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-10 Wildlife Restoration FY2016

PROJECT NUMBER: 1.73

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 2018

REPORT DUE DATE: 1 September 2016

PRINCIPAL INVESTIGATOR: Danny Caudill, ADF&G

WORK LOCATION: Interior, Alaska. Unit 19D East

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.

No moose survey was planned during the reporting period. However, a survey was opportunistically accomplished during the reporting period by assisting agency management staff.

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. We have monitored the calves routinely since capture and as of 1 August 2016 calf survival was ~60%. These calves will continue to be monitored through spring of 2017.

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

Capture of yearling moose was not planned during the reporting period.

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

We conducted twinning surveys during 18–24 May 2016. We observed 36 cows with a single calf and 17 cows with twins.

JOB/ACTIVITY 2: Conduct moose browse surveys.

No browse survey was planned or conducted during the reporting period.

JOB/ACTIVITY 3: Wolf population estimation.

The wolf survey was not completed due to poor snow tracking conditions during the planned winter survey period. The survey will be reattempted in the winter of 2017.

JOB/ACTIVITY 4a: Bear population estimation.

We captured and instrumented 7 bears in spring 2016 to maintain a sample size (n = 35 after 2016 captures) of ~25% radiomarked bears in the population. We conducted a mark-resight bear survey in early May 2016. The preliminary model (i.e., null model; intercept only) from this survey estimated 96.51 (SE = 12.34) bears in the study area. A more in-depth analysis (i.e., inclusion of covariates) will be conducted in the next reporting period. In previous (2014) bear survey, the intercept only model appeared to be the most supported model and estimated 113 (SE = 14.9) bears in the study area.

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

No 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

The wolf survey (job/activity 3) was not accomplished during FY16 because snow conditions were not appropriate.

III. PUBLICATIONS

None.

IV. RECOMMENDATIONS FOR THIS PROJECT

None.

PREPARED BY: Danny Caudill

DATE: 27 July 2015