19 March 2012

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. 16325

(Jooke Robbins, Ph.D., Center for Coastal Studies)

## 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. Dr. Robbins is requesting authorization to conduct research on seven cetacean species in the Gulf of Maine, Atlantic Ocean, Gulf of Mexico, and Caribbean Sea during a five-year period. Dr. Robbins is seeking to renew permit 633-1778.

## RECOMMENDATIONS

<u>The Marine Mammal Commission recommends</u> that the National Marine Fisheries Service issue the permit, but—

- condition it to require Dr. Robbins to minimize disturbance of the animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if any evidence indicates that the activity is interfering with female/calf behavior, feeding, or other vital functions;
- condition it to require Dr. Robbins to make observations sufficient to detect possible shortand long-term effects of biopsy sampling and report the effort made and the information collected to the Service;
- advise Dr. Robbins of the need to have her Institutional Animal Care and Use Committee (IACUC) review and approve the proposed research protocols prior to initiating the research activities; and
- advise Dr. Robbins of the need to consult with the relevant entity (e.g., National Marine Sanctuary, National Ocean Service, National Park Service, Tres Palmas Marine Reserve) and obtain any required authorizations prior to conducting the proposed research activities in a sanctuary, critical habitat area, seashore, or reserve.

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## **RATIONALE**

Dr. Robbins proposes to conduct research on cetaceans year-round in waters from Maine to Florida and in waters near Puerto Rico. Research off the northeast United States would occur primarily from March–December and off the mid-Atlantic and southeast United States and Puerto Rico from November–May. The purposes of the proposed research are to continue a long-term study to investigate humpback whale (1) abundance and vital rates; (2) range, movement and habitat use patterns; (3) demographic parameters and reproductive success; (4) disease and health; (5) foraging ecology and nutritional stress; and (6) entanglement and other human-related impacts. In addition, Dr. Robbins would investigate population structure, health, and human impacts on fin, sei, blue, minke, sperm, and killer whales.

Dr. Robbins seeks authorization to observe, photograph, and videotape up to 2,100 humpback whales, 250 fin whales, 100 sei whales, and 50 blue, minke, sperm, and killer whales each year. Individuals of all age classes and either sex could be harassed. Researchers would approach animals at a minimum distance of 30 m using small and medium-sized vessels (i.e., 4 to 13 m in length) to obtain good quality photographs, group size estimates, and body condition information. Researchers also could conduct focal follows for up to 1.5 hours. However, if an animal or group reacts adversely to the vessel, the researchers would modify or cease activities. In addition, researchers would collect sloughed skin and feces using nets, sieves, scoops, and pumps at a minimum distance of 30 m. Exhaled air could be collected using a long pole at a distance of 6–9 m. Researchers would approach and sample humpback whale calves estimated to be less than three months of age and females with those calves in Puerto Rico only. Calves estimated to be less than three months (i.e., humpback whales in the North Atlantic region and blue, minke, sperm, and killer whales) or six months of age (i.e., fin and sei whales; based on time to weaning) would not be approached or sampled, although females with those calves could be approached and sampled. Furthermore, individual animals could be approached multiple times per year to obtain relevant data or samples (i.e., humpback and fin whales in the northeast region could be approached up to 20 and 5 times per year, respectively; see the take tables for details regarding specific taking).

Dr. Robbins and her co-investigators would biopsy sample up to 340 humpback whales, 90 fin whales, 70 sei whales, and 30 blue, minke, sperm, and killer whales per year using a crossbow (see the take tables for details regarding age-specific taking). Those estimates include successful biopsy sampling of an individual and biopsy sampling misses (i.e., the dart misses the animal and hits the water). Thus, the number of individuals successfully sampled may comprise a subset of the requested takes. In most cases, individuals would be biopsy sampled only one time per year. However, 80 juvenile or adult humpback whales in the northeast region could be biopsy sampled up to three times per year to assess genetic characteristics, aging, toxicology, reproduction, and overall health parameters. The researchers would not biopsy sample humpback whale calves estimated to be less than three months of age or six months of age for fin and sei whale calves, but would biopsy sample females with such calves. Those calves would be biopsy sampled before the female to reduce unnecessary disturbance of the pair. Researchers also would cease biopsy sampling activities if an individual or a group exhibits behavioral reactions to three missed sampling attempts. Skin, feces, and blubber could be imported or exported for various analyses and archiving purposes. Finally, Dr.

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Robbins is requesting authorization to harass the North Atlantic right whale and 14 other marine mammal species incidental to the proposed research activities.

Dr. Robbins noted that she would cease activities if any evidence indicated that those activities are interfering with pair bonding, reproduction, feeding, or other vital functions and if active nursing occurs. The Commission concurs with the need for such restrictions and believes that the permit should include them explicitly, particularly for female-calf pairs. To that end, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit, but condition it to require Dr. Robbins to minimize disturbance of the animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if any evidence indicates that the activity is interfering with female/calf behavior, feeding, or other vital functions. In addition, Dr. Robbins is requesting to biopsy sample calves of varying ages and females with those calves. Data from those animals would be useful, but those data should not be collected at the expense of the calves. To date, the Commission is aware of no reports indicating strong adverse effects occurring from researchers studying female-calf pairs. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require Dr. Robbins to make observations sufficient to detect possible short- and long-term effects of biopsy sampling and report the effort made and the information collected to the Service.

Dr. Robbins plans to continue sharing images and samples with the following entities: New England Aquarium, Groningen University in the Netherlands, University of California Santa Cruz, University of California San Francisco, the Australian Antarctic Division, the Service's Northwest Fisheries Science Center, Allied Whale, Mingan Islands Cetacean Study, Canadian Department of Fisheries and Oceans, and other collaborators in the North Atlantic region.

It is unclear if Dr. Robbin's IACUC has reviewed and approved the proposed research protocols. As such, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Dr. Robbins of the need to have her IACUC review and approve the proposed research protocols prior to initiating the research activities. In addition, Dr. Robbins has indicated that she will seek authorization under the Convention on International Trade in Endangered Species of Wild Fauna and Flora prior to importing or exporting parts from marine mammals listed in the Convention's appendices. She also stated that some of the research activities would occur in various national marine sanctuaries, North Atlantic right whale critical habitat areas, national seashores, and marine reserves. That being the case, the Marine Mammal Commission also recommends that that the National Marine Fisheries Service advise Dr. Robbins of the need to consult with the relevant entity (e.g., National Marine Sanctuary, National Ocean Service, National Park Service, Tres Palmas Marine Reserve) and obtain any required authorizations prior to conducting the proposed research activities in a sanctuary, critical habitat area, seashore, or reserve.

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.

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Please contact me if you have any questions concerning the Commission's recommendations.

Sincerely,

Timothy J. Ragen, Ph.D. Executive Director

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