

**Wildlife Restoration OPERATING GRANT
FINAL 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: AKW-23 FY18

PROJECT NUMBER: 1.76

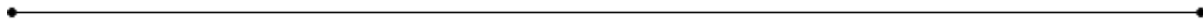
PROJECT TITLE: Moose literature review, project design, and data analysis

PERIOD OF PERFORMANCE: July 1, 2017 to June 30, 2018

REPORT DUE DATE: September 1, 2018

PRINCIPAL INVESTIGATOR: Graham G. Frye

COOPERATORS: NA



I. PROGRESS ON PROJECT OBJECTIVES DURING PERIOD OF PERFORMANCE

OBJECTIVE 1: Literature review and identifying research needs.

JOB/ACTIVITY 1A: Conduct a thorough review of the scientific literature pertaining to moose biology and harvest management in Alaska.

ACCOMPLISHMENTS: A review of the scientific literature pertaining to moose biology and harvest management in Alaska is ongoing. Key publications and reports have been obtained and either have been or are currently being reviewed.

Job/Activity 1b: Identify information gaps and research needs via Job/Activity 1a and discussion with ADF&G management biologists.

ACCOMPLISHMENTS: Discussions with managers about research needs have been conducted regularly during FY2018 and are ongoing.

OBJECTIVE 2: Analyze existing ADF&G moose data sets in collaboration with managers and other researchers.

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Job/Activity 2a: Analyze existing ADF&G moose data sets in order to maximize the information gained from previous and ongoing moose research and management efforts.

ACCOMPLISHMENTS: Analyses of historic moose reproduction and survival data from GMU 20A were conducted during FY2018.

Job/Activity 2b: Collaborate with other ADF&G managers and researchers to produce reports and/or scientific papers with results from Job/Activity 2b.

ACCOMPLISHMENTS: Collaboration with Rodney Boertje (former ADF&G research biologist) led to the preparation and submission of a manuscript on age-specific reproductive metrics in nutritionally stressed moose during FY2018 (See FY18 interim report for federal aid project 1.65).

OBJECTIVE 3: Develop proposals for new research based on needs identified in Objective 1 and results from Objective 2.

ACCOMPLISHMENTS: A proposal was developed to investigate the feasibility of Close-Kin Mark-Recapture for estimation of moose abundance and vital rates in Alaska. The project was approved for funding in FY2019.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

To date, literature reviews have been conducted, historic ADF&G moose data have been analyzed, a peer-reviewed manuscript has been submitted, and a new research project has been developed. Additional literature review, data analysis, and manuscript preparation will continue into FY2019.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

NA

IV. PUBLICATIONS

The current draft of the manuscript prepared during FY2018 is still under review at the Journal of Wildlife Management, so cannot yet be disseminated.

V. RECOMMENDATIONS FOR THIS PROJECT Literature review, data analysis, and manuscript preparation should continue throughout FY2019.

Prepared by: Graham G. Frye

Date: 20 August 2018