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

Grant Number: **T-1** **Segment Number:** **6**
Project Number: **7**
Project Title: Breeding ecology and habitat quality for arctic warbler in Interior Alaska
Project Duration: July 1, 2004 – June 30, 2007
Report Period: July 1, 2006 – June 30, 2007
Report Due Date: September 30, 2007
Partner: Alaska Bird Observatory

Objectives:

1. Document Arctic Warbler breeding chronology, productivity, territory size, and site fidelity; and
2. Develop a hierarchical model of habitat quality for the Arctic Warbler in Interior Alaska.

Summary of Accomplishments:

The following accomplishments relate to Objective 1:

2005 Field Season

1. 41 nests found and monitored; recorded number of eggs, nestlings, and fledglings to document breeding chronology and productivity. Average clutch size = 5.9 eggs (SD = 0.61, range 5-7, n = 18), mean brood size = 5.3 (SD = 1.10, range 2-7, n = 40), productivity = 5.2 nestlings/nest (SD = 1.10, range 2-7, n = 38).
2. Banded 46 adults with USFWS bands and individual color bands for use in determining territory size and site fidelity.
3. Banded 149 nestlings from 27 nests with USFWS bands to determine natal site fidelity future field seasons.

2006 Field Season

1. Recorded first singing male on 8 June.
2. Ten nests were discovered prior to a series of storms that dropped several inches of rain and more than a foot of snow on the plots between 17 June and 24 June. These weather events caused abandonment of all nests under observation.
3. Continued nest searching effort after weather events to determine re-nesting attempts and to observe changes is adult distribution.
4. Banded 43 adults with USFWS bands and color bands for use in determining territory size.

The following accomplishments relate to Objective 2:

2005 Field Season

1. Collected vegetation data within a circle (10m radius) with the nest at the center and within a 1m radius circle 7m southwest of the nest site.
2. Completed off-study plot transects to survey for Arctic Warblers in various habitats.
3. These data combined with data from 2004 were used in the spring of 2006 to create a preferred habitat model for Arctic Warblers.

4. The preferred habitat model indicates that Arctic Warblers correspond with more open vegetation structure and a higher diversity of herb and grass species.

2006 Field Season

1. Scouted sites and conducted additional off-study-plot transects to confirm findings of habitat model.

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):
$11,443	$3,814

Project Leader *(or Report Contact Person)*: David Shaw

Additional Information:

1. Is this project contributing samples to the Alaska Avian Influenza detection effort?

   In cooperation with the Andrew Lang, a post-doctoral associate at the University of Alaska Fairbanks, we are collecting fecal samples from Arctic Warblers captured during the project. These samples will be screened for H5N1 avian influenza.

2. Do you anticipate having any unspent funds at the end of the project?

   We do not anticipate having any unspent funds at the completion of this study. In fact, we hope to secure additional funds to prepare manuscripts for submission to journals, as much of what we are learning is new information.