

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

**Grant Number:** W-33 **Segment Number:** 11  
**Project Number:** 19.10  
**Project Title:** Region I research planning, design, and support  
**Project Duration:** July 1, 2003–June 30, 2014  
**Report Due Date:** September 1, 2013  
**Principal Investigators:** Rod Flynn, and Dave Gregovich  
**Work Location:** Southeast Alaska

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**I. PROGRESS ON PROJECT OBJECTIVES DURING LAST SEGMENT**

**OBJECTIVES:**

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

Design and support are an important part of maintaining a high quality research program. Planning is needed at many levels from strategic planning to planning experimental protocols of individual projects. A research plan is necessary to develop and maintain program direction, structure, and function that complement the Division of Wildlife Conservation's strategic plans. Short and longer-term research priorities were established through discussions and meetings with regional and headquarters staffs. Additional discussions were held with others outside of the regional staff, including other regions, federal management agencies, and universities. Research questions were designed to answer management questions. Regional priorities were reevaluated related to this new information and in conjunction with potential funding.

2. Develop research design alternatives based on identified priorities.

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.

3. Compare alternative research designs using specific evaluation criteria.

Research designs were reevaluated and modified as necessary with the input of our statistical staff, based on information learned in previous years.

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

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. Dave Gregovich worked as a research analyst II to improvement our research support. We analyzed and reported the results from studies associated with the Juneau Access Improvement Projects involving brown bears, moose, mountain goats, and wolverines.

## II. **SUMMARY OF WORK COMPLETED ON JOBS IDENTIFIED IN ANNUAL PLAN THIS PERIOD**

### **JOB/ACTIVITY 1: Establish research program priorities**

Short and longer-term research priorities were evaluated through discussions and meetings with regional staff, other regions, federal management agencies, and universities. Regional priorities were reevaluated related to this new information and in conjunction with potential funding. Because of partnering opportunities and targeted funding for specific groups of wildlife, regional staff identified additional priorities in the areas of wolf population assessment and brown bear population assessment. These projects were in addition to ongoing research priorities for brown bears, moose, mountain goats, and Sitka black-tailed deer.

### **JOB/ACTIVITY 2: Develop research design alternatives**

Alternative studies were considered for several of the projects, especially for the POW wolf population assessment and Yakutat brown bear population assessment. 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 staff to work on the study.

### **JOB/ACTIVITY 3: Evaluate research designs**

Research designs were reevaluated and modified as necessary with the input of our statistical staff, based on information learned in previous years. We adjusted the design of the wolf population estimation project.

### **JOB/ACTIVITY 4: Statistical and population estimation/biometric services**

We coordinated with our staff biometrician in the review of projects. We presented an introductory short course on statistical programming in the R environment, and another course on ArcGIS to Region I personnel. We provided technical support for various staff as needed. These analyses focused on habitat selection. We developed habitat models for black bear den locations and brown bear road corridor crossings. We developed landscape habitat factors for use in studies spanning multiple projects and species, including projects related to marten, deer, moose, and caribou. We created and maintained software for use in habitat selection studies.

We presented results from a comparison of resource selection function (RSF) methods at the annual Region 1 meeting and at the Alaska Wildlife Society annual meeting. We attended an RSF-modeling workshop. We finished final reports on brown bear and wolverines that were funded by DOT&PF (Juneau Access Improvement Projects).

We assessed DWC data management needs and worked towards creation of data management standards as part of the Data Management Working Group. We reviewed

hunting regulations and permit documents, and gathered Region I edits and suggestions for delivery to the Regulations, Information, Permitting, and Harvest Implementation Team (RIPHIT). We redesigned hunting permit overlays to more closely adhere to statewide conventions.

III. Not applicable.

IV. **SIGNIFICANT DEVIATIONS AND/OR ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD**

None.

V. **PUBLICATIONS**

None.

VI. **RECOMMENDATION FOR THIS PROJECT**

Extend the project for another year.

**Prepared by:** Rod Flynn and Dave Gregovich

**Date:** 9/01/2013