

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

Grant Number: W-33-8 **Segment Number:** 9
Project Number: 14.26
Project Title: Estimating wolf populations in Southeast Alaska using noninvasive DNA sampling
Project Duration: July 1, 2009–June 30, 2012
Report Due Date: September 1, 2011
Principal Investigators: Dr. David Person
Work Location: Prince of Wales Island and Ketchikan, Alaska

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

JOB/ACTIVITY 1: Collection of wolf scats

During the reporting period we surveyed sampling transects on Prince of Wales Island once per month during September–November 2010. In November, we augmented our sampling scheme by establishing 126 scent post stations located along 11 of our vehicle driven transects and 5 of our walking transects located within the north-central portion of the island. On vehicle transects, scent posts were located every kilometer and on walking transects they were located every 500m. We surveyed a total of 103km of vehicle transects and 24 km of walking transects. Scent post stations consisted of a small patch of loose gravel situated in front of a wooden scent post inoculated with wolf gland lure or wolf urine. We surveyed each transect once per month during November 2010 to February 2011.

We recorded very little wolf activity on our transects. Only 4 vehicle-driven transects with scentpost stations showed evidence of wolf activity. We detected wolf activity on walking transects within Honker Divide and Sarkar Lakes areas. We collected only 2 fresh scats during the reporting period but encountered a total of 26 scats. Most of those were located within the Honker Divide and Sarkar Lakes areas. No fresh and only 9 total scats were encountered outside those 2 areas. To date since the beginning of this project in 2009, only 10 relatively fresh scats were located. Only 2 of those scats were from areas outside of Honker Divide. Consequently, no systematic sampling or resampling necessary for DNA-based population estimation was achieved.

JOB/ACTIVITY 2: Extracting DNA from scats and genotyping wolves

Too few scats were obtained to accomplish this job.

JOB/ACTIVITY 3: Analysis and population estimation

No analysis was done this report period.

JOB/ACTIVITY 4: Publication and report writing

14.26 Estimating wolf populations in Southeast Alaska using noninvasive DNA sampling

Title

FY11 Interim Report

No publications completed during this reporting period.

II. RECOMMENDATIONS FOR THIS PROJECT

This project needs to be revised because efficient collection of wolf feces is not possible owing to a potentially low density of wolves. To accomplish our original design, we would need to greatly expand the effort to locate and collect fresh scats within the study area. That would involve many more field personnel and a much greater commitment of resources and time. We recommend that the current methodology be abandoned. As an alternative, we should consider radiocollaring wolves from neighboring packs within the north-central portion of Prince of Wales Island and then use those animals to aerially locate packs and count pack members during autumn when wolves are often visible within open muskegs. That was the method used previously with reasonable success. Unfortunately, it will require the commitment of 2-3 field personnel during September–November to capture, radiocollar, and track wolves.

Prepared by: Dr. David Person

Date: 8/22/2011