

**Alaska Department of Fish and Game  
Wildlife Restoration Grant**

**GRANT NUMBER:** AKW-10 Wildlife Restoration FY2016

**PROJECT NUMBER:** 6.0

**PROJECT TITLE:** The Status of Dall Sheep and Factors Influencing Their Populations

**PERIOD:** July 1, 2015 – June 30, 2016

**PROJECT LOCATION:** Statewide

**REPORT DESCRIPTION:** This performance report describes Dall sheep survey and inventory activities. Activities are listed by game management unit.

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**The Status of Alaska Dall Sheep and Factors Influencing Their Populations in  
Region II**

**Regionwide:**

**ACTIVITY :** Draft a triennial Dall sheep management report.

Dall sheep management report was prepared and submitted for publication in 2014. Staff continued to collect information in preparation for drafting next report. The department is transitioning to a 5-year report and plan. The next report is scheduled for publication in 2018.

**ACTIVITY:** Monitor the sheep harvest through field observations, hunter harvest reports and contact with hunters.

Information was collected during interviews with hunters and from information provided on harvest reports from permit hunts and general seasons. See area specific activities for additional information.

**ACTIVITY:** Provide information to state and federal regulatory processes on Dall sheep management. Collect data from sheep presented for sealing by hunters.

All sheep taken in Region II were presented to staff for measuring and sealing. In addition, approximately 25% of all rams taken in Alaska are sealed in Region II. See area specific activities for additional information. Staff routinely interact with federal staff and discuss management of Dall sheep relative to the respective regulatory systems. Staff prepared information for presentation to the state Board of Game meeting in 2015.

**ACTIVITY:** Survey selected sheep areas to determine distribution, sex and age.

Surveys were completed in selected hunt areas within individual GMUs. See Area specific activities.

**Activities by Unit:**

**Units 7&15**

ACTIVITY 1: Nine rams were taken during the general season. Eighty-seven hunters participated in the general season. Only 3 of 9 drawing permit hunters participated, and no rams were harvested.

ACTIVITY 2: Eight count areas were surveyed during the performance period. A total of 293 sheep were counted consisting of 85 rams, 164 ewe-like individuals, 2 unidentified adults, and 42 lambs. Overall sheep numbers for Game Management Units 7 and 15 continue to steadily decline despite restrictive hunting regulations.

**Unit 14C**

ACTIVITY 1: Sheep harvest was monitored through hunter harvest reports and sealing records. Harvest for GMU 14C was 17 rams. Sheep horn size, sheep age and location of kill was collected from sheep horns and interviews with hunters at the time of sealing.

ACTIVITY 2: Sheep surveys were conducted from 3-10 July 2016. A total of 1054 sheep were counted, including 293 rams, 561 ewes, and 200 lambs.

ACTIVITY 3: Research was ongoing in GMU 14C to determine productivity and mortality. Results will be reported under a separate project.

**Submitted by:** Cynthia M. Wardlow

**The Status of Alaska Dall Sheep and Factors Influencing Their Populations in Region III**

From Statewide section:

Provide information to state and federal regulatory processes on Dall sheep management.

See #4, below

Collect data from sheep presented for sealing by hunters

Collected data from sheep harvested in Units 12, 19, 20, 21, 24, 25, 26B and 26C at the time of sealing via measurements and required harvest reports, including days hunted, location of hunt, date of kill, method of take, commercial services used, length and diameter of horns, sheep age, and curl class. Data were analyzed and summarized.

1. Prepare triennial sheep management reports.

Compiled information and data for 9 Dall's Sheep Management Reports and Plans for Units 19, 20, 21, 24, 25, 26B, and 26C.

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2. Conduct aerial surveys to monitor population trends.

Aerial surveys were conducted to assess trend, distribution, productivity, and sex and age composition of the sheep population during July 2015 or June 2016. Survey areas included the following areas:

- Wrangell/Nutzotin Mountains in Unit 12
- Tok Management Area in Units 12, 20D, and 20E;
- Western Alaska Range in Unit 19C;
- Central Alaska Range in Unit 20A;
- White Mountains in Units 20B, 20F and 25C;
- Mt. Harper and Tanana Hills area of Units 20B, 20D, and 20E;
- Glacier Mountain Controlled Use Area in Unit 20E
- Central Brooks Range in Units 24 and 25;
- Eastern Brooks Range in Units 25 and 26B;

3. Monitor harvest through hunter contacts, surveys and harvest or permit reports and analyze harvest data.

Contacted most hunters individually and monitored harvest via required harvest reports in general, registration, and drawing permit hunts in Units 12, 19, 20, 21, 24, 25, 26B, and 26C. Harvest data were analyzed.

4. Provide Dall Sheep management information to state and federal regulatory processes.

Communicated and coordinated with and attended meetings of 15 local Fish and Game Advisory Committee, the Alaska Board of Game, 2 Federal Regional Advisory Councils, the Federal Subsistence Board, numerous local village councils, Native corporations, and the Wrangell-St. Elias Subsistence Resource Commission about Dall's Sheep management and to review and analyze regulation proposals for the Alaska Board of Game and the Federal Subsistence Board.

## **The Status of Alaska Dall Sheep and Factors Influencing Their Populations in Region IV**

### **Regionwide Activities:**

ACTIVITY 1: Prepare triennial sheep management reports.

The triennial sheep management reports were not due in this reporting period.

ACTIVITY 2: Monitor sheep harvest through field observations, hunter harvest reports and contact with hunters. Collect data from sheep presented for sealing by hunters.

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	Rams Harvested	Ewes Harvested	Unknown Sex Harvested
<i>Unit 11</i>	44	3	0
<i>Unit 13A</i>	22	0	0
<i>Unit 13B</i>	5	0	0
<i>Unit 13C</i>	8	0	0
<i>Unit 13D</i>	14	0	0
<i>Unit 13E</i>	15	0	0
<i>Unit 14A</i>	28	0	0
<i>Unit 14B</i>	7	0	1
<i>Unit 16B</i>	10	0	0

ACTIVITY 3: Survey selected sheep areas to determine distribution, sex and age.

2015 Summer Surveys	< Full Curl	Full Curl	Ewe- like	Lambs	Total
<i>Unit 11 CA 11</i>	26	5	102	39	172
<i>Unit 11 CA 12</i>	55	24	168	75	322
<i>Unit 13A Boulder Cr.</i>	71	5	125	70	271
<i>Unit 13A Chickaloon-East</i>	50	4	67	33	154
<i>Unit 13A Hicks Cr.</i>	34	0	45	17	96
<i>Unit 13A Caribou Cr.</i>	106	1	261	56	424
<i>Unit 13A Sheep Mtn.</i>	17	5	31	15	68
<i>Unit 13E Watana Creek Hills</i>	10	3	13	7	33
<i>Unit 13E West Kosina</i>	31	6	94	41	172
<i>Unit 13E Chulitna Mtns</i>	62	6	118	63	249
<i>Unit 11 CA 11</i>	26	5	102	39	172
<i>Unit 11 CA 12</i>	55	24	168	75	322
<i>Unit 13A Boulder Cr.</i>	71	5	125	70	271
<i>Unit 14A&amp;B Talkeetna Mtns</i>	111	16	246	113	494

**Submitted by:** Todd A. Rinaldi, Region IV Management Coordinator

### **The Status of Alaska Dall Sheep and Factors Influencing Their Populations in Region V**

**Region wide Activities:**

Provide information to state and federal regulatory processes on Dall sheep management.

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Area management staff reviewed State and Federal regulatory proposals, attended regulatory process meetings, and presented Dall sheep information to the State Board of Game, State Fish and Game Advisory Committees, Federal Subsistence Board, and Federal Subsistence Regional Advisory Councils. In March 2015, department staff provided information to the State Board of Game on an Agenda Change Request proposal to close all sheep seasons in Unit 23 and western Unit 26A; the ACR proposal was adopted by the board.

**Mountain Range or Use Area Activities:**

**Baird Mountains:**

Conduct aerial sex and age composition surveys in established count areas.

The National Park Service (NPS) conducted an aerial sex and age composition survey during June 2016. ADFG staff were not able to participate due to scheduling conflicts with the Western Arctic Caribou Herd photocensus. Results from the June 2016 sheep survey are found in Table 1.

Table 1 Baird Mountain Sheep Survey Results

	<Full Curl	Full Curl	Ewe-like	Lambs	Total
Western Baird Mtns.	13	8	127	47	196 95% C.I. (126- 309)

Monitor the population by conducting minimum counts or generating population estimates with survey data.

The survey conducted by NPS in June 2016 also produced a population estimate. The sheep population preliminary results were 196 sheep (95% CI 126-309).

Monitor harvests through, federal permit hunts, Community-based Harvest Assessments, public contacts and field observations.

All sheep hunts in the Baird Mountains in Units 23 and 26A were closed due to low populations. For the Baird and Trail Creek area, the point estimate for total sheep is 72 and 78% lower than the 2011 estimates.

Update population objectives in cooperation with the public and other agencies.

Sheep information was reported at Advisory Committee meetings and no hunting in Unit 23 and Unit 26A west of the Etivluk River drainage was recommended due to low populations and poor recruitment.

**DeLong Mountains:**

Conduct aerial sex and age composition surveys in established count areas.

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NPS conducted an aerial sex and age composition survey during June 2016. ADFG staff were not able to participate due to scheduling conflicts with the WACH photocensus.

	<Full Curl	Full Curl	Ewe-like	Lambs	Total
DeLong Mtns.	36	18	180	97	331 95% C.I. (240-462)

Monitor the population by conducting minimum counts or generating population estimates with survey data.

The survey conducted by NPS in June 2016 also produced a population estimate. The sheep population preliminary results remain low at 331 sheep (95% CI 240-462).

Monitor harvests through the harvest ticket system, permit hunts, Community-based Harvest Assessments, public contacts and field observations.

All sheep hunts in the De Long Mountains in Units 23 and 26A were closed due to low populations. For the Baird and Trail Creek area, the point estimate for total sheep is 72 and 78% lower than the 2011 estimates.

Community-based Harvest Assessments were completed by Division of Subsistence in Kotzebue in Unit 23, and in Point Hope in nearby neighboring Unit 26A. Data analysis is currently ongoing and results are not available.

Update population objectives in cooperation with the public and other agencies.

Sheep information was reported at Advisory Committee meetings and no hunting in Unit 23 and Unit 26A west of the Etivluk River drainage was recommended due to low populations and poor recruitment.

**Schwatka Mountains:**

Monitor harvests through the harvest ticket system, permit hunts, Community-based Harvest Assessments, public contacts and field observations.

All sheep hunts in the Schwatka Mountains in Units 23 and 26A west of Etivluk River, were closed due to low populations.

**Submitted by:** Tony Gorn, Region V Management Coordinator