

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

SHEEP REPORT

by

Frank Jones

Volume VI
Annual Project Segment Report
Federal Aid in Wildlife Restoration
Project W-6-R-5, 6, Work Plan E

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.

(Printed April 1965)

WORK PLAN SEGMENT REPORT
FEDERAL AID IN WILDLIFE RESTORATION

STATE: Alaska

PROJECT NO.: W-6-R-5, 6

TITLE: Alaska Wildlife Investigations

WORK PLAN: E

TITLE: Dall Sheep Studies

JOB NO.: 1

TITLE: Population and Distribution
Studies

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

ABSTRACT

The aerial survey of the Kenai Peninsula was completed during this period and indicates a minimum population on the Peninsula of approximately 1300 sheep. Legal Rams comprise 8.3 per cent of the total population as compared to a mean of 12.5 per cent of the populations found throughout the rest of Alaska. The lamb crop was fair this year, 39 lambs:100 ewes. This was lower productivity than for the past two years. survival to the yearling age was good.

RECOMMENDATIONS

No recommendation relative to management is made at this time.

WORK PLAN SEGMENT REPORT
FEDERAL AID IN WILDLIFE RESTORATION

STATE: Alaska

PROJECT NO.: W-6-R-5, 6 TITLE: Alaska Wildlife Investigations

WORK PLAN: E TITLE: Dall Sheep Studies

JOB NO.: 1 TITLE: Population and Distribution
Studies

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

OBJECTIVES

To obtain and evaluate information on the distribution of Dall sheep and population levels and trends.

TECHNIQUES

An aerial survey of the north-central portion of the Kenai Peninsula was flown in an attempt to complete the sheep counts on the Peninsula. A Piper PA-18 was used and the locations and numbers of sheep observed were plotted on a chart. The aircraft was flown as near 70 miles per hour as possible and as close to groups of sheep as was feasible for accurate counting.

A ground survey was conducted during June in the Dry Creek study area to determine the magnitude of the lamb crop and the survival of the previous year's lambs to the yearling age. This count was performed on foot and by the use of binoculars and a 20 power spotting scope.

Interviews with pilots and guides revealed some opinions of population levels and trends in other areas.

FINDINGS

During this reporting period an aerial survey was conducted in the north-central portion of the Kenai Peninsula. This activity required 8.1 hours of actual counting time, not including flying time to and from the area, and resulted in a count of 339 animals, or approximately 42 animals per hour. The area was

divided into four sections for ease of counting and tabulation. In addition, one area, Bear Mountain, was counted from the air on July 7, 1964, and again on foot July 8, 1964, for comparison purposes.

Section 1

This section is bordered on the north by Turnagain Arm, on the east by Canyon Creek and Sixmile Creek, on the south by Fox Creek and Colorado Creek, and on the west by Resurrection Creek. No sheep were found in this section.

Section 2

This section is bordered on the north by Fox Creek and Colorado Creek, on the east by Quartz Creek, on the south by Falls Creek, and on the west by a line extending northward from Juneau Lake to the confluence of Fox Creek and Resurrection Creek. One-hundred-thirty-one sheep were counted in this area.

Section 3

Section 3 is bordered on the north by the Seward-Anchorage Highway, on the east by the Seward-Anchorage Highway, on the south by Kenai Lake, and on the west by Quartz Creek. One-hundred-seventy-nine sheep were found in this section.

Section 4

Section 4 is bordered on the north by the Seward-Anchorage Highway, on the east by Johnson Creek and Bench Creek, on the south by the Seward-Anchorage Highway, and on the west by the Seward-Anchorage Highway. Twenty-nine sheep were counted in this area.

Composition of the different groups of sheep was obtained where possible. However, turbulence, visibility and area inaccessibility often prevented obtaining complete composition data. Table 1 presents the numbers counted in each section, the date flown, composition obtained, and the counting time involved.

Table 1. Aerial counts on Kenai Peninsula July 14-15, 1964

Date Flown	Section	Flying Time	Legal Rams	Under 3/4	Ewes	Lambs	Yearlings	Unid.	Total
7/14/64	1	1.4 hrs.	0	0	0	0	0	0	0
7/14/64	2	2.1 hrs.	9	5	51	27	18	21	131
7/14/64	3	2.3 hrs.	12	17	41	25	17	67	179
7/15/64	4	<u>2.3 hrs.</u>	<u>5</u>	<u>0</u>	<u>10</u>	<u>3</u>	<u>2</u>	<u>9</u>	<u>29</u>
Totals		8.1 hrs.	26	22	102	55	37	97	339
Per cent of total			7.7	6.5	30.1	16.2	10.9	28.6	100.0

Ram:Ewe ratio = 47:100

Lamb:Ewe ratio = 54:100

Yearling:Ewe ratio = 36:100

In order to compare aerial count data with ground count data, Bear Mountain was flown on July 7, 1964, and then counted on foot the following day. Table 2 gives the data collected by both methods.

Table 2. Counts made on Bear Mountain by foot and from the air

Date	Method	Legal Rams	Under 3/4	Ewes	Lambs	Yearlings	Unid.	Totals
7/7/64	Air	3	23	31	18	8	42	125
7/8/64	Foot	1	22	41	19	12	44	139

The other sheep ranges of the Kenai Peninsula were flown previously, during August of 1963, and those data are presented in Table 3 with the counts made this year.

Table 3. Total sheep counted on the Kenai Peninsula

Date Flown	Flying Time	Legal Rams	Under 3/4	Ewes	Lambs	Yearlings	Unid.	Totals
9/10/12/13/63	7.3 hrs.	81	144	355	131	*	214	925
7/14/15/64	<u>8.1 hrs.</u>	<u>26</u>	<u>22</u>	<u>102</u>	<u>55</u>	<u>37</u>	<u>97</u>	<u>339</u>
Totals	15.4 hrs.	107	166	457	186	37	311	1264

* In September long yearlings are almost as large as ewes and are included in the ewe group.

Ram:Ewe ratio = 59:100

Total rams - 273; total ewes - 457

Ave. sheep counted per flying hour = 81

Productivity

Composition counts were made along Dry Creek on June 13 and 14, 1964 to obtain data on lamb production and to assess survival of last year's lambs to the yearling age.

The total number counted for these two days was 586 sheep including 192 ewes and 74 lambs for a lamb:ewe ratio of 39:100. Counts made in 1962 and 1963 at approximately the same date gave lamb:ewe ratios of 49:100 and 58:100 respectively. Survival to the yearling age was found to be almost the same as for the previous two years. The yearling:ewe ratio in 1962 was 41:100, in 1963 it was 39:100, and in 1964 it was 37:100.

Interviews with several bush pilots and guides indicated that in their opinions the lamb crop for other areas of the state was fair for 1964, but was not so high as in 1963. Their impressions are not supported by actual counts.

SUBMITTED BY:

Frank Jones
Work Plan Leader

APPROVED BY:

Don H. Strode
Federal Aid Coordinator

James M. Brooks
Director, Division of Game