

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

Grant Number: W-33-8 **Segment Number:** 9
Project Number: 2.15
Project Title: Movement patterns, home range, and habitat use by Sitka black-tailed deer in Southeast Alaska
Project Duration: July 1, 2008–June 30, 2012
Report Due Date: September 1, 2011
Principal Investigators: Karin McCoy, Phillip Mooney, David Person
Work Location: Southeast Alaska, primarily Chichagof Island.

I. SUMMARY OF WORK COMPLETED ON JOBS IDENTIFIED IN ANNUAL PLAN THIS PERIOD

JOB/ACTIVITY 1a: Deer capture, radio collaring, monitoring

Deer Capture Activities:

Several distinct ground capture sessions were conducted with little success due to low deer numbers along the road system coupled with higher than expected difficulties with ground darting deer. A net-gunning crew was called in during August to increase capture efficiency.

July 15–24, 2010: Ground captures: 3 deer collared (1 male, 2 females).

August 2–5, 2010: Ground captures: no deer collared.

August 9–11, 2010: Ground captures: no deer collared.

August 27–28, 2010: Aerial Alpine Netgunning. Captures: given low success with ground capture operations, a specialized net-gunning crew was brought down from Fairbanks to conduct aerial operations to capture deer in the alpine. 17 deer (7 males and 10 females) were captured and collared during operations, with chases lasting 15 seconds to 4 minutes/animal. One additional deer was killed. This brought the total number of animals collared up to 23 (8 males, 15 females). Costs of the net-gunning included travel costs to bring a special helicopter and crew down from Fairbanks.

September 29–30, 2010: Ground captures: 4 deer collared, all female.

March 6–11, 2011: Ground and boat-based capture operations, none captured.

March 21–24, 2011: Ground and boat-based capture operations, none captured.

April 27–29, 2011: Ground and boat-based capture operations, none captured. One collar that was on mortality was recovered.

June 2011: In June we decided to refurbish the 4 collars from the deer mortalities (two hunter kills and two winter kills), and asked Telonics to replace the 3 collars with the failed VHF signal. They complied. These 7 collars in addition to the 3 that were never originally deployed gives us 10 collars that we will attempt to deploy in the field during July–Dec 2011.

Aerial Surveys and Monitoring:

September 2, 2010: Quick telemetry flight to follow up after deer captures and make sure no capture mortalities occurred. Survey time about 1 hour. Surveyor only attempted to detect VHF signal, not locate the deer. All 23 collared deer were detected with VHF signals on “successful.”

November 15, 2010: Telemetry survey using supercub aircraft for 27 collared deer (survey time of 4 hrs and 30 minute). Six collars VHF were not detected and another three had very slow/strange signals. One collar appeared to be on dead battery. Remaining 17 deer were located.

November 18, 2010: Follow-up telemetry survey for 10 deer to double-check collar status through VHF beats/minute (dead battery, mortality, successful, unsuccessful), double-check strange/weak/missing signals from previous flight, and confirm mortality locations (survey time was 2 hours). The VHF signal for three collars still not detected despite extensive searching, believed inoperable. The seven remaining collars were detected, of which one collar was on dead battery, and two collars were on mortality. These two collars were on deer killed by hunters and returned to ADFG. One of the collars was damaged by the hunter’s shot and data was not retrievable from the collar.

December 10, 2010: Telemetry survey using supercub aircraft for 25 remaining collared deer (survey time 3 hrs, 20 min). For three collars the VHF signal still was not detected, believed to be inoperable. The remaining 22 deer were located, of which one was still on dead battery.

March 15, 2011: Telemetry survey using supercub aircraft for 25 remaining collared deer (survey time 3 hrs, 15 min). Three VHF collars still not found, believed inoperable. Remaining 22 deer were located, of which one was on still on dead battery and one was on mortality near Cannery Point.

April 20, 2011: Telemetry survey using supercub aircraft for 25 remaining collared deer. Survey time was 4 hours. Three collars VHF still not found, believed inoperable. Remaining 22 deer located, of which two were now on dead battery and two collars were on mortality (one located previously near Cannery Point and one in the Pavlof watershed). Additional survey time spent to assess road condition for ground operations. The two collars on mortality were recovered late April; these deer died in the winter.

May 19, 2011. Telemetry survey using supercub aircraft for 23 remaining collared deer (survey time 3 hrs, 15 min). Three collars VHF still were not found, believed inoperable. Remaining 20 deer located, of which three were on dead battery.

Job/Activity 2a: Monitor snow conditions

Snowfall data was compiled from nearby weather stations.

JOB/ACTIVITY 3a: Deer habitat use

No analyses were conducted because most of the GPS collar data (with the exception of the mortalities) has not yet been retrieved from the field. Half of the collars will be will be retrieved after August 1st 2011. The other half will be retrieved after August 1st, 2012.

JOB/ACTIVITY 4a: Summary report of the capture activities and project status

We prepared and submitted the annual performance report.

Prepared by: Karin McCoy

Date: 9/01/2011