

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: – P16.0

PROJECT TITLE: Alaska’s Region III Muskox S&I program: Muskox 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

COOPERATORS: N/A

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 muskox population to evaluate the 5-year trend.

1.1 Conduct annual aerial surveys to estimate population size and determine age–sex composition.

ACCOMPLISHMENTS:

- We conducted precalving surveys in Units 26B and 26C in late April 2020 in 16.6 hours of aircraft charter flight time and located 16 of 16 active radiocollared muskox in 10 groups. In addition, we located 11 groups of muskoxen (1–5 animals per group) along the Sagavanirktok, Ribdon, and Ivishak rivers, 1 muskox was in the upper Itkillik River drainage, and a group of 7 muskoxen were in the Canning River drainage. During the

survey we took photos of each muskox group located in the late April pre-calving surveys to aid in counting and distinguish between yearlings and muskoxen older than yearlings.

- Ground composition surveys were not conducted in Units 26B and 26C due to Covid 19 restrictions.
- We radiotracked muskox groups in Units 26B and 26C and counted calves in mid October for 6.5 hours of fixed-wing flight time.
- We radiotracked muskox groups in Units 26B and 26C and counted new calves in groups during 2–3 June and 15–16 June. In early June, we observed 51 calves in 18 groups during 9 hours flight time. In mid June, we observed 47 calves in 17 groups during 17.5 hours flight time
- During Unit 26B and 26C radiotracking flights in April, June, and October we investigated muskox distribution throughout Unit 26B, including the Sagavanirktok, Kuparuk, Ribdon, Ivishak, and Itkillik river drainages. Muskox were also distributed in the Canning River drainage in Unit 26C.
- We flew a survey in 19A and 21E on 22 May (6 hours and 71 muskox) and 16 June (6 hours and 34 muskox). All groups were photographed and composition data were obtained.

1.2 Capture and radiocollar muskoxen to maintain 15–30 radio collars on adult female muskoxen

ACCOMPLISHMENTS:

- We captured and deployed vhf radio collars on 11 muskoxen on 15–16 June, using 17.4 hours of helicopter and 17.5 fixed-wing flight time.

1.3 Opportunistically test for the presence of potentially population-regulating diseases.

ACCOMPLISHMENTS:

- Serum from 15 adult females were sent to the lab to test for: Chlamydia, Brucellosis, BVDV, and Ceruloplasmin levels, Protein levels, Serum amyloid and haptoglobin levels.
- Nasal swabs from 11 adult female muskoxen were sent to lab to test for mycoplasma
- Fecal samples from 7 adult females were tested for gastrointestinal nematode eggs and fecal samples from 4 adult females were tested for parasitic larvae.

1.4 Record muskox observations during surveys of other types of wildlife to document range use and expansion of the population.

ACCOMPLISHMENTS:

- Muskoxen were observed during moose and caribou surveys. Nothing unusual was noted.

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

2.1 Monitor natural mortality factors affecting the population

ACCOMPLISHMENTS:

- We found 1 muskox dead 5 days after June captures, about 1 mile from capture site, indicating that this was a capture-related mortality.

2.2 Examine dead muskoxen to look for causes of death, disease, mineral deficiencies, and contaminants.

ACCOMPLISHMENTS:

- We located 2 dead muskox in Units 26B and 26C. Due to poor weather, mechanical difficulties, and logistical issues, no opportunities were presented to investigate cause of death.

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

3.1 No activity will be conducted on this objective that is not incidental to other work.

ACCOMPLISHMENTS:

- No assessments were completed and do not appear to be warranted at this time.

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

4.1 Prepare data and information for 5-year Muskox Repots and Operational Plans.

ACCOMPLISHMENTS:

- We compiled information and data in preparation for writing 2 five-year Muskox Management Reports and Plans. These reports were drafted in FY2020 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 final reports will be available in FY20201 at the following url: <http://www.adfg.alaska.gov/index.cfm?adfg=librarypublications.wildlifepublications&sort=all&species=Muskox&publicationtype=Species+Management+Report+%28and+Plan%29&submit=Search>

- The most recent Muskox Management Reports and Plans are available at the following url:
http://www.adfg.alaska.gov/static/research/wildlife/speciesmanagementreports/pdfs/muskox_2015_smr_full_report.pdf

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

ACCOMPLISHMENTS:

- We communicated and coordinated with and provided information at meetings of 6 local Fish and Game Advisory Committees, the Alaska Board of Game, 3 Federal Regional Advisory Councils, the Federal Subsistence Board, Office of Subsistence Management, numerous local village councils and Native corporations, about muskox management and to review and analyze biological information prepared to present regarding proposals for the Alaska Board of Game and the Federal Subsistence Board.
- We critically evaluated all data and considered opening a hunt in Northeast Alaska because we have met our management objective of ≥ 300 muskox at least 1 year old and made recommendations, using those data, to the Alaska Board of Game for consideration.

4.3 Develop or review population objectives to assess their relevance

ACCOMPLISHMENTS:

- Data and information from activities in objectives 1–4 were used by biologists in 2 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.
- We re-evaluated population objectives and determined that a population of ≥ 300 muskox at least 1 year old is appropriate for the Northeast Alaska population.
- We considered population objectives for the new population in Unit 21E and are in the process of determining appropriate population size.

4.4 Use public education and communication to minimize conflicts between human activities and muskoxen.

ACCOMPLISHMENTS:

- We discussed muskox management with the North Slope Borough wildlife department and 4 Fish and Game Advisory Committees. We also were prepared to respond to and make recommendations to the public to improve public understanding of these natural processes by communicating and coordinating with local residents and oil field workers, but 0 abandoned muskox calves and 0 muskox killed by bears were reported.

4.5 Work with local Advisory Committees, village representatives, and other agencies to promote the establishment of huntable muskox populations.

ACCOMPLISHMENTS:

- We discussed muskox viable population size and huntable numbers with the North Slope Borough wildlife department, the Alaska Board of Game, and 4 Fish and Game Advisory Committees.

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 2 events

1. Ground composition surveys were cancelled in Northeast Alaska due to COVID-19 safety concerns for staff and the public
2. Additional staff time was spent preparing for field work and attempted field work in order to comply with COVID-19 safety protocol.
3. Additional staff time was used to write drafts of the 5-year muskox management reports and plans.

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

1. Personnel: higher-than expected personnel cost, as indicated in previous paragraph and because staff were writing drafts of the 5-year muskox management report and plan.
2. Supplies: Fewer radio collars and capture supplies were purchased for muskox in Northeast Alaska because adequate number of muskox were collared.

IV. PUBLICATIONS

No publications were published during the report period.

V. RECOMMENDATIONS FOR THIS PROJECT

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

Prepared by: Doreen Parker McNeill

Date: September 2020