

**DEER  
ANNUAL SURVEY AND INVENTORY  
PERFORMANCE REPORT**

**STATE:** Alaska

**GRANT AND SEGMENT NR.:** W-33-10  
**PROJECT NR.:**

**PERIOD:** 1 July 2011 – 30 June 2012

**PROJECT LOCATION:** Region 1 and Region II. Region II-Game Management Unit 6 – North Gulf Coast and Prince William Sound, Game Management Unit 8 – Kodiak Archipelago.

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

**REPORT DESCRIPTION:** This performance report describes Region 2 deer survey and inventory activities. Regionwide activities are listed before specific activities by herd and game management unit.

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**Region I Activities**

**ACTIVITY 1:** Determine harvest and population trends using a mail survey of deer hunters.

Beginning in RY2011 (fall 2011), the department changed their deer harvest data gathering system from the mail out survey, to a harvest report card. Each deer harvest ticket now has a harvest report card attached, and hunters are required to submit their hunt effort through this card, or, report on-line through the department web site. Although we had plans to follow this up with a non-response bias survey, we never completed this task.

**ACTIVITY 2:** Conduct spring pellet-group surveys at selected locations throughout the region.

Pellet-group surveys were conducted in late April - mid May 2012. The winter was relatively mild, allowing staff to access deer pellet transect sites fairly early. The traditional deer pellet transects have been reduced in favor of testing a new method using the DNA from deer pellets to estimate deer numbers in a given area. Staff continued with a 3rd year of a new method of estimating deer density using pellets, by collecting pellets and analyzing them using DNA. We can then use DNA as a mark/recapture tool in estimating deer density. This was conducted in Unit 3 near Petersburg.

**ACTIVITY 3:** Conduct shoreline deer condition surveys on selected shoreline segments to further assess post-winter deer condition.

This was conducted in Unit 4, where 480 miles of beach were surveyed, and 388 deer were classified (264 adults, 124 juveniles) for body condition. Eighty seven percent were

in good condition, 10% in fair condition (showing some ribs and/or hips showing) and 3% in poor condition (ribs visible, listless when approached, hair loss).

ACTIVITY 4: Analyze historical pellet survey data to examine correlates of deer-pellet density. No work was done on this activity.

ACTIVITY 5: Conduct mortality transects in key areas as needed and budgets allow.

Deer mortality transects were conducted in Freshwater Bay on Chichigof Island. Nine miles of beach were walked, 7 deer mortalities were discovered 5 adults (4 bucks, 1 doe) and 2 fawns. In other areas of the region, staff recorded deer mortalities along traditional deer pellet transects as they encountered them.

ACTIVITY 6: Monitor the harvest by communicating with hunters on an opportunistic basis. Staffs noted anecdotal information from discussions with hunters throughout the RY 2011 deer hunting season.

ACTIVITY 7: Conduct DNA based pellet transects at selected locations.

Staff conducted DNA pellet transects in Unit 3 to test this method in an area with low density deer. Part of the decision to move this operation to Unit 3 also hinged on the need for deer data in this area in lieu of potential intensive management efforts to boost deer number.

ACTIVITY 8: Compare/analyze radio-collared deer movement with DNA pellet survey collections and post-winter conditions.

This analysis is ongoing from the work on Northeast Chichigof Island during RY10 and RY11.

**Submitted by:** Neil L. Barten, Region I Management Coordinator

## **Region II Activities**

ACTIVITY : Prepare a biennial deer management report.

A deer management report was submitted to Headquarters for publishing during the summer 2011. Staff continue to collect information for future publication.

ACTIVITY : Determine harvest and population trends using a mail questionnaire.

Questionnaires were replaced in 2011 with a new harvest reporting system. All hunters were required to obtain harvest tickets and report on hunting activities after the season or at the completion of their hunt.

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

These are standard activities accomplished in each office. See Area specific activities.

## **Activities by Unit**

### **Unit 6**

ACTIVITY 1: Spring shoreline surveys conducted by boat in March and airplane in May indicated extremely heavy snow conditions throughout the range of deer in Unit 6. A heavy winter die-off was expected to occur.

ACTIVITY 2: Conducted annual pellet group surveys on 24 transects. Surveys indicated low to moderate populations in most of the range. The populations on Hinchinbrook and Hawkins Islands were higher and continued to increase overall. However, deer pellet surveys do not detect current-year mortality because it occurs late in the winter.

ACTIVITY 3: Harvest estimate is not yet available, but interviews with hunter suggest an increase in harvest over last year to approximately 2,000 deer.

### **Unit 8**

ACTIVITY 1: Assess winter mortality in standardized mortality count areas. The winter of 2011/12 had a moderate-high loss of deer. Reports from the public and deer mortality transects indicated a higher rate of deer mortality on the northern portion of the Kodiak Archipelago than had been noted in the previous 3 years.

ACTIVITY 2: Conduct a deer hunter mail questionnaire survey. We monitored hunting activities and harvest by a deer harvest report cards. No results have been posted at this time.

ACTIVITY 3: Evaluate improved procedures for assessing population status. No activity during this reporting period due to other priorities.

**Submitted by:** Gino Del Frate

**Date:** 2 September 2012