

**Wildlife Restoration 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-R4-2020 Amendment #1

PROJECT NUMBER: 4.0

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

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

PERFORMANCE YEAR: July 1, 2020 – June 30, 2021

PRINCIPAL INVESTIGATOR: Todd A. Rinaldi

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Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

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

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.

Objective 3: Brown/Grizzly Bear Management with Public Participation and Outreach. 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.

I. PROGRESS ON PROJECT OBJECTIVES DURING PERFORMANCE YEAR

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

ACCOMPLISHMENTS:

Regionwide

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

The Region also notes brown bear sightings by sex and age when possible while conducting field work associated with other research and management activities (i.e., caribou and moose surveys, telemetry flights, etc.) and from the public. While reports across the region suggest brown bear populations are stable, field observations by biologists and members of the public in Units 11 & 13 suggest that brown bear numbers in both units have declined over the past few years.

Unit 9

- Use number, age and sex data recorded during fall moose trend surveys to calculate observed bear densities.

Similar to previous efforts, we counted few bears in 7 moose trend count areas covering 892 km². Moose surveys were flown in November by which time most bears were in dens. Because snowless moose surveys are not proving to be effective, this method is not proving to be worthwhile.

Area staff also designed and coordinated a replicate bear survey in September completed by USFWS in Unit 9E. DFG state were responsible for analyzing and summarizing the data

Unit 10 (Unimak Island)

- Record brown bear number, age and sex data during caribou parturition and fall composition surveys for observations of brown bear population status and trends

In October 2020, 45 bears were observed on Unimak Island during a 5-hour caribou composition survey including 17 cubs. In May 2021, 25 brown bears were observed during a 5-hour caribou parturition survey.

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.

ACCOMPLISHMENTS:

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

During this reporting period information from 595 brown bears was collected during the sealing process and teeth were collected to determine age from more than 561 of those bears. All brown bears are sealed whether from hunting or non-hunt related mortalities. During the sealing process, we record a variety of data associated with the hunter, hunter effort, and bear morphometry to aid us in management of this species. These include but are not limited to methods of take, transportation used, specimens collected, presence of tattoos or similar identifiers of previous handling, determination of sex, skull length and width, maternal condition and a pre-molar is extracted for laboratory age analysis at a later date.

- Monitor the harvest and hunting effort using data from sealing reports, registration permits, and interviews with hunters.

Unless the hunt is administered under a draw or registration hunt, general season opportunity for brown bear in Region IV does not require residents to acquire a harvest ticket. Brown bear are required to be sealed which serves as the hunt report. The Unit 9 biennial spring registration hunts were open during the reporting period due to a regulatory decision to allow displaced hunters from 2020 to receive an additional opportunity due to the pandemic-related closure of the hunt last year. opportunity. Five hundred and ninety-five bears were sealed from Region IV (10 bears taken in Defense of Life or Property). The sealing process provides an opportunity to interview successful hunters and gather sex and age data from the harvested bear(s). Additionally, the sealing process provides insight into the abundance and distribution of brown bears in the unit.

The Region also notes brown bear sightings and activities from the public and while conducting field work associated with other research and management activities.

In Units 11, 13, 14A, 14B, and 16 brown bears can be harvested at a black bear bait station under the seasons and bag limits for brown bear. During this reporting period there were 946 bait sites registered within Region IV. One hundred and sixteen brown bears were taken at these bait sites.

- Document all human-caused brown bear mortality by sealing all bears killed through legal harvest, illegal hunting, defense of life or property, and vehicle collisions

Staff documented all human-caused brown bear mortality and recorded 10 instances of a bear killed in defense of life or property, no agency kills, no BVCs, and 2 brown bear-human attacks during this reporting period.

OBJECTIVE 3: Brown/Grizzly Bear Management with Public Participation and Outreach. 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.

ACCOMPLISHMENTS:

- Develop Five-year Brown Bear Management Report and Plans by GMU.

Brown Bear Management Reports and Plans are currently being drafted and are expected to be finalized in 2021. Past plans and information can be found here: <http://www.adfg.alaska.gov/index.cfm?adfg=librarypublications.wildlifepublications&sort=species&sort2=speciesname&speciesname=Brown%20Bear>

- Respond to issues and public reports involving brown bears associated with nuisance behavior, injuries, habituation, and bear-vehicle collisions (BVCs).

An ongoing part of bear management across the region is to work with constituents to address concerns about bears or human-bear conflicts. Staff responds trouble shooting sources of attractants, proper storage of attractants (including proper containment of livestock), loaning out electric fences to thwart bears, and discussing other aversive conditioning techniques with members of the public. We also work with the Alaska State Wildlife Troopers, Alaska State Parks, USFWS, landfills, fish processors as well as communities and tribal councils.

During this reporting period we fielded approximately 35 human-bear conflict phone calls and conducted about 24 site visits to address bear issues. There were 10 DLPs, 0 agency kills, 0 BVCs and 2 brown bear-human attacks during this reporting period.

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

During the reporting period we fielded approximately 35 human-bear conflict phone calls and used these opportunities to educate the callers about bear attractants and how best to avoid bear-human conflicts. As part of our education message, we highly encourage the use of electric fences to prevent bears from accessing things like fish smokers, fish drying racks, landfills, livestock pens or any other type of attractant found at a person's residence. This includes providing brochures on the use of electric fences, referring the caller to our website that contains ample information on the use of electric fences, and in some cases, loaning out electric fences to the public. In addition, staff were present at the Mat Valley Sportsman's Show and at the Fish Expo in Dillingham providing educational material and discussing ways to reduce bear human conflicts.

Office staff worked with local residents to reduce human/bear conflicts as well as municipal landfill staff in Dillingham, Naknek, and King Salmon. Topics discussed included the proper storage and containment of refuse, game meat, bird seed,

livestock, fish waste and other attractants. Emphasis is placed on securing potential attractants away from access by bears.

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

All information collected is used inform state and federal regulatory processes. Outside of common communication with our federal counterparts there was no federal proposal addressing brown bears during this reporting period. Staff compiled and presented biological, population, and hunting information at more than 12 State Advisory Committee meetings, 4 Regional Advisory Council meetings, Subsistence Resource Commission meetings, and 2 Federal Subsistence Board meetings. There was a special state Board of Game this spring addressing spring draw hunts – specifically Unit 9 registration hunts.

Unit 9

- Annually meet with businesses along river corridors and adjacent to bear habitat to discuss bear safety and install bear deterrents.

King Salmon staff met with 6 businesses to discuss bear deterrents and safety. The pandemic limited additional appointments.

Unit 17

- Work with the local landfill to address fish waste disposal practices that attract bears including the use of cameras to monitor bear activity.

In rural communities, messages regarding the proper disposal of fish waste are frequently conveyed through radio interviews and DFG updates. Dillingham staff frequently engaged with Friends of the Landfill (FOL) to help decrease bear activities in and around the landfill, and to connect with the public on how to coexist with bears. This performance period staff worked with the City of Dillingham in multi-platform informational campaign.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

None for this reporting period.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

Ongoing brown bear research in Unit 13 referenced above is funded through AKW-R-11-2020 Density and Demography of GMU13 Brown Bears grant award #F19AF00484

IV. PUBLICATIONS

Brown Bear Management Reports and Plans are currently being drafted and are expected to be finalized in 2022. Past plans and information can be found here:
<http://www.adfg.alaska.gov/index.cfm?adfg=librarypublications.wildlifepublications&sort=species&sort2=speciesname&speciesname=Brown%20Bear>

V. RECOMMENDATIONS FOR THIS PROJECT

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

Prepared by: Todd A. Rinaldi, RIV Management Coordinator

Date: 8/18/21