



MARINE MAMMAL COMMISSION

23 May 2016

Ms. Jolie Harrison, 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. 19638
(Paul Ponganis, Ph.D.,
Scripps Institution of Oceanography)

Dear Ms. Harrison:

The Marine Mammal Commission (the 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 (the MMPA). Dr. Ponganis proposes to conduct research on California sea lions in California during a five-year period—permit 14676 authorized similar activities.

Dr. Ponganis proposes to conduct research on California sea lions on San Nicolas Island, California. The purpose of the research is to investigate the role of various physiological responses, oxygen store depletion, and anaerobic metabolism in dive and foraging behavior of California sea lions. Dr. Ponganis and co-investigators would harass, capture¹, handle, restrain, measure/weight, administer drugs² to, mark³, sample⁴, and/or attach instruments to up to 14 lactating females per year (see the Take Table). Up to four instruments could be attached to each female including VHF transmitters, satellite-linked transmitters, 3D accelerometers⁵, time-depth recorders, PO₂ electrodes and PO₂-ECG recorders, lactate electrodes and recorders, temperature electrodes and recorders, and/or CATS-Cams. Instruments would be removed by the researchers when the animals return to the rookery⁶ or would fall off during the sea lions' annual molt. Dr. Ponganis could capture⁷, handle, restrain, measure/weight, and mark⁸ dependent pups—each pup would be held until the female has recovered from anesthesia and the pair can be reunited. Non-target California sea lions, harbor seals, northern elephant seals, and northern fur seals may be harassed incidentally during the proposed activities.

¹ Animals could be recaptured to remove instruments.

² Including anesthesia drugs and antibiotics.

³ With flipper tags.

⁴ Including blood and whiskers.

⁵ Including head-mounted accelerometers.

⁶ Generally within a few days.

⁷ Each pup also could be captured and held when the female is recaptured.

⁸ By clipping fur or attaching a small neoprene or tape patch and flipper tags.

In addition, Dr. Ponganis requests up to one lactating female California sea lion mortality⁹ per year—those sea lions would be necropsied. If a lactating female dies as a result of research activities and her dependent pup can be identified, Dr. Ponganis would transfer it to a rehabilitation facility. Further, Dr. Ponganis would coordinate his activities with other pinniped researchers working on San Nicolas Island. The University's IACUC has reviewed and approved the proposed research protocols.

Dr. Ponganis would select a sea lion to be captured based on location and accessibility of the animal to minimize disturbance of other animals and to optimize safety of both the animal and the researchers. To minimize impacts on female-pup pairs, Dr. Ponganis would conduct the activities in a cautious manner and keep the procedures and anesthesia time to a minimum. He also would monitor the female-pup pair for at least 1 hour after they are reunited. If a female shows signs of distress (i.e., abnormal locomotion favoring the probe site, lethargy, or lack of interaction with the pup or other animals) after being released back into the rookery, the animal would be recaptured and the instruments removed. Further, Dr. Ponganis would recapture immediately any female showing those signs of distress before it departs to or returns from sea and promptly remove the instruments. The Commission believes that the proposed activities are consistent with the purposes and policies of the MMPA and recommends that the National Marine Fisheries Service issue the permit, as requested.

Please contact me if you have any questions regarding the Commission's recommendation.

Sincerely,



Rebecca J. Lent, Ph.D.
Executive Director

⁹ By either unintentional mortality or intentional mortality (i.e., euthanasia for humaneness purposes).