

**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:** 3.50

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

**PROJECT DURATION:** 1 July 2008–30 June 2013

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

**REPORT DUE DATE:** 1 September 2012

**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**

**JOB/ACTIVITY 1:** Literature review.

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

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

We completed a Wildlife Technical Bulletin that included 17 years of data on Fortymile caribou herd numbers, birth rates, calf weights, calf:cow ratios, movements, ranges, and densities. We summarized all recent data, as well as data from 3 prior projects on the Fortymile herd (projects 3.38, 3.43, and 3.48). We also summarized historical Fortymile caribou data and comparative data from other Alaska caribou herds. Our primary contribution was in providing a nutrition-related cautionary signal to inform managers as to when the increasing Fortymile herd should be stabilized through increased harvest. The rationale was to avoid an eventual strong decline in herd numbers induced by unsustainable high density and low nutritional status.

The operating budget was largely spent on attending the 13<sup>th</sup> International Arctic Ungulate Conference in Yellowknife, Northwest Territories, Canada during 22–26 August 2011. The principal investigator spoke on Alaska caribou status and management during the plenary and closing sessions. Also, while chairing a session on predator and prey relationships, the principal investigator presented a PowerPoint® presentation on managing moose-caribou-wolf-bear systems in Alaska.

### **III. PUBLICATIONS**

BOERTJE, R. D., C. L. GARDNER, K. A. KELLIE, AND B. D. TARAS. 2012. Fortymile caribou herd: Increasing numbers, declining nutrition, and expanding range. Alaska Department of Fish and Game, Wildlife Technical Bulletin 14, ADF&G/DWC/WTB 2012-14, Juneau, Alaska.

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

Begin summarizing the effect of sterilizing and translocating Fortymile wolves during 1997–2001 on wolves, caribou, moose, and Dall sheep.

**PREPARED BY:** Rodney D. Boertje

**DATE:** 4 August 2012