

FEDERAL AID ANNUAL RESEARCH 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 State Wildlife Grant

Grant Number: W-33 **Segment Number:** 10
Project Number: 4.43
Project Title: Spatial relationships, harvest vulnerability, and harvest rates of brown bears on the northern mainland coast of Southeast Alaska
Project Duration: July 1, 2009–June 30, 2013
Reporting Period: July 1, 2011 – June 30, 2012
Report Due to HQ: September 1, 2012
Principal Investigators: Rod Flynn, Antony Crupi, LaVern Beier
Cooperators: Wrangell-Saint Elias National Park & Preserve
Work Location: Mainland coast of Southeast Alaska from Glacier Bay National Park to Icy Bay, including the Yakutat and Malaspina Forelands

I. PROGRESS ON PROJECT OBJECTIVES DURING LAST SEGMENT

OBJECTIVE 1: Describe seasonal spatial relationships of brown bears in a portion of Unit 5 including seasonal home ranges and habitat selection.

We have captured 49 brown bears (22 males, 27 females) in Unit 5A and deployed GPS collars on them. Of these, 17 brown bears (10 males, 7 females) were captured at the landfill in Yakutat. In Unit 5B, we captured and deployed GPS collars on 18 brown bears (9 males, 9 females). By the end of the reporting period, we had retrieved 35 GPS radiocollars from 31 individual bears.

OBJECTIVE 2: Estimate harvest rate of brown bears.

We collected DNA from the live-trapped brown bears (67) and 10 human-caused mortalities. We sent the samples to Wildlife Genetics International for analysis.

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

JOB/ACTIVITY 1a: Capture bears, deploy GPS radiocollars

We captured 17 brown bears (5 males, 12 females) in Unit 5A during the reporting period. The bears were processed and outfitted with GPS equipped radiocollars. Sixteen bears were caught on the Yakutat Forelands near the beach. Three of the captured bears had been previously radiocollared; we retrieved their old collars and deployed new GPS radiocollars. One female bear was captured in 5A at the Yakutat landfill.

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In Unit 5B, we captured 7 brown bears and deployed GPS equipped radiocollars. Four of the bears were female and three were male. Three of the bears were captured to remove and replace their radiocollars.

JOB/ACTIVITY 1b: Retrieve collars

By the end of the reporting period, we had retrieved 35 GPS radiocollars from 31 individual bears.

JOB/ACTIVITY 1c: Download and analyze location data.

Brown bear GPS radiocollar data have been downloaded and entered into geographical databases. The location data have been analyzed according to seasonal movement patterns, animal home range size, and den site selection.

JOB/ACTIVITY 1d: Prepare reports and publications

We completed one interim wildlife research report titled, “Spatial relationships and harvest vulnerability of brown bears in the Malaspina Forelands of Southeast Alaska” in February 2012. This report summarized the work conducted in the first 3 field seasons.

JOB/ACTIVITY 2: Collect DNA samples

We collected DNA from 24 live-trapped brown bears and 10 harvested bears. The DNA samples have been processed and archived. They will be sent to Wildlife Genetics International for analysis.

III. PUBLICATIONS

Flynn, R. W., L. R. Beier and S. B. Lewis. 2012. Spatial relationships and harvest vulnerability of brown bears in the Malaspina Forelands of Southeast Alaska. Interim wildlife research report. Alaska Department of Fish and Game, Juneau, AK. USA

IV. RECOMMENDATIONS FOR THIS PROJECT

We are prepared to continue field work in Yakutat following similar objectives and job activities in the upcoming year.

.Prepared by: Anthony Crupi

Date: 09/01/2012