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-29

PROJECT NUMBER: 8.0 Ptarmigan

PROJECT TITLE: Steese and Denali Highway Comparative Rock Ptarmigan Graduate Study

PERIOD OF PERFORMANCE: March 23, 2018 – June 30, 2022

PERFORMANCE YEAR: March 23, 2018 – March 23, 2019; year 1 of a 3-year grant

REPORT DUE DATE: June 29, 2019

PRINCIPAL INVESTIGATOR: Cameron J. Carroll

COOPERATORS: University of Alaska-Fairbanks

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Collect data on adult female survival, nest initiation dates, clutch size and nest success of rock ptarmigan adjacent to the Steese Highway (Unit 25C) and the Denali Highway (Unit 13B) for a comparative study looking at reproductive ecology of these two distinct populations.

ACCOMPLISHMENTS: A total of 93 rock ptarmigan hens were captured and fitted with a radio-transmitter during the 2018 field season (53 at Steese Highway study site and 40 at Denali Highway study site). Field crews successfully collected data on nest location, clutch size, incubation duration, nest success/failure rate, hatch date, bi-weekly chick survival, and mortality rates for all monitored adult hens and chicks at both study sites through 9 August, 2018.

OBJECTIVE 2: Collect data on brood survival to 10 August for rock ptarmigan adjacent to the Steese Highway (Unit 25C) and the Denali Highway (Unit 13B) for a comparative study looking at reproductive ecology of these two distinct populations.

ACCOMPLISHMENTS: Field crews monitored all radio-collared hens that successfully hatched ≥ 1 chick through 9 August, 2018 to collect data on brood survival.

OBJECTIVE 3: Collect data on sex ratios of rock ptarmigan chicks at hatch adjacent to the Steese Highway (Unit 25C) and the Denali Highway (Unit 13B) for a comparative study looking at reproductive ecology of these two distinct populations.

ACCOMPLISHMENTS: Egg shell fragments and non-viable eggs were collected from nest bowls following successful hatch in June 2018 and will be stored until additional samples are collected in 2019 and 2020 at which time all samples will be analyzed to determine sex ratio at hatch.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

None as this is the first year of the project.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

None

IV. PUBLICATIONS

None

V. RECOMMENDATIONS FOR THIS PROJECT

No new recommendations.

Prepared by: Cameron J. Carroll and Richard A. Merizon

Date: