

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-R3-2020

PROJECT NUMBER: – P1.0

PROJECT TITLE: Alaska's Region III Moose S&I program: Moose Populations and Factors Influencing Their Status in Interior and Northeast Alaska

PERIOD OF PERFORMANCE: July 1, 2019 - June 30, 2021

PERFORMANCE YEAR: July 1, 2019 - June 30, 2020; year 1 of a 2-year grant

REPORT DUE DATE: Submit to FAC August 28, 2020

PRINCIPAL INVESTIGATOR: Doreen Parker McNeill

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Conduct 3 investigations by 06-30-2021.

Project statement objectives:

Objective 1: Population Size, Status, and Trend. Assess the size and status of each moose population to evaluate the 5-year trend.

1.1: Collect anecdotal information about area moose populations through contacts with hunters and viewers.

ACCOMPLISHMENTS:

- We collected anecdotal information about Region III moose populations through contacts with hunters and moose viewers who contacted 6 area offices throughout the year.

1.2 Conduct geospatial population estimation (GSPE) surveys

ACCOMPLISHMENTS:

- In northern Unit 20D we conducted a GSPE survey during 15 November – 5 December 2019 and sampled 66 out of 546 Sample Units (SUs), for a total flight time of 66 hours.
- In southwestern Unit 20D we conducted a GSPE survey during 21 October – 11 November 2019 and sampled 35 out of 214 SUs for a total flight time of 35 hours.
- In Unit 20A during November 9–18 we conducted a GSPE survey and sampled 137 of 987 SUs. Total flight time was 98.2 hours.
- In Unit 20B we conducted a GSPE on the Minto Flats Management Area (MFMA). We sampled 52 of 169 SUs. for a total flight time of 45.9 hours.
- We scheduled a GSPE surveys in Unit 24B, but were unable to conduct surveys because of inadequate conditions during the period surveys can be conducted (lack of snow in November–December).
- We conducted a GSPE survey in Unit 19A during February 19–28 and sampled 300 of 1,579 SUs. Sighting data were collected on 30 radiocollared moose and incorporated into the population estimate. Total flight time was 400 hours.
- No GSPE was conducted in Unit 25D due to lack of adequate conditions during October–November.
- In Unit 20E during 9–27 November we conducted a GSPE survey and sampled 159 of 857 SUs. Sighting data were collected on 38 radiocollared cows and incorporated into the population estimate. Total flight time was 213.6 hours.

1.3 Conduct riparian zone minimum direct count surveys

ACCOMPLISHMENTS:

- We conducted Riparian Zone population survey in Unit 26B in April 2020 and identified adults and calves. Total hours flown was 42.5 hours.

1.4 Conduct composition–trend surveys.

ACCOMPLISHMENTS:

- We collected composition and trend data as part of each GSPE and riparian zone survey listed above. Transects were flown approximately 0.5 miles apart and all groups of moose were circled to determine composition.

- We conducted composition-only surveys in Unit 21D November 23–25 for a total of 35.4 flight hours. Transects were flown approximately 0.5 miles apart and all groups of moose were circled to determine composition.
- We conducted composition-only surveys in Unit 19A West on November 14 (7 hours), 19A East on November 25 (7 hours), 19C on November 27 (3 hours), and 21E on November 14 (7 hours). Transects were flown approximately 0.5 miles apart and all groups of moose were circled to determine composition.
- We conducted aerial composition-only surveys in Unit 21D November 23-25 (35.4 hours). SUs were surveyed using transects flown approximately 0.5 miles apart and all groups of moose were circled to determine composition.
- We conducted composition-only surveys in Unit 19A East on November 25 (7.2 hours)

1.5 Monitor trend count data for information on age-sex composition.

ACCOMPLISHMENTS:

- We monitored the trend count data and assessed the long-term trends of age and sex composition for populations where population surveys are accomplished regularly.

1.6 Conduct spring twinning (calf production) surveys.

ACCOMPLISHMENTS:

- We conducted a twinning survey in Unit 20D during 27–28 May and observed 50 randomly-located cows with calves during 9.5 hours of flight time.
- We conducted a twinning survey in Units 20A and 20B during 20–24 May and observed 129 randomly-located cows with calves during 26.9 hours of flight time.
- We conducted a twinning survey in Units 21D and 24D during 23–25 May and observed 101 randomly-observed cows with calves during 18.4 hours of flight time.
- We conducted a twinning survey in Unit 19D during May 25–31 and observed 48 randomly-located cows with calves were during 50 hours of flight time.
- We conducted twinning surveys in Unit 21E on 27 May and 2 June and observed 40 randomly-located cows with calves during 24 hours of flight time.
- We conducted a twinning survey in Unit 20E during 14 May – 2 June and observed 28 radiocollared cows with calves and 41 randomly-located cows with calves during 19.8 hours of flight time.

1.7 Deploy radio collars on moose for use in GSPE surveys and to monitor distribution, productivity, and mortality.

ACCOMPLISHMENTS:

- 10 radio collars were deployed on adult cows in Unit 20E on 23–24 March. Total fixed wing flight time was 11.2 hours and total helicopter flight time was 6.4 hours.
- No radio collars were deployed in Unit 21A or 21E due to COVID-19 (March–April) and attendance at Board of Game meeting (Feb–March), both of which pre-empted field work.

1.8 Examine teeth to conduct age structure analysis.

ACCOMPLISHMENTS:

- We aged teeth from 135 harvested moose.

Objective 2: Mortality, Harvest Monitoring and Regulations. Assess the number of moose harvested by hunters and other sources of mortality that might have an impact on each moose population, statewide.

2.1 Monitor and assess harvest through analysis of hunt report data, potlatch information, and through contact with hunters.

ACCOMPLISHMENTS:

- Moose harvest throughout Units 12, 19, 20, 21, 24, 25, 26B, and 26C was monitored through analysis of 10,032 hunt reports from hunting seasons varying in length from 10 to 160 days (primarily during September), including moose taken in one general hunt applicable throughout most of the region, 89 drawing permit hunts, 14 registration permit hunts, 3 Tier II hunts, 1 targeted hunt, and 1 special hunt. Harvest data were analyzed, and the results were applied to management planning and ongoing harvest and population assessments.
- We operated a moose hunter checkstation on the Koyukuk River for 31 days and interviewed approximately 350 hunters about their observations and hunting methods during a 25-day season.
- At the Koyukuk River checkstation we collected teeth from 135 harvested moose.

2.2 Monitor natural mortality factors affecting the population.

ACCOMPLISHMENTS:

- Through interviews with hunters, local residents, pilots, and others and through biologists' observations, we monitored natural mortality in Units 12, 19, 20, 21, 24, 25, 26B, and 26C. No unusual mortality events were noted.

2.3 Opportunistically examine and collect samples from dead moose to look for causes of death, disease, mineral deficiencies, and contaminants.

ACCOMPLISHMENTS:

- We collected samples from 13 moose harvested in Unit 20D by hunters and sent them to ADF&G Veterinary Services for testing.
- Due to high winter mortality in 19D associated with deep snow, we examined 4 moose which died near McGrath.

2.4 Encourage hunters to report hunting activities via mandatory reporting processes to improve moose harvest data collection and assessment

ACCOMPLISHMENTS:

- Staff in 6 offices encouraged hunters to report harvest by explaining how the data are used and educating hunters about the various ways to report (in person, by phone, by internet, or by mail).

Objective 3: Habitat Enhancement and Assessment. Assess moose habitat and browse availability directly or indirectly in specified areas of the region and perform habitat enhancement in areas where it is feasible.

3.1 Assess moose habitat and browse.

ACCOMPLISHMENTS:

- Staff from 6 area offices assessed habitat quality through ground and aerial field observations in throughout region III in conjunction with surveys conducted above.
- In Unit 12, 83 moose pellet transects and associated vegetation surveys were conducted from the ground during 20 hours during 9–11 June.

3.2 Assess habitat quality through browse surveys and field observations

ACCOMPLISHMENTS:

- No browse surveys were accomplished due to curtailment of field work due to COVID-19 concerns and lack of helicopter transport.

3.3 Assess habitat quality through weighing short-yearlings

ACCOMPLISHMENTS:

- We weighed 37 short-yearling moose in Unit 20D during 12.3 helicopter and 25.1 fixed-wing flight time

Objective 4: Moose Management with Public Participation and Outreach. Manage the moose populations of Alaska with an effort to engage the public using public meetings, working groups, educational materials, and incentive programs.

4.1 Compile data and prepare information for 13 five-year Moose Management Reports and Operational Plans.

ACCOMPLISHMENTS:

- We compiled information and data in preparation for writing 14 five-year Moose Management Reports and Plans for Units 12, 19, 20, 21, 24, 25, 26B and 26C. These reports are scheduled to be written in FY2021 and will include historical and current data, management directions, methods, Board of Game actions, harvests and natural mortality, habitat assessments, and local and statewide non-regulatory issues. The most recent Moose Management Reports and Plans are available at the following url:
http://www.adfg.alaska.gov/index.cfm?adfg=wildliferesearch.smrmoose2010_2020

4.2 Provide information to state and federal regulatory processes on moose management.

and

4.3 Work with local Fish and Game advisory committees to understand public desires and concerns regarding moose management

ACCOMPLISHMENTS:

- We communicated and coordinated with and provided information at meetings of 15 local Fish and Game Advisory Committees, the Alaska Board of Game, 4 Federal Regional Advisory Councils, the Federal Subsistence Board, Office of Subsistence Management, numerous local village councils and Native corporations, and the Wrangell–St. Elias Subsistence Resource Commission about moose management and to review and analyze biological information prepared to present regarding proposals for the Alaska Board of Game and the Federal Subsistence Board.

4.4 Review population and harvest objectives to assess their relevance to managing moose in the region.

ACCOMPLISHMENTS:

- Data and information from activities in objectives 1–4 were used by biologists in 6 area offices to review population and harvest objectives to determine whether each objective remained relevant during the current year and assessed whether harvest was impacting each population.

4.5 Educate hunters to improve their understanding of hunting regulations and the value of conserving moose populations, to obtain better harvest data through increased harvest reporting.

ACCOMPLISHMENTS:

- Six area offices communicated and coordinated with local residents regarding moose–human problems, to improve understanding of these situations, and reduce need for Defense of Life or Property kills. We also responded to and made recommendations in instances of moose–human interactions. Staff educated the public on moose awareness and safety, used public education programs and/or increased communication with the public to improve understanding of hunting regulations and the value of conserving moose populations, and to obtain better harvest data through increased harvest reporting.

4.6 Complete moose portion of Annual Intensive Management Reports for the Board of Game to comply with regulatory requirements for Intensive Management programs.

ACCOMPLISHMENTS:

- We prepared the moose portion of 2 Annual Intensive Management Reports for the Board of Game to comply with regulatory requirements for Intensive Management programs. See publications, listed in section IV.

4.7 Use public education at the Koyukuk River Checkstation to improve understanding of hunting regulations and the value of conserving moose populations, to obtain better harvest data through increased harvest reporting, and provide information about proper meat care

ACCOMPLISHMENTS:

- We completed a moose hunter newsletter for Unit 21D and 24 and mailed it to 422 hunters and mailed antler tags and hunt information to 200 resident hunters and educated hunters during 26 days at the Koyukuk River checkstation.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

Results of objectives 1–4 will be summarized in the report portion of the 5-year moose management report and plan, scheduled to be published in FY2021.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

No SDRs were submitted for this project.

In addition to progress noted in section I, more staff time than expected was expended. This was caused by 3 events

1. Weather conditions which facilitated ability to conduct an extensive GSPE survey, which was further extended by inclement weather during the survey and
2. A substantial amount of time responding with biological information for emergency requests to extend or close moose seasons due concerns about food shortage due to COVID-19 or spread of the disease among hunters in the field.
3. Additional staff time was spent preparing for field work that was not cancelled in order to comply with COVID-19 safety protocol.

Budgeted amounts differed from those expected in the project statement due to

1. Personnel: higher-than expected personnel cost, as indicated in previous paragraph.
2. Supplies: No radio collars and capture supplies were purchased for moose Unit 21A or 21E because moose were in poor condition due to deep snow.

IV. PUBLICATIONS

Moose portion of the Annual Report to the Alaska Board of Game on Intensive Management for Moose with Wolf, Black Bear, and Grizzly Bear Predation Control in Game Management Unit 19A. February 2020.

https://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/2020_gmu_19a_intensive_management_annual_report.pdf

Moose portion of the Annual Report to the Alaska Board of Game on Intensive Management for Moose with Wolf, Black Bear, and Grizzly Bear Predation Control in Game Management Unit 19DEast. February 2020.

https://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/2020_gmu_19d_east_intensive_management_annual_report.pdf

No other publications were completed during the report period.

V. RECOMMENDATIONS FOR THIS PROJECT

We recommend continued funding for this project in order to effectively survey, inventory and manage moose populations in Interior and Northeast Alaska.

Prepared by: Doreen Parker McNeill

Date: September 2020