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

GRANT NUMBER: AKW-B-SW-2020 Amendment #1

**PROJECT NUMBER: 35.0** 

PROJECT TITLE: Status, Public Use, and Management of Small Game Populations in Alaska

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

**REPORT DUE DATE:** August 10, 2021

PRINCIPAL INVESTIGATOR: Richard A. Merizon and Cameron J. Carroll

COOPERATORS: University of Alaska, Denali National Park, volunteers

Authorities: 2 CFR 200.328 2 CFR 200.301 50 CFR 80.90

# I. PROGRESS ON PROJECT OBJECTIVES DURING PERIOD OF PERFORMANCE

All project objectives were addressed and work completed during this reporting period.

OBJECTIVE 1: Coordination and Administration: Administer 1 project under a grant that includes coordination/administration by June 30, 2021:

Activity Tag: Project Coordination and Administrative Support, Compliance, and Monitoring.

a. Receive recommendations and assist DWC management staff in addressing local or regional small game management concerns or questions.

ACCOMPLISHMENTS: A good relationship has been built between the Small Game Program (SGP) and area management biologists statewide. The SGP has developed research questions, management proposals, and educational materials based on discussions with area managers to assist and ease existing staff workload. SGP staff met with several Area Biologists (Delta Junction, Nome, Bethel, Fairbanks, and Palmer), local Advisory Committees, and conservation organizations to address small game regulatory proposals and concerns and provide relevant data to inform the BOG process. a. Promote development of research based on clear management needs with other DWC programs, universities, federal agencies, and other entities as funding is available.
ACCOMPLISHMENTS: The SGP was involved in two research projects during FY21 in coordination with DWC and the University of Alaska-Fairbanks. A rock ptarmigan research project (grant number: AKW-29; Project Number 8.0) was completed at the end of FY21. An Alaska hare research project (grant number: AKW-R-2-2020) is ongoing and a Ph.D. student is working towards accomplishing all project objectives.

OBJECTIVE 2: Outreach and Communication: Inform/communicate with 500-1,000 individuals by June 30, 2021

Activity Tag: Outreach to Individuals

a. Create and maintain an effective network of volunteers throughout the state to accomplish SGP goals that include spring breeding and summer brood surveys and wing collections from harvested grouse and ptarmigan.

ACCOMPLISHMENTS: A total of 6 volunteers on the Kenai Peninsula completed spring breeding surveys between April and May 2021. Over 25 new and nearly 15 former volunteers were recruited and trained in June 2021 to complete summer brood surveys (FY22; July 2021).

b. Complete a Statewide Status report for Alaska's small game every two years that documents the current status of studied populations, management issues, research studies, and future goals.

ACCOMPLISHMENTS: In January 2021, SGP program staff completed the Wildlife Management Report articulating the details of all population monitoring, research, hunter harvested wing collections, and recent Board of Game action for 2019 and 2020. The SGP staff also completed the annual "Hunter Summary" (6pp) briefly outlining population monitoring results and expectations for the 2020-2021 hunting season.

OBJECTIVE 3: Research, Survey, Data Collection, and Analysis: Conduct several hundred replicate spring breeding, summer brood, and inspect 1,500-2,000 hunter harvested wings annually by June 30, 2021.

Activity Tag: Fish and Wildlife Species Data Acquisition and Analysis.

a. Complete spring breeding surveys for grouse, ptarmigan, and spring counts of snowshoe hare that will provide more timely and useful abundance data for managers in select locations on and off the road system.

ACCOMPLISHMENTS: A total of 5 ruffed, 2 sharp-tailed, and 4 sooty grouse, 19 willow, and 14 rock ptarmigan spring breeding survey locations were visited, and surveys completed between April and May 2021.

Ruffed grouse surveys were completed in Delta Junction, Tok, Palmer, Anderson, and Fairbanks. Sharp-tailed grouse surveys were completed in Delta Junction and Tok. Sooty grouse surveys were completed in Haines, Juneau, Ketchikan, and Petersburg. Willow and rock ptarmigan surveys were completed in the Alaska Range, Anchorage, Tok, Eagle Summit, Denali National Park, Kenai Peninsula, and Nome.

Summary results from these surveys will be published in the annual Status of Small Game 2021 hunter handout in August 2021 and a more detailed presentation in the biennial Wildlife Management Report for 2021 and 2021 published in December 2022.

b. Promote and maintain the statewide voluntary wing collection program of hunter harvested grouse and ptarmigan to monitor and document harvest composition. ACCOMPLISHMENTS:

A total of 671 wings were collected during regulatory year 2020 (RY20; July 1, 2020 – June 30, 2021). All 7 species of Alaskan grouse and ptarmigan were represented in the collection from 11 of 26 game management units (GMU). A SGP goal is to increase hunter awareness and participation in wing collections as it is a cost effective way to collect harvest composition data and better understand which statewide grouse and ptarmigan populations are being exploited.

c. Promote and maintain statewide brood surveys to monitor population productivity of sharp-tailed grouse and rock, white-tailed, and willow ptarmigan. ACCOMPLISHMENTS:

During FY21, the SGP was able to enlist 15 volunteers to assist in our fifth annual brood surveys (July 2021). In total, 180km of transects were completed. This is a technique the SGP began in July 2016 and has proven to be highly effective at estimating early chick survival of monitored populations. Surveys for sharp-tailed grouse occur in Delta Junction. Surveys for rock, white-tailed, and willow ptarmigan occur in the Alaska Range, Eagle Summit (rock ptarmigan only), and Hatcher Pass. Outreach efforts were highly successful to enlist additional volunteers in FY21. An additional 25 volunteers were recruited in June 2021 to assist expanded survey effort in the Chugach State Park, Kenai Mountains, and Sheep Mountain.

d. Complete research on popular rock and willow ptarmigan populations to evaluate movement, mortality, and productivity.

ACCOMPLISHMENTS:

Preliminary data analysis on age-specific movement and survival was completed during FY21 with additional analysis and report writing planned for FY22.

OBJECTIVE 4: Training and Education: Conduct 15-20 training events by June 30, 2021: Activity Tag: Fish and Wildlife Technical Training

a. Develop educational programs, seminars, handouts, and interactive material with DWC staff and non-governmental organizations on small game hunting and life history strategies of small game for the public.

ACCOMPLISHMENTS: As a result of the ongoing Covid-19 pandemic this activity was not accomplished.

## II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

This project has been ongoing since 2011 and covers completing survey and inventory work for Alaska's grouse, ptarmigan, and hare species. These data are used to address regulatory proposals before the Alaska BOG, Federal Subsistence Board, inform hunters and ADF&G staff, and address the sustainability of these heavily utilized species across the state.

The SGP has been successful in developing and securing long-term monitoring projects across the state, conducting and completing valuable research addressing important management concerns, and informing thousands of hunters and members of the public about regulations, Board of Game and Federal Subsistence Board proposals, and recruitment of new hunters and license holders.

Due to the ongoing Covid-19 pandemic the SGP had a significant budget surplus due to travel restrictions and the lack of need to purchase field gear (food, equipment, etc.).

## III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

None

## IV. PUBLICATIONS

- Merizon, R.A., and C. J. Carroll. *In Prep*. Alaska Small Game Summary 2021. Alaska Department of Fish and Game. 6pp.
- Merizon, R.A., and C. J. Carroll. 2021. Status of Grouse, Ptarmigan, and Hare in Alaska, 2019-20. Alaska Department of Fish and Game, Wildlife Management Report ADF&G/DWC/WMR-2021-1, Juneau, Alaska.
- Merizon, R.A., and C. J. Carroll. 2020. Alaska Small Game Summary 2020. Alaska Department of Fish and Game. 6pp.

#### V. RECOMMENDATIONS FOR THIS PROJECT

This is an ongoing survey and inventory project for small game populations across the state of Alaska. These data are used to address regulatory proposals before the Alaska BOG. It is recommended this project continue. Additional recommendations for specific objectives are included below.

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Date: 10 August, 2021