



MARINE MAMMAL COMMISSION

19 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: Request for Amendment, Permit No. 10018
(Rachel Cartwright, Ph.D.,
Keiki Kohola Project)

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. Permit 10018 authorizes photo-identification, focal follows, underwater observations, and collection of sloughed skin from humpback whales in Hawaii and Alaska. The current permit expires on 30 June 2013. Dr. Cartwright is requesting amendment of the permit to allow tagging of females with calves and yearlings in Hawaii for the remaining two years of the permit.

RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit amendment, provided that it—

- require Dr. Cartwright to report her data regarding possible short- and long-term effects from tagging to the Permit Office;
- consult with Dr. Robin Baird regarding co-principal investigator Mark Deakos's experience instrumenting cetaceans with suction-cup and satellite tags prior to issuing the permit amendment and condition the permit amendment to allow tagging by either method only if Mr. Deakos has demonstrated a proficiency with said method; otherwise, the Service should require Mr. Deakos to gain experience with marine mammal biologists adept at the proposed method before authorizing him to tag cetaceans using that method;
- ensure that activities to be conducted under this permit and those of other permit holders who might be conducting research on the same species in the same areas are coordinated and, as possible, data and samples shared to avoid duplicative research and unnecessary disturbance of animals;
- advise Dr. Cartwright of the need to have an Institutional Animal Care and Use Committee (IACUC) review and approve the research protocol prior to initiating the proposed tagging activities; and

- advise Dr. Cartwright of the need to consult with the National Marine Sanctuary to determine if a permit is required before conducting the proposed activities.

RATIONALE

Permit No. 10018 authorizes Dr. Cartwright to observe, photograph, videotape, and collect sloughed skin from humpback whales in Hawaiian and Alaskan waters. Dr. Cartwright proposes to attach suction-cup tags to 18 females with calves per year and implantable satellite tags to 6 yearlings per year. The purpose of the proposed research is to (1) assess the effects of “focal follow” methods using research vessels on the behavior of female-calf pairs; (2) characterize habitat use of female-calf pairs on humpback breeding grounds, including identifying key resting areas and describing movement patterns within and among those areas; and (3) document the behavior of newly-independent yearlings on breeding grounds.

Mark Deakos, a co-principal investigator, would instrument humpback whales with suction-cup and implantable satellite-linked tags. He would apply suction-cup tags only to females with calves that are at least one month of age (e.g., based on resight data) using a crossbow. The tags may include VHF transmitters and data loggers that would record and store time, depth, temperature, light levels, GPS locations, and swim speed. The tags also would include a mechanism to allow release after either (1) 24 hours (i.e., long enough to evaluate the response of the mother-calf pair to tagging) or (2) two weeks (i.e., based on the assumption that two weeks would be sufficient to determine long-term effects).

Mr. Deakos would attach implantable satellite-linked tags only to yearlings using a modified line-thrower gun. He would distinguish yearlings from calves based on their milky flukes.

In the application for both techniques, he would approach a female up to two times and a yearling up to three times per tagging attempt at a distance of 10 m. An approach consists of successful tagging of an individual, tagging misses (i.e., the tag misses the animal and hits the water), and unsuccessful tagging attempts (i.e., the suction-cup tag does not adhere to the animal or the animal dives before the tag can be attached). Focal follows, high-resolution photographs, and video would be used to assess the behavioral and overall health effects of tagging individuals.

Dr. Cartwright did not indicate if the data from those studies would be shared with the Permit Office, but such data have long been sought to provide a stronger basis for assessing the effects of various types of tagging. Because the information has such potential value, the Marine Mammal Commission recommends that the National Marine Fisheries Service require Dr. Cartwright to report her data regarding possible short- and long-term effects from tagging to the Permit Office.

Mr. Deakos’s curriculum vitae indicates that he has experience with photo-identification and biopsy sampling. However, his experience tagging cetaceans is not clear. His curriculum vitae states that he worked as a small boat research assistant with “emphasis on deploying satellite tags on false

Mr. P. Michael Payne
19 December 2011
Page 3

killer and beaked whales.” That statement is not evidence of skill or experience deploying satellite tags. Elsewhere, his curriculum vitae indicates that he opportunistically tagged and biopsy sampled beaked whales in September 2002 and tagged fin whales with radio and satellite tags in summer 1995. The Service also provided supplemental information from Dr. Cartwright regarding Mr. Deakos’s tagging experience. She stated that he has extensive experience, working primarily with Dr. Robin Baird, in deploying suction-cup and satellite tags. Still, the nature of that experience is not clear. Because the curriculum vitae is rather vague regarding Mr. Deakos’s tagging experience, the Marine Mammal Commission recommends that the National Marine Fisheries Service consult with Dr. Baird regarding Mr. Deakos’s experience instrumenting cetaceans with suction-cup and satellite tags prior to issuing the permit amendment and condition the permit amendment to allow tagging by either method only if Mr. Deakos has demonstrated a proficiency with said method; otherwise, the Service should require him to gain experience with marine mammal biologists adept at the proposed method before authorizing him to tag cetaceans using that method.

The Marine Mammal Commission also recommends that the National Marine Fisheries Service ensure that activities to be conducted under this permit and those of other permit holders who might be conducting research on the same species in the same areas are coordinated and, as possible, data and samples shared to avoid duplicative research and unnecessary disturbance of animals.

Finally, the application is unclear as to whether Dr. Cartwright has sought review and approval of the proposed activities by an IACUC, as required by section 2.31 of the Animal and Plant Health Inspection Service’s Animal Welfare Act regulations. In this case, Dr. Cartwright’s institution may not have an IACUC. However, some of the co-investigators’ institutions do have IACUCs. The Marine Mammal Commission therefore recommends that the National Marine Fisheries Service advise Dr. Cartwright of the need to have an IACUC review and approve the research protocol prior to initiating the proposed tagging activities. In addition, some of the research activities would occur in the Hawaiian Islands Humpback Whale National Marine Sanctuary. That being the case, the Marine Mammal Commission recommends that that the National Marine Fisheries Service advise Dr. Cartwright of the need to consult with the National Marine Sanctuary to determine if a permit is required before conducting the proposed activities.

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,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive, flowing style.

Timothy J. Ragen, Ph.D.

Executive Director