



MARINE MAMMAL COMMISSION

25 April 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. 15142
(Colleen Reichmuth, Ph.D.,
University of California at Santa Cruz)

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. Reichmuth is requesting authorization to capture from the wild and maintain in captivity two bearded seals for purposes of scientific research. The permit would be valid for a five-year period.

RECOMMENDATIONS

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

- first consult with the Animal and Plant Health Inspection Service to ensure that Dr. Reichmuth's plans and facilities for transporting and maintaining the animals meet the requirements established under the Animal Welfare Act and are adequate to provide for the animals' health and well-being;
- advise Dr. Reichmuth of the need to consult with personnel at the Polaria regarding maintaining bearded seals in captivity prior to the seals' capture; and
- advise Dr. Reichmuth of the need to have the University's Institutional Animal Care and Use Committee (IACUC) review and approve her research protocols prior to initiating the proposed capture or research activities.

RATIONALE

Dr. Reichmuth proposes to capture and remove two bearded seals from the wild near Kotzebue, Alaska. The captures would allow her to continue studies currently being conducted under scientific research permit 14535. The purpose of the research is to assess the sensory capabilities of pinnipeds, including their ability to assess acoustic information. Permit 14535 allows Dr. Reichmuth to obtain captive bearded seals from public display or rehabilitation facilities. However, no public display or rehabilitation facility currently is housing bearded seals in the United States. For that reason, Dr. Reichmuth can complete her permitted studies only if she captures and maintains seals from the wild. She has designed the proposed capture activities with the participation

and support of the Native Village of Kotzebue and the Ice Seal Committee of Alaska, which works closely with the Service in managing ice seal species in Alaska.

Dr. Reichmuth proposes to capture up to four bearded seals, but would remove only two of those seals during the course of the permit. The seals primarily would be captured during September or October in Kotzebue Sound. A veterinarian, a marine mammal care specialist skilled in pinniped captures, and members of the tribal community in the Native Village of Kotzebue (including the Chairman of the Ice Seal Committee) would accompany Dr. Reichmuth on the captures. The capture team would target seals less than two years of age and of either sex. They would use tangle nets deployed from a 6-m vessel to capture the seals during daylight hours. The capture team would not set the nets within 100 m of any other marine mammal. However, Dr. Reichmuth may harass incidentally one spotted and one ringed seal during the five-year period.

After a seal is restrained safely on the capture boat, the team would evaluate the seal's physical condition to ensure that the seal is bright, alert, and responsive (i.e., the BAR criteria) and free of obvious signs of health problems as described by Dierauf and Gulland (2001; e.g., obvious discharge, masses, swelling, asymmetry, significant dental problems, poor coat condition, pox/lesions, signs of dehydration, abnormal breath sounds). That information and the estimated weight of the seal would be compared to healthy conspecifics of similar age to confirm its overall condition. If the team determines that the seal is not suitable for the project, it would be released immediately back into Kotzebue Sound. However, if the seal is deemed suitable, it would be transported to a holding facility in Kotzebue.

The team would measure and weigh the two seals to be transported to Long Marine Laboratory in Santa Cruz to determine appropriate dosages of emergency drugs. They would not take blood samples or conduct further diagnostic tests that might delay transport of the seals. The maximum time from capture to arrival in Santa Cruz is expected to be less than 48 hours. Dr. Reichmuth and either a veterinarian or marine mammal care specialist would accompany the seals on the entire trip. One or both of the seals would be transported to the Alaska SeaLife Center for care if any problems were to arise that precluded direct transport to California (e.g., transport timing or coordination, weather, changes in seal condition).

After arrival in Santa Cruz, the seals would be held in quarantine and evaluated more thoroughly for health problems. If a seal is in good health but unsuitable for the research project (e.g., it is deaf), Dr. Reichmuth and/or the Service would arrange for its permanent maintenance at a suitable USDA-approved public display facility. If the seal has a medical condition or disease, Dr. Reichmuth would work closely with the attending veterinarian and other experts (including Dr. Teri Rowles of the Service, Dr. Frances Gulland of The Marine Mammal Center, and Dr. Tracey Goldstein of the University of California at Davis's Marine Ecosystem Health Diagnostic and Surveillance Laboratory) to determine the best course of action. Dr. Reichmuth has requested authorization for up to two bearded seal deaths during the five-year period to be covered by the permit, noting that death could occur during capture activities, transport, or quarantine. The seals would not be released from quarantine until the release criteria set forth by Whaley and Borkowski (2006) are met.

After the seals have been released from quarantine, they would be held under the authority of permit 14535 in compliance with appropriate housing and animal care practices specified by the permit and the Animal and Plant Health Inspection Service regulations. To facilitate this research but also ensure that the seals are given appropriate care, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit, but first consult with the Animal and Plant Health Inspection Service to ensure that Dr. Reichmuth's plans and facilities for transporting and maintaining the animals meet the requirements established under the Animal Welfare Act and are adequate to provide for the animals' health and well-being. In addition, the Service has indicated that bearded seals have not been held at public display facilities in the United States. Although Dr. Reichmuth has maintained other species of ice seals at Long Marine Laboratory, she has yet to maintain bearded seals. The Polaria in Tromsø, Norway, has maintained bearded seals successfully for nearly 10 years. Because individual species of seals acclimate to captivity in various manners and may have different foraging, habitat, and thermal constraints, the Commission recommends that the Service advise Dr. Reichmuth of the need to consult with personnel at the Polaria regarding maintaining bearded seals in captivity prior to the seals' capture.

Upon completion of the multi-year research project (i.e., three to four years), the final disposition of the seals would be permanent maintenance at an appropriate public display facility. The seals would be maintained at Long Marine Laboratory until they are placed at another facility. Long-term placement of the seals would not occur for quite some time and, in the interim, the species may be listed under the Endangered Species Act. Because such a listing would preclude issuance of a Marine Mammal Protection Act public display permit, it currently is not possible to determine the specific authority under which the animals ultimately would be maintained or the facility where they would reside. It appears that multiple facilities could house the seals and would be interested in doing so. Therefore, it should be sufficient to note in the permit that, once the animals are taken into captivity, the expectation is that they would not be released back into the wild and that their permanent maintenance in captivity will be authorized either under the scientific research permit issued to Dr. Reichmuth or some other appropriate authorization issued under the Marine Mammal Protection Act and/or the Endangered Species Act.

The Service indicated that the University of California's IACUC has not reviewed or approved the proposed research protocols. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service advise Dr. Reichmuth of the need to have the University's IACUC review and approve her research protocols prior to initiating the proposed capture or research activities.

In addition, if the bearded seal or some pertinent subpart thereof is listed as either threatened or endangered, it also would be designated as depleted under the Marine Mammal Protection Act. If that occurs, the Service could not issue a public display permit under the Marine Mammal Protection Act. In that case, the Service would authorize the capture, related research activities, and permanent maintenance in captivity under research permits because that is the authority under which they were originally captured.

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Finally, capture activities would occur during the same time of year as subsistence hunting for bearded seals. The Commission, however, has been advised that community members helping to capture the seals would not participate in subsistence hunting on the days that capture activities occur. They would be compensated for their time spent planning and participating in capture activities and other associated expenses (i.e., gasoline, operational supplies, etc.). They also would communicate with other local hunters to ensure that the capture activities do not occur in areas where subsistence hunting is expected to occur or do not otherwise interfere with hunting. The proposed capture activities therefore are expected to have little or no effect on subsistence hunting.

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 and the Endangered Species Act. Please contact me if you have any questions concerning the Commission's 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 beginning.

Timothy J. Ragen, Ph.D.
Executive Director

References

- Dierauf, L.A., and F.M.D. Gulland. 2001. CRC handbook of marine mammal medicine, second edition. CRC Press, LLC, Boca Raton, Florida, 1,120 pages
- Whaley, J.E., and R. Borowski. 2006. Best practices marine mammal stranding response, rehabilitation, and release: Standards for release. National Oceanic and Atmospheric Administration/U.S. Fish and Wildlife Service, 92 pages.