

**FEDERAL AID  
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-4 17.82 FY2015 **Segment Number: 1**  
**Project Number:**  
**Project Title:** Kenai Peninsula black bear movements and historical diet comparison  
**Project Duration:** 1 July 2013 – 30 June 2017  
**Report Period:** 1 July 2014 – 30 June 2015  
**Report Due Date:** September 28, 2015  
**Cooperator:**  
**PRINCIPAL INVESTIGATOR:** Sean Farley  
**WORK LOCATION:** Kenai Peninsula, Alaska

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**I. PROBLEM OR NEED THAT PROMPTED THIS RESEARCH**

The population of black bears available across Kachemak Bay from Homer and south to Port Graham is unknown (aka Seldovia bears). The area is heavily wooded and a classic line transect census would not likely generate enough observations to warrant a valid estimate. The application of a spatially explicit mark-recapture estimate has the highest probability of success, however nothing is known of black bear movements and diet (which will influence movement patterns) from this area. We propose to deploy Global Positioning System (GPS) collars on Seldovia black bears and collect movement data to be used as a coefficient in development of a spatially explicit mark recapture population estimate.

**II. REVIEW OF PRIOR RESEARCH AND STUDIES IN PROGRESS ON THE PROBLEM OR NEED**

Black bear are an important large game animal on the Kenai Peninsula with an annual harvest of approximately 600 animals. While the geographic distribution of the harvest is generally along the road system and from bait sites, approximately 50% of all black bears taken on the Kenai Peninsula are from 15C. And, a significant portion of those are from the area across Kachemak Bay from Homer and south to Port Graham.

**III. APPROACHES USED AND FINDINGS RELATED TO THE OBJECTIVES AND TO PROBLEM OR NEED**

#### **IV. MANAGEMENT IMPLICATIONS**

Application of the spatially explicit approach is improved with an understanding of movement parameters (speed, mean daily distance, total distance per time, etc.), all of which are unknown for Seldovia black bears.

#### **V. SUMMARY OF WORK COMPLETED ON JOBS**

##### **FROM PROJECT STATEMENT:**

##### **Objectives:**

**Objective 1:** Deploy up to 20 GPS collars on black bears across Kachemak Bay from Homer and south to Port Graham to collect movement data.

**Job/activity 1a:** Collect movement data. A subset of black bears will be collared with GPS radio collars and followed for two years to collect data on movement.

##### **Accomplishments:**

Preliminary work including survey flights and biopsy darting of bears was performed on this project in FY 2014. Although preliminary work showed some promise, it was determined that the study plan required some modification. And, similar concerns with overharvest of bears in Prince William Sound have been brought to our attention. As a result, DWC has decided to revise the project and incorporate new techniques, analytical methods, and study areas in a new project. This project has been cut from the program.

#### **VI. PUBLICATIONS**

None

#### **I. ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT**

**NONE**

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**DATE: DECEMBER 22, 2015**