



# MARINE MAMMAL COMMISSION

14 July 2010

Mr. P. Michael Payne, Chief  
Permits, Conservation, and Education Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910-3225

Re: Request for Amendment, Permit No. 14241  
(Peter Tyack, Ph.D.)

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit amendment request with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. Based on its review of the amendment request, the Commission offers the following recommendation.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested amendment, provided that the conditions currently contained in the permit remain in effect, and that the Service—

- withhold authorization for tagging any female cetaceans accompanied by a neonate and for conducting controlled sound exposure experiments on focal groups that include a neonate;
- prior to issuing the amendment, require the permit holder to submit documentation indicating that the proposed research has been reviewed and approved by an Institutional Animal Care and Use Committee as required by section 2.31 of the Animal and Plant Health Inspection Service's Animal Welfare Act regulations;
- address the discrepancy between the amendment request and the existing permit as to whether short-finned pilot whales are authorized to be taken in Cape Cod Bay and, if necessary and appropriate, add short-finned pilot whales to the list of species included in the permit;
- grant authorization to collect skin and blubber from short- and long-finned pilot whales in Cape Cod Bay; and
- approve the applicant's request to extend the authorized studies to include the named species in the waters around Cape Hatteras.

## RATIONALE

Permit No. 14241 authorizes the permit holder to take by harassment various species of non-threatened, non-endangered cetaceans (e.g., beaked whales and large delphinids) to study their behavior, sound production, and responses to mid-frequency sound at received levels of up to 180

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dB re 1 $\mu$ Pa. The permit authorizes tagging, behavioral observations, photo-identification, and sound playback studies that are focused on adults and juveniles of either sex. Calves less than one year of age and females accompanied by such calves may not be tagged or exposed to playback sounds. The permit is valid through 31 July 2014.

The permit holder is requesting that the permit be amended to authorize the tagging of females accompanied by calves older than neonates and sound playback experiments targeting groups that include older calves, but not neonates. The permit holder proposes to define neonates differently for species that are listed as threatened or endangered versus those that are not. For listed species, neonates would include calves estimated to be less than six months of age. For non-listed species, neonates would be defined as calves with obvious fetal folds. The permit holder also is seeking amendment of the permit to allow (1) biopsy sampling (skin and blubber) of several cetacean species in the Mediterranean Sea (i.e., Blainville's beaked whales, Cuvier's beaked whales, short-finned pilot whales, long-finned pilot whales, bottlenose dolphins, Risso's dolphins, and false killer whales), all of which can be tagged under the existing permit; (2) biopsy sampling (skin and blubber) of short-finned pilot whales and long-finned pilot whales in Cape Cod Bay, Massachusetts, both of which the permit holder asserts can be tagged under the existing permit (see below); and (3) the currently authorized activities (tagging, behavioral observations, photo-identification, and sound playback studies) to be conducted on Cuvier's beaked whales, True's beaked whales, Gervais' beaked whales, Blainville's beaked whales, bottlenose dolphins, Risso's dolphins, and common dolphins in waters off Cape Hatteras, North Carolina.

### **Research on Mother-Calf Pairs**

As previously noted, the permit currently prohibits the tagging of cetacean calves less than one year of age and females accompanied by such calves. The permit also does not allow sound playbacks to be directed at focal groups that include calves less than one year of age. The permit holder requests that the permit be amended to authorize the tagging of females accompanied by non-neonate calves and to target playback studies at focal groups that include calves, but not neonates. The permit holder is not seeking authority to tag dependent calves under one year of age. The permit holder notes that amending the permit to allow playback experiments to be conducted on calves younger than one year of age, but not neonates, would be consistent with the authorization granted under Permit No. 14534 to the National Marine Fisheries Service's Office of Science and Technology, with whom the permit holder is collaborating.

As noted in previous Commission letters, exposing mother-calf pairs to various research procedures (i.e., tagging, biopsy sampling, acoustic playbacks) may pose heightened risks to the calves (e.g., separation from the mother). In addition, allowing some research on calves based on their assumed age is complicated by the fact that it is difficult to determine a calf's age in the field. Recognizing these complications, the Commission has noted in past letters that it sees value in investigating and documenting the responses of mother-calf pairs to sound from various human-related sources. Such information is necessary for assessing sound effects and developing mitigation and monitoring procedures.

In this case, the permit holder and the research team with whom he is collaborating are highly experienced and qualified and have developed a monitoring program (e.g., various tags, passive acoustics, and visual monitoring) that should enable the researchers to determine marine mammal responses to the various acoustic experiments. Given these considerations, the Commission considers it appropriate for the Service to amend the permit to authorize the tagging of females accompanied by non-neonate calves and the conduct of playback studies targeting focal groups that include non-neonate calves. Consistent with the permit holder's amendment request, the Marine Mammal Commission recommends that the National Marine Fisheries Service withhold authorization for tagging any female cetaceans accompanied by a neonate and for conducting controlled sound exposure experiments on focal groups that include a neonate.

### **IACUC Review and Approval**

The information provided does not indicate clearly whether the activities proposed in the amendment request have been reviewed and approved by the permit holder's Institutional Animal Care and Use Committee. Therefore, the Marine Mammal Commission recommends that, prior to issuing the amendment, the National Marine Fisheries Service require the permit holder to submit documentation indicating that the proposed research has undergone such review and has been approved by the Institutional Animal Care and Use Committee as required by section 2.31 of the Animal and Plant Health Inspection Service's Animal Welfare Act regulations.

### **Short-finned Pilot Whales**

The permit holder's 11 March 2010 letter to the Service requests that Table 2 ["Annual takes of marine mammals in Cape Cod Bay, MA"] of the permit be amended to authorize the applicant to collect skin and blubber biopsies from short-finned pilot whales and long-finned pilot whales that may be taken by tagging, exposure to sound playbacks, etc., in Cape Cod Bay. However, neither the original application nor Table 2 of the permit list short-finned pilot whales among the species that can be taken in Cape Cod Bay. The Marine Mammal Commission recommends that the National Marine Fisheries Service address the discrepancy between the amendment request and the existing permit as to whether short-finned pilot whales currently are authorized to be taken in Cape Cod Bay and, if necessary and appropriate, add short-finned pilot whales to the list of species included in the permit. Adding short-finned pilot whales may be important, in part, because short- and long-finned pilot whales are difficult to distinguish in the field. Once the discrepancy has been addressed, the Marine Mammal Commission recommends that the National Marine Fisheries Service grant authorization to collect skin and blubber biopsy samples from these species in Cape Cod Bay.

### **Studies off Cape Hatteras**

Finally, the applicant has requested permission to extend his studies to a number of cetacean species in the waters off Cape Hatteras. In view of the applicant's qualifications, the current lack of information regarding the subject species in this area, and the potential utility of comparative studies of cetaceans in this region and other regions covered under this permit, the Marine Mammal

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Commission recommends that the National Marine Fisheries Service approve the applicant's request to extend the authorized studies to include the named species in the waters around Cape Hatteras.

The Commission believes that the activities for which it has recommended approval are consistent with the purposes and policies of the Marine Mammal Protection Act.

Please contact me if you have any questions concerning these comments and recommendations.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael L. Gorkin for". The signature is written in a cursive style and is positioned above the typed name and title.

Timothy J. Ragen, Ph.D.  
Executive Director