

# 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:** 9

**PROJECT NUMBER:** 3.50

**PROJECT TITLE:** Analysis and summary of data from the Fortymile caribou range

**PROJECT DURATION:** 1 July 2008–30 June 2012

**REPORT DUE DATE:** 1 September 2011

**PARTNER:** ?

**PRINCIPAL INVESTIGATOR:** Rodney D. Boertje, ADF&G

**COOPERATORS:** Jim Herriges, Bureau of Land Management; John Burch, U.S. National Park Service; Layne Adams, U.S. Geological Service

**WORK LOCATION:** Fairbanks

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

**OBJECTIVE:** Compile, analyze, and summarize data from 3 prior 5-year projects that focused on the Fortymile caribou herd and associated wolves, moose, and sheep.

*JOB/ACTIVITY 1: Literature review.*

We continued weekly literature reviews using web-based search engines through ARLIS.

*JOB/ACTIVITY 2: Write reports and publications.*

Work was expanded on a manuscript currently entitled “Increasing Fortymile caribou numbers, declining nutrition, and expanding range: When to manage for a stable herd?” The operating budget was spent to supplement Fortymile herd parturition surveys in May 2011. Last year, work focused on summarizing range use of the Fortymile herd.

After 2 consecutive years of low parturition rates, we observed improved rates this year to normal levels for the Fortymile herd. Rates in May 2011 indicate moderate nutritional status relative to other herds in Alaska: 2 of 3 caribou 36 months of age were parturient, as were 5 of 7 caribou 48 months of age, and 34 (85%) of 40 caribou  $\geq$ 48 months of age.

### III. PUBLICATIONS

We are working toward publishing the draft manuscript as Wildlife Technical Bulletin 14 of the Alaska Department of Fish and Game numbered series.

#### **IV. RECOMMENDATIONS FOR THIS PROJECT**

Finish summarizing the history of Fortymile herd size, relative nutritional status, and distribution. Provide a nutrition-related signal to when herd size should be stabilized. Ideally, managers would implement elevated harvests to stabilize herd size before caribou overpopulate the range and decline in the absence of elevated harvests.

Subsequently, begin summarizing the effect of sterilizing and translocating wolves on wolves, caribou, moose, and Dall sheep.

**PREPARED BY:** Rodney D. Boertje

**DATE:** 1 August 2011