

**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-23

PROJECT NUMBER: 19.10

PROJECT TITLE: Region 1 research planning, design, and support

PERIOD OF PERFORMANCE: 1 July 2017–30 June 2018

REPORT DUE DATE: 1 September 2018

PRINCIPAL INVESTIGATORS: Susannah Woodruff and Dave P. Gregovich

COOPERATORS:

Authorities: 2 CFR 200.328
2 CFR 200.301
50 CFR 80.90

I. PROGRESS ON PROJECT OBJECTIVES DURING PERIOD OF PERFORMANCE

OBJECTIVE 1: Conduct strategic evaluations of research needs based on current management needs and objectives.

ACCOMPLISHMENTS: During the reporting period, we established short and long-term research priorities through discussion with research and management staff. As a research group, we developed draft of a proposed process for setting research priorities within Region I. We drafted a mission statement specific to our research team and created a draft template with criteria for evaluating research project proposals. The next step is bringing in other leaders (i.e., management coordinator and regional supervisor) and management biologists. This step has been stalled with some major changes in personnel (i.e., our regional supervisor took another job and we do not currently have a regional supervisor). We hope to continue work on establishing research priorities in the region. Several projects identified as priorities in previous years (e.g., wolf predation research, fisher demographics research) were initiated.

OBJECTIVE 2: Develop research design alternatives based on identified priorities.

ACCOMPLISHMENTS: In the evaluation of regional research priorities, alternative studies were considered for all projects. Final decisions on topic selection, research design, and field techniques were based on an analysis of the likelihood of accomplishing the research objectives, logistical considerations, and available staffing and expertise to work on the study.

OBJECTIVE 3: Compare alternative research designs using specific evaluation criteria.

ACCOMPLISHMENTS: Research designs were re-evaluated and modified as necessary with the input of our statistical and biological staffs, based on information learned in previous years. Pilot studies conducted in previous years were used to identify the most appropriate design. We will continue to use pilot studies to inform development and implementation of our projects.

OBJECTIVE 4: Conduct routine and sophisticated statistical and population estimation analyses.

ACCOMPLISHMENTS: We coordinated with our staff biometrician in the review of projects. In addition, our staff biometrician conducted various analyses of research data for final reports and publications (see statewide Biometrics report for details). We also consulted with our research analyst to improve the support capabilities of our research program. The research analyst collected, processed, and analyzed spatial data used to provide information on wildlife-habitat relationships. Foremost amongst such habitat-related analyses are resource selection functions (RSFs) which assign probabilities to wildlife species use of various landscape features.

II. SUMMARY OF WORK COMPLETED ON PROJECT TO DATE.

No ongoing research projects were completed in this reporting period; however, much progress was made on each project. The drafting of a process for establishing research priorities in the region was a major goal and accomplishment within the research group. The development and implementation of this process will continue in upcoming fiscal years.

Specific project reports detail the many accomplishments made within the Region I research program in FY18. We successfully initiated several research projects in FY18 including *Fisher colonization, habitat use, and competition with marten in Southeast Alaska* and *Seasonal predation patterns of wolves in single and multiple-ungulate systems*.

Research Analyst Dave Gregovich played an important role in several divisional research projects which resulted in output critical to DWC's mission. Dave also worked to build divisional capacity for future wildlife resource selection and movement studies. Dave assisted Kevin White by producing software code to run population simulations of mountain goats under various climate change scenarios. With Boyd Porter, he performed all analysis and drafted two reports on black bear habitat use on Prince of Wales Island which will be published in FY19. He performed all analysis on another report in progress regarding brown bear habitat use on Admiralty and Chichagof Islands. With Jenny McBride, he produced a vegetation map used in this brown bear analysis.

Additionally, we hired a new Sitka black-tailed deer research biologist who will conduct deer and other ungulate research throughout Region I.

III. SIGNIFICANT DEVELOPMENT REPORTS AND/OR AMENDMENTS.

NONE

IV. PUBLICATIONS

Several publications were produced within the research group and are specified in individual project reports.

V. RECOMMENDATIONS FOR THIS PROJECT This project should be continued as described in the study plan and project statement.

Prepared by: Susannah Woodruff, Research Coordinator

Date: 1 September 2018