



MARINE MAMMAL COMMISSION

12 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: Request for Amendment, Permit No. 16094
(Alaska Department of Fish and Game)

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. Permit 16094 authorizes the Alaska Department of Fish and Game to conduct research on harbor seals throughout their range in Alaska. The current permit expires on 31 December 2016. The Department is requesting to add procedures to the current permit.

RECOMMENDATION

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit amendment but advise the Department of the need to obtain approval from its Institutional Animal Care and Use Committee before initiating the proposed captive study.

RATIONALE

The purpose of the Department's research is to monitor, characterize, and/or assess harbor seal population trends, movement patterns, foraging ecology, physiology, haul-out behavior, life history parameters, demography, pupping and molting phenology, genetic structure, prevalence of infectious disease, and vulnerability to disturbance. Authorized activities include harassing, counting, observing, photographing, capturing, restraining, sedating, measuring, sampling, marking/tagging, and instrumenting numerous harbor seals. The Department is authorized to conduct the specified activities on individuals of all age classes and either sex.

The Department is requesting three changes to its permit, including—

- (1) increasing the number of whiskers it collects during capture activities;
- (2) adding photogrammetry of the muzzle and foreflippers during capture activities; and
- (3) adding a non-invasive study of whisker growth at the Alaska SeaLife Center.

Mr. P. Michael Payne

12 April 2012

Page 2

Activities involving wild seals

The purposes of the following activities are to (1) evaluate stress (cortisol) and pregnancy hormone (progesterone) concentrations in addition to dietary stable isotope signatures and (2) document whisker growth and potentially differentiate age classes based on claw bands of wild harbor seals. The Department proposes to increase the number of whiskers collected from one to two (i.e., one from each side of the muzzle) during capture activities. Researchers also would take photographs of each seal's muzzle and foreflippers. Whiskers would be collected and photographs would be taken when each seal is sedated. However, the number of seals that could be captured and sampled under the permit would not change.

Activities involving seals in permanent captivity or undergoing rehabilitation

The proposed captive study would enable researchers to investigate whisker growth and replacement for improving the usefulness of dietary stable isotope information obtained from whiskers. The Department proposes to add a non-invasive study documenting whisker growth over time in harbor seals held in permanent captivity or undergoing rehabilitation at the Alaska SeaLife Center in Seward, Alaska. Researchers would use hair dye to mark the seals' whiskers when they are sedated. They would apply dye to the entire muzzle only after it is applied to another portion of the seal to ensure no adverse reaction. Dye would be reapplied no more than one time every 20 days or eight times per year. Researcher would photograph whisker growth primarily once per week but potentially on a daily basis. If at any time during the study it appears that participation in the study is having a negative effect on the health or releasability of the seals, the attending veterinarian can reduce activities or remove the animal from the study. The Department has requested up to three unintentional mortalities per year for captive animals and five unintentional mortalities per year for animals undergoing rehabilitation. At present, the Center houses only three captive harbor seals and various numbers of seals undergo rehabilitation throughout the year.

It is unclear whether the Department's IACUC reviewed the proposed whisker study involving captive seals. Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit amendment but advise the Department of the need to obtain approval from its IACUC before initiating the proposed captive study.

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