



MARINE MAMMAL COMMISSION

31 January 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. 15569
(Kenneth C. Balcomb, III,
The Center for Whale 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. The applicant is requesting authorization to conduct research on cetaceans, primarily killer whales, in the eastern North Pacific during a five-year period. This applicant is seeking to renew and amend permit 532-1822.

RECOMMENDATIONS

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

- specifies within the take table the (1) total number of takes for each species or stock, (2) the total number of individuals within that species or stock that could be taken, and (3) the total number of times each individual within that species or stock could be taken;
- conditions the permit to require Mr. Balcomb to develop, implement, and annually report the results of an assessment method that would help him detect possible adverse effects of his research on the whales;
- conditions the permit to require Mr. Balcomb to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if any evidence indicates that the activity is interfering with female/calf behavior, feeding, or other vital functions; and
- advises Mr. Balcomb of the need to obtain additional permits from the relevant entities (e.g., the National Marine Sanctuary, the specific state, NOAA, or the U.S. Fish and Wildlife Service) prior to conducting the proposed activities in a sanctuary, marine protected area, or wildlife refuge.

RATIONALE

Mr. Balcomb proposes to conduct research year-round on cetaceans, primarily killer whales, in the inland waters of Washington and in coastal and territorial waters from the southern boundary of California to Kodiak Island, Alaska. The proposed research would continue an important long-term study (35 years) to determine stock size and structure of killer whales, including southern resident killer whales, throughout their range.

Mr. Balcomb would photograph, observe, opportunistically sample, remotely measure, and acoustically record vocalizations of southern resident killer whales each year. Individuals from 17 cetacean species and 4 pinniped species also may be taken opportunistically. The take table in the application provides information on the expected number of takes per species, but does not provide other required information (i.e., the distribution of takes among individual animals and the number of takes of individual animals per year). Mr. Balcomb requests 8,500 takes of southern resident killer whales per year but the distribution of those takes among the whales in that stock is not clear: is he seeking authority to take each of the 85 southern resident killer whales 100 times or does he anticipate some non-uniform distribution of takes among those killer whales? Additionally, he requests 100 takes of fin whales, but it is not clear if he plans to take 100 fin whales 10 times per year or 10 fin whales 10 times per year. The uncertainty in the number of individuals that could be taken and the distribution of those takes among individuals makes it impossible for the Commission, and presumably the public, to comment meaningfully on the potential effects of the research on individual study animals or their stock. For example, will he be concentrating any of his studies on female-calf pairs, or on a certain pod? To ensure that the Commission and the public have the information needed to comment in an informed manner, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit as requested, provided that it specifies within the take table the (1) total number of takes for each species or stock, (2) the total number of individuals within that species or stock that could be taken, and (3) the total number of times each individual within that species or stock could be taken.

Individuals from all age classes and both sexes could be harassed during the proposed activities. He could observe, photograph, and measure individuals from a distance using aerial and laser techniques from a rotary-wing aircraft at a minimum altitude of 228 m. However, for most observations, he would use up to two vessels, 5 to 20 m in length. In general, he would approach animals no closer than 20 m to observe and photograph them. In the rare instances (e.g., when injuries or tags warrant photographing) he would approach animals no closer than 10 m. In all cases, he proposes to operate in a manner that would minimize disturbance of the target animals, including female-calf pairs. During encounters, he also would sample feces and prey remains using dip nets.

In his application, Mr. Balcomb indicated that each encounter with an animal or group of animals could last up to four hours. That being the case, individual animals could be taken for hundreds of hours in a single year. The Service considers any animal approached within a certain distance as having been taken. That approach may simplify permit issuance, but it does not provide useful insight into the actual effects of such takes. Some method of assessing the potential impacts of the proposed research seems necessary given that disturbance is one of the three leading

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hypotheses to explain the lack of recovery of this stock, all whales in the stock may be taken, they may be taken multiple times, they may be taken by multiple sources, and they may be taken over considerable periods of time. The resulting information also should be useful for determining the cumulative effects of human activities on the whales. Therefore, to ensure that this research is not causing significant adverse effects or contributing significantly to cumulative effects, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require Mr. Balcomb to develop, implement, and annually report the results of an assessment method that would help him detect possible adverse effects of his research on the whales. To be useful, that assessment may simply require observations, documentation, and reporting of whale behavior, or changes therein, as a result of his activities.

Because females and their calves could be harassed, the Commission believes that the permit should require conditions to protect female/calf pairs and avoid disrupting their behavior. For that reason, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require Mr. Balcomb to minimize disturbance of the subject animals by exercising caution when approaching animals, particularly female/calf pairs, and stopping an approach if any evidence indicates that the activity is interfering with female/calf behavior, feeding, or other vital functions.

Mr. Balcomb has participated and would continue to participate in an advance notification network of researchers who conduct research on the specific cetacean and pinniped species. His data is provided to those researchers via his website. For the past 35 years, he also has been cooperating with all other researchers in the study area by making demographic and photographic data available and providing prey and fecal samples for analyses. Mr. Balcomb has indicated that those samples would not need to be imported or exported for analyses.

Mr. Balcomb indicated that some of the research activities would occur in various national marine sanctuaries, marine protected areas, and wildlife refuges. As that is a possibility, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Mr. Balcomb of the need to obtain additional permits from the relevant entity (e.g., the National Marine Sanctuary, the specific state, NOAA, or the U.S. Fish and Wildlife Service) prior to conducting the proposed activities in a sanctuary, marine protected area, or wildlife refuge.

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 large initial 'T'.

Timothy J. Ragen, Ph.D.
Executive Director