



MARINE MAMMAL COMMISSION

19 December 2011

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: Request for Amendment, Permit No. 14534
(Brandon Southall, Ph.D.,
NOAA's Office of Science and Technology)

Dear Mr. Payne:

The Marine Mammal Commission, in consultation with its Committee of Scientific Advisors on Marine Mammals, has reviewed the above-referenced permit amendment request with regard to the goals, policies, and requirements of the Marine Mammal Protection Act. Permit 14534 authorizes research activities on numerous species of cetaceans, unidentified *Mesoplodon* spp., and pinnipeds in waters off Southern California. The current permit expires on 31 July 2015. Dr. Southall proposes to add three potential focal species, increase the number of controlled exposure experiments, and clarify minor modifications to his operational protocols.

RECOMMENDATIONS

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

- the conditions currently contained in the permit as amended remain in effect; and
- the Service advises Dr. Southall of the need to have his Institutional Animal Care and Use Committee (IACUC) review and approve the research protocol modifications prior to initiating those activities.

RATIONALE

Permit No. 14534 authorizes Dr. Southall to take by harassment various species of cetaceans, unidentified *Mesoplodon* spp., and pinnipeds to study their behavior, sound production, and responses to mid-frequency and pseudorandom sound. Authorized activities include behavioral observations, photo-identification, tagging, vocalization recordings, and controlled exposure experiments (i.e., sound playback studies). The permit authorizes Dr. Southall to tag and conduct controlled exposure experiments on juveniles and adults of either sex. However, the permit does not authorize the tagging of cetacean calves less than one year of age or females accompanied by neonate calves. It also does not authorize Dr. Southall to conduct controlled exposure experiments on groups of cetaceans that include neonate calves.

Dr. Southall is requesting three changes to his permit, including—

- (1) adding humpback, minke and killer whales as potential focal species (Table 1);
- (2) increasing the number of controlled exposure experiments for an individual from one to two per year; and
- (3) clarifying minor modifications to his operational protocols.

Table 1. Proposed takes based on types of procedures and whale species.

Procedures	Whale species		
	Humpback	Minke	Killer
Behaviorally observe, photograph, acoustically record, tag ¹ , and conduct controlled exposure experiments	20	20	20
Behaviorally observe, photograph, acoustically record, and tag	80	80	40
Behaviorally observe, photograph, acoustically record, and conduct controlled exposure experiments	60	60	60
Behaviorally observe, photograph, acoustically record	114	114	798

¹Takes include 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).

The current permit authorizes incidental take of humpback, minke and killer whales but does not include them as potential focal species. However, those species also may be affected adversely by human-generated sound in the marine environment, and Dr. Southall is seeking permission to add them to his list of potential focal species.

Dr. Southall also has noted an inconsistency between the terms and conditions of the existing permit and its take table. The terms and conditions indicate that no more than two controlled exposure experiments may be conducted per individual per day. However, the take table indicates that no more than one controlled exposure experiment may be conducted per animal per year. Dr. Southall is investigating responses of marine mammals to two different sound types (i.e., simulated mid-frequency sonar and pseudorandom noise) and he seeks to compare the responses of individuals to each of the sound types. However, he does not intend to conduct controlled exposure experiments on the same individual in the same day. Therefore, he is requesting that the Service amend the take table to allow for two controlled exposure experiments to be conducted per individual per year. Ideally, the experiments would be conducted within a few days of one another. The proposed changes would not increase the total number of individuals (i.e., 20) he would target for a controlled exposure experiment nor would he conduct more than 20 total controlled exposure experiments per species with any combination of individuals.

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Finally, Dr. Southall also proposes to make minor modifications to his research protocols based on his and other researcher's results to date. Those results indicate that the most common responses, especially for beaked whales, are temporary avoidance behavior and changes in vocalizations. Those responses have been observed in all three successful controlled exposure experiments on beaked whales and do not appear to be associated with risk of injury. Absent any evidence of injury and based on the need to collect information on beaked whales, Dr. Southall proposes to modify his shut-down protocols for beaked whales to allow for a controlled exposure experiment to continue if real-time vocalizations cease. That modification does not require changing the permit's current terms and conditions or affect the number of authorized takes; he has included the modification in his amendment request for the sake of transparency and completeness.

The Marine Mammal Commission recommends that the National Marine Fisheries Service amend Permit No. 14241 as requested, provided that the conditions currently contained in the permit as amended remain in effect. The application does not state whether the activities proposed in the amendment request have been reviewed and approved by Dr. Southall's IACUC. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Dr. Southall of the need to have his IACUC review and approve the research protocol modifications prior to initiating those 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 these comments and 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 end.

Timothy J. Ragen, Ph.D.
Executive Director