

**FEDERAL AID
ANNUAL PERFORMANCE REPORT**

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF WILDLIFE CONSERVATION
PO Box 115526
Juneau, AK 99811-5526

Annual PROGRESS REPORT SHELL AND INSTRUCTIONS

The purpose of this report is to summarize significant findings and their management implications for the entire project. This template is based on Federal Aid reporting requirements as found in the Federal Aid Handbook, Chapter 11 <http://wsfrprograms.fws.gov/subpages/toolkitfiles/fah52211.pdf>

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

Grant Number: T-21 **Segment Number: 1**
Project Number: 11.0
Project Title: Southeast Alaska Citizen Science Program
Project Duration: 16 April 2011 – 30 June 2015
Report Period: 1 July 2013 – 30 June 2014
Report Due Date: 30 September 2014
Principle Investigator: Karen Blejwas, ADF&G
Project Location: Southeast Alaska (GMUs 1 – 5)

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

Objective 1: Create a citizen science program in Southeast Alaska to collect and compile baseline information on species of greatest conservation need.

Job/Activity 1a: Identify species with information needs and create citizen-based programs aimed at filling those information gaps

Job/Activity 1b: Identify, promote, and integrate with existing citizen science programs (such as NatureMapping, USA National Phenology Network, Birds in Forested Landscapes) that will help address information gaps and conservation needs in Southeast Alaska.

Job/Activity 1c: Partner with other agencies, educational institutions and community groups to promote citizen science efforts in Southeast Alaska.

Job/Activity 1d: Partner with educational institutions and community groups to develop and distribute outreach and educational materials relating to specific projects.

Job/Activity 1e: Identify monitoring needs that can be met with citizen-based monitoring efforts and implement them. Identify community groups and partners to manage these efforts on a long-term basis.

Accomplishments: We hired a Wildlife Biologist I on April 1, 2013. The WBI partnered with community schools, agencies (USFS, NPS) and libraries throughout the reporting period to present on bat research and citizen science opportunities. In the winter of 2013, the WBI worked with high school science teachers to integrate bat research into the science curriculum, enabling students in Gustavus and Angoon to deploy and monitor bat detectors in their communities. From our work with homeowners on excluding bats from residences, we identified designing a heated bat box as a need that could be met through citizen science. We partnered with the UAS Construction Technologies Program to have a student design and build a prototype and assembled a group of interested community members to act as advisors. The prototype was completed in May and installed at a home where bats had recently been excluded to test whether bats would use it. We intend to continue this effort until we find a design that is successful in attracting bats.

Objective 2: Continue to support and expand the Southeast Alaska Bioblitz.

Job/Activity 2a: Work with partners to make the Southeast Alaska Bioblitz an annual event in Juneau. Recruit taxonomic experts to help create a comprehensive species list for the Juneau area.

Job/Activity 2b: Work with partners to expand the Southeast Alaska Bioblitz to other communities in the region in alternate years.

Accomplishments: We held the 4th grade Bioblitz event on May 1, 2014. We continued to refine the objective of the event to develop a long-term data set for the area. Surveys incorporated standardized sampling methods and techniques so that indices of abundance and diversity could be compared among years. We found a total of 160 species and calculated the abundance of each species. Additionally, organizers from 6 different agencies held a volunteer appreciation dinner allowing volunteers to ask questions about the event. This served to be quite helpful for new volunteers in order to familiarize them with the protocols and the schedule. This year, 18 taxonomic experts volunteered to lead 12 survey groups, with 200 4th grade students from around the Juneau School District participating in the event.

Objective 3: Develop a Citizen Science bat monitoring program for Southeast Alaska.

Job/Activity 3a: Collect and compile reports of bat observations and roost locations from local residents across Southeast Alaska. Develop an online reporting system. Forward all data annually to Wildlife Diversity Program staff in Region 2 and the Alaska Natural Heritage Program.

Job/Activity 3b: Give at least one public presentation on bats in every community with a passive monitoring station. Distribute sighting forms and encourage local residents to watch for bats and report their sightings. Investigate reports of local bat roosts and survey local trails to identify potential monitoring routes.

Job/Activity 3c: Recruit citizen scientists to conduct emergence counts at local roosts following the standardized protocol developed by eastern bat biologists in response to White Nose Syndrome.

Job/Activity 3d: Recruit citizen scientists to conduct acoustic monitoring surveys on established transects in the Juneau area during April – September. Develop and implement a volunteer acoustic survey training program and provide training sessions as needed. Post survey results on the web. If the program is successful, partner with other

agencies or NGOs to continue it in Juneau and expand it to other Southeast communities in future years.

Job/Activity 3e: Partner with the University of Alaska Museum to encourage members of the public to report and collect sick or dead bats. Coordinate with the ADF&G wildlife veterinarian to necropsy bats as needed prior to submission to the Museum.

Job/Activity 3f: Partner with local high schools and universities to establish long-term passive monitoring stations and develop hands-on research projects for students.

Accomplishments: We re-structured the citizen science webpage and added a listserv to disseminate important project information. We are currently working with IT to institute an online reporting system for bat and roost observations. In the fall of 2013 and spring/summer of 2014, we gave 8 bat presentations in Yakutat, Gustavus, Haines, Petersburg and Wrangell to elementary, high school and community members. Presentations incorporated local data on species presence and seasonal activity patterns from the acoustic monitoring in those communities. We obtained the locations of 6 maternity roosts from participants during these presentations and conducted roost emergence counts when weather permitted. In the spring of 2014, we met with local residents in 2 communities, Gustavus and Haines, and mapped locations of previous and present bat roosts. The local libraries have posted these maps and community members can add locations of known roosts. We distributed forms for bat observations, new roosts and sick/dead bats at these library 'bat stations' for locals to report their observations to ADF&G Wildlife Diversity Program biologists. Over the reporting period, members of the public reported > 20 sick, injured, or dead bats and ~15 bat carcasses were collected, sent to the ADF&G veterinarian for disease testing, and deposited in the UA Museum.

In Juneau, we recruited and trained two volunteers to assist WDP staff with conducting acoustic driving surveys. In the spring of 2014, the WBI connected with two communities in Southeast, Haines and Gustavus, and successfully implemented an acoustic driving survey project with the help of local libraries and community members. We held 2 survey training sessions where individuals learned how to use acoustic bat detectors and GPS units. We also distributed educational materials explaining the contribution of this citizen science effort towards the Southeast Bat Monitoring project. Librarians in these communities are responsible for the monitoring schedule, volunteer recruitment and equipment check out and this project would not be successful without the involvement of these crucial community members. Each community is responsible for completing a driving survey twice a month from April through September, for a total of 12 surveys in each community. Weather and equipment failure were problems that altered the schedule. During the reporting period, 30 community members volunteered their time and completed 8 surveys in Juneau, 5 surveys in Gustavus, and 4 surveys in Haines. We are in the process of analyzing the acoustic driving survey data and the results will be presented at an upcoming conference and community presentations, as well as posted on the citizen science web site. Additionally, during the summer of 2014, we initiated two science fair projects incorporating the data from the stationary detectors monitoring bat activity in Gustavus and Angoon.

II. PUBLICATIONS

None.

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

None.

IV. RECOMMENDATIONS FOR THIS PROJECT

None.

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Date: September 1, 2014