

**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-29

PROJECT NUMBER: P3.0

PROJECT TITLE: Cause and rate of neonatal moose calf mortality in Unit 23 Lower Kobuk

PERIOD OF PERFORMANCE: March 23, 2019 to March 23, 2020

PERFORMANCE YEAR: March 23, 2019 to March 23, 2020; year 3 of a 4-year grant

REPORT DUE DATE: Submit to Coordinator May 29, 2020

PRINCIPAL INVESTIGATOR: Warren Hansen

COOPERATORS: None

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Evaluate mortality rates and cause of mortality in neonatal moose

ACCOMPLISHMENTS: In 2019 we purchased an additional 70 radio transmitters. We took these transmitters to the Noorvik public school and worked with students ages 5th grade – 12th grade to build the radio collars and inform them on the objectives of the study. We deployed all these collars between May 28 and June 1, 2019. We redeployed an additional 4 collars to total 74 collar deployments. The monitoring schedule followed the same outline as 2018. The mortality rate and cause of mortality was also very similar to 2018. The survival rate as of May 2020 is currently 40% compared to 38% at that time in 2019. Of all natural caused mortalities, 35 were attributed to bear and 2 are attributed to wolf in 2019. In 2018 all predator related mortalities were attributed to bear.

For the 2020 field season we have acquired an additional 70 transmitters that we intend to deploy at the end of May. Thereafter, monitoring will continue once per month until failure of the collar. This is expected to occur after about one year. All 2019 collars will be continually monitored until failure along with additional 2020 collars that will be deployed in June, 2020.

Collar deployments and monitoring is expected to occur using the same methods as the previous two years.

All goals have been met for capture and monitoring for mortality on this project. No future changes will be made to this project.

This project has been maintained within the outlined budget. It is too early in the project to make any management recommendations without multiple years of data.

OBJECTIVE 2: Monitor the population for signs of nutritional stress.

ACCOMPLISHMENTS: During the capture events we weighed all the calves and noted if the calves were singletons or twins. Average weight of singleton calves was 19.1 kg and 21.3 kg while twins weighed an average of 16.8 kg and 19.6 kg for 2018 and 2019 respectively. The observed twinning rate was 36% and 33% for 2018 and 2019. This data met our project objectives for monitoring signs of nutritional stress.

All goals have been met for the monitoring of nutritional stress for the first two years of this project. With multiple years of data collected we will begin to evaluate factors that influence calf weights and twinning rates.

This project has been maintained within the outlined budget. It is too early in the project to make any management recommendations until the third year of data is collected.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

After two years of this project we have identified a survival rate of 38% and 40% after 48 weeks. When compared to other studies of neonatal mortality of low moose density populations across the state of Alaska this survival rate appears to fall within the range of other studies (Bertram and Vivion, 2002). Neonatal calf weights and twinning rates initially appear to be reflecting a nutritionally healthy population and are in concordance with previously estimated browse removal rates.

SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

A significant development to emerge from this project has been the public outreach effort. We have made a considerable effort to inform the communities within the study area about the project and when captures will be taking place. We have coordinated with the US Fish and Wildlife Service to relay capture dates to community members during their visits to villages in the study area and include an announcement in their annual newsletter. We printed a flier that indicated when and how we would be capturing moose calves in the study area and sent them to Kotzebue, Noorvik and Kiana for distribution. We also posted the flier to our Fish and Game Facebook and “boosted” it so that it would be advertised on the Facebook pages of all area residents. Recently, ADF&G colleagues traveled to Noorvik and presented information on the 2018 spring capture effort and currently observed mortality rates. This effort to inform the communities about our capture efforts has appeared to be effective at getting the message out. To date we have

not received any negative feedback regarding the project goals, aircraft use or capturing and handling moose.

We will continue this outreach effort throughout the life of this project. No additional significant developments, changes or amendments have been or will be made to this project to date. The project will continue as planned for the following two years.

IV. PUBLICATIONS

No publications have been made from this project.

V. RECOMMENDATIONS FOR THIS PROJECT

This project is projected to continue for two years without any significant changes.

Prepared by: Warren Hansen

Date: 5/4/2020