

ALASKA DEPARTMENT OF FISH AND GAME
JUNEAU, ALASKA

STATE OF ALASKA
William A. Egan, Governor

DEPARTMENT OF FISH AND GAME
Walter Kirkness, Commissioner

DIVISION OF GAME
James W. Brooks, Director
Don H. Strode, Federal Aid Coordinator

MARINE MAMMAL REPORT

by

John Vania

Volume VI
Annual Project Segment Report
Federal Aid in Wildlife Restoration
Project W-6-R-5, 6, Work Plan G-b
(Printed April 1965)

The subject matter contained within these reports is often fragmentary in nature and the findings may not be conclusive; consequently, permission to publish the contents is withheld pending permission of the Department of Fish and Game

WORK PLAN SEGMENT REPORT
FEDERAL AID IN WILDLIFE RESTORATION

STATE: Alaska

PROJECT: W-6-R-5 and 6 TITLE: Alaska Wildlife Investigations

WORK PLAN: G-b TITLE: Marine Mammals Studies

JOB NO.: 1,2,3, and 4 TITLE: Beluga Whales, Sea Lions, Sea Otters, Hair Seal

PERIOD COVERED: January 1, 1964 to December 31, 1964

ABSTRACT

Beluga and Sea Lion

Beluga and sea lion work done during this reporting period will be incorporated into comprehensive reports on these species due June 30, 1965.

Sea Otter

One hundred and fifty eight sea otters were counted during a survey of the Kodiak Archipelago and 395 were counted in the Prince William Sound - Kayak Island area. Previous counts in these areas have been higher, however, the difference is not considered significant at present. Replicate surveys in the Kayak Island area show that counts can vary greatly from survey to survey.

Seal

In 1964 hair seals in Game Management Units 1 through 16 were reported to be molting from the first week in July to October 31. Seals in the northern areas of these units may start to molt as much as three weeks later than those in the southern areas. In any one area yearlings appear to start molting before adults.

RECOMMENDATIONS

Because molting seals are of little commercial value it is recommended that the season on seals be closed from July 15 to October 15.

WORK PLAN SEGMENT REPORT
FEDERAL AID IN WILDLIFE RESTORATION

STATE: Alaska

PROJECT: W-6-R-5 and 6 TITLE: Alaska Wildlife Investigations

WORK PLAN: G-b TITLE: Marine Mammals Studies

JOB NO.: 1,2,3 and 4 TITLE: Beluga Whales, Sea Lions, Sea Otters, Hair Seal

PERIOD COVERED: January 1, 1964 to December 31, 1964

OBJECTIVES

To determine the abundance and distribution of beluga whales; assess the present harvest by natives; gather additional information on the breeding biology, age and food habits; and explore the use of underwater sound transmissions as a method of keeping belugas from entering river systems.

To classify the rookeries and hauling out grounds of sea lions and investigate the breeding biology, movements, and food habits of the animal and to monitor sea lion harvest operations.

To determine the abundance and distribution of sea otter in selected areas of the State and to gather information on the breeding biology, molt and food habits of the animals.

To determine the response of hair seal populations to harvesting; obtain information on the timing of the molt; to determine the current relative abundance and obtain information on the major pupping areas of the State.

TECHNIQUES

Aerial surveys were conducted in the Kodiak Archipelago, Prince William Sound and the Kayak Island area to determine the abundance and distribution of sea otters. Three types of aircraft were used: a Cessna 180 flown at an air speed of about 120 m.p.h. was used to survey the Kodiak Island and Prince William Sound areas; a Supercub flown at an air speed of 85 m.p.h. was used for the first two surveys in the Kayak Island area; and a Grumman Widgeon flown at about 120 m.p.h. was used for the remaining surveys. All surveys were flown at an altitude of 300-400 feet and approximately one-quarter

of a mile from the beach. Offshore areas are not generally covered. Wind and sea conditions must be calm or the survey is not flown.

Seal hunters were interviewed and their observations were used to determine the general timing of the molt of hair seals in Game Management Units 1 through 16. A local seal processing plant was also visited periodically and hides were examined for molting information.

Major seal pupping areas were determined through interviews with seal buyers and hunters and through a review of scattered reports on marine mammals.

FINDINGS

Comprehensive reports on beluga and Stellar sea lions, scheduled for completion by June 30, 1965, will contain information obtained on these species during this reporting period.

Sea Otter

Surveys

One hundred and fifty-eight sea otters were observed on June 2 during a flight in the Kodiak Archipelago. The flight covered the Trinity Islands, the south shore of Kodiak Island, Afognak, Shuyak and the Barren Islands. A survey was made in Prince William Sound on October 1 and in the Kayak Island area on October 3; 395 sea otters were observed. Results of these surveys are presented in Table 1.

Table 1. Kodiak Island, Prince William Sound and Kayak Island sea otter surveys, 1964.

<u>Kodiak Island area</u>		<u>Prince William Sound-Kayak Island area</u>	
Barren Islands	81	Hinchinbrook Island	168
Latax Rocks	63	Montague Island	42
Seal Island	13	Green & Little Green Is.	41
Marmot Island	1	Knight Island	4
Trinity Islands	<u>0</u>	Kayak-Wingham Island	<u>24</u>
Total	158		395

These numbers are considerably lower than those reported in

previous years. Lensink (1962) reports sighting 681 otter in the Kodiak Island area and 720 in Prince William Sound and the Kayak Island area in 1959. The differences could of course be due to a decline in the population since 1959, but I feel that we simply missed many animals; the how and why remains to be determined.

Surveys carried out by Johnson in the Kayak Island area after October 3 point out how widely counts may vary from one survey to the next. On October 15, January 23 and February 4 Johnson counted 1, 27 and 39 sea otters respectively. On January 28, the pilot who had flown most of the surveys, in company with a seal hunter, reported sighting a single herd of 85-100 otters hauled out on the beach in the survey area. Since the Kayak Island population is somewhat removed from other populations the discrepancy between counts is not likely to be the results of otter movements in and out of the area.

In view of these findings previous sea otter surveys may be considerably less accurate than we suppose. Sea otter populations, especially along the Aleutian Islands where surveys are difficult even under ideal conditions, may be much higher than previously considered. More surveys will have to be conducted and other methods of counting sea otters will have to be explored before a high degree of confidence can be placed in survey findings.

Seals

Timing of the molt

In 1964 seal hunters in the south central and southern areas of the state (Game Management Units 1 through 16) reported seeing a few seals molting in the first week in July. Seals in Prince William Sound were the first to show signs of new hair growth while those further south in the Ketchikan area were first reported molting approximately three weeks later. No seals were reported molting after October 31.

Periodic examinations of molting pelts which were received at a local seal processing plant indicated that yearling seals in any one area probably began to molt before adults. Pups, which are born in either May or June, molt before birth or shortly thereafter and do not molt again until the following year.

Seal Pupping Areas

The location of major seal pupping areas in Game Units 1 through 16 could only be determined through interviews with seal hunters and buyers and through a review of scattered reports on marine mammals. Funds for the seal project did not become available until after the pupping season had passed. The following is a list of the areas which now appear to produce significant numbers of hair seal pups:

Tugidak Island	Icy Bay
Port Heiden	Glacier Bay
Port Moller	Unakivik Inlet
College Fiord	Long Bay
Eaglek Bay	

Tugidak Island now appears to have the largest single concentration of spotted seals in Alaska. The adult population during the 1964 pupping season probably numbered in excess of 10,000 animals, and pup production may have exceeded 7,500.

LITERATURE CITED

Lensink, C. J. (1962). The History and status of Sea Otters in Alaska. Unpub. MS. Ph.D. thesis Purdue University, Lafayette, Ind.

SUBMITTED BY:

John Vania
Work Plan Leader

APPROVED BY:

Don H. Stuede
Federal Aid Coordinator

James H. Brooks
Director, Division of Game