## DEER ANNUAL SURVEY AND INVENTORY PERFORMANCE REPORT

STATE: Alaska

GRANT AND SEGMENT NR.: W-27-5 PROJECT NR.: 2.0

WORK LOCATION: Statewide

**PROJECT LOCATIONS:** Game Management Regions 1 and 2

**PERIOD:** 1 July 2001–30 June 2002

**PROJECT TITLE:** The Status of Alaska Deer and Factors Influencing Their Populations

**REPORT DESCRIPTION:** This statewide performance report includes the two regions involved in deer survey and inventory activities. Statewide and regional activities are listed before specific activities by herd and game management unit.

The Status of Alaska Deer and Factors Influencing Their Populations in Region I

#### **Regionwide Activities**

Activity 1: Conduct a mail survey of deer hunters to determine parameters of hunt.

Not only was a mail survey of a sample of Region I hunters conducted, a review of several previous year's survey results was performed for consistency. We surveyed 3,730 harvest ticket holders out of a total of 12,138. The response rate was 61%, and from that we estimated that about 7,981 hunters harvested about 10,547 deer.

Activity 2: Conduct pellet-group surveys at selected locations throughout the region.

This activity was successfully carried out in April and May 2002. About 7,800 plots were surveyed on 34 count areas between Ketchikan and Douglas Island. Six new pellet-group transects were established on Zarembo Island in Unit 3. Yakutat transects were not evaluated during the year.

Activity 3: Conduct mortality transects in key areas as needed and budgets allow.

This activity was successfully carried out in Unit 4 in spring 2002. Four miles of mortality transects were walked and no dead deer were documented. One condition-index survey was completed in March 2002, with mean condition values of 3.48, a significantly higher value than seen in the last survey in March 1999.

Activity 4:

Draft a deer management report.

Area biologists collected data to be used in the final report, due to headquarters in April 2003.

Activity 5: Provide information to the Board of Game regarding deer management.

During the January 2002 Board of Game meeting, Region I staff provided the results of a survey of Southeast advisory committees queried on shooting deer from boats. Also provided information to the Board as it considered a proposal to initiate the use of harvest reports to gather deer hunting data, as opposed to the mailout survey that has been used for two decades.

Activity 6: Write an annual survey and inventory performance report.

This document satisfies the activity described.

Activity 7: Monitor the harvest by communicating with hunters as opportunity allows.

Area biologists and other staff members spoke with hunters opportunistically to gain a better understanding of their hunting effort and success.

## Activities by Unit

#### Units 1A & 2

Activity 1: Operate hunter check station on Prince of Wales Island.

This activity was not carried out in fall 2001.

# Units 1B & 3

Activity 2: Conduct spotlight surveys.

Two spotlight surveys were conducted on Kuiu Island in Unit 3.

#### Unit 4

Activity 1: Conduct deer mortality transects in key areas as needed.

This activity was successfully carried out in spring 2002.

Activity 2: Conduct spotlight surveys.

There were no spotlight surveys conducted during the regulatory year.

**Total Regional Segment Period Project Costs (in thousands):** \$150.2

Submitted by: Bruce Dinneford, Wildlife Biologist IV

### The Status of Alaska Deer and Factors Influencing Their Populations in Region II

### **Regionwide Activities**

Activity 1: Draft a deer management report.

Draft deer management reports were prepared for Region 2 deer populations in 2001.

Activity 2: Provide information to the Board of Game on deer management.

Provided information for the Board of Game as it addressed proposals regarding deer in Region 2 during its spring 2001 meeting.

Activity 3: Write an annual survey and inventory performance report.

Activity 4: Monitor the deer harvest through field observations and contacts with hunters.

See Activity 5.

Activity 5: Conduct a deer hunter mail questionnaire survey.

Region 2 completed its annual mail deer questionnaire.

## Activities by Unit

#### Unit 6

Activity 1: Conduct aerial survey of Prince William Sound shoreline in spring to assess deer over-winter survival.

No aerial surveys were conducted, however, other observations were made while conducting research in the area, and winter survival appeared good. Winter snowfall was such that deer were not forced to the beaches and were able to spread out away from the beach.

Activity 2: Conduct annual pellet group surveys.

We conducted deer pellet surveys during 29 May–14 June 2001 with a total of 52 person-days on Montague, Hinchinbrook, Hawkins, Knight and Naked Islands. We surveyed 1658 plots along 29 transects in 8 areas. Overall mean number of pellet groups per plot was up slightly (though not significantly) from last year.

Activity 3: Conduct a deer hunter mail questionnaire survey.

Total harvest was 1,700 with males composing 61% of the take.

Success rate was 64%, and successful hunters harvested an average of 1.4 deer each.

#### Unit 8

Activity 1: Assess winter mortality in standardized mortality count areas.

The deer population continued to recover from the devastating winter mortality that occurred the 1998–99 winter. Record snow falls in February 2002 resulted in increased fawn and yearling mortality in some areas, most notably inner Uyak Bay, Browns Lagoon, and inner Terror Bay. Over winter mortality in other areas was low to moderate, and it appeared that most adult deer were able to find sufficient forage and lower snow depths on coastal capes and shorelines. An increase in deer killed by loose dogs was reported in the vicinity of Kodiak city during the winter of 2001–02.

Activity 2: Conduct a deer hunter mail questionnaire survey.

We monitored hunting activities and harvest by a mail questionnaire. Extrapolated results indicated the 2001 harvest was 2,899 deer, including 95% males. Twenty-four percent of the harvest was from Afognak, Raspberry, and Shuyak islands; 76% of the harvest was from Kodiak and small adjacent islands. Hunter success was 71% and successful hunters averaged 2.1 deer per hunter. The average number of days hunted was 4.7 days/hunter. Boats were the most common means of transportation (43%) followed by highway vehicles (17%) and aircraft (14%). Hunter residency was: Kodiak Island residents (47%), non-local Alaska residents (43%) and, non-residents (10%).

Activity 3: Evaluate improved procedures for assessing population status.

The department has teamed with staff from Kodiak NWR to sponsor a unit-wide vegetative analysis. This project commenced in 2001 and will continue until 2003. We are also working with Kodiak NWR and the University of Alaska – Fairbanks to develop graduate studies to investigate deer population biology and habitat use research.

Other activities funded by federal aid on this project: None

**Total Regional Segment Period Project Costs (in thousands):** \$48.2

Submitted by: Michael G McDonald, Region II Assistant Management Coordinator

Statewide Project Costs (in thousands): State Share = \$49.6 Federal Share = \$148.8 Total Costs = \$198.4