

**FEDERAL AID ANNUAL RESEARCH  
PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME  
DIVISION OF WILDLIFE CONSERVATION  
PO Box 115526  
Juneau, AK 99811-5526

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

**GRANT NUMBER:** W-33

**SEGMENT NUMBER:** 10

**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

**REPORTING PERIOD:** 1 July 2011 to 30 June 2012

**REPORT DUE DATE:** 1 September 2012

**PRINCIPAL INVESTIGATOR:** Nick Demma

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

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**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 conducting studies of adult female productivity, calf survival and causes of neonatal calf mortality in the Mulchatna caribou herd for 2012 calving periods.

OBJECTIVE 2: Evaluate survival of female caribou.  
We have made significant progress compiling and summarizing the existing cow telemetry database for the Mulchatna caribou herd. We estimated annual survival of adult cows through 2011.

OBJECTIVE 3: Evaluate survival and growth of male caribou.  
We continue to make progress compiling and summarizing survival and growth of male caribou in the Mulchatna herd. We have estimated seasonal and annual survival of bull caribou for several calf cohorts 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 agency regional meetings, public Board of Game meetings, and professional scientific symposiums.

**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 118 newborn calves during the 2012 calving period to characterize survival and determine cause of mortality during the first month. We determined pregnancy rates of radio-collared cows  $\geq 2$ yo during 2012.

JOB/ACTIVITY 2: Adult cow survival.

We compiled and summarized the existing telemetry database to estimate annual survival of adult cows during 2011.

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

We estimated seasonal and annual survival rates of male caribou during 2011. We continue to record video of surviving radiocollared bull caribou during fall to evaluate antler development. We compiled and summarized 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, Alaska Board of Game meetings, and the Southwest Alaska Science Symposium.

**V. PUBLICATIONS**

None.

**VI. RECOMMENDATIONS FOR THIS PROJECT**

Continue as planned.

**Prepared by:** Nick Demma

**Date:** 28 August 2012