

**Alaska Department of Fish and Game  
Division of Wildlife Conservation  
September 2008**

**Abundance, spatial relationships, and trans-boundary  
movements of brown bears on the mainland coast of  
Southeast Alaska**

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**Research Annual Performance Report  
1 July 2007–30 June 2008  
Federal Aid in Wildlife Restoration  
W-33-6  
Study 4.36**

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# FEDERAL AID ANNUAL RESEARCH PERFORMANCE REPORT

ALASKA DEPARTMENT OF FISH AND GAME  
DIVISION OF WILDLIFE CONSERVATION  
PO Box 115526  
Juneau, AK 99811-5526

**PROJECT TITLE:** Abundance, spatial relationships, and trans-boundary movements of brown bears on the mainland coast of Southeast Alaska

**PRINCIPAL INVESTIGATOR:** Rodney W. Flynn, Coauthors: Stephen Lewis, LaVern R. Beier, and Grey Pendleton

**COOPERATORS:** U.S. Fish and Wildlife Service, U.S. Forest Service

**FEDERAL AID GRANT PROGRAM:** Wildlife Restoration

**GRANT AND SEGMENT NO.** W-33-6

**PROJECT NO.** 4.36

**WORK LOCATION:** Mainland coast of Southeast Alaska from the Stikine River to the Misty Fjords National Monument, including the drainage of the Unuk River

**STATE:** Alaska

**PERIOD:** 1 July 2007 – 30 June 2008

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## I. PROGRESS ON PROJECT OBJECTIVES

OBJECTIVE 1: Provide project supervision for brown bear studies on the mainland coast, including the preparation of budgets, the planning of field and office activities, data analysis, and report preparation.

This project was initiated in 2005 with funding from contracts with the U.S. Fish and Wildlife Service and the U.S. Forest Service. Progress on the project's study objectives proceeded as planned. Field work for summers 2005, 2006, and 2007 were organized and completed successfully. All data have been compiled and stored for future analyses.

OBJECTIVE 2: Study brown bear movement patterns.

Altogether, 38 individual brown bears have been captured and GPS collars were deployed on 32 of them. Three bears were recaptured in subsequent years for a total of 34 collar years. We have retrieved 27 of the GPS collars that were deployed in 2004 - 2006. The location data from these collars were downloaded and the information summarized. We were unable to retrieve 3 GPS collars because the collars released in difficult terrain and then the VHF transmitters failed prematurely. Additionally, 2 collars did not release as scheduled and the collars are probably still on the bears. The VHF signals from 1 collar were never relocated. One collar is on the ground, but the VHF transmitter is not working correctly, so we haven't been able to retrieve it.

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

JOB/ACTIVITY 1A: Prepare annual plan for field work.

The annual work plan was completed and submitted. Progress on the project's study objectives proceeded as planned. Field work for summer 2008 was organized.

JOB/ACTIVITY 1B: Compile, organize, and analyze field data using appropriate methods.

We retrieved 13 GPS radiocollars and failed to retrieve 4 others. Two GPS collars did not release as scheduled. The VHF signals from 2 collars were never heard again. One collar was still on the bear and another was on the ground, but the VHF transmitter malfunctioned.

Data from the 13 retrieved GPS collars were downloaded, organized, and summarized. All files were converted to geodatabases using ArcMap GIS software.

JOB/ACTIVITY 1C: Prepare reports as required by other funding sources and manuscripts for professional journals.

No additional reports or manuscripts were completed. The completion date for the other contracts was extended to more coincide with this project.

JOB/ACTIVITY 2A: Deploy GPS collars on up to 10 brown bears in the study area.

We captured and radiocollared 1 male brown bear in the Unuk River drainage during 10 days of effort. High water and abundant spawning salmon resulted in the bears being difficult to foot snare, so we did not achieve our target.

JOB/ACTIVITY 2B: Retrieve collars at the end of the data collection period.

We retrieved 13 GPS radiocollars that had been deployed in 2006.

**III. ADDITIONAL FEDERAL AID-FUNDED WORK NOT DESCRIBED ABOVE THAT WAS ACCOMPLISHED ON THIS PROJECT DURING THIS SEGMENT PERIOD**

None.

**IV. PUBLICATIONS**

None.

**V. RECOMMENDATIONS FOR THIS PROJECT**

The project is progressing as scheduled. The field work has been completed and the focus will be on data analysis and report preparation.

Project No. 4.36 – Mainland Brown Bear  
FY08 Annual Performance Report

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APPROVAL DATE: \_\_\_\_\_