

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

Grant Number: T-1 **Segment Number:** 6
Project Number: 2
Project Title: Banding Station, Creamer's Field
Project Duration: July 1, 2003 – June 30, 2007
Report Period: July 1, 2005 – June 30, 2006
Report Due Date: September 30, 2006

Objectives

1. To conduct a standardized migration-monitoring station in spring and fall at Creamer's Field Migration Station (CFMS), Fairbanks.
2. To analyze data and examine the population dynamics and timing of life-history events (e.g. migration, reproduction, molt, juvenile dispersal, and seasonal differences in body condition) of migratory passerines.

Summary of Accomplishments

The following accomplishments are related to Objective 1.

Fall Migration 2005:

1. Between 16 July—30 September 2005, 34 standard mist nets (2.6m high x 12m long, 30mm mesh) were operated for 6 hours daily, weather permitting, for the purpose of capturing, identifying, banding and collecting data on: age, sex, size and stage of molting (if any) of migrating songbirds. Nets were operated for a total of 11,460.5 hours. Other than a five-day lull during the third week of August, capture rates were consistently high from late July through mid-September.
2. A total of 4,243 birds of 34 species were banded. The most abundant species were Yellow-rumped Warbler (1,052), Dark-eyed Junco (814), Orange-crowned Warbler (497), American Tree Sparrow (512) and Lincoln's Sparrow (377). These five species comprised approximately 75% of all birds banded.
3. This was the fifth highest season for newly captured and banded birds in 14 years of operation at CFMS. Total captures for Hammond's Flycatchers (108) were the highest ever. Ruby-crowned Kinglet captures (125) were the third highest ever in CFMS history. Overall captures of thrush species were variable. For example, captures for Swainson's Thrush (128) and American Robin (34) were almost one-half what they were in 2004. However, captures for Hermit Thrush (42) increased while those for Gray-cheeked Thrush (22) were comparable to the previous year. Captures for warbler species was variable as well. For example, Orange-crowned (497), Yellow-rumped (1,052), and Townsend's Warbler (29) captures increased over the previous year, while captures for Yellow (73) and Blackpoll Warbler (40), Northern Waterthrush (28) and Wilson's Warbler (79) were lower than the previous year. Overall captures of sparrow species (Dark-eyed Junco (814), White-crowned (78),

Lincoln's (377), Savannah (126), and American Tree Sparrow (512)) increased over the previous year.

4. Notable captures include an American Three-toed Woodpecker and Black-backed Woodpecker, a Northern Harrier, three Solitary Sandpipers, Wilson's Snipe, Rusty Blackbird and two Pine Siskens.
5. The mortality rate at CFMS during the fall season was 0.3%, which is lower than the accepted average for mist-netting studies of 1-2%.
6. Fifty-one volunteers provided 1139 hours of assistance, while two interns contributed an additional 808 hours of service.
7. Bird-banding presentations were given to 41 groups (1,043 people) in cooperation with the Alaska Department of Fish and Game Creamer's Nature Program. Informal banding demonstrations were given to an additional 221 independent visitors.

Spring Migration 2006:

8. Twenty-six standard 12m mist nets were operated for 6 hours, weather permitting, on alternate days from 25 to 30 April and daily from 1 May – 7 June 2006. Nets were operated for a total of 5485 hours.
9. The spring capture rate of 103.3 birds/1000 net hours continued to be above-average for CFMS 14-year history.
10. Total captures were 567 new and previously banded birds. We captured 410 individuals of 31 species. The most abundant species were Yellow-rumped Warbler (87), Dark-eyed Junco (71), and Swainson's thrush (38). These three species accounted for 35% of all captures. Forty-eight individuals banded in previous years (returns) were approximately 8.5% of our total captures. Of these returns, noteworthy individuals include a Black-capped Chickadee (resident species) first banded in 2002 and a Myrtle Warbler (long –distant migrant) first banded in 2003.
11. For several species, captures were the highest they have ever been in CFMS 15-year history. These species include: Gray Jay (5) and Rusty Blackbird (8). In addition, captures for Yellow-rumped Warbler (87) as well as several sparrow species including American Tree (9), Savannah (13) and White-crowned Sparrow (13) were substantially higher in 2006 than 2005. Captures of many of Alaska's long-distance migrant warbler species (including Orange-crowned Warbler (19), Yellow Warbler (7), Yellow-rumped Warbler, Blackpoll Warbler (4), Northern Waterthrush (32) and Wilson's Warbler (8)) were also greater than the previous year. Spring 2006 also marked declines in captures of several species including Common Redpoll (3) and Gray-cheeked Thrush (1)—the lowest captures ever for this species in the spring.

12. Interesting captures include: a second-year (SY) male Merlin and a SY male Bohemian Waxwing. Spring 2006 marks the first time these species were caught since the 2001 season.
13. The mortality rate at CFMS during the 2006 spring season was 0.5%, which is lower than the accepted average for mist-netting studies of 1-2%.
14. A training program for wildlife professionals occurred at CFMS from 22 May to 31 May. The training program included hands-on training in methods of capturing and banding passerines at CFMS as well as an alternate site operated along the boreal forest trail of Creamer's Field Migratory Waterfowl Refuge. We trained 12 biologists during this two-week program. These biologists were employees of the Institute for Bird Populations and ABO (Avian Influenza Screening crew).
15. Twenty-five volunteers provided 430 hours of assistance.
16. Bird banding demonstrations were given to 26 groups (541 individuals) in cooperation with the Alaska Department of Fish and Game Creamer's Nature Program. Informal banding demonstrations were given to an additional 92 independent visitors.

The following accomplishments are related to Objective 2:

Benson, A.M., B.A. Andres, W. N. Johnson, S. Savage, and S. M. Sharbaugh. Differential timing of Wilson's Warbler migration in Alaska. *Wilson Journal of Ornithology*. December 2006 issue.

Benson, A.M. and W. N. Johnson. An evaluation of autumn mist-netting data for monitoring songbird populations in interior Alaska. *Journal of Wildlife Management*. In review.

Note: Funding for data analyses associated with this publication was provided by the Tetlin NWR (\$6700) and Alaska Bird Observatory (\$600).

Benson, A.M. and K. Winker. High-latitude migrants overlap energetically demanding events in Alaska. Submitted to the *Auk* for review.

Walker, T. Creamer's Field Migration Station: Fall 2005 Report. Submitted to the Alaska Department of Fish and Game and Bureau of Land Management. *Available at www.alaskabird.org*

Guers, S. Creamer's Field Migration Station: Spring 2006 Report. Submitted to the Alaska Department of Fish and Game. *Available at www.alaskabird.org*

Significant Deviations

None

Actual Costs during this Report Period (*personnel plus all operating expense totals*):
(Reported costs included ADF&G indirect calculated at 13.5%)

Federal (from ADF&G):	Partner (nonfederal share):
\$43,603	\$14,534

Project Leader (*or Report Contact Person*): Sue Guers, Migration Program Manager

Additional Information:

1. Is this project contributing samples to the Alaska Avian Influenza detection effort? Yes, through a collaboration with the Institute of Arctic Biology, University of Alaska, Fairbanks (UAF). ABO and UAF staff collected approximately 1000 samples from 27 species during the 2005 fall season, and approximately 500 samples from the 2006 spring season.
2. Do you anticipate having any unspent funds at the end of the project? No