

**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: AKW-20 Wildlife Restoration FY2017

SEGMENT NUMBER: 12

PROJECT NUMBER: 1.73 Moose

PROJECT TITLE: Long-term effects of predator reductions on moose abundance, survival, nutrition, and hunting harvest in the Unit 19D East moose management area

PROJECT DURATION: 1 July 2012–30 June 2019

REPORT DUE DATE: 1 September 2017; Resubmitted December 1, 2017

PARTNER: None

PRINCIPAL INVESTIGATOR: Danny Caudill, ADF&G

COOPERATOR: None

WORK LOCATION: Interior, Alaska. Unit 19D East, the upper Kuskokwim River drainage upstream of the Selatna River. Intensive study area (also known as the “Unit 19D moose management area” or “MMA”) comprised of a 2,896 km² area along the Kuskokwim and Takotna rivers within Unit 19D East that immediately surrounds the community of McGrath.

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

JOB/ACTIVITY 1A: Estimate moose numbers and population composition in the Unit 19D East MMA.

Poor snow conditions prevented the GSPE moose survey from being completed in the fall of 2016. The survey has been rescheduled for the fall of 2017.

JOB/ACTIVITY 1B: Determine annual survival rates and primary causes of mortality of moose calves.

We captured 64 moose calves in the spring of 2016 (previous reporting period) and followed those individuals through the end of May 2017. Twenty three calves remained alive and radio tagged at the end of May 2017. The collars began dropping of the animals as planned in May 2017.

JOB/ACTIVITY 1C: Determine condition, survival rates, and causes of mortality of yearling moose.

We captured and weighed 19 female yearling moose in March 2017. Average mass was ~410 lbs.

JOB/ACTIVITY 1D: Determine twinning rates of moose in the MMA.

We conducted twinning surveys during 23–26 May 2017. We observed 32 cows with a single calf and 12 cows with twins.

JOB/ACTIVITY 2: Conduct moose browse surveys.

We conducted a browse survey in March 2017. We are still compiling the data for analysis from this survey.

JOB/ACTIVITY 3: Wolf population estimation.

We conducted a wolf survey 1–3 March 2017. We observed 63 independent wolves and or wolf tracks in or directly adjacent to the 8,314 km² wolf control zone within Unit 19D East.

JOB/ACTIVITY 4a: Bear population estimation.

No capture or survey was planned during the report period.

JOB/ACTIVITY 4b: Estimate black bear harvest rates.

Two radio-marked bears were harvested in the study area during the report period.

JOB/ACTIVITY 5: DNA analysis.

Hair was collected, when present, at calf kill sites. However, the calf mortality study is still ongoing and thus the hair has not yet been submitted for DNA analysis.

JOB/ACTIVITY 6: Literature review, data analysis, report writing, and publication of results.

The principal investigator reviewed the literature and completed reports.

II. SIGNIFICANT DEVIATIONS AND/OR ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD

Due to an unallowable expense on the FY2017, AKW-7 grant report, \$14,747 will be debited to this grant in FY2018, AKW-23.

The moose survey (job/activity 1a) was not accomplished during FY16 because snow conditions were not appropriate.

Additionally, due to an unallowable expense on the FY2017, AKW-7 grant report, \$14,747 will be debited to this grant in FY2018, AKW-23.

III. PUBLICATIONS

None.

IV. RECOMMENDATIONS FOR THIS PROJECT

None.

PREPARED BY: Danny Caudill

DATE: 8/14/2017

Revised by: Brenda Bowers and Lem Butler

Date: December 1, 2017