

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-B-R4-2020 Amendment #1

PROJECT NUMBER: 3.0

PROJECT TITLE: Region IV Caribou Management S&I program: The Status of Alaska Caribou and Factors Influencing Their Populations in Central/Southwest Alaska

PERIOD OF PERFORMANCE: July 1, 2020 through June 30, 2021

PERFORMANCE YEAR: FY21

REPORT DUE DATE: September 2021

PRINCIPAL INVESTIGATOR: Todd A. Rinaldi

COOPERATORS: Dave Crowley, Heidi Hatcher, Tim Peltier & Bryan Reiley

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Population Size, Status, and Trend. Assess the size and status of each population to determine the five-year trend.

ACCOMPLISHMENTS:

Northern Alaska Peninsula Herd (Unit 9)

- Conduct surveys via helicopter during October to assess fall composition.

Poor weather conditions for flying and observing caribou made for a challenging survey over the course of 2 days using two planes and observers and helicopter. Thirty-six of 60 collared cow caribou were located and 1,971 were classified (the highest since 2015).

Southern Alaska Peninsula Herd (Unit 9)

- Conduct surveys via helicopter during October to assess fall composition.

The SAP fall assessment occurred over two days in November two planes and observers and helicopter. One thousand four hundred and ninety-six caribou were classified over a weather limited survey area which is the highest count since 1989.

Unimak Herd (Unit 10)

- Conduct surveys via helicopter during October to assess fall composition.

Most of Unimak Island was inaccessible during this survey period due to poor weather. Two hundred and fifty-seven caribou were classified. Of note was a rather high bull-to-cow ratio of 78 which warrants increased harvest.

Mulchatna Herd (Unit 9, 17, 18 and 19)

- Conduct aerial photo census to estimate herd size.

A photo survey was completed this performance period to obtain a Rigest estimate of the MCH population. Sixty-seven of the 69 collared animals were located over a 7-day period that comprised both pre-survey and survey dates. To accomplish this goal, we continue to conduct more intensive pre-survey flights to ensure that the MCH were aggregating appropriately for a photo survey attempt and to obtain a more precise and accurate population estimates. Total fixed-wing flight time was 104 hours,

- Conduct sex and age compositions surveys via helicopter during spring to assess parturition, and again in October to assess fall composition.

A fall composition survey of the MCH was conducted on 10–12 October 2019. Three thousand four hundred and ninety-six caribou were classified (~25% of the population). The bull-to-cow ratio exceeds our objective again however the calf-to-cow ratio was below our objective of 30:100 following the one of the highest ratios observed in 2018. The eastern portion continues to exceed objectives. In looking at the historical data, there is quite a bit of fluctuation year to year in this metric which is typical of other interior and southwest Alaska caribou herds. Fall flights required approximately 20 hours of fixed-wing time and 15 hours of helicopter flight time.

Due to staffing and pandemic related issues, no spring surveys were completed this reporting period.

- Conduct captures during April to provide a collared sample of caribou for surveys and survival studies.

Due to staffing and pandemic related issues, no spring completed were completed this reporting period.

Nelchina Herd (Units 11, 14A, 14B, & 13)

- Conduct aerial photo census/survey to estimate herd size.

Weather precluded a summer population assessment however the modeled population was calculated at 44,500 which is above the upper end of the objective. The final post-hunt population estimate in October was determined to be 34,520.

- Conduct sex and age compositions surveys via helicopter during mid-summer to assess calving and again in October to assess fall composition.

On October 7th, the fall composition survey was conducted in Units 11 & 13. A total of 4,036 animals were categorized during the survey. Sex and age ratios remain healthy and above objective. Five hours of fixed-wing and 7 hours of helicopter flight time were required to complete this activity. Summer composition surveys were precluded by weather.

In Unit 14A&B composition surveys only occur in fall. Three hundred and eighty-one caribou were classified. Bull and calf-to-cow ratios remain high. Six and a half hours of fixed-wing and 5 hours of helicopter flight time were required to complete this activity.

OBJECTIVE 2: Mortality/Harvest Monitoring and Regulations. Assess the number of caribou harvested by hunters and other sources of mortality that might have an impact on each population.

Southern Alaska Peninsula Herd (Unit 9)

- Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

In Unit 9D 64 caribou were harvested by 96 hunters. This harvest is below objectives.

Northern Alaska Peninsula Herd (Unit 9)

- Monitor hunting and other mortality factors through harvest reporting, public contacts and field observations.

In Units 9C&E, 57 caribou were harvested by 117 Tier II subsistence permits. This harvest is below objective.

Unimak Herd (Unit 10)

- Monitor hunting and other mortality factors through harvest reporting, public contacts, and field observations.

Four permits were issued by the Federal Subsistence Board. The state season remains closed due to population concerns but there is a BOG proposal to change this.

Mulchatna Herd (Unit 9, 17, 18 and 19)

- Monitor hunting and other mortality factors through harvest reporting, public contacts, and field observations.

Region IV staff were unable to visit local villages in July to issue caribou permits during this reporting period due to pandemic travel restrictions. Seven hundred and twenty-nine permits were issued for state and federal hunts yielding 55 reported caribou harvested. A considerable number of hunt reports remain unreturned. This hunt was open only for the fall hunt period due to conservation concerns.

- Track radio-collared individuals periodically to assess survival and mortality rates

Staffing precluded periodic flying of radio-collared caribou prior to February. Information was monitored through research flights and at least 8 flights radio-tracking flights leading up to the 2021 photo census in late June. Most of the collars in the MCH are satellite collars with VHF capabilities and will not require tracking for the air due to the digital delivery of locations via satellite.

Nelchina Herd (Units 11, 13 14A, & 14B)

- Monitor hunting and other mortality factors through harvest reporting, public contacts, and field observations.

3,751 caribou were harvested by 6,450 reported hunters. No state harvest occurred in Unit 11. This year staff travelled to the Denali Highway and conducted hunter interviews in September.

Under draw permit, 62 caribou were harvested in Units 14A&B by 108 hunters (200 permits).

- Track radio-collared individuals periodically to assess survival and mortality rates.

Caribou collared with satellite/GPS technology are monitored regularly through desktop monitoring and auto-generated collar report received monthly. Caribou with

VHF collars were monitored monthly from October through June via fixed-wing aircraft (40 hours)

OBJECTIVE 3: Habitat Enhancement /Assessment. Assess the nutritional status of the caribou population directly or indirectly where it is feasible.

ACCOMPLISHMENTS:

Nelchina Herd (Units 11, 14A, 14B, & 13)

- Capture approximately 20 calves in October to collect weight and morphometric data to aid in conducting population assessments and deploy radio collars to monitor movements.

Over the course of 4 days in October, 18 caribou calves were captured, assessed, and radiocollared requiring a combined total of 10 hours of helicopter and 18 hours fixed-wing time.

- Monitor general movement of caribou to and from seasonal ranges through reconnaissance flights using both very high frequency (vhf) and satellite telemetry.

Collared calves are monitored regularly through monthly tracking flights from October through June via fixed-wing aircraft (~55 hours) to monitor movement and survival.

- Conduct parturition surveys during peak calving to determine pregnancy rates of age specific collared female caribou.

A parturition survey was completed over three days in early June 2021 requiring 28 of fixed-wing flight time to track 54 collared adult cows.

Mulchatna Herd (Unit 9, 17, 18 and 19)

- Capture approximately 20 calves in April each year to collect weight and morphometric data to aid in conducting population condition assessments and deploy radio collars to monitor movements.

Due to staffing and pandemic related issues, no spring captures were completed by management staff this reporting period

- Monitor general movement of caribou to and from seasonal ranges through reconnaissance flights using both very high frequency (vhf) and satellite telemetry.

Caribou collared with satellite/GPS technology are monitored regularly through desktop monitoring and auto-generated collar reports received monthly. Caribou with VHF collars were monitored monthly from October through June via fixed-wing aircraft (~55 hours) to monitor movement and survival.

- Conduct parturition surveys during peak calving to determine pregnancy rates of age specific collared female caribou, as well as age at first reproduction.

Parturition surveys were completed over the course of 3 days in May. Eighty-four cows were located of which 78% were pregnant. The survey required of approximately 45.5 hours of fixed-wing aircraft flight time.

Unimak Herd (Unit 10)

- Capture 15 cows in spring to deploy radio collars and collect morphometric and health data on Unimak Island.

Caribou capture on Unimak did take place due weather and staffing constraints. Fifteen collars are available to deploy next performance period.

OBJECTIVE 4: Caribou Management with Public Participation and Outreach.

Manage each caribou population with an emphasis on engaging the public through public meetings, working groups, educational materials, and incentive

ACCOMPLISHMENTS:

- Provide information to state and federal regulatory processes on caribou management.

All information collected is used to inform state and federal regulatory processes. Outside of common communication with our federal counterparts there were 5 federal proposals and special action addressing caribou during this reporting period. Staff compiled and presented biological, population, and hunting information at 12 Advisory Committee meetings, 6 Regional Advisory Council meetings, Subsistence Resource Commission meetings, 2 Federal Subsistence Board meetings and native corporations. There are 18 state Board of Game proposals addressing caribou in Region IV during this reporting period.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

We have met most of our objectives during FY21 however weather events and poor sampling conditions continue to present obstacles to conducting robust surveys across the

region. Logistical issues related to the COVID pandemic did affect our ability to complete some activities.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

None during this reporting period.

IV. PUBLICATIONS

Alaska Department of Fish and Game. 2021. Annual report to the Alaska Board of Game on intensive management for caribou with wolf predation control in Game Management Units 9B, 17B&C, and 19A&B, the Mulchatna caribou herd. Division of Wildlife Conservation, Juneau.

V. RECOMMENDATIONS FOR THIS PROJECT

We recommend continued funding for this project in order to effectively manage caribou populations in Central/southwest Alaska.

Prepared by: Todd A. Rinaldi, Regional Management Coordinator

Date: 8/18/2021