

**DEER  
ANNUAL SURVEY AND INVENTORY  
PERFORMANCE REPORT**

**STATE:** Alaska

**GRANT AND SEGMENT NUMBER:** W-33-12

**PROJECT NUMBER:** 2.0

**PERIOD:** 1 July 2013 – 30 June 2014

**PROJECT LOCATION:** Statewide

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

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



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

**Regionwide Activities**

ACTIVITY 1: Prepare biennial regional deer management reports.

These reports are being reviewed and edited.

ACTIVITY 2: Provide information to state and federal regulatory processes on deer management.

Data from deer harvest and population indices will be provided to the Alaska Board of Game and Regional Advisory Council at their next regularly scheduled meeting (winter 2015).

ACTIVITY 3: Determine harvest and population trends using a harvest reporting system.

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 in RY12, we never completed this task.

ACTIVITY 4: Conduct spring pellet-group surveys at selected locations throughout the region.

Pellet-group surveys were conducted in late April - mid May 2014. The traditional deer pellet transects have been reduced in favor of testing two new methods: 1) using the DNA from deer pellets to estimate deer numbers in a given area, and 2) using a “path sampling” approach for counting deer pellets instead of the traditional method. Both the DNA and path sampling techniques are being tested with the hope they can provide us with more precise methods of determining deer abundance. The majority of the effort has taken place in Units 1A and 3, given the increased interest in deer numbers associated with the intensive management issues in these areas.

ACTIVITY 4b: Conduct vegetation sampling at selected locations in Units 1A and 3. Browse surveys of vaccinium were conducted during spring 2014 in Units 1A and 3 as part of baseline information being gathered related to intensive management. Data is currently being analyzed.

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

Deer mortality transects were conducted in Unit 4 along Peril Strait between Baranof and Chichagof Islands, and in Freshwater Bay on Chichagof island. Only two miles of beach were walked due to overall good spring conditions but no mortalities were discovered. 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.

A deer check station was jointly run in cooperation with the US Forest Service- Hoonah Ranger District just outside of Hoonah on NE Chichagof Island during September. The federal budget shutdown eliminated staffing for the rest of the season and as a result, hunter information was limited and incomplete.

Staffs noted anecdotal information from discussions with hunters throughout the RY 2013 deer hunting season.

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

In spring 2014 staff conducted DNA pellet transects in Unit 3 for the 2<sup>nd</sup> consecutive year 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 numbers. This was the 4<sup>th</sup> consecutive year we employed this DNA method and continue to investigate the utility of this method for assessing deer abundance.

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

### **Regionwide Activities**

ACTIVITY : Prepare a biennial deer management report.

A deer management report was submitted to Headquarters for publishing during the summer 2013. Staff continue to collect information for future publication.

ACTIVITY : Determine harvest and population trends using a harvest reporting system.

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.

ACTIVITY : Provide information to state and federal regulatory processes on Sitka Black Tailed deer management.

Staff routinely interact with federal staff and discuss management of deer relative to the respective regulatory systems. Staff prepared information for presentation to the state Board of Game meeting in 2015.

## **Activities by Unit**

### **Unit 6**

ACTIVITY. Spring shoreline surveys were not conducted because of early spring and leaf out.

ACTIVITY. This year's Mean Pellet Groups/Plot (MPGP) was 0.78, the second lowest on record (since 1994/95 which was the first year that a comparable sample area was considered). The winter of 2011/2012 received the highest snowfall on record with over 27 feet of snow recorded in Cordova. The MPGP is now 47% lower than the 2011 estimate. This may indicate that the population is slowly increasing, which corresponds with anecdotal reports from those familiar with the area. Nevertheless, the MPGP appear to be low which may also suggest that the deer population is low.

ACTIVITY. Harvest estimate is not yet available, but reports from hunters suggest that harvest was low due to decreased effort and success related to a population decline. The harvest was likely less than 1,200 deer. As the population recovers from the severe winter in RY 2011 we should make progress toward achieving both population and harvest objectives.

### **Unit 8**

ACTIVITY : A Sitka black-tailed deer mortality survey was completed on the shoreline of Chief Cove (west Kodiak Island) in April. We surveyed 13.47 km of shoreline and located 6 mortalities resulting in 0.45 carcasses/km. Winter mortality of deer in Chief Cove during 2012–13 was low compared to 2011–12 (1.43 carcasses/km) suggesting either lower winter mortality rates or decreased deer abundance in this region. The Chief Cove area serves as a major deer wintering area for the western Spiridon Peninsula and has consistently revealed the highest winter mortality rates when compared to other historical survey areas (i.e., Olga Bay, North

Sitkalidak Strait). Island wide reports from hunters and local residents concurred with our annual deer mortality transects, suggesting winter mortality was minimal across Kodiak Island.

ACTIVITY : Evaluate improved procedures for assessing population status. We are currently investigating various modeling approaches to obtain a population estimate and gather information on recruitment and survival.

ACTIVITY. Estimate sex ratios with alpine aerial surveys in August. No activity during this reporting period due to other priorities.

ACTIVITY. Hunt reports provided data on hunting effort and harvest. Two thousand seven hundred nineteen hunters took to the field of which 1,569 were successful harvesting 2,851 deer (2,161 bucks, 691 does) in 13,651 hunting days averaging 4.8 hunting days per deer.