

**FEDERAL AID
INTERIM 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: T-1 **Segment Number:** 3
Project Number: 5.13
Project Title: Distribution, abundance, and ecology of forest owls in Southeast Alaska
Project Duration: July 1, 2006 – June 30, 2008
Report Period: 1 July 2006 – 30 June 2007
Report Due Date: September 30, 2007
Partner: Alaska Department of Fish and Game

Project Objectives

OBJECTIVE 1: Establish a Southeast Alaska Owl Network – train volunteers to participate in region-wide owl monitoring efforts.

JOB/ACTIVITY A: Recruit and train volunteers in cooperation with the Juneau Raptor Center.

JOB/ACTIVITY B: Send volunteers to the field to begin collecting data.

OBJECTIVE 2: Design a survey protocol for nocturnal owls in Southeast Alaska.

JOB/ACTIVITY A: Use distance sampling, repeated surveys, and radio-telemetry to estimate probability of detection of at least one species of owl in SEAK and evaluate survey methods for estimating abundance of forest owls.

JOB/ACTIVITY B: Determine the influence of temporal, weather, and lunar factors on vocalizations of forest owls in Southeast Alaska.

OBJECTIVE 3: Describe distribution and abundance of forest owls in Southeast Alaska.

JOB/ACTIVITY A: Design and conduct broad-scale surveys for forest owls during the peak period of detectability and using the optimal survey method.

JOB/ACTIVITY B: Locate marked owls using radiotelemetry to describe habitat associations, nesting and roosting habitat (if possible), and diet through pellet analysis (if possible).

JOB/ACTIVITY C: Investigate and opportunistically survey unroaded areas.

OBJECTIVE 4: Develop recommendations for a broad-scale monitoring protocol for this species group.

JOB/ACTIVITY A: Analyze data.

JOB/ACTIVITY B: Write reports and journal articles.

Summary of Project Accomplishments

OBJECTIVE 1:

JOB/ACTIVITY A: We continued to solicit volunteers for the Southeast Alaska Owl Network, in conjunction with the Juneau Raptor Center.

JOB/ACTIVITY B: We continued to have volunteers document owl sightings and conduct silent and broadcast surveys.

OBJECTIVE 2:

JOB/ACTIVITY A: The field portion of this job was completed during 2006; final analysis and reporting will be completed during the final year (2008) of this project.

JOB/ACTIVITY B: The field portion of this job was completed during 2006; final analysis and reporting will be completed during the final year of this project.

OBJECTIVE 3:

JOB/ACTIVITY A: Based on results of objectives 1 and 2, we designed and implemented a survey protocol for forest owls in Southeast Alaska. We utilized the Southeast Alaska Owl Network to conduct surveys in 14 communities throughout Southeast Alaska during the peak period of detectability. Because of the record snowfall in Southeast Alaska during the winter of 2006/2007, many survey points and routes that would normally have been available during this time period were unavailable. To date, many volunteers have not turned in data from their surveys so these numbers are incomplete. Thirty-eight volunteers conducted silent surveys and 10 volunteers participated using an extended survey protocol that combined silent and broadcast survey methods. Volunteers spent 107.36 hours surveying for forest owls and detected 25 owls during broadcast surveys and 9 owls during silent surveys. Volunteers submitted anecdotal sighting reports of 155 owls. Once we receive all volunteer data, final analysis and reporting will be completed.

JOB/ACTIVITY B: Based on radio-telemetry relocations of western screech-owls gathered during 2005 and 2006, we generated estimates of use area size and documented roosting and nesting habitat. These data were reported at the IV North American Ornithological Conference, in Veracruz Mexico. We attempted to collect additional data on habitat use in conjunction with a student volunteer in Sitka by radio-tagging 2 western screech-owls in the Sitka area. The first was an immature that was captured on 16 November on the campus of Sheldon Jackson College. This bird was located the day after capture and then dispersed from the area (i.e., the radio was not heard again). A second western screech-owl was captured on 20 April in the vicinity of Starrigavan River. This owl was relocated several times over the following week before being found dead due to starvation. These 2 captures did not generate enough data to supply us with additional home range or habitat use data; final analysis of owl relocation data will be completed during the final year of this project.

JOB/ACTIVITY C: While planning our survey effort this year, we evaluated several options for surveying unroaded areas for owls. However, because our goal was to design a monitoring protocol that could continue based solely on the volunteer network; we did not try to use methods this year that, in all likelihood, would be unavailable to volunteers (i.e., snowmachines) in later years. We did not attempt to survey unroaded coastal areas from skiff due to the numerous problems associated with that method, such as boating at night and difficulty hearing owls over water noise. We feel that, at this time, surveying away from roads is too difficult and would not provide sufficient additional information.

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