

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

Grant Number: AKW-4 Wildlife Restoration FY2015

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 2015

PRINCIPAL INVESTIGATOR: Nick Demma

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 accomplished our objective of monitoring adult females during the calving period to estimate age-specific calf production. We evaluated summer calf survival and fall calf recruitment by conducting sex/age composition surveys during October.

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 caribou herd (MCH). We have estimated seasonal and annual survival of bull caribou for several calf cohorts from 2006 to 2014.

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 determined pregnancy status of 38 known-age radiocollared cows \geq 2yo during 2015 to estimate age-specific calf production in MCH. We evaluated summer MCH calf survival and fall calf recruitment by conducting fall age/sex composition surveys. Fall 2014 MCH calf:cow ratio was 30 calves:100 cows, indicating moderate summer calf survival and fall recruitment.

JOB/ACTIVITY 2: Adult cow survival.

We captured and radiocollared 15 short-yearling MCH females and 12 adult females during April 2015 to augment our sample for estimating annual female survival.

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

We radiocollared 6 MCH adult bull caribou during April 2015, to 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, the February 2015 Alaska Board of Game meeting, to the interagency Mulchatna Caribou Herd Working Group, and through informal public contacts. We gave a presentation summarizing these findings to the general public during a Wildlife Wednesday seminar in December 2014.

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

none

V. PUBLICATIONS

none

VI. RECOMMENDATIONS FOR THIS PROJECT

Continue as planned.

Prepared by: Nick Demma

Date: 28 August 2015