27 September 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: Permit Application No. 15271
(James T. Harvey, Ph.D.
Moss Landing Marine Laboratories)

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. The applicant is requesting authorization to conduct research on blue, fin, humpback, and gray whales and take by incidental harassment six other species of marine mammals off California, Oregon, and Washington during a five-year period.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service—

- issue the permit authorizing the applicant to biopsy and tag blue, fin, humpback, and gray whales, including females accompanied by calves other than neonates, but otherwise limit the permit by excluding authorization to biopsy or tag any neonates or females accompanied by a neonate;
- add to the permit a condition requiring that the applicant document observations regarding short- and long-term effects from biopsy sampling and tagging and report them to the Permit Office; and
- issue the permit but condition it to require that the applicant not initiate any of the research before providing the Service with documentation that the applicant's Institutional Animal Care and Use Committee has reviewed and approved the research protocol.

RATIONALE

The applicant proposes to photograph, biopsy, tag, and track blue, fin, humpback, and gray whales, primarily in waters off the Southern California Bight, San Luis Obispo, Monterey Bay, and San Francisco, California. The purposes of the proposed research are to (1) relate distribution and abundance of cetaceans with environmental factors, (2) determine diet and foraging behaviors as cetaceans exploit prey resources, (3) determine types of acoustic behavior of cetaceans and how

acoustic signals are affected by anthropogenic factors, and (4) determine the movements of individuals or pods during migrations or within their home range.

Each year, up to the following number of whales would be taken from each of the four species and by each of the four procedures:

	Whale Species			
Procedures	**Blue**	**Fin**	**Humpback**	**Gray**
Photo-identification and biopsy sampling	50	30	200	100
Suction-cup tagging	30	10	30	40
Dart tagging	10	5	10	10
Tagging with small implantable tags	10	5	10	10

The tags and related instruments may include VHF/UHF transmitters, time-depth recorders, GPS tags, accelerometers, D-tags, bioacoustics probe tags, and video cameras and will be deployed via pole, crossbow, rifle, or compressed-air rifle. The implantable tags will be sterilized using an autoclave, coated with an antibiotic, and placed in a vacuum pack until the time of deployment. Females with dependent non-neonate calves will be biopsied and tagged. Tagged individuals would be observed and photographed daily for the first week and approximately once a week thereafter for the next two months. The whales also would be acoustically monitored using a hydrophone deployed from a vessel. In addition, up to 200 California sea lions, 20 harbor seals, 50 Pacific white-sided dolphins, 20 northern right whale dolphins, 10 harbor porpoises, and 20 short-beaked common dolphins would be taken annually by Level B harassment in the course of conducting the proposed research activities.

Research on Mother-Calf Pairs

As noted in the Commission's previous letters, exposing mother-calf pairs to certain 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 research on some calves based on their assumed age is complicated by the fact that it can be difficult to determine a calf's age in the field. Recognizing these complications, the Commission nevertheless 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 applicant would not be required to determine the age of a calf but rather to make a distinction between a neonate calf and an older calf. Making such distinctions will be facilitated by the size of the calf, the time of year, and the location where the calf is observed. Neonates rarely are seen in the proposed study areas because births generally occur farther south and the calves are more developed when they arrive in the study areas. Thus, the applicant may not be able to determine a calf's age precisely but should be able to discern whether the calf is a neonate.

In previous letters regarding tagging of large whales and non-neonate calves, the Commission also has recommended that the Service require monitoring of short-and long-term effects to determine if such effects occur and to assess their nature and significance. In that regard, the applicant indicates that he will monitor tagged animals on a daily basis for the week after tagging and about once a week thereafter. Such monitoring provides an opportunity to assess tagging effects, which are still a matter of some controversy.

As the applicant will be documenting behavioral responses to vessel traffic, the whales will not be exposed to sounds introduced by the applicant, precluding any additional risk to the animals.

Given these considerations, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit authorizing the applicant to biopsy and tag blue, fin, humpback, and gray whales, including females accompanied by calves other than neonates, but limit the permit by excluding authorization to biopsy or tag any neonates or females accompanied by a neonate. In view of the need to collect additional information on the effects of biopsy sampling and tagging large whales, the Marine Mammal Commission also recommends that the National Marine Fisheries Service add to the permit a condition requiring that the applicant document observations regarding short- and long-term effects from biopsy sampling and tagging and report them to the Permit Office.

IACUC Review and Approval

The proposed activities have not been reviewed and approved by the applicant's Institutional Animal Care and Use Committee (IACUC), as required by section 2.31 of the Animal and Plant Health Inspection Service's Animal Welfare Act regulations. This presents a dilemma with regard to the Service's new policy, which the Commission supports, requiring IACUC approval before issuing a permit. In this case, the applicant is required to obtain his research permit as a condition for receiving approval from his IACUC. To avoid an irreconcilable standoff, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit but condition it to require that the applicant not initiate any of the research before providing the Service with documentation that the applicant's IACUC has reviewed and approved the research protocol.

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 the Commission's recommendations.

Sincerely,

Timothy J. Ragen, Ph.D.
Executive Director