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-7 Intensive Management FY2018

PROJECT NUMBER: 2.0

PROJECT TITLE: Evaluate the Effectiveness of Intensive Management for Moose in Unit 15

PERIOD OF PERFORMANCE: April 1, 2015 – June 30, 2018

PERFORMANCE YEAR: April 1, 2017 – March 31, 2018

REPORT DUE DATE: September 28, 2018

PRINCIPAL INVESTIGATOR: David Saalfeld, Jeff Selinger, and Jason Herreman

COOPERATORS: Cynthia Wardlow

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: **Monitor forage abundance and utilization to evaluate browse abundance and quality and determine habitat capability to develop reasonable IM population objectives**.

ACCOMPLISHMENTS: In 2018, 41 sites were sampled in the spring using the Seaton browse removal method and feces were collected at each site for microhistology/nutrient analysis. Samples of major browse species were also collected at these sights for nutrient analysis. Summer moose fecal samples were collected across Unit 15C for microhistology and nutrient analysis.

OBJECTIVE 2: **Investigate and monitor wolf, black bear and brown bear abundance relative to defined IM objectives**.

ACCOMPLISHMENTS: During February and March 2018, 6 additional wolves were captured and collared in 15C to supplement the 18 wolves collared in 2017. Additionally, 10 flights were completed, which provided estimates of population size and pack dynamics.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

OBJECTIVE 1:

Browse surveys are being conducted to evaluate winter forage availability in Unit 15C to determine if the intensive management objectives are attainable and whether or not the moose population can be maintained at the current population size. Measurement of winter forage availability and utilization in Unit 15C began in spring of 2016 and continued in 2017 and 2018. Protocols follow those established in Paragi et al. (2008) and Seaton et al. (2011). Survey design estimates current annual growth of forage species and the amount removed each year as an index of forage availability.

In 2016, 39 sites were sampled using the Seaton browse removal method and plants were dried to create species mass curves. Feces were collected at each site for microhistology/nutrient analysis.

In 2017, 40 sites were sampled using the Seaton browse removal method, with feces collected at each site for microhistology/nutrient analysis. Additional plants were dried to improve mass curves for species with minimal numbers of plants sampled in 2016 and voucher specimens pressed, dried, and mounted for all major species. During summer 2017 a collaborative effort, not under this grant, with the Kenai National Wildlife Refuge, Chugach National Forest, and Kenai Fjords National Park was launched to map and quantify habitat types on the Kenai Peninsula using fine-resolution digital photography and ground truthed vegetation plots. As part of this effort ground truthed plots were classified by dominance class (coniferous forest, broadleaf forest, mixed forest, shrub, herbaceous, non-vascular, or non-vegetated), overstory vegetative composition, understory vegetative composition, and tree cover diameter. Samples of major forage species were collected for nutritional analysis and moose fecal samples were collected for microhistology and nutrient analysis at sites visited in Unit 15C.

In 2018, 41 sites were sampled in the spring using the Seaton browse removal method and feces were collected at each site for microhistology/nutrient analysis. Samples of major browse species were also collected at these sights for nutrient analysis. Summer moose fecal samples were collected across Unit 15C for microhistology and nutrient analysis.

OBJECTIVE 2:

During February and March 2018, 6 additional wolves were captured and collared in Unit 15C to supplement the 18 wolves collared in 2017. Preliminary data from collared individuals suggest ≥ 5 packs within the Unit 15C IM area. Additionally, preliminary data based on flights (i.e., data based on 10 complete flights where at least some members of each collared pack were observed) estimates an average minimum count of 31 wolves (range 23 – 36 individuals) within the Unit 15C IM area. Bear abundance studies were not completed during FY2018 and are not currently planned for future years.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

USFWS approved an amendment to decrease the grant duration, ending the grant on June 30, 2018. After extensive investigation by DWC and USFWS staff into performance

reporting and financial accounting of the 5-year AKW-7 Intensive Management award for projects Caribou 1.0, Moose 2.0, and Deer 3.0, it was determined it is in the State's best interest to cease work on and terminate the entire AKW-7 award, first Caribou on Dec. 1, 2017, and then moose and deer projects on June 30, 2018.

IV. PUBLICATIONS

Annual Report to the Alaska Board of Game on Intensive Management for Moose with Wolf Predation Control in Game Management Unit 15A. February 2018.

V. RECOMMENDATIONS FOR THIS PROJECT

Project closed

Prepared by: David Saalfeld
Date: 9/18/2018