

**Wildlife Restoration MULTI-YEAR GRANT
INTERIM 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-R-7-2019

PROJECT NUMBER: P1.0

PROJECT TITLE: Southcentral Alaska Wolf Population Dynamics

PERIOD OF PERFORMANCE: December 1, 2018 – June 30, 2023

PERFORMANCE YEAR: October 1, 2020 – September 30, 2021

REPORT DUE DATE: Submit to Coordinator December 06, 2021; due to FAC December 29, 2021

PRINCIPAL INVESTIGATOR: David Saalfeld

COOPERATORS: Jeff Selinger

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: During 2019-2023, document numbers of packs, pack size, and pack dynamics for wolves in southcentral Alaska (i.e., GMUs 6, 7, 14C, and 15).

ACCOMPLISHMENTS: Prior to January 1, 2019, pre-award money was used to purchase 25 Telonics iridium collar (TGW-4570-4) with a remote drop-off (CR-2A). During March 22 – 25, 2019, helicopter captures of wolves were conducted on the Kenai Peninsula (GMU 7 and 15) resulting in the capture/collaring of 13 wolves. However, because the grant was not approved until late December 2018, we were not able to schedule additional helicopter captures prior to snow melting and due to lack of pilot availability. In addition to collaring 13 wolves in 2019, 10 fixed-winged surveys were conducted to document pack size and dynamics.

During February 14 – 16 and March 10 – 12, 2020, helicopter captures were conducted on the Kenai Peninsula (GMU 7 and 15) and Anchorage bowl (GMU 14C) resulting in the capture/collaring of 20 wolves. Additionally, during the reporting period, 10 fixed-winged surveys were conducted to document pack size and dynamics. These surveys documented ~8 collared packs on the Kenai Peninsula and 1 collared pack in GMU 14C. Although captures and

survey flights were successful during the reporting period, 9 days of helicopter time were lost due to equipment issues, weather, and Covid-19 concerns.

During February 14 – 17, March 7 – 8, and March 13 – 16, 2021, helicopter captures were conducted on the Kenai Peninsula (GMU 7 and 15) and Anchorage bowl (GMU 14C) resulting in the capture/collaring of 35 wolves. In addition, 3 wolves were captured in GMU 14C using ground trapping techniques. Favorable snow conditions this winter increased our capture efficiency resulting in collaring more wolves than anticipated (i.e., objective was to collar ≤ 25 wolves per year). During the reporting period, 10 fixed-winged surveys were conducted to document pack size and dynamics. These surveys documented ~13 collared packs on the Kenai Peninsula and 3 collared pack in GMU 14C.

OBJECTIVE 2: After collars are recovered in 2022/2023, estimate home range, movements, and habitat selection of wolves in southcentral Alaska.

ACCOMPLISHMENTS: Although most collars are not scheduled to be released until 2023, there were 2 mortalities in 2019, 7 in 2020, and 16 in 2021, where we were able to recover the collars. Unfortunately, the collars could not be downloaded at Alaska Department of Fish and Game and have been sent to Telonics to download the data. As more collars are recovered, it is likely we can produce preliminary estimates of home range and movements prior to 2023.

However, due to Covid-19 there has been a delay in receiving full datasets from recovered collars. To date, we have only received a subset of the telemetry data. Preliminary data from these collars indicate home ranges on the Kenai Peninsula range from 190 – 765 km². There have also been several long-distance movements, where wolves have traveled > 600 miles from Homer, AK to the Brooks Range, AK.

OBJECTIVE 3: After collars are recovered in 2022/2023, estimate survival rates, dispersal, and diet of wolves in southcentral Alaska.

ACCOMPLISHMENTS: Although this objective cannot be fully completed till the end of this study, we continually monitor collared wolves to document any mortalities. Identifying sources of mortalities aid in estimating survival rates. To date, 2 collared wolves died in 2019, 7 in 2020, and 16 in 2021, 4 were natural mortality and 21 were harvested by trappers or hunters. As we continue to track wolves throughout this study, we will be able to provide more robust survival estimates. Preliminary estimates of mortality rates (i.e., inverse of survival rates) are similar to a previous study conducted on Kenai National Wildlife Refuge in the 1980's (i.e., Current study = 33% vs Previous study = 28%). In addition, we have been monitoring dispersal rates of collared wolves and there has been several long distance movements where wolves have traveled > 600 miles from Homer, AK to the Brooks Range, AK, or from Homer, AK to Denali National Park, AK.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

During the reporting period, 38 wolves comprising ~13 packs were collared on the Kenai Peninsula (GMU 7 and 15) and 3 packs in the Anchorage Bowl (GMU 14C). To date, there have been 25 mortalities, 4 were natural mortalities and 21 were harvested by trappers/hunters. Collared packs have been monitored approximately biweekly when sufficient snow cover was

present. However, due to the increase in collared wolves after our successful 2021 capture season, we plan to increase flight time in 2022 to sufficiently monitor these new packs (i.e., we added 7 additional wolf packs in 2021). Because wolves are difficult to survey from the air without sufficient snow cover, they are only tracked from November – April. During the reporting period, 10 fixed-wing survey flights were conducted with pack size averaging 5.5 animals (pack size ranged from 3 – 14 wolves). To date, we have not calculated any preliminary estimates of abundance due to the limited amount of data available from the packs collared in 2021.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

There were not any significant developments or amendments during this reporting period.

V. RECOMMENDATIONS FOR THIS PROJECT

Based on results from the current reporting period, we will need to increase flight time in 2022 and 2023 to monitor the additional wolves collared during this reporting period.

Prepared by: David Saalfeld

Date: 12/06/2021