Alaska Department of Fish and Game
Wildlife Restoration Grant

**Grant Number:** AKW-30 Habitat Enhancement

**Project Number:** P1.0

**Project Title:** Evaluation of the effects of fire on moose and forage quantity and quality in the southcentral Alaska area of Alphabet Hills

**Period of Performance:** 23 March 2018 – 23 March 2019

**Performance Year:** Year 2 of a 5-year grant

**Report Due Date:** 29 June 2019

**Principal Investigator:** Kimberly King Jones, Wildlife Biologist III

**Cooperators:** William Collins - ADF&G Wildlife Physiologist II
                        Paul Schuette – UAA ACCS Lead Wildlife Ecologist

Authorities: 2 CFR 200.328
             2 CFR 200.301
             50 CFR  80.90

**Progress on Project Objectives During Performance Year**

**Objective 1:** Quantify moose browse quality, quantity, and proportional browse removal within the 2003/2004 Alphabet Hills burn area (Burn Area A; BAA), the planned Alphabet Hills burn area (Burn Area B; BAB), and the unburned area (UA).

**Accomplishments:** Browse quality, quantity, and proportional removal within BAA, BAB, and the UA were sampled early-, mid-, and late- summer, and again in late-winter.

**Objective 2:** Document body condition, productivity, twinning rates, and survival of collared moose that are using BAA and the UA.

**Accomplishments:** 60 GPS collars were deployed on bull and cow moose in the vicinity of BAA and the UA between Fall 2018 and Spring 2019. Two of the collared moose (1 bull, 1 cow) have been lost to wolf predation since deployment. We are currently conducting productivity/ twinning surveys of the collared cows.
OBJECTIVE 3: Monitor spatial habitat selection of moose in BAA and the UA, the immediate response of moose to prescribed fire in BAB, and the moose colonization rate of BAB if it is ignited.

ACCOMPLISHMENTS: No spatial analysis has been accomplished to date. Hourly GPS fixes from collared moose are currently being collected and will be used to evaluate spatial selection and response to a burn in BAB if it occurs.

OBJECTIVE 4: Compare moose densities and composition between BAA and the UA.

ACCOMPLISHMENTS: Fall moose composition surveys were flown in BAA and moose pellet counts were conducted in BAA and the UA to estimate relative moose densities.

OBJECTIVE 5: Model the effects of fire on browse quality; moose nutrition, fitness, and movements; and moose populations.

ACCOMPLISHMENTS: No modeling has been accomplished to date.

OBJECTIVE 6: Evaluate the usefulness of prescribed fire as a tool for habitat enhancement in GMU 13.

ACCOMPLISHMENTS: No analysis of data or evaluation of the usefulness of prescribed fire as a tool for habitat management has been accomplished to date.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE. We are currently in year 2 of this 5-year project. We are still in the data collection phase of the project and do not have any results or findings to report currently.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.
No SDRs or amendments were submitted during this performance year.

IV. PUBLICATIONS
We are still in the data collection phase of the project and do not have any publications associated with this project.

V. RECOMMENDATIONS FOR THIS PROJECT
No changes to the project statement are required at this time.

Prepared by Kimberly King Jones, Wildlife Biologist III
Date: 23 May 2019