

FEDERAL AID ANNUAL RESEARCH PERFORMANCE REPORT

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 115526
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PROJECT TITLE: Analysis and summary of data from the Fortymile caribou range

PRINCIPAL INVESTIGATOR: Rodney D. Boertje

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

FEDERAL AID GRANT PROGRAM: Wildlife Restoration

GRANT AND SEGMENT NO. W-33-7

PROJECT NO. 3.50

WORK LOCATION: Game Management Unit 20A

STATE: Alaska

PERIOD: 1 July 2008 – 30 June 2009

I. PROGRESS ON PROJECT OBJECTIVES SINCE PROJECT INCEPTION

FY09 was year one of the project.

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

OBJECTIVE 1: Conduct literature review and review existing data on (1) caribou biology and ecology; (2) indices to nutritional status of ungulates; (3) models of ungulate population dynamics; (4) predator-prey ratios in relation to population dynamics of moose, caribou, sheep, wolves, and grizzly bears; (5) predator/prey relationships in multi-prey, multi-predator systems; and (6) population and harvest data on moose, caribou, sheep, wolves, and bears in Unit 20A.

I routinely reviewed new abstracts using a weekly Thomson Internet bibliographic service (ISI Discovery Agent). Desired references were retrieved through ARLIS or the UAF library. I estimated that 25 person-days were spent on this job during this reporting period.

OBJECTIVE 2: Determine response among wolves and ungulates to experimental wolf sterilization and translocation.

Wolf numbers were reduced by translocation and sterilization from November 1997 to April 2000. Data on moose surveys in and adjacent to the past wolf control area were analyzed during this reporting period with assistance from our biometrician, Brain Taras. Caribou, sheep, and wolf population data have not yet been analyzed. Locations of radiocollared wolves since 1992 were entered into suitable databases during this reporting period. These data will be used to show the changes in distribution of packs and

territory size prior to versus after treatment of wolf packs. Treatment reduced 15 wolf packs to 15 pairs of dominant sterile wolves.

OBJECTIVE 3: Evaluate the feasibility of determining trend of the Fortymile caribou herd using conventional indices.

The Fortymile Herd was photographed and layout of photos and counting has begun. No additional progress was made on this objective, in part, because the principal investigator was busy with other aspects of Projects 3.50 and 1.65.

OBJECTIVE 4: Evaluate managing for elevated yield of the Fortymile caribou herd and related herd demography.

No progress was made on this objective, in part, because the principal investigator was busy with other aspects of Projects 3.50 and 1.65.

OBJECTIVE 5: Determine the seasonal ranges of the Fortymile caribou herd, 1992-2008.

The principal investigator compiled maps of annual and seasonal distribution of the Fortymile herd since 1992 and gained assistance entering the data into suitable mapping software. Summarizing these data will occur this winter.

OBJECTIVE 6: Publish papers on 2-5.

No final analysis of data was completed during this reporting period, so papers could not be written.

III. ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD

None

IV. PUBLICATION

None

V. RECOMMENDATIONS FOR THIS PROJECT

A biometrician should be assigned analysis of the associated data.

VI. APPENDIX

None

Project No. 3.50 – Analysis/publication of 40-mile caribou data
FY09 Annual Performance Report

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APPROVAL DATE: _____