

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

Grant Number: W-33

Segment Number: 11

Project Number: 3.51

Project Title: Evaluating management strategies to enhance harvest from southwest Alaska Caribou Herds

Project Duration: 1 July 2011 to 30 June 2016

Report Due Date: 1 September 2013

Partner:

PRINCIPAL INVESTIGATOR: Nick Demma

COOPERATORS: Dave Crowley, Todd Rinaldi

WORK LOCATION: GMUs 9, 10, 17, 18, 19, Southwest Alaska

I. PROGRESS ON PROJECT OBJECTIVES DURING LAST SEGMENT

OBJECTIVE 1: Estimate production, survival, recruitment, and causes of mortality of neonates. We attained our objective of monitoring adult females during the calving period to estimate age-specific productivity. We radiocollared MCH and Southern Alaska Peninsula caribou herd (SAP) calves to evaluate survival and determine cause of death of neonates.

OBJECTIVE 2: Evaluate survival of female caribou. We continued to monitor radiocollared cows in the Southwest Alaska caribou herds to evaluate survival of adult cows.

OBJECTIVE 3: Evaluate survival and growth of male caribou. We summarized and analyzed data to evaluate survival and growth of male caribou in the Mulchatna herd. We have estimated seasonal and annual survival of bull caribou for several calf cohorts from 2006 to present.

OBJECTIVE 4: Report findings in appropriate scientific and popular venues. We have reported findings of adult and calf survival, causes of calf mortality, and growth of bull caribou at intra- and inter-agency meetings, at public meetings, and in other informal settings.

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

JOB/ACTIVITY 1: Calf production, survival and cause of mortality of neonates.

We captured and radiocollared 116 newborn MCH calves during the 2013 calving period to characterize survival and determine cause of mortality during the first month. We determined pregnancy status of 68 known-age radiocollared cows ≥ 2 yo during 2013 to estimate age-specific productivity in MCH.

We monitored survival of 116 newborn SAP calves during the 2013 calving period to characterize survival and determine cause of mortality during the first month. We determined pregnancy status of 16 known-age radiocollared cows ≥ 2 yo during 2013 to estimate age-specific productivity in SAP.

Seventy-one adult cows were observed during a parturition survey conducted on Unimak Island.

JOB/ACTIVITY 2: Adult cow survival.

We captured and radiocollared 19 10-month-old MCH females to supplement our sample for estimating annual survival.

JOB/ACTIVITY 3: Evaluate growth and survival of male caribou.

We estimated seasonal and annual survival rates of male caribou during 2012. We radiocollared 9 MCH bull caribou during April 2013, which will supplement our sample of bulls for evaluating annual survival. We analyzed morphological measurements to determine annual change in body mass, jaw length, and metatarsus length of bull caribou.

JOB/ACTIVITY 4: Report findings in appropriate scientific and popular venues.

We presented findings at ADFG regional meetings and Alaska Board of Game meetings, to the interagency Mulchatna Caribou Herd Working Group, and through informal public contacts.

IV. SIGNIFICANT DEVIATIONS AND/OR ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD

V. PUBLICATIONS

VI. RECOMMENDATIONS FOR THIS PROJECT

Continue as planned.

Prepared by: Nick Demma

Date: 26 August 2013