ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 25526
Juneau, AK 99802-5526

DEER
ANNUAL SURVEY AND INVENTORY

STATE: Alaska

GRANT AND SEGMENT NUMBER: AKW-4 Wildlife Restoration FY2015

PROJECT NUMBER: 2.0

PERIOD: 1 July 2014 – 30 June 2015

PROJECT LOCATION: Statewide

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

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

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

Region wide 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 were provided to the Alaska Board of Game and Regional Advisory Council during winter 2015 meetings.

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.

Unit 4 –Moderate snowfall during winter 2013-14 and a mild spring favored high over-winter survival. Hunters reported seeing many deer during the fall 2014 season, but not at lower elevations. Minimal snowfall allowed deer to remain dispersed throughout their home ranges. Even so, we estimate the FY 2014 harvest at around 6,500 deer.

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.

Unit 2:

1. Traditional pellet group surveys were completed in spring 2015. Surveys were conducted in Red Bay, Sarkar, Honker Divide and Snakey Lakes units. Populations in Unit 2 continue to be stable to increasing.
2. Aerial alpine surveys were conducted in fall 2014 on the north end of POW as a comparison with Unit 3 areas.

Unit 4: Conducted three traditional deer pellet surveys in early May.

ACTIVITY 4b: Conduct vegetation sampling at selected locations in Units 1A and 3.
No browse surveys were conducted during spring 2015 in Units 1A and 3. Data collected in previous years are 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.

Unit 4: Conducted two deer mortality transects in the immediate Sitka area and found no mortalities. Mild winter and spring conditions are believed to have contributed to high overall survival.

ACTIVITY 6: Monitor the harvest by communicating with hunters on an opportunistic basis.

Unit 4 – No deer hunter check stations were operated during FY14. In previous years check stations were operated on NE Chichagof Island to monitor harvest following several severe winters. However, we did not operate check stations this year because the deer population appears to be rebounding and competing needs for ADF&G staff time and time.

Staffs noted anecdotal information from discussions with hunters throughout the RY 2014 deer hunting season.

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

No new data were collected during spring 2015. Data collected during previous years is being analyzed to help evaluate the efficacy of this method of estimating deer abundance.

Submitted by: Tom Schumacher, Region I Management Coordinator

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

Region wide Activities:

ACTIVITY : Prepare a biennial deer management report.

A deer management report was prepared and submitted to Headquarters for review during the summer 2015. Staff continue to collect information for future publication. The department is transitioning to a 5-year report and plan. The next report will be published in 2017.

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. Final harvest estimate is not yet available but preliminary reports from hunters suggest that harvest increased as the population increased and success rates improved. The harvest was likely less than 1,200 deer but about double previous 2 years. Harvest in RY12 and RY13 was the lowest on record with less than 600 deer reported in the harvest each year.

Unit 8

ACTIVITY : No mortality survey was completed this spring. 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 rigorous population estimate and gather information on recruitment and survival. No additional population estimation techniques were implemented this reporting period; however, anecdotal reports from hunters, air taxis, and guides suggest the deer population has increased following the severe winter of 2011. Guides and air taxis have reported seeing high densities of deer throughout the archipelago, particularly on the southern end of Kodiak Island and on Afognak and Raspberry Islands. Further, numerous reports of residents observing does with multiple fawns have been recorded and suggest a healthy, productive, growing population.

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 and seventy-three hunters took to the field of which 1,733 were successful. Hunters harvested 3,069 deer (2,582 bucks, 487 does) in 12,159 hunting days averaging 4.0 hunting days per deer. Boats and aircraft were the most popular means of transportation for successful deer hunters. In RY14, 50% of the successful deer hunters used boats and 27% used aircraft as their primary means of access.

Submitted by: Gino Del Frate, Region II Management Coordinator