



MARINE MAMMAL COMMISSION

14 May 2012

Mr. P. Michael Payne, Chief
Permits and Conservation Division
Office of Protected Resources
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910-3225

Re: Permit Application No. 16111
(John Calambokidis,
Cascadia Research Collective)

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. Mr. Calambokidis is requesting authorization to conduct research on various cetacean and pinniped species in U.S., foreign, and international waters of the eastern North Pacific Ocean during a five-year period. Some of these activities currently are authorized under permit 540-1811, which Mr. Calambokidis is seeking to renew and amend.

RECOMMENDATIONS

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

- condition it to require Mr. Calambokidis 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 Mr. Calambokidis 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, which includes bringing samples collected in foreign or international waters into the United States.

RATIONALE

Mr. Calambokidis proposes to conduct research on cetaceans and pinnipeds in waters from Central America to Alaska. His research primarily occurs in waters off the coast of California, Oregon, and Washington. The purposes of the proposed research are to continue a long-term study

investigating (1) population size and structure, (2) range and movement patterns, (3) diving behavior, (4) social organization, (5) feeding ecology, (6) contaminants, and (7) prevalence of ship strikes and entanglement.

Observing, photographing, videotaping, recording, and prey mapping

Mr. Calambokidis seeks authorization for himself and other researchers working under the requested permit to observe, photograph, videotape, and acoustically record numerous individuals of various species or groups of cetaceans each year (see the take table in the application). Individuals of all age classes and either sex could be harassed. Researchers under this permit would use small and large vessels to photograph and videotape cetaceans at distances of approximately 50 m. They also could conduct focal follows at distances of 100–300 m. In addition, they would photograph and videotape marine mammals under water using pole cameras and divers at distances of 5 m. One or two divers may enter the water for up to 10 minutes to obtain good quality images. Researchers under this permit would use fixed-wing aircraft opportunistically to collect data and track animals. They would collect environmental and standard survey data (i.e., species, number, distance/heading, behavior, etc.) during both aerial and vessel-based surveys. In addition, they would monitor cetaceans acoustically using a hydrophone deployed from a vessel or moored to a temporary buoy. Researchers would use a 50- to 200-kHz depth sounder to characterize prey near large cetaceans. In addition, they would conduct land-based surveys of pinnipeds using a spotting scope at a distance of approximately 100 m.

Collecting samples

Researchers working under this permit would biopsy sample cetaceans using a non-tethered crossbow or, from large vessels, a tethered crossbow. The approach distance for biopsy sampling would be 10–50 m. They would not biopsy sample calves of large cetacean species (i.e., humpback, blue, gray and fin whales) if those calves were judged to be less than four months of age or calves of all other cetacean species if they were judged to be less than one year of age, but would biopsy sample females with such calves. Researchers also would collect sloughed skin using various types of nets and sample exhaled air using a long pole at a minimum distance of 3 m. In addition, they would collect feces samples from pinniped haul-out sites. Researchers generally would not collect feces during the pupping season but if they were to do so, they would avoid disturbing groups of pinnipeds with neonate pups. Mr. Calambokidis did not request authorization to export and import samples.

Tagging cetaceans

Researchers would instrument numerous cetaceans using suction-cup and/or dart tags (see the take table). Suction-cup tags may include VHF transmitters and data loggers that would record and store time, depth, temperature, GPS locations, acoustic recordings, swim speed, heading, pitch, roll, heart rate, video, and still images. The dart tags would include location-only transmitters. Those tags are of an improved break-resistant design and would be anchored in the skin at minimal depths. Tags would be deployed via pole, crossbow, or pneumatic projector at a distance of 3–30 m.

Researchers could instrument individuals with two different types of tags simultaneously and an individual would be instrumented with no more than three tags. Here, too, they would not tag calves of large cetacean species (i.e., humpback, blue, gray and fin whales) if those calves were judged to be less than four months of age or calves of all other cetacean species if they were judged to be less than one year of age, but they propose to tag females with such calves.

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, Mr. Calambokidis 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.

Data regarding the behavior of females accompanied by calves would be useful, but such data should not be collected at the expense of 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 supported 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, the Commission considers it reasonable to allow some flexibility in working with those pairs, provided that the researchers monitor and report their effects. On that basis, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit, but condition it to require Mr. Calambokidis 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 species in the same areas are coordinated and, as possible, data and samples are shared to avoid duplicative research and unnecessary disturbance of animals.

Mr. Calambokidis's Institutional Animal Care and Use Committee (IACUC) currently is reviewing the research protocols. He expects his IACUC approval prior to issuance of the research permit, as the IACUC has approved similar protocols in the past. Mr. Calambokidis is aware of the need to have IACUC approval prior to conducting the proposed activities.

Lastly, the Commission notes that samples collected in foreign or international waters would need to be imported and/or exported. Mr. Calambokidis indicated that some previous imports and exports of marine mammal parts were authorized under other institution's permits under the Convention on International Trade in Endangered Species of Wild Fauna and Flora. To ensure all requirements are met, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Mr. Calambokidis of the need to obtain permits under the Convention on

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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, which includes bringing samples collected in foreign or international waters into the United States.

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 style with a long horizontal stroke at the beginning.

Timothy J. Ragen, Ph.D.
Executive Director