

Wildlife Restoration OPERATING GRANT FINAL 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: P4.0

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

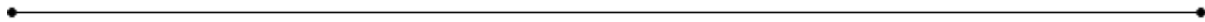
PERIOD OF PERFORMANCE: July 1, 2019 - June 30, 2021

PERFORMANCE YEAR: July 1, 2020 - June 30, 2021; year 2 of a 2-year grant

REPORT DUE DATE:

PRINCIPAL INVESTIGATOR: Darren Bruning, Fish and Game Coordinator, ADF&G

COOPERATORS: N/A



I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

OBJECTIVE 1: Conduct 3 brown/grizzly bear investigations by 06-30-2021.

Project statement objectives:

Objective 1: Population Size, Status, and Trend. Assess the size and status of each brown/grizzly bear population to determine the 5-year trend.

1.1 Assess population trends through anecdotal field observations made by biologists and members of the public.

ACCOMPLISHMENTS:

- We documented brown/grizzly bear locations during aerial surveys for other species.
- We discussed brown/grizzly bear observations across the region with hunters, guides, troopers, and members of the public.

- We discussed brown/grizzly bear observations with hunters and provided USB drives to hunters who may wish to share their trail camera photos of bears with us to help understand the status of grizzly bears.

1.2 Obtain estimates of ages of harvested bears by tooth sectioning and counting annuli.

ACCOMPLISHMENTS:

- We obtained estimated ages of 250 brown bears harvested during the previous fiscal year by results of tooth sectioning and age analysis by counting annuli.

1.3 Conduct aerial surveys to monitor movements and home ranges of radiomarked bears and to monitor population trends.

ACCOMPLISHMENTS:

- We monitored movement of Unit 20D grizzly bears throughout the year via GPS collar location data.
- We conducted 11 aerial surveys in Unit 20D and 20A to monitor cub survival and document dates of den entrance and emergence for collared bears during April–May and September–October for 35.5 hours of fixed-wing flight time.
- We visited 2 den sites used by collared grizzly bears and collected data on den characteristics requiring 7 hours of helicopter flight time.
- We retrieved 5 dropped radio collars and downloaded final locational data from the collars.

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

2.1 Monitor harvest through registration permit hunt reports, interviews with hunters, and analysis of sealing data.

And

2.2 Document human-caused mortality by taking data for bears presented for sealing, including bears killed through legal harvest, illegal hunting, defense of life or property, and vehicle collisions

And

2.3 Analyze drawing and registration permit harvest data collected.

ACCOMPLISHMENTS:

- We monitored the harvest of brown bears in Units 12, 19, 20, 21, 24, 25, 26B, and 26C primarily through data collected when bears were sealed, but also with 4 registration and 7 drawing permit harvest reports, field observations, interviews with successful hunters and analyses of data. Hunting seasons were 10- to 365-days long. Data was collected on 241 harvested brown bears (including 9 killed in defense of life or property and 0 'Natural Mortality or Unknown' harvest, and 39 harvested over bait). Harvest data were analyzed, and the results were applied to management planning and ongoing population assessment.

2.4 Collect data, determine sex, and extract a tooth for aging from bears presented for sealing by hunters

ACCOMPLISHMENTS:

- Premolar teeth for aging were collected from 125 harvested brown bears.
- We collected hair and tissue samples from harvested bears for isotope and genetic analysis.

2.5 Monitor brown bear bait station permit distribution and harvest over bait.

ACCOMPLISHMENTS:

- We monitored distribution of approximately 734 bear bait stations throughout Units 19A, 19D, 20A, 20B, 20C, 20D, 20E, 20F, 21C, 21D, 24C, 24D, and 25D and analyzed their distribution in relation to roads, communities, brown bear harvest, and black bear bait stations.
- We examined hunter submitted trail camera pictures of grizzly bears visiting bear bait stations in unit 20D.

Objective 3: Habitat Enhancement and Assessment. Assess brown/grizzly bear habitat directly or indirectly in specified areas of the state.

3.1 Monitor blueberry abundance through monitoring of permanent blueberry sample areas or through interviews with blueberry pickers and anecdotal evidence.

ACCOMPLISHMENTS:

- During July–August we assessed blueberry abundance at 20 permanent blueberry plots located in Units 12 and 20E.

3.2 Maintain a radiocollared sample of grizzly bears to evaluate distribution and habitat use.

ACCOMPLISHMENTS:

- We maintained sample of 3-7 radiocollared grizzly bears in Unit 20D and 20A to monitor distribution and habitat use.
- We inspected den sites of two radiocollared female grizzly bears.

Objective 4: Brown/Grizzly Bear Management with Public Participation and Outreach.

4.1 Compile information and data for, or draft and finalize 5-year brown bear survey and inventory operational reports and plans for each Unit inhabited by brown/grizzly bears.

- Accomplishments: We compiled information and data in preparation for writing 7 five-year brown–grizzly bear Management Reports and Operational Plans for Units 12, 19, 20, 21, 24, 25, 26B and 26C. These reports and plans will be available at the following URL when completed:

<http://www.adfg.alaska.gov/index.cfm?adfg=librarypublications.wildlifepublications&sort=all&species=Brown+Bear&submit=Search>.

4.2 Provide brown/grizzly bear information to state and federal regulatory processes on brown bear management.

ACCOMPLISHMENTS:

- We prepared the brown/grizzly bear portion of 2 Annual Intensive Management Reports for the Board of Game to comply with regulatory requirements for Intensive Management programs. See Section IV, publications, below.
- We communicated and coordinated with and attended meetings of 10 local Fish and Game Advisory Committees, and 3 Federal Regional Advisory Councils about brown bear management and to review and analyze regulation proposals for the Federal Subsistence Board. The number of meetings attended was reduced, and many meetings, including the regular Statewide Board of Game meeting, were cancelled due to COVID-19 concerns.

4.3 Respond to issues and public reports involving brown bears associated with conflict behavior, injuries, habituation, and bear–vehicle collisions to help alleviate such conflicts and inform the public about safety.

and

4.4 Manage each brown/grizzly bear population with an emphasis on engaging the public in management goals and objectives through public meetings, working groups, educational materials, and incentive programs.

and

4.5 Work with local residents and businesses to reduce brown bear–human conflicts and minimize attractants that may lead to defense of life or property kills (DLP).

and

4.6 Educate the public on bear awareness, bear behavior and safety, and provide demonstrations of how to minimize attractants and/or use electric bear fences to reduce bear/human problems as requested.

ACCOMPLISHMENTS:

- Six area offices responded to and made recommendations in 16 reports of human–brown bear interactions.
- Staff educated the public on bear awareness and safety, used education and/or increased communication with the public to improve understanding of hunting regulations and the value of conserving brown/grizzly bear populations, and to obtain better harvest data through increased harvest reporting.

4.7 Develop or review population objectives for brown/grizzly bears in each of 6 areas.

ACCOMPLISHMENTS:

- Data and information from activities in objectives 1–4 was 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.

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 Brown Bear management report and plan, scheduled to be published in FY21 (see objective 4.1, above.)

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

No SDRs were submitted for this project.

Reports listed in objective 4.1 were expected to be published in FY2020 but were delayed due to biologist preparation for and attendance at the Alaska Board of Game meeting and a substantial amount of time responding with biological information for emergency requests to extend or close hunting seasons for all species (including brown bear) due to concerns about food shortage due to COVID-19 or spread of the disease among hunters in the field.

IV. PUBLICATIONS

Brown bear 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 2021.

http://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/2021_gmu_19a_intensive_management_annual_report.pdf

Brown bear 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 19D East. February 2021.

http://www.adfg.alaska.gov/static/research/programs/intensivemanagement/pdfs/2021_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 to effectively survey, inventory and manage brown bear populations in Interior and Northeast Alaska.

Prepared by:

Date: August 2021