and that the results of those efforts may not be evident in the estimates of incidental mortality provided in the draft 2006 stock assessment reports. If, however, observed and estimated mortality and serious injury rates for 2005 and 2006 have not declined, the Service should consider reconvening the harbor porpoise take reduction team to assess and recommend solutions.

Classification of strategic stocks

The majority of strategic stocks are classified as such because they are listed as threatened or endangered under the Endangered Species Act or designated as depleted under the Marine Mammal Protection Act. Five stocks warrant classification as strategic because human-caused mortality rates exceed their potential biological removal levels, including the four stocks with fisheries interactions discussed above, and Southern resident killer whales for which potential biological removal is exceeded based on one ship-strike mortality of a habituated whale. Of these five stocks, three also are listed as endangered.

Inconsistencies in classification arise in cases where reliable estimates of either potential biological removal or human-caused mortality are unavailable. In those instances, the Service relies upon the advice of its regional scientific review groups to determine whether a stock should be classified as strategic. The Commission agrees that sound scientific advice is useful when objective data are unavailable, but the advice provided by the scientific review groups or the Service's response to that advice appears to be inconsistent among stocks and regions. Ten stocks with

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unreliable estimates of either potential biological removal or human-caused mortality are classified as strategic, although many other stocks with similarly unreliable estimates are not. Three stocks of harbor porpoises in Alaska are classified as strategic because “the abundance estimates are quite old and information on incidental harbor porpoise mortality in commercial fisheries is not well understood.” The draft report for Southeast Alaska harbor porpoise indicates that “long-term survey information suggests a decline in the Southeast Alaska population,” although the information regarding that trend is not provided in the report. In contrast, many other stocks in Alaska and elsewhere are not classified as strategic but their abundances and human-caused mortality are poorly known. Two stocks of bottlenose dolphins in the Gulf of Mexico are classified as strategic because their level of human-related mortality or serious injury relative to their potential biological removal level is unknown and because they may have been affected by several unusual mortality events involving bottlenose dolphins in the Gulf of Mexico. Again, many non-strategic stocks have unreliable or unavailable estimates, and it is not clear that involvement in unusual mortality events is consistently considered when determining whether a stock is strategic—especially when the events do not involve human-caused mortality. Finally, five stocks of Atlantic and Gulf of Mexico beaked whales are classified as strategic because “of uncertainty regarding stock size and evidence of human induced mortality and serious injury associated with acoustic activities.” Abundance and mortality/injury rates are similarly uncertain for beaked whale stocks in the Pacific and Alaska regions and those whales also may be exposed to anthropogenic noise. However, none of those stocks are classified as strategic.

The underlying concern here is not with the inconsistencies per se, but rather with the idea that inconsistent approaches may lead to classification errors that pose additional risks to some stocks. To avoid that situation, the Marine Mammal Commission recommends that the National Marine Fisheries Service make suitable adjustments to stock assessment guidelines to ensure consistent methods for identifying strategic stocks. To allow the regional scientific review groups to discuss various approaches and develop consistent guidelines, the Service may wish to convene a joint meeting of those groups. Such a meeting also would provide an opportunity to address other inconsistencies in stock assessments among regions, such as evaluation of potential biological removal for declining stocks (i.e., whether to estimate a value or report it as “undetermined,” “undefined,” or “n/a”) and statistics provided in summary reports (e.g., survey interval, last survey year, and coefficients of variation for mortality estimates). The Commission would be pleased to participate in such a meeting.

Please contact me if you have questions about these recommendations or wish to discuss them.

Respectfully,



Timothy J. Ragen, Ph.D.
Executive Director