Alaska Department of Fish and Game Wildlife Restoration Grant

GRANT NUMBER: F20AF00014 AKW-R-14-2020

PROJECT TITLE: R4 Nelchina Caribou Herd Iridium Collar Deployment

PERIOD OF PERFORMANCE: October 1, 2019 – June 30, 2023

PERFORMANCE YEAR: October 1, 2020 – Sept. 30, 2021; year 2 of a 4-year grant

REPORT DUE DATE: Submit to Coordinator December 24, 2021; due to FAC Dec. 29, 2021

PRINCIPAL INVESTIGATOR: Heidi Hatcher

Authorities: 2 CFR 200.328

2 CFR 200.301 50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Procure 32 Iridium caribou collars by August 2020 and 32 additional Iridium collars by August 2021.

ACCOMPLISHMENTS: 30 additional Iridium caribou collars (for a total of 64 collars for the project) were procured and were received in Glennallen prior to August 2021.

OBJECTIVE 2: Deploy 42 Iridium Satellite collars on Nelchina cows and 22 Iridium satellite collars on Nelchina bulls by November 2021.

ACCOMPLISHMENTS: Iridium Satellite collars were deployed on 21 Nelchina cows in October 2020, 11 bulls and 3 cows in April 2021, and 7 bulls and 13 cows in October 2021. Weather and COVID complications precluded the deployment of the final collars, which will be deployed in October 2022 along with any collars retrieved from dead animals in the field before that date.

OBJECTIVE 3: Remove accessible inactive/mort collars from the field as they accumulate between July 1, 2019 and June 30, 2023.

ACCOMPLISHMENTS: In October 2020, 2 Iridium collars were retrieved for redeployment. 16 additional VHF collars were retrieved to clear airwaves. In April 2021, 1 bull

mortality was investigated through field necropsy and the Iridium collar was retrieved for redeployment. Additional collars will be retrieved in June and October, 2022.

OBJECTIVE 4: Maintain data fees for satellite collars through June 30, 2023.

ACCOMPLISHMENTS: During this reporting period data and activation fees were pre-paid through June 30, 2023 for the 64 collars that have been procured.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

In October 2020, 21 collars were deployed on cow caribou. Also during October 2020, 18 mort radiocollars were retrieved from the field in order to make available additional frequencies for the next Iridium collar order. Bulls and cows were targeted for collar deployment in April 2021, when 13 Iridium collars were deployed. One bull mortality was investigated and the Iridium collar retrieved in late April 2021, and the mortality was determined to be caused by existing factors not related to capture. The next order of collars was completed and collars were prepared for October 2021 deployment, when 20 additional collars were deployed. Remaining collars will be deployed in October 2022. The Iridium collars that are currently on the air are providing invaluable information on the movements and distribution of the herd, some of which have traveled to Dawson, Yukon this winter while other animals remain in Unit 11.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

The last few collars will be deployed in October 2022, as well as any collars retrieved from the field for redeployment.

IV. PUBLICATIONS

Work from this project was highlighted in an online science lecture about the Nelchina herd, which is available on the ADF&G YouTube channel.

V. RECOMMENDATIONS FOR THIS PROJECT Project will continue as scheduled.

Prepared by: Heidi Hatcher

Date: 12/30/2021