

**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: 3.49

PROJECT TITLE: Development of methods to assess effects of oil field infrastructure on caribou movements, growth, and survival

PROJECT DURATION: 1 July 2006–30 June 2012

REPORT DUE DATE: 1 September 2011

PRINCIPAL INVESTIGATOR: Stephen M. Arthur, ADF&G

COOPERATORS: U.S. Bureau of Land Management; J. Horne, E. O. Garton, K. Nicholson, University of Idaho

WORK LOCATION: Units 26B, 24A, and 25A; northeast Alaska

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

JOB/ACTIVITY 5a: Develop models of caribou movements.

Accomplishments: An agreement was established with scientists at the University of Idaho to develop models needed to analyze spatially correlated data on caribou movements.

Working with scientists at the University of Idaho, a database was prepared containing locations of caribou determined by GPS collars. Other data sets were obtained, including digital maps of North Slope oil field infrastructure and vegetation cover types. Sources for weather data were investigated.

JOB/ACTIVITY 8a: Prepare annual report, travel to meetings/conferences.

Accomplishments: Two meetings were held with University of Idaho researchers: Steve Arthur traveled to Moscow, Idaho in February and the 3 Idaho scientists traveled to Fairbanks and the North Slope study area during June 2011.

A meeting was held in Moscow, Idaho in February to discuss the project's main goals and to develop an operating plan. Additional meetings were held in Fairbanks in June, and the team traveled to the North Slope to become familiar with the study area and characteristics of the oil field and local habitat types.

PREPARED BY: Stephen M. Arthur

DATE: 2 August 2011