

**FEDERAL AID
FINAL PROGRESS 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-9

Segment Number: 1

Project Number: 8.0

Project Title: Monitoring landbird populations in Alaska

Project Duration: 1 May 2009 to 30 June 2013

Report Due Date to HQ: 31 December 2012

Principle Investigator: Susan Guers

Project Location: State and federal conservation lands throughout Alaska

I. SUMMARY OF WORK COMPLETED ON JOBS *Briefly describe how Federal Aid funds were spent on each active job, listing the results achieved (1 paragraph each). If a job was not accomplished as planned, very briefly tell why.*

Note: the last performance report was due September 1, 2012 and reported from July 1, 2011 – June 30, 2012. This performance report will summarize the entire duration of the project in addition to the period from June 30, 2012 through December 31, 2012.

Objectives: In this five-year study, we propose to bring the Alaska Landbird Monitoring Survey to or near full implementation. This will be done by addressing the four issues limiting the program as outlined above. Specifically, we will address each issue as follows:

- **Objective 1:** Determine the number of ALMS surveys that can be conducted by three roving crews of trained observers (Issue 1).

Accomplishments:

Federal Aid funds were available for this project beginning May 2009. In the 5 weeks before the ALMS sampling period began, the Alaska Bird Observatory (ABO) hired one survey crew for fieldwork that was able to survey 4 ALMS routes (2 each on 2 different land management units).

Federal funding and match was available in during the winter of 2009/2010, and ABO was able to hire 3 roving crews. These crews surveyed 8 ALMS routes on 4 separate land management units.

Funding to hire crews from other agencies wasn't reliably available until March 2011; given funding and timing restraints, only 2 crews rather than the standard 3 were hired to perform the 2011 ALMS fieldwork. These 2 roving crews sampled 5 ALMS routes on 3 separate land management units.

In 2012, 1 roving crew sampled 3 ALMS routes on 1 land management unit.

Based on these results from the 2009 field season, it was projected (dependent on weather and logistics) that 3 crews could sample 12 ALMS routes. However, it is realistic to expect some unfavorable weather or logistical issues. Given these conditions it seems reasonable to assume that 8-9 new ALMS routes could be completed with 3 crews.

- **Objective 2:** Develop and conduct a rigorous course to train qualified observers to conduct ALMS surveys throughout Alaska (Issue 2).

Accomplishments:

The training for ALMS crews developed out of an already existing ABO bird identification and distance estimation course. The course was conducted during the last two weeks of May. Sessions began in the early morning (M-F) and ran until lunch. Mid to late May is optimal for bird diversity in the Fairbanks area.

The instructors were Tim Walker and Kristen Bartecchi-Rozell. Both have extensive experience in the field and in teaching. The course content focused on identifying birds by call and song, estimating the distance between a point and a singing bird, and identifying habitat characteristics? Due to varying levels of experience, the training was customized to the participants each year. Since the primary surveyors were returning from previous years, already very experienced with Alaska birds, bird identification and vocalizations was more review than instruction. The majority of training time was spent teaching distance estimation in various habitats. All participants were tested on bird identification and distance estimation. Using speakers and flags placed at different distances, participants learned to judge distances to the sound by both sight and sound.

Habitat identification and use of habitat data sheets were emphasized in the second week. An effort was made to find habitat similar to the ALMS plots to become familiar with the vegetation. In some cases, like the tundra plots, it was hard to replicate in Fairbanks.

Ten minutes (the time for an ALMS point count) is a long time to remain attentive, requiring discipline and practice. As a result, the instructors required multiple practice surveys be completed for each observer/intern combination during the training period.

All ALMS biologists (lead surveyor and intern) took part in this course, and the instructor was retained for all years. The course was also open to agency biologists and technicians conducting their own ALMS surveys.

- **Objective 3:** Send roving crews of observers to aid in the establishment of ALMS routes on land management units that want to participate in the program over the long-term. This will substantially offset the relatively high startup costs of ALMS (Issue 3) and help increase overall participation to the program (Issue 4).

Accomplishments:

The 2009 ABO roving crew initiated 2 routes on the Innoko National Wildlife Refuge (NWR) and resurveyed 2 routes on the Kanuti NWR. The Innoko NWR had wanted to survey their ALMS routes but did not have the funds to hire and train qualified staff. Having the roving crew available allowed them to participate in the program. Conducting the Kanuti surveys allowed the refuge biologist to work on another project and maintain the Refuge participation in the ALMS program.

ABO hired 3 roving crews in 2010. The first crew initiated 1 route on Kodiak NWR and then 2 routes on the Alaska Peninsula/Becharof NWR. The second roving crew initiated 2 routes on Innoko NWR while the third roving crew initiated 3 routes on the NPR-A. Habitat data were collected on all points during all surveys.

In 2011, ABO hired a roving crew to conduct bird and habitat surveys on five remote plots (blocks) on Kanuti National Wildlife Refuge during June 2011. Two of these plots are part of ALMS. The crew completed bird surveys on two of these plots and habitat data on one. Habitat data on the second plot was not needed at this time. The crew also completed five replicate bird surveys on both ALMS plots, as requested by the coordinator of the ALMS program. In addition to the ALMS plots the crew completed bird and habitat surveys on three Kanuti Inventory (INVE) plots. The INVE plots follow the ALMS protocol except that they are smaller in size. The plots have been assigned ALMS block numbers. Conducting the Kanuti surveys allowed the refuge biologist to work on a Whimbrel project while maintaining the refuge's participation in the ALMS program. A second ABO roving crew spent most of the month of June 2011 on the NPR-A initiating 3 new routes.

In 2012, ABO hired one roving crew to conduct bird surveys on the NPR-A. Three blocks were surveyed over a three-week period in June. Habitat was not performed on these blocks because they were repeats of the 2010 field season.

II. MANAGEMENT IMPLICATIONS *In 1–3 paragraphs, summarize management implications of your findings, or include a brief summary under each objective's findings above. Please provide suggestions for further work (i.e. what did this study show us, and where do we go from here)?*

A successful ALMS program will provide several benefits in terms of both conservation and management for landbirds in Alaska. It is estimated that ALMS and BBS will be able to jointly assess the population trends of at least 48 landbird species statewide, in addition to population trends for an array of shorebirds and other non-landbird species. Modeling habitat associations for these species can also be possible. Information on population trends and habitat use will greatly advance our understanding of the status of landbird populations both in Alaska and in northern regions of North America. Such information will become the benchmark upon which we will begin to understand and assess ecological changes in Alaska, such as those that are beginning to result from climate warming.

Over the course of 4 field seasons, this project successfully advanced the implementation of the ALMS program throughout land management units of Alaska. ABO initiated 20 survey routes among 5 land management units. Additional surveys were also initiated independently by cooperating agencies. For this project, ABO had a

fine history of hiring well-trained crews. We had the advantage of being able to hire the biologists we wanted, rather than going through the selection process used by the state and federal governments. ABO was the only organization in Alaska to offer a Distance Training program; the lead instructor, Tim Walker, had almost 10 years of using this protocol and authored a manual for the National Park Service in 2005. Also, many of the primary observers would return year after year to perform surveys. Finally, ABO salaries were much lower than those for the state and federal government biologists, so the costs of the project were kept much lower than if land management units did the work themselves.

Hiring biologists for 2 months was always a challenge (of course, people would like longer-running jobs), but luckily, Alaska is a big draw and the time frame is good for undergrads, so hiring interns wasn't too difficult. ABO worked hard to develop a seasonal staff of competent biologists that would return for several years to this project. ABO actively recruited biologists throughout the year and offered a flexible working environment. A major difficulty for this project was not knowing which agencies were going to be on board for the upcoming field season often until very late (February or March, even later). This made hiring and logistical planning quite a challenge. Obtaining match was a significant challenge. These monies required a 1:1 match. Our main source of match was volunteer time for BBS routes. This entails reminding BBS volunteers to keep track of their time and mileage and then submit it in a timely fashion. Another hurdle was the fact that agency biologists conducted many BBS routes during work hours; this makes the time ineligible for match.

III. PUBLICATIONS *Include posters, presentations and reports.*

Presentations summarizing the ALMS field seasons (2009-2011) were given each year at the Boreal Partners in Flight meeting as well as to members of the Alaska Bird Observatory during annual meetings. Due to the dissolution of ABO, these presentations are not in my possession at this writing.

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

In 2011, an agreement between ABO and the North and West Alaska Cooperative Ecosystem Studies Unit paid for the ALMS surveys performed on Kanuti NWR. The total budget for performing these 2 blocks was \$15,340, which covered the salaries of the roving crew, training, food and equipment, and travel to and from Kanuti NWR to Fairbanks, AK.

In 2012, the cost to send one roving crew to NPR-A to conduct bird surveys on 3 blocks was \$10,266. This money was awarded to ABO by a Bureau of Land Management grant (#L12AP20001). This money was not billed to ADFG. The money from this grant paid for salaries (ALMS project manager, ALMS primary surveyor, ABO Executive Director and Financial Officer) and for ABO overhead costs. The BLM provided travel costs (to

and from NPR-A and within NPR-A) as well as the majority of equipment and food costs.

V. SIGNIFICANT DEVIATIONS:

In 2012, ABO lacked the funds to hire three roving crews; an agreement with ADFG extended the project for one year with the understanding that ABO would not do a full-scale ALMS project for that field season. The BLM approached ABO with grant money that would allow ABO to hire one roving crew (consisting of a paid biologist as primary observer and volunteer as scribe) to continue survey work on the NPR-A. The cost for the 2012 ABO ALMS field season was not billed to ADFG and the data collected contributed to the ALMS program.

The ABO Board of Directors dissolved the ABO as an organization on December 31, 2012; as a result, only four field seasons, rather than five as per this contract, were completed for this project. There was to be one more field season of roving crews performing point count surveys throughout Alaska in 2013.

Prepared by: Sue Guers

Date: 14 March 2013