12 September 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. 16553
(Brent Stewart, Ph.D., J.D.,
Hubbs SeaWorld Research Institute)

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. Stewart is seeking to renew permits 486-1790 and 486-1506 to conduct research on pinnipeds in California during a five-year period.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested permit, but condition it to ensure that activities to be conducted under the 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

Dr. Stewart proposes to conduct research on harbor seals, northern elephant seals, and California sea lions year-round throughout southern California, including the Channel Islands and mainland California. The objectives are to continue long-term research of more than 30 years investigating (1) abundance, (2) survival and reproductive success, (3) demography, (4) community ecology, (5) foraging patterns, (6) habitat use, (7) disease/health, and (8) phenology of the three pinniped species.

Dr. Stewart would harass, capture, handle, restrain, administer drugs to, measure, weigh, mark/tag, sample, and attach instruments to individuals from the three species (see the take tables in the application). In general, harbor seals and California sea lions would be captured using hoop nets and physically restrained for marking, tagging, and other procedures. However, Dr. Stewart may not capture or physically restrain elephant seals during marking or tagging, but he would capture and physically or chemically restrain them for other procedures. Individual animals may be marked with non-toxic dye or paint and tagged with plastic flipper tags. Dr. Stewart would collect various samples from captured pinnipeds, including blood, blubber, hair, skin, swabs, urine, feces, and spew. The

samples would be analyzed for stable isotopes and fatty acid signatures. He also would use ocular fluorescein stain to determine the presence, location, and severity of corneal ulcers. A sterile fluorescein strip would be placed against the eye for less than 1 second to deposit a small amount of stain, which is distributed across the cornea when the animal blinks. If an ulcer is present, the corneal surface will turn bright green. Normal tearing will flush the stain out of the eye within a few minutes.

In addition, Dr. Stewart may attach instruments to the pelage of the head or between the shoulders with epoxy or attach the instruments using flipper tags to a subset of the captured pinnipeds (see the take tables in the application). The instruments would weigh no more than 45 grams and could include VHF transmitters, satellite transmitters, or time-depth recorders. Instruments either would be removed when the animals are recaptured several months later or would be allowed to fall off during the next molt.

Dr. Stewart would conduct aerial surveys to census the population and track instrumented pinnipeds. He would fly those surveys multiple times per year using single or twin-engine aircraft at a minimum altitude of 700 feet above sea level. The surveys would harass incidentally up to 800 harbor seals, 1,400 elephant seals, and 700 sea lions per year. Dr. Stewart also would conduct ground surveys to collect scat samples, perform haul-out counts, and observe individual pinniped behaviors. He would conduct those surveys using spotting scopes, binoculars, and observation blinds to minimize disturbance. Ground surveys would harass up to 550 harbor seals, 2,725 elephant seals, and 1,850 sea lions per year. Dr. Stewart is not proposing to harass non-target species incidental to the proposed activities. He plans to avoid any northern fur seals, Steller sea lions, and Guadalupe fur seals that are present during the proposed activities. The Commission understands that those species can be avoided during ground surveys but is unsure how Dr. Stewart would avoid them during aerial surveys. Therefore, the Service should request and evaluate information from Dr. Stewart regarding how he plans to avoid non-target species during aerial surveys.

Dr. Stewart has indicated that his Institutional Animal Care and Use Committee (IACUC) has reviewed and approved the proposed procedures until July 2013. At that time, his IACUC will review the procedures again and he will provide the Service a copy of the updated IACUC approval.

Dr. Stewart also is requesting to unintentionally kill or seriously injure up to four harbor seals, four elephant seals, and four sea lions per year during the five-year period. If a lactating female dies as a result of the research activities and her dependent pup can be identified, researchers would contact the Service's Regional Stranding Network Coordinator immediately and proceed as directed.

Various scientists conduct research on the same species at the same locations identified in Dr. Stewart's application. As such, Dr. Stewart's research activities may overlap with those of other researchers and thus could lead to unnecessary disturbance or duplicative collection of samples if not coordinated with the other researchers. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested permit, but condition it to ensure that activities to be conducted under the 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.

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,

Timothy J. Ragen, Ph.D.
Executive Director