12 December 2011

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. 16479

(Daniela Maldini, Ph.D., Pacific Whale Foundation)

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. Maldini is requesting authorization to study humpback whales in Hawaii during a five-year period. She previously obtained numerous letters of confirmation under the Act's General Authorization for Scientific Research.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit, provided that it condition the permit to require Dr. Maldini to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly mother/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with mother/calf behavior, feeding, or other vital functions.

## **RATIONALE**

The purposes of the proposed research are to (1) determine the probability of "surprise encounters" with humpback whales in relation to time of day, environmental variables, vessel behavior, and whale abundance and (2) quantify potential "near misses" between vessels and humpback whales. A "surprise encounter" occurs when a whale surfaces within 300 m of a vessel without being detected by the observers or crews on that vessel prior to its surfacing. A "near miss" is defined as a surprise encounter that occurs within 45° left or right of the bow and at a distance of 80 m or less.

Dr. Maldini would observe, photograph, and videotape humpback whales and their interactions with vessels. She would conduct systematic line transect surveys up to three times per week using a rigid hull-inflatable watercraft, 4.5-m in length. The surveys would occur between Maui, Kahoolawe, and Lanai at speeds up to 32 km/hour. Two observers would scan surrounding waters every 15 minutes to collect data regarding locations of whales, their behavior, and other environmental parameters. Whale-watch vessels collect the same types of data. By maintaining the same protocols, Dr. Maldini plans to derive correction factors for humpback densities determined from whale-watch vessels. In addition, surprise encounters would be recorded continuously while

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the inflatable travels along the survey lines. When a surprise encounter occurs, observers would record the distance and angle from the inflatable to the whale, vessel speed, and environmental parameters. The observers would monitor subsequent surfacing of the whales for up to 30 minutes to determine surface and dive intervals, direction of travel, and group composition. Dr. Maldini then would approach the whales at a minimum distance of 20 m for photo-identification and size estimation. Individuals from all age classes and both sexes could be harassed during the proposed activities. She would approach 189 individual humpback whales per year. In addition, the same individuals may be taken more than one time during surprise encounters. As such, Dr. Maldini is requesting to take each individual up to three times, which is based on past experience and whale recapture data in Maui County.

Dr. Maldini has requested permission to harass up to 80 Hawaiian insular false killer whales up to three times per year incidental to the proposed activities. However, she expects to take few individuals of this species because they rarely occur in association with humpback whales. Dr. Maldini also has a letter of confirmation, #13427-03, that allows her to harass 16 other cetacean species. She would approach a humpback whale sighted with species listed in the letter but would not approach a whale if it was sighted with species not specified.

Dr. Maldini collaborates with the Hawaiian Islands Humpback Whale National Marine Sanctuary and the Whale Disentanglement Network. The Sanctuary provides whale strike data to Dr. Maldini to ground-truth her models. Based on this relationship, she would share results from this project with the Sanctuary. Dr. Maldini also plans to obtain the appropriate permit from the state of Hawaii and would report her activities to the Sanctuary.

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit. However, because mothers and their calves could be harassed, the Commission believes that the permit should require conditions specific to mother/calf behavior. As such, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require Dr. Maldini to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly mother/calf pairs, and stopping an approach if there is evidence that the activity may be interfering with mother/calf behavior, feeding, or other vital functions.

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

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