



MARINE MAMMAL COMMISSION

20 June 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: Permit Application No. 15844
(Glacier Bay National Park and Reserve)

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 humpback, killer, and minke whales in southeastern Alaska, primarily in Glacier Bay National Park and Reserve. The activities would be conducted during a five-year period. Most of these activities currently are authorized under permits 945-1499 and 945-1776, which the applicant is seeking to renew and amend.

RECOMMENDATIONS

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

- requires the applicant to provide documentation that an Institutional Animal Care and Use Committee has reviewed and approved the research activities before initiation of those activities; and
- ensures that activities to be conducted under this permit and those of other permit holders who might be conducting research on the same species in the same areas are coordinated and, as possible, data and samples shared to avoid duplicative research and unnecessary disturbance of animals.

RATIONALE

Glacier Bay National Park and Reserve proposes to conduct research on cetaceans in southeastern Alaska, primarily in the Park and Reserve. The activities could occur year-round but generally would occur from April through November of each year. The purposes of the proposed research are to continue a long-term research project to inform management and provide baseline information by investigating (1) population size and status (2) distribution, (3) social organization and behavior, (4) reproduction, (5) foraging behavior, and (6) whale reactions to the presence of vessels.

The applicant seeks authorization to observe, photograph, videotape, and acoustically record humpback, killer, and minke whales (Table 1). Under this permit researchers would perform these activities four to five times per week from May to September. They would use vessels to approach the whales closely (15–40 m on average, 10–20 m at a minimum) to photograph and videotape them using hand-held digital cameras and film cameras. They also would collect sloughed skin and feces. In addition, the applicant would monitor the cetaceans acoustically using a hydrophone deployed from a stationary vessel.

Table 1. Requested annual takes by activity and whale species.

Procedure	Whale species		
	Humpback	Killer	Minke
Photograph/videotape	6,300	500	20
Biopsy sample	30	30 ¹	
Incidentally harass for biopsy sample	50	50 ¹	

¹ Annual requested takes are from each of the three stocks of killer whales (i.e., Alaska resident, West Coast transient, and offshore stocks) upon which the applicant would be conducting research.

The applicant would biopsy sample humpback and killer whales using a crossbow or pneumatic rifle (Table 1). The applicant would not sample calves less than one year of age and would not intentionally sample any whale more than once. Biopsy sampling would not occur every year, but rather on an as needed basis depending on funding and collaborators' needs. This type of sampling primarily is focused on humpback whales and would be used to investigate regional and individual differences in prey preferences of whales in Alaska waters and to test the hypothesis that those prey preferences are learned by a calf from its mother during the first year of life. The samples would be analyzed for stable isotopes and mtDNA haplotypes. Lastly, the researchers would use a color video depth sounder with 50 and 200 kHz transducers to qualitatively assess humpback whale prey and use nets or trawls to assess their prey quantitatively. They would maintain a 100-yd distance from feeding whales during hydroacoustic and net sampling. The researchers do not anticipate harassment of non-target species and have not requested Level B harassment takes incidental to the proposed activities.

The applicant would mitigate the potential for disturbance by (1) approaching whales at a slow (i.e., less than 10 knots) and consistent speed, (2) avoiding erratic changes in engine speed and vessel direction, (3) avoiding changing engine gears, and (4) remaining with an individual whale or group of whales for no more than 60 minutes per day. Researchers would discontinue approaching whales if an animal exhibits signs of harassment such as evasive or high energy behaviors and particular caution would be taken when approaching mother/calf pairs. The researchers immediately would terminate research activities if there was any evidence that the activities were interfering with vital functions (e.g., pair-bonding or nursing) or were threatening in any way. The researchers also would not position the vessel between a mother and her calf.

The proposed activities have not been reviewed and approved by an Institutional Animal Care and Use Committee, as required by section 2.31 of the Animal and Plant Health Inspection Service's Animal Welfare Act regulations. As such, the Marine Mammal Commission recommends

Mr. P. Michael Payne
20 June 2011
Page 3

that the National Marine Fisheries Service require the applicant to provide documentation that an Institutional Animal Care and Use Committee has reviewed and approved the research activities before initiation of those activities. If the Park and Reserve does not have its own Institutional Animal Care and Use Committee, then it should consult with the Fish and Wildlife Service or U.S. Geological Survey regarding the use of their Committees.

In addition, various researchers may be conducting research in the same area and on the same species. To avoid duplicative research and unnecessary disturbance of animals, the Marine Mammal Commission recommends that the National Marine Fisheries Service ensure that activities to be conducted under this permit and those of other permit holders who might be conducting research on the same species in the same areas are coordinated and, as possible, data and samples shared.

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 large, sweeping initial 'T'.

Timothy J. Ragen, Ph.D.
Executive Director