

**Alaska Department of Fish and Game
State Wildlife Grant
ANNUAL INTERIM PERFORMANCE REPORT**

Grant Number: T-1 **Segment Number:** 6
Project Number: 15
Project Title: Evaluating the effects of forest management on bird and vegetation communities
Project Duration: July 1, 2004 – June 30, 2006
Report Period: July 1, 2004 – June 30, 2005
Report Due Date: August 1, 2005

Objectives (*as submitted in grant project statement*):

1. Monitor how bird densities, forest structure, and understory composition have changed since 1991-1993.
2. Compare bird densities, forest structure, and understory composition among treatments to test whether thinning or gapping helps enhance recruitment of birds, plants, or forest structural attributes that are characteristic of old-growth forests.
3. Test whether retention of old-growth trees in harvested stands helps hasten recruitment of birds and vegetation components that are characteristic of old-growth stand.

Summary of Accomplishments (Describe accomplishments related to the work that was proposed to be done during this same period in the Project Description and work schedule):

The following accomplishments are related to Objective 1:

1. Six biologists spent over 1,000 hours in the spring (approx. 10%) and summer (approx. 90%) i) summarizing protocols, data, and plot locations from 1991–1992; ii) re-establishing monitoring plots; and iii) surveying birds and forest vegetation to monitor decadal trends.
2. Existing data and all study plot locations from 1991–1992 were made available by Dominick DellaSala and his staff from the World Wildlife Fund in the spring of 2005.
3. We re-surveyed breeding bird and forest vegetation communities using the original methods at 5 replicate study areas for each of 3 different treatments; old-growth, young-growth untreated, and young-growth thinned. Each study area included 5 points that were surveyed 4 times from 1–20 June to estimate breeding bird densities and one time from 10–27 June for vegetation structure and composition. All points were also geo-referenced using GPS.
4. All data are currently being compiled and prepared for analysis and reporting.

No progress was made or planned to be made on Objectives 2 and 3 during this report period.

Significant Deviations (if any, and explain the reasons for these):

1. We had intended to resurvey 4 different treatments; the 3 described above (#1) and young-growth with canopy gaps (gapped hereinafter). However, after revisiting the original gapped plots we found that most (60%) had been subsequently thinned and were no longer suitable for study. We searched for replacements but found that no gapped sites were available that met the original criteria in terms of location, stand size, year of

harvest, and year of treatment. Resurveying the remaining 40% of the plots was considered but abandoned because the small sample of plots (10) would not provide sufficient samples for monitoring.

2. We could not find candidates from the FWS biotechnician register that were i) available for the short time-frame of sampling and ii) had adequate field experience. Thus we used personal service contracts to hire qualified personnel. These contracts included hourly rates and travel expenses comparable to those included in the original proposal.
3. Considerable savings were incurred in this study because lodging was provided by USDA Forest Service and vehicles and gas were provided by U.S. Fish and Wildlife Service, Juneau Fish and Wildlife Field Office and the Denver Zoological Foundation. We will use the additional money left over to help finance statistical analysis of the data in 2005-2006 by U.S. Fish and Wildlife Service temporary personnel (Jim Johnson), and to partially fund a second field season in 2006.
4. Additional non-federal services were made available by the Denver Zoological Foundation in the form of use of a vehicle for field research.
5. Non-federal matching services were also provided by SEAWEAD in the form of leadership in the collection of data on vegetation communities. Normal rate of \$40/hr was reduced to \$20/hr. This replaces services outlined in the proposal (GIS, palm pilot programming), as this was deemed more useful to our immediate project needs.
6. Finally, we are seeking funding to fully support an additional year of surveys which would complete the replication of the original study conducted in 1991–1992.

Federal (from ADF&G):	Partner (nonfederal share):
\$18,033.38	\$6,011.13

Project Leader (or Report Contact Person):

Steve Matsuoka,
Alaska Landbird Coordinator
U.S. Fish and Wildlife Service
Migratory Bird Management
1011 E. Tudor Road, ms 201
Anchorage, Alaska 99503 USA
907-786-3672, 907-786-3641 (fax)
steve_matsuoka@fws.gov