

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

**GRANT NUMBER:** AKW-B-R1-2020

**PROJECT NUMBER:** 2.0

**PROJECT TITLE:** Region I Deer Management S&I program: Alaska's Deer Populations and Factors Influencing Their Status

**PERIOD OF PERFORMANCE:** July 1, 2019 – June 30, 2020

**PERFORMANCE YEAR:** July 1, 2019 - June 30, 2020; year 1 of a 2-year grant

**REPORT DUE DATE:** August 28, 2020

**PRINCIPAL INVESTIGATOR:** Richard Nelson

**COOPERATORS:** None

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**I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR**

**OBJECTIVE 1:** Population, size, status, and trend. Assess the size and status of each population to determine the 5-year trend.

**Region I - Units 1, 2, 3, 4, and 5**

- Monitor broad trends in populations through annual spring pellet-group surveys in selected areas.

**ACCOMPLISHMENTS:** Due to the COVID-19 pandemic, pellet surveys were accomplished in 2 watersheds in Unit 1A and 1 watershed in Unit 1C. Typically biologists conduct pellet surveys in 20 watersheds throughout Southeast Alaska.

**Unit 1, 2, 3, and 4**

- Continue evaluating aerial alpine deer surveys as a method to estimate relative abundance and trend of deer populations.

**ACCOMPLISHMENTS:** During late summer 2019, surveys were completed throughout Region I, except only 1 survey was flown on Douglas island due to inclement weather. Compared to the previous year, deer/hour increased in Unit 1B, Unit 3, and central Unit

2, but decreased in northern Unit 2.

**OBJECTIVE 2: Mortality/Harvest Monitoring and Regulations.** Monitor hunter effort and assess the number of deer harvested by hunters and other sources of mortality that may influence the trend of each population.

**Regionwide**

- Estimate hunter effort and harvest by analyzing data collected through mandatory harvest ticket reports.

**ACCOMPLISHMENTS:** Annual regionwide deer hunter effort and harvest information is collected, entered in the statewide deer harvest database, and summarized by Region I. Region I staff collected, entered, and summarized data from deer harvest reports. Hunter effort and harvest data were multiplied by a proportional expansion factor unique to each community to account for hunters who failed to submit reports. The expanded data reflect total estimated hunter effort and harvest for each year. The expanded data were made available to management biologists on the division’s intranet site by early July.

GMU	Regulatory Year					Average
	2015	2016	2017	2018	2019	
01A	387	417	566	652	846	574
01B	129	116	112	106	83	109
01C	343	330	295	233	257	292
02Z	4,243	3,534	2,433	2,079	1,953	2,848
03Z	717	778	618	601	863	715
04Z	6,492	7,192	5,258	5,219	5,969	6,026
05A	13	21	13	15	17	16
<b>Total</b>	<b>12,324</b>	<b>12,388</b>	<b>9,295</b>	<b>8,905</b>	<b>9,988</b>	<b>10,580</b>

Table 1. Annual deer harvest by GMU for Southeast Alaska, regulatory years 2015-2019. A regulatory year begins on July 1 and extends through June 30 of the following year.

**Region I, Units 1-5**

- Monitor for occurrence of diseases and parasites among deer populations.

**ACCOMPLISHMENTS:** To monitor for occurrence of diseases and parasites as well as other general information about deer populations and hunting management staff communicated formally and informally with hunters in each game management unit and maintained contact with the broader hunting community through interactions with Fish and Game Advisory Committees and local hunting organizations. No unusual occurrences of diseases or parasites were reported.

#### **Unit 4**

- Conduct spring mortality and body condition surveys in key areas as warranted and budgets allow.

ACCOMPLISHMENTS: Spring body condition and mortality surveys were conducted in Unit 4 from February to May 2020. Overall body condition scores (n=168 for all age and sex classes) was 3.3 (based on a rating scale of 0-5). For comparison previous surveys were conducted in 2017 and averaged 3.5. Mortality transects were surveyed in 14 locations during March and April. Dead deer per mile was 0.65, which is double the value when conducted in 2017, but lower than the last heavy snowfall winter in 2007 when biologists recorded 3.8 mortalities per mile.

OBJECTIVE 3: Habitat Enhancement /Assessment. Monitor range condition in deer winter habitat.

#### **Region I - Units 1, 2, 3, 4, and 5**

- Monitor browsing intensity annually in conjunction with spring pellet group transects.

ACCOMPLISHMENTS: Due to the Covid-19 pandemic and restrictions on travel few deer pellet transects were surveyed during spring 2020. Consequently, little browsing intensity data was also collected.

OBJECTIVE 4: Deer Management with Public Participation and Outreach. Manage each deer population with an emphasis on engaging the public through public meetings, working groups, educational materials, and incentive programs.

#### **Region I, Units 1, 2, 3, 4 and 5**

- Prepare 5-year Deer Management Operational Reports and Plans for each unit/subunit inhabited by deer.

ACCOMPLISHMENTS: Regional management biologists completed Deer Species Management Plans and Reports for deer reporting on the period RY11 – RY16 and planning for the period RY17 – RY22. Unit-specific reports and plans can be found at: <https://www.adfg.alaska.gov/index.cfm?adfg=librarypublications.wildlifepublications&sort=all&species=Sitka+Black-tailed+Deer&submit=Search>

- Provide information to state and federal regulatory processes on deer management.

ACCOMPLISHMENTS: Regional management biologists regularly participated in public regulatory processes by providing data and guidance to Fish and Game Advisory Committees and members of the public to help develop proposals to the Alaska Board of

Game, by providing data and commenting on proposals created by the Federal Subsistence Regional Advisory Council.

- Provide information on status of deer populations, likely trends, habitat use, and harvest management to other agencies and the public.

ACCOMPLISHMENTS: Deer harvest data are of great interest to the public, land management agencies like the US Forest Service, and other interest groups. Regional management biologists provided population and harvest data as requested by other agencies and the media and through informal conversations with hunters and other members of the public.

## **II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.**

During this reporting period population trends for deer throughout the region were monitored at reduced-level using fewer pellet group surveys than previous years due to the COVID-19 pandemic. Compared to the previous year, deer harvest increased in all Units except 1B and 2 (Table 1). Harvest in GMUs were within the historic range, and the current level of harvest is sustainable.

## **III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.**

The Covid-19 pandemic and associated restrictions on travel and fieldwork during spring 2020 greatly limited our ability to conduct annual deer pellet group surveys. Consequently, we did not hire seasonal staff or spend money on field travel and accommodations in support of those surveys and the budget for those surveys was significantly underspent.

## **IV. PUBLICATIONS**

None.

## **V. RECOMMENDATIONS FOR THIS PROJECT**

The Department of Wildlife Conservation recommend continuation of this project.

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**Date:** August 2020