

**Alaska Department of Fish and Game
Wildlife Restoration Grant**

GRANT NUMBER: AKW-B-R1-2020

PROJECT NUMBER: P 4.0

PROJECT TITLE: Region I Brown Bear S&I program: Alaska Brown Bear Populations and Factors Influencing Their Status

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: August 28, 2020

PRINCIPAL INVESTIGATOR: Richard Nelson

COOPERATORS: None

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.

Units 1, 3, 4, and 5

- Solicit anecdotal observations from biologists, big game guides, and hunters for changes in brown bear abundance.

ACCOMPLISHMENTS: In Region I harvested brown bears must be sealed, which provides an opportunity to collect information on harvested bears, hunting effort, and anecdotal information from hunters. Nonresidents account for the majority of brown bear hunting effort and harvest in all units except Unit 3, and all hunts are administered through registration or draw permits with required hunt reports. Region I staff monitored brown bear abundance throughout the region by analyzing hunt reports and sealing records including information on harvest, skull size, age, sex ratio, and effort required to harvest a bear.

Unit 1C

- Gather baseline data on how brown bears use the Sweetheart Creek area prior to construction of a proposed hydroelectric project by collaring 3-5 bears with GPS

collars.

ACCOMPLISHMENTS: No progress. Region I staff did not capture or collect information on brown bears using the Sweetheart Lake Hydroelectric project area. The feasibility of this objective will be reassessed. This unit-specific objective is also included under Objective 3.

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

Units 1, 3, 4, and 5

- Monitor harvest and hunting effort by issuing draw and registration permits, monitoring harvest, and recording and analyzing data collected during sealing and from hunt permit reports.

ACCOMPLISHMENTS: In Region I harvested brown bears must be sealed, which provides an opportunity to collect information on harvested bears, hunting effort, and anecdotal information from hunters. Region I staff monitored brown bear harvest throughout the region through sealing records, which include information on skull size, sex, and age of harvested bears and locations of harvest. A premolar tooth is collected at the time of sealing and sent to a commercial lab for cementum aging. Ages were reported back to ADF&G and archived for future reports. Area management staff monitored other sources of mortality including agency and Defense of Life or Property (DLP) kills of dangerous bears, disease, and parasites, but biologists do not believe that non-hunting mortality has a significant effect on individual brown bear populations.

GMU	Regulatory Year					5-Year Average
	2015	2016	2017	2018	2019	
01A	1	5	7	4	3	4
01B	4	2	7	5	0	4
01C	8	12	8	16	11	11
01D	14	11	15	11	12	13
03Z	0	1	1	0	1	1
04Z	119	135	136	161	53	121
05A	8	10	8	17	5	10
05B	0	0	1	2	1	1

Table 1. Summary of brown bear harvest by GMU for Southeast Alaska, regulatory years 2015 – 2019. A regulatory year begins on July 1 of that year and extends through June 30 of the following year.

UNIT 1D

- Continue to monitor the efficacy of requiring hunters to view the *Take a Closer Look* video in keeping harvest of female bears within the management guideline of less than 38% of total harvest.

ACCOMPLISHMENTS: All Unit 1D brown bear hunters were required to watch the “Take a Closer Look” video prior to hunting brown bears in Unit 1D. It appears this video has some effect on hunter choice because fewer female bears have been harvested in recent years.

OBJECTIVE 3: Habitat Enhancement /Assessment. Assess brown bear habitat availability directly or indirectly in specified areas of the region and inform land use planning affecting brown bear populations.

Units 1, 3, 4, and 5

- Participate in land use planning processes as needed to provide the most current information on effects of planned changes on brown bear populations.

ACCOMPLISHMENTS: Regional management staff indirectly monitored brown bear habitat through anecdotal information on bears and available food resources provided by hunters, staff observations, and brown bear research staff in Unit 1D. Staff worked with regional land management agencies to comment on land use planning efforts to determine possible impacts to brown bears.

Unit 1C

- Monitor brown bear use of Sweetheart Lake hydroelectric project area using trail cameras, by identifying individuals through DNA analysis of hair samples, and by capturing and radio collaring several bears to learn about seasonal movements and habitat use before and after development.

ACCOMPLISHMENTS: No progress. Region I staff did not capture or collect information on brown bears using the Sweetheart Lake Hydroelectric project area. The feasibility of this objective will be reassessed.

OBJECTIVE 4: Brown/Grizzly Bear Management with Public Participation and Outreach. Manage each brown bear population with an emphasis on engaging the public in management goals and objectives through public meetings, working groups, educational materials, and incentive programs.

Units 1, 3, 4, and 5

- Write Species Management Reports and Plan or annual updates as required.

ACCOMPLISHMENTS: The Brown Bear Species Management Report and Plan (SMRP) reporting on the period RY2014 – RY2019 and planning for the period RY2020 – RY2025 is in draft. The SMRP will be published before the next reporting period.

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

ACCOMPLISHMENTS: Region I staff engaged with the public through Fish and Game Advisory Committees, local agencies, and residents. Staff discussed management issues and regulatory proposals at Fish and Game Advisory Committee meetings and Federal Regional Subsistence Advisory Council. Staff also engaged with local communities and residents through ongoing efforts to educate both on bear safety, proper storage of trash and other attractants, and managing small livestock. Regional management staff engaged in habitat use planning efforts throughout the region primarily by commenting on logging and road-building plans on national forest lands and by contributing information to Haines Borough and BLM heliskiing management proposals.

- Work with agencies, local governments, and the public to educate people about brown bear ecology, behavior, and ways to minimize and mitigate human-bear conflicts.

ACCOMPLISHMENTS: Management staff continue to provide educational programs to communities and to support efforts by community groups, the Alaska Wildlife Troopers, and local governments to minimize bear-human conflict.

Unit 4

- Continue working with staff at Port Armstrong Hatchery and other private non-profit fish hatcheries to discourage bears from foraging in work areas using tasers.

ACCOMPLISHMENTS: Unit 4 management staff continue to consult and work with hatchery staff to minimize and mitigate interference by brown bears with hatchery work. The Port Armstrong hatchery has been granted a permit to hire qualified individuals to aversively condition bears using tasers, so department staff no longer directly participate in that work. Staff will reconsider this unit-specific objective in future project statements.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

During this reporting period brown bear harvest throughout Region I varied within the historical range for each unit. RY19 harvest in Unit 4 was lower than traditional harvest averages due to the closure of the spring non-resident brown bear season related to the COVID-19 pandemic. Anecdotal accounts and staff observations suggest brown bears are increasing in portions of Units 1C and 3, particularly on islands in Unit 3. At its January 2019 meeting the Alaska Board

of Game liberalized brown bear harvest regulations in Unit 3 by adding a fall season beginning in RY19. All objectives were accomplished.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

The FY2020 budget for this project was overspent because of bear conflict issues that arose in the fall in Haines, AK and continued in the spring when the bears came out of the den. Staff spent 9 days in Haines meeting with residents to educate them about garbage and securing attractants. Staff talked to the town's landfill supervisor about securing trash. Staff worked with the local police to identify and locate bears causing structural damage to buildings.

IV. PUBLICATIONS

None.

V. RECOMMENDATIONS FOR THIS PROJECT

We recommend continuing this project with the changes mentioned above. More detailed recommendations for this project will be presented in the RY2014 – RY2023 Brown bear Species Management Report and Plan. That Report and Plan should be published during 2020 and will be available on the Department's website.

The Sweetheart Creek brown bear assessment project should be discontinued due to a limits of staff time to conduct this activity.

Discontinue our assessment of the use of tasers to deter bears at Port Armstrong Hatchery for worker safety.

Prepared by: Stephen Bethune, Sitka Area Management Biologist

Date: August 2020