

# FEDERAL AID ANNUAL RESEARCH PERFORMANCE REPORT

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

**PROJECT TITLE:** Demographics and spatial ecology of Dall sheep in the central Brooks Range

**PRINCIPAL INVESTIGATOR:** Stephen M. Arthur

**COOPERATORS:** U.S. Bureau of Land Management, National Fish and Wildlife Foundation

**FEDERAL AID GRANT PROGRAM:** Wildlife Restoration

**GRANT AND SEGMENT NO.** W-33-7

**PROJECT NO.** 6.15

**WORK LOCATION:** Central Brooks Range, Unit 24A

**STATE:** Alaska

**PERIOD:** 1 July 2008 – 30 June 2009

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## I. PROGRESS ON PROJECT OBJECTIVES SINCE PROJECT INCEPTION

This is the first year for Project 6.15.

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

JOB/ACTIVITY 1A: Capture 20 Dall sheep ewes and equip with GPS collars.

Twenty adult ewes were captured by net-gunning and equipped with GPS-radiocollars during March 2009.

JOB/ACTIVITY 1B: Analyze GPS data to investigate distributions and movements.

GPS data from collared ewes were relayed by satellite uplink and entered into a database for future analysis.

JOB/ACTIVITY 2A: Monitor collared ewes during May to detect births.

Birth rates were not estimated due to logistical difficulties (primarily weather) that precluded flights during the latter half of the lambing period. However, sufficient flights were conducted to estimate that the lambing period began approximately 18 May and likely peaked during 22–25 May.

JOB/ACTIVITY 3A: Radiocollar 20 lambs/year.

Twenty lambs were captured during 20–22 May. Lambs were equipped with expandable, breakaway VHF radiocollars.

JOB/ACTIVITY 3B: Locate lambs by aerial radiotracking to estimate survival.

Lambs were monitored weekly during May and June to estimate survival. Three lambs died during late May, and survival through June was 85%.

JOB/ACTIVITY 3C: Investigate mortalities to determine likely causes.

Three instances of lamb mortality were investigated: causes of death were drowning, eagle predation, and wolverine predation.

JOB/ACTIVITY 4A: Prepare annual and final reports.

Data on sheep movements and survival were entered into databases. An annual performance report was prepared.

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

None.

**IV. PUBLICATIONS**

None.

**V. RECOMMENDATIONS FOR THIS PROJECT**

None.

**VI. APPENDIX**

None.

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APPROVAL DATE: \_\_\_\_\_