

**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-R1-2020 Amendment #1 SFY21

PROJECT NUMBER: 4.0

PROJECT TITLE: Region 1 Brown Bear S&I program: Alaska's Brown Bear Populations and Factors Influencing Their Status

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

REPORT DUE DATE: August 27, 2021

PRINCIPAL INVESTIGATOR: Richard Nelson

COOPERATORS: None

I. PROGRESS ON PROJECT OBJECTIVES DURING PERIOD OF PERFORMANCE

STRATEGY: RESEARCH, SURVEY, DATA COLLECTION AND ANALYSIS

OBJECTIVE 1: Conduct 3 investigation by June 30, 2021

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

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.

ACTIVITY 1B: 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.

Region I, 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. Although Region I experienced high levels of DLP's in RY2020 (20 in GMU 1D and 19 in GMU 4), during more normal years, biologists do not believe that non-hunting mortality has a significant effect on individual brown bear populations. The future harvest strategy was greatly reduced due to the large number of DLPs in GMU 1D in RY2020.

Table 1. Summary of brown bear harvest by GMU for Southeast Alaska, regulatory years 2016 – 2020. A regulatory year begins on July 1 of that year and extends through June 30 of the following year.

GMU	Regulatory Year					5-Year Average
	2016	2017	2018	2019	2020	
01A	5	7	4	3	9	5.6
01B	2	7	5	0	4	3.6
01C	12	8	16	11	17	12.8
01D	11	15	11	12	19	13.6
03Z	1	1	10	1	0	2.6
04Z	135	136	161	53	158	128.6
05A	10	8	17	5	7	9.4
05B	0	1	2	1	0	0.8

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. That video provides tips on distinguishing between male and female bears. It appears this video has some effect on

hunter choice because a lower proportion of female bears has been harvested in recent years.

ACTIVITY 1C: 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.

Region 1, 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.

STRATEGY: PLANNING

OBJECTIVE 2: Develop/Revise plan by June 30, 2021

ACTIVITY 2A: 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.

Region I, Units 1, 3, 4, and 5

- Prepare 5-year Brown Bear Management Operational Reports and Plans for each unit/subunit inhabited by brown bears.

ACCOMPLISHMENTS: All Brown Bear Species Management Report and Plan (SMRP) reporting on the period RY2014 – RY2019 and planning for the period RY2020 – RY2025 were completed and published during this 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.

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. Harvest levels returned to normal levels for RY2020. Anecdotal accounts and staff observations suggest brown bears are increasing in portions of Units 1C and 3, particularly on islands in Unit 3. All objectives were accomplished.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

During RY 2020 the Region I budget for brown bear management was overspent by \$6.1K. This discrepancy was due to spending nearly 18K over budget by the Douglas office to deal with nuisance bear issues in Haines. Most of this expense was related to travel for staff to spend additional time in Haines.

IV. PUBLICATIONS

Bethune, S. W. 2021. Brown Bear management report and plan, Game Management Unit 4: report period 1 July 2014-30 June 2019, and plan period 1 July 2019—30 June 2024. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2021-13, Juneau.

Churchwell, Roy T. 2021. Brown Bear management report and plan, Game Management Unit 1: report period 1 July 2014-30 June 2019, and plan period 1 July 2019—30 June 2024. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2021-10, Juneau.

Churchwell, Roy T. 2021. Brown Bear management report and plan, Game Management Unit 5: report period 1 July 2014-30 June 2019, and plan period 1 July 2019—30

June 2024. Alaska Department of Fish and Game, Species Management Report and Plan ADF&G/DWC/SMR&P-2021-3, Juneau.

V. RECOMMENDATIONS FOR THIS PROJECT

The Department of Wildlife Conservation recommends continuing this project.

Prepared by:

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Date: August 2021