



# MARINE MAMMAL COMMISSION

4 May 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. 15324  
(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. The Alaska Department of Fish and Game is seeking to renew and amend permit 358-1787 to conduct research on pinnipeds in Alaska during a five-year period.

## RECOMMENDATIONS

The Marine Mammal Commission recommends that the National Marine Fisheries Service issue the permit but condition it to—

- require that the applicant provide its updated Institutional Animal Care and Use Committee approval to the Service once it has been issued and before the Department initiates research under the new permit;
- require that applicant suspend research activities and consult with the Service if, in any given year, its research leads to the death of four or more seals from any single species covered by the permit and consult with the Service and Commission regarding possible changes to the research protocols if more than eight seals (all species combined) are unintentionally killed during research in a given year; and
- prohibit the Alaska Department of Fish and Game from leaving capture nets unattended in the water at any time, day or night.

## RATIONALE

The Alaska Department of Fish and Game proposes to collaborate with subsistence hunters to conduct research on spotted, ringed, bearded, and ribbon seals in the Bering, Chukchi, and Beaufort Seas. Nine villages from Bristol Bay through Kaktovik would participate in the research. The research would continue studies of more than 20 years to (1) monitor the status and health of each of the four species' populations, (2) improve population assessments, and (3) determine seal movement patterns. The Department would use that information, especially movement patterns, to

develop mitigation measures for industrial and shipping activities that would minimize disturbance of these species and maintain their availability to Alaska Natives for subsistence purposes.

Seals taken by subsistence hunters are the source of a large portion of the data regarding the status and health of ice seals. If this permit is issued, each year participating hunters would send samples from seals taken for subsistence to the Alaska Department of Fish and Game. The samples would include soft tissues, stomach contents, hair, urine, feces, and teeth. Additionally, the Department would import samples taken from dead animals killed for subsistence purposes or from seals legally collected for research in Russia, Canada, and Norway. The Department also would share some samples with other researchers, export some samples to Canada for analysis, and archive some samples.

In addition, Department scientists would capture and release live seals as part of the proposed research to assess the status and health of the seals and provide information regarding movement patterns. The Department proposes to harass, capture, handle, restrain, administer drugs to, measure, weigh, tag, sample, perform diagnostics (i.e., ultrasound blubber depth) on, and attach instruments to various numbers of individuals of each pinniped species (Table 1). Department researchers would tag pinnipeds using plastic flipper tags and would collect various samples from captured seals, including blood, blubber, hair, skin, urine, vibrissae, swabs, feces, and muscle.

**Table 1. Requested annual takes by activity and species**

<b>Procedure</b>	<b>Spotted seal</b>	<b>Ringed seal</b>	<b>Bearded seal</b>	<b>Ribbon seal</b>
Capture, sample, and VHF flipper tag	200	200	200	200
Instrument with a VHF flipper transmitter and satellite-linked depth recorder	40	40	40	40
Instrument with a VHF flipper transmitter and crittercam	40	40	40	40
Instrument with a VHF flipper transmitter and an acoustic tag	40	40	40	40
Incidental harassment	50	50	50	50

The research would involve individuals of all age classes and both sexes except females and their neonate or unweaned pups. Researchers would attach no more than two devices to any individual seal. They would attach the devices to the pelage of the head or between the shoulders with glue or attach using flipper tags. Crittercams and acoustic tags would be designed to release within a day or two of attachment, minimizing the need for recapture.

The Department indicated that (1) its Institutional Animal Care and Use Committee (IACUC) has reviewed and approved the procedures that would be used in the proposed research activities, (2) under its existing permit and IACUC approval, it still has a number of takes available for research, and (3) its IACUC will not review the proposed activities until the Department has secured a permit for those activities. The Commission believes that another review by the IACUC is essential as some circumstances clearly have changed (e.g., the number of animals involved in the proposed activities) and others also may have changed (e.g., the researchers may have new information regarding how their methods should be improved). Therefore, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require that the Department provide its updated IACUC approval to the Service once it has been issued and before the Department initiates research under the new permit.

### **Unintentional Mortalities**

The proposed research may result in the unintentional death of some subject seals. The Department is requesting authorization for up to eight unintentional deaths per year for each of the four species of pinnipeds. Its current permit authorizes only five deaths per species during the five-year permit (i.e., an average of one death per species per year). The Alaska Department of Fish and Game states that, of the 167 seals captured and handled under its current permit, no unintentional deaths have occurred. The Department plans to expand its research to allow it to capture and handle pinnipeds at up to four locations simultaneously; hence, the requested increase in the allowed number of unintentional deaths. The Commission is sympathetic to this concern but questions whether an eightfold increase in the number of authorized deaths is justified. Given the proposed expansion of capture effort, including the potential for concurrent studies at up to four locations, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to require suspension of research activities, pending review and authorization to proceed, if four or more seals from any single species covered by the permit are killed in any given year. Further, the Marine Mammal Commission recommends that the National Marine Fisheries Service consult with the Alaska Department of Fish and Game and Commission regarding possible changes to the research protocols if more than eight seals (all species combined) are unintentionally killed during research in a given year. In making these recommendations, the Commission recognizes that unintentional deaths can be caused by several factors, including diminished health of individuals, apnea, adverse reactions to drugs, and capture techniques. Nevertheless, if the unintentional deaths exceed the numbers cited here, then a review of procedures is warranted.

The Department also indicated that drowning in capture nets can occur but that drowning is not expected to occur frequently. However, the Department stated that it may leave some of the capture nets in the water over night. The Commission believes that leaving nets unattended at any time undoubtedly will increase the risk that seals caught in the nets could drown unnecessarily. To minimize such risks, the Marine Mammal Commission recommends that the National Marine Fisheries Service condition the permit to prohibit the Alaska Department of Fish and Game from leaving capture nets unattended in the water at any time, day or night.

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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