



MARINE MAMMAL COMMISSION

9 February 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. 16599
(Dorian Houser, Ph.D.,
National Marine Mammal 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. Houser is requesting authorization to conduct research on hearing sensitivities of cetaceans in the United States during a five-year period. These activities currently are authorized under permit 1095-1837, which he is seeking to amend and renew.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested permit, provided it advises Dr. Houser of the need to have his Institutional Animal Care and Use Committee (IACUC) approve his research protocols prior to initiating the proposed activities.

RATIONALE

Dr. Houser proposes to conduct research on cetaceans in waters, on beaches, or in rehabilitation facilities in the United States on an opportunistic basis during a five-year period. The purposes of the proposed research are to conduct auditory measurements and recordings of cetaceans that have stranded or are undergoing rehabilitation to determine (1) the hearing sensitivities of species for which information is lacking and (2) variation in hearing sensitivities within a population or stock. He would use the data to assess the potential impacts of human-generated sound on marine mammals and to develop mitigation measures to minimize those impacts.

Dr. Houser would record auditory evoked potentials with noninvasive suction-cup sensors or subcutaneous pin electrodes on up to 15 individuals from cetacean species listed under the Endangered Species Act and up to 15 individuals from any other cetacean species (i.e., species not listed under the Act) per year. Sound would be transmitted via suction-cup transducers, a hydrophone, an underwater sound projector, or aerial speaker depending on the species and if the animal is on land or submerged in water. Up to three two-hour sessions could be performed on any individual animal, but only two sessions could occur on any given day. Individual odontocetes from all age classes and both sexes could be harassed during the proposed activities. Because evoked

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response testing methods would need to be refined on small mysticetes before being performed on large mysticetes, Dr. Houser would conduct the proposed activities on minke and gray whales of all age classes and both sexes but would conduct those activities only on calves of the remaining mysticete species and only those calves that have been deemed candidates for euthanasia or rehabilitation by the attending veterinarians. The onsite veterinarian or stranding coordinator may administer sedatives to subject animals as deemed necessary to ease pain and suffering and/or to facilitate recovery from pre-existing conditions, but sedatives should not be necessary to conduct the proposed activities. In addition, Dr. Houser may request repeat testing on subsequent days if he obtained insufficient information regarding the animal's hearing in prior tests and the animal is deemed sufficiently healthy for testing. He does not anticipate that retesting will be necessary in most cases involving odontocetes because of the robust nature of their auditory systems. In all cases, Dr. Houser would cease testing activities if the attending veterinarian determines that the testing is causing undue stress to the animal.

Dr. Houser is requesting authorization for one unintentional death of any cetacean species not listed under the Endangered Species Act during the five-year period. Authorization for unintentional deaths is being requested because a cetacean that has stranded or is undergoing rehabilitation may die during the course of these tests. By themselves, the proposed methods should not significantly affect the subject animals. However, given their condition, they may not tolerate additional handling or they may die from other causes during handling. To avoid such deaths, Dr. Houser has been testing, and would continue to test, only those animals that are judged by the attending veterinarian or stranding network coordinator to be healthy enough to tolerate the additional tests. Dr. Houser would not harass any other marine mammal species incidental to the proposed activities. It is conceivable that additional animals might be harassed if the tests are performed on animals that have stranded together, but the impacts of such harassment are not expected to be significant in that context.

Dr. Houser indicated that his IACUC is reviewing the proposed research protocols. However, it has yet to approve those protocols. As such, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested permit, provided it advises Dr. Houser of the need to have his IACUC approve his research protocols prior to initiating 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 recommendation.

Sincerely,

A handwritten signature in blue ink that reads "Timothy J. Ragen". The signature is written in a cursive style with a long horizontal line extending from the 'T'.

Timothy J. Ragen, Ph.D.
Executive Director