



MARINE MAMMAL COMMISSION

25 November 2009

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. 14676
(Paul Ponganis, 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 application with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. The Commission offers the following recommendations and comments.

RECOMMENDATIONS

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

- the Service require the applicant to identify pups associated with lactating females targeted for capture before attempting to capture those animals and to monitor animals following their release to assess the effects of the research procedures on the animals and to verify that mothers and pups reunite;
- the Service, if it has not already done so, discuss with the applicant the advisability of obtaining authorization for the accidental death or serious injury of a certain number of animals (i.e., one or two) as a result of the proposed research activities;
- the Service require that, in the event that a female dies or is seriously injured as a result of the activities, the orphaned pup, if unlikely to survive on its own, be humanely provided for or, if that is not possible, euthanized;
- the permit, if issued, provide authorization for the taking by harassment of a small number of Guadalupe fur seals incidental to the research; and
- the Service authorize the use of a prophylactic antibiotic to minimize the risk of infection in the animals being studied.

RATIONALE

The applicant is requesting authorization to take by harassment up to 10 adult female California sea lions annually (not to exceed 20 animals over a five-year period) to investigate the role of blood oxygen store depletion in the dive behavior and foraging ecology of the species. The

animals would be captured; anesthetized; instrumented with a backpack blood oxygen recorder, a time-depth recorder, and a VHF transmitter; flipper-tagged; and recaptured for instrument removal. The proposed research would be conducted on San Nicolas Island off the coast of California. The applicant is requesting that the permit be issued for five years but expects that the research will be concluded within two or three field seasons. The applicant also is requesting authority to harass annually up to 6,000 California sea lions, 500 harbor seals, 1,000 northern elephant seals, and 150 northern fur seals incidental to conducting the proposed research. The proposed research has been reviewed and approved by the applicant's Institutional Animal Care and Use Committee.

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested permit, provided that the Service require the applicant to identify pups associated with lactating females targeted for capture before attempting to capture those animals and to monitor animals following their release to assess the effects of the research procedures on the animals and to verify that mothers and pups reunite. The Marine Mammal Commission also recommends that, if it has not already done so, the Service discuss with the applicant the advisability of obtaining authorization for the accidental death or serious injury of a certain number of animals (i.e., one or two) as a result of the proposed research activities. The applicant should be made aware that, absent such authorization, research activities likely would have to be suspended in the event of an accidental death or serious injury of an animal until authorization for such takes has been obtained. As a related matter, the Marine Mammal Commission recommends that the permit, if issued, require that, in the event that a female dies or is seriously injured as a result of the activities, the orphaned pup, if unlikely to survive on its own, be humanely provided for or, if that is not possible, euthanized.

In addition, the application states that there is a possibility that northern fur seals could be disturbed incidental to conducting the proposed research, it but makes no reference to the potential for disturbing Guadalupe fur seals. Although Guadalupe fur seals are seen only occasionally on San Nicolas Island, the Marine Mammal Commission recommends that the permit provide for the incidental harassment of a small number of individuals of this species in case they are present when research activities are being conducted.

Finally, the applicant requests authorization to administer 1–2 g of cephalexin antibiotic prophylactically at the time of catheterization to introduce an electrode and thermistor probes and removal of the probes. However, the applicant indicates that the Service has not authorized the use of prophylactic antibiotics in his past research. The applicant maintains that surgical studies have shown that one-time dosing is just as effective as multiple doses after closure of the incision for most surgeries, citing a study by Bratzler et al. Recent studies (as yet unpublished) have shown that an injection of cephalexin (marketed as Excede) is effective for five days. The use of this prophylactic antibiotic appears to be a reasonable precaution, and the Marine Mammal Commission therefore recommends that the Service authorize its use to minimize the risk of infection in the animals being studied.

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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 this recommendation.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a prominent initial 'T'.

Timothy J. Ragen, Ph.D.
Executive Director