



# MARINE MAMMAL COMMISSION

24 July 2012

Mr. P. Michael Payne, 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. 17115  
(James Lloyd-Smith, Ph.D.,  
University of California, Los Angeles)

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. Lloyd-Smith is seeking to conduct research on California sea lions at Año Nuevo Island, California, for a five-year period.

## **RECOMMENDATION**

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the requested permit, as requested.

## **RATIONALE**

Dr. Lloyd-Smith proposes to continue research initiated in 2010. The objectives are to (1) investigate exposure to and shedding of leptospirosis in stranded and wild California sea lions and (2) understand the mechanisms underlying recurrent and deadly epizootics of leptospirosis in sea lions. Stranded sea lions (up to 140 per year) would be sampled under The Marine Mammal Center's stranding agreement—thus, their sampling would be covered under a different permit. Permit 17115 would authorize research only on sea lions in the wild.

Dr. Lloyd-Smith and colleagues would harass, capture, handle, restrain, sedate, measure, mark/tag, and sample 80 California sea lions each year of numerous age classes (i.e., yearling, juvenile, subadult) of either sex. Those activities would occur from September through November (i.e., during the leptosporosis outbreak season) for four years, with up to 12 sampling trips per year. Researchers would stalk the sea lions and capture them using hoop nets. They also may capture an additional 20 sea lions per year and release them without sampling. They would be released without sampling, because Dr. Lloyd-Smith is seeking to match the sex ratio of sea lions sampled at The Marine Mammal Center with the sex ratio of sea lions sampled in the wild. The researchers would mark each sea lion with plastic flipper tags to identify individuals and avoid recapturing them.

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The researchers would collect blood, urine, and vibrissae from each sea lion to be sampled. The samples would be analyzed at numerous laboratories using serological, molecular, microbiological, and stable isotope techniques and then archived at The Marine Mammal Center. Dr. Lloyd-Smith would compare data from the wild and stranded sea lions to determine whether and how seroprevalence and incidence rates in stranded individuals can be used to estimate those rates in the wild population.

Dr. Lloyd-Smith is requesting authorization to harass incidentally up to 5,000 California sea lions, 3,000 northern elephant seals, and 60 harbor seals per year during the proposed research activities. In addition, he is requesting to kill, unintentionally or via euthanasia, up to two sea lions per year not to exceed four sea lions during the five-year period. A veterinarian or veterinary technician would administer drugs to euthanize an animal, if necessary. Full post-mortem examinations would be conducted on all sea lions that died as a result of the proposed activities.

Dr. Lloyd-Smith's Institutional Animal Care and Use Committee has reviewed and approved the proposed procedures. In addition, he has and would continue to coordinate his activities with researchers at the National Marine Mammal Laboratory, the Service's Southwest and Northwest Fisheries Science Centers and Regional Offices, University of California Santa Cruz, Año Nuevo State Park, and non-profit organizations. Dr. Lloyd-Smith has been granted permission to conduct research at the Park from the California State Department of Parks and Recreation and the University of California Natural Reserve System.

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit, as requested.

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 long horizontal line extending from the end.

Timothy J. Ragen, Ph.D.  
Executive Director