



MARINE MAMMAL COMMISSION

13 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. 17086
(Robin Baird, Ph.D., Cascadia Research)

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. Baird is a member of the Committee of Scientific Advisors and has not participated in the Commission's review of his application. Dr. Baird is requesting authorization to conduct research on 27 specified cetacean species and unidentified *Mesoplodon* spp. in all U.S. and international waters in the western Atlantic Ocean during a five-year period. Permit 15330 authorizes the applicant to conduct similar research activities involving cetaceans in the Pacific Ocean.

RECOMMENDATIONS

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

- authorize in the permit all of the anticipated takes from the proposed research activities, including incidental harassment of non-target animals;
- condition the permit to allow tagging of female dwarf sperm whales with all but neonate calves (e.g., calves with fetal folds) and require Dr. Baird to make observations sufficient to detect possible short- and long-term effects of tagging and report the effort made and the information collected to the Service;
- ensure that tagging activities to be conducted under this permit and those of other permit holders who might be tagging the same species in the same areas are coordinated and, as possible, data and samples are shared to avoid duplicative research and unnecessary disturbance of animals; and
- advise Dr. Baird of the need to obtain permits 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.

RATIONALE

Dr. Baird proposes to conduct research on cetaceans, primarily by tagging animals, in the western Atlantic Ocean, including both international waters and the waters subject to U.S.

jurisdiction offshore of Virginia, North Carolina, South Carolina, Georgia, and Florida. The purposes of the proposed research are to study (1) population size and structure, (2) range and movement patterns, (3) diving and nocturnal behavior, (4) social organization, (5) feeding ecology, and (6) disease. Using funding from the U.S. Navy, Dr. Baird would collaborate with Dr. Andrew Read, Duke University, to tag numerous cetaceans in the Atlantic Ocean. Dr. Read has been issued a letter of confirmation (No. 16185) under the general authorization for scientific research provision of the Act (section 104(c)(3)(C)) to take by Level B harassment the same species Dr. Baird would be tagging. The Service is proposing to use Dr. Read's general authorization to authorize any harassment of marine mammals by Dr. Baird incidental to the tagging activities that would be covered under proposed permit 17086. In light of the collaboration between Drs. Baird and Read, the Service believes that it is unnecessary and would be duplicative to authorize additional takes of those same species by Level B harassment under the proposed permit.

The Commission does not agree. Authorizing the taking that would occur as a direct result of tagging activities under one scientific research permit and any taking of non-target marine mammals that may occur incidental to conducting those tagging activities under a separate authorization will confound efforts to assess the total taking that occurs subsequent to the tagging activities and the effects of that taking. It also would increase the potential for confusion in monitoring permitted activities and set a bad precedent. In addition, it does not appear that the requirements of the Act's general authorization provision have been met with respect to any Level B harassment that may occur incidental to Dr. Baird's planned tagging activities. To be covered by the general authorization, section 104(c)(3)(C) requires that the researcher must submit, at least 60 days before the commencement of the planned research, specific information that includes the (1) species or stocks of marine mammals that may be harassed, (2) location of the research, (3) period during which the research would be conducted, (4) purpose of the research, including the basis for determining that the research constitutes "bona fide research" as defined under the Act, and (5) methods that will be used to conduct the research. In this case, the letter of intent from Dr. Read did not request authorization to take marine mammals in the course of conducting tagging activities, and the Service's letter of confirmation only covers taking during the course of conducting visual and aerial surveys, behavioral observations, and passive acoustic monitoring. Moreover, the taking authorization issued to Dr. Read only covers the area out to 185 km from shore and south of the Virginia–North Carolina border. Thus, even if that authorization were interpreted as somehow allowing taking by Dr. Baird incidental to his research, it would not cover the full area in which he proposes to operate. In short, a general authorization is not a blanket authorization to take a certain number of marine mammals in a certain location, but it is specific to the activities set forth in the letter of intent and the letter of confirmation. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service authorize in the proposed permit all of the anticipated takes from the proposed research activities, including incidental harassment of non-target animals.

Dr. Baird also seeks authorization to observe, photograph, videotape, and record acoustically numerous individuals of various species of cetaceans each year (see the take table in the application, detailing the proposed taking). Researchers under this permit would photograph and videotape cetaceans both from above the water and under the water using pole cameras at distances of 5–10

m. Dr. Baird would monitor the cetaceans acoustically using a hydrophone deployed from a vessel. He also would collect sloughed skin, feces, and prey from the water, which he is proposing to import or export for further analyses.

Because the Service considers any animal approached within a certain distance as having been taken, regardless of whether the animal reacts to the approach or related research activities, Dr. Baird estimated the total number of takes per species for tagging activities based on all anticipated approaches, including 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). Thus, the number of individuals successfully tagged would comprise a subset of the requested takes.

Dr. Baird proposes to tag up to 30 cetaceans of each species per year, including up to 20 animals with satellite tags, up to 10 animals with suction-cup tags, and up to 6 animals with both types of tags. Satellite tags would include location-only and location-depth recorders. Suction-cup tags may include VHF transmitters and data loggers that would record and store time, depth, temperature, light levels, GPS locations, acoustic recordings, swim speed, video, and still images. Tags would be deployed using a pneumatic projector, crossbow, or pole at a distance of 2–30 m. Dr. Baird would make no more than two tagging attempts per individual per encounter, and no more than four tagging attempts per individual per year. He would not tag calves less than one year of age and females with calves less than six months of age, except dwarf sperm whales. Dwarf sperm whale movements and habitat use patterns are poorly understood due to the difficulty in approaching and tagging those whales. As such, Dr. Baird requests authorization to tag female dwarf sperm whales with calves less than six months of age. In this regard, Dr. Baird notes that in Hawaii he has successfully approached females with calves less than six months of age more closely than other groups.

Data regarding the behavior of females accompanied by calves would be useful, but such data should not be collected at the expense of adversely affecting the calves. In the past few years, the Commission has recommended that the Service adopt a policy authorizing a slow and graduated increase in activities involving female-calf pairs, coupled with careful monitoring and reporting of potential adverse effects. Until recently, the Commission generally has recommended that researchers not tag females with dependent calves, particularly those likely to be less than six months of age. However, the Commission has allowed additional leeway in working with those pairs for other applicants. In addition, the Commission is aware of no reports indicating that strong adverse effects have occurred when researchers studied female-calf pairs. Therefore, it is reasonable to allow flexibility in working with those pairs, provided that the researchers undertake appropriate monitoring and reporting. On that basis, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to allow tagging of female dwarf sperm whales with all but neonate calves (e.g., calves with fetal folds) and require Dr. Baird to make observations sufficient to detect possible short- and long-term effects of tagging and report the effort made and the information collected to the Service. In addition, the Marine Mammal Commission recommends that the National Marine Fisheries Service ensure that tagging activities to be conducted under this permit and those of other permit holders who might be tagging the same

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species in the same areas are coordinated and, as possible, data and samples are shared to avoid duplicative research and unnecessary disturbance of animals.

Dr. Baird's Institutional Animal Care and Use Committee (IACUC) has not yet reviewed or approved the research protocols. However, he has informed his IACUC of the new project and is awaiting guidance from them regarding submission of the protocols. Dr. Baird is aware of the need to have IACUC approval prior to conducting the proposed activities. Lastly, the Commission notes that the importation and exportation of marine mammal parts will require additional authorizations. To ensure all requirements are met, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Dr. Baird of the need to obtain permits 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.

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 cursive script, appearing to read "Michael L. Gork" followed by a flourish and the letters "for".

Timothy J. Ragen, Ph.D.
Executive Director