

**FEDERAL AID  
INTERIM PERFORMANCE 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-1 **Segment Number:** 6  
**Project Number:** 8  
**Project Title:** Factors affecting the past, current, and future, production and distribution of trumpeter swans in Alaska  
**Project Duration:** July 1, 2004 – June 30, 2008  
**Report Period:** July 1, 2006 – June 30, 2007  
**Report Due Date:** September 30, 2007  
**Partner:** University of Alaska Fairbanks

---

**Project Objectives**

Statewide:

1. Estimate spatial and temporal rates of population change in Trumpeter swans;
2. Describe variation in size, elevation, and latitude of water bodies used by breeding Trumpeter swans;
3. Estimate spatial and temporal patterns in Trumpeter swan production rates;
4. Project maximum sustainable breeding populations for Alaska;
5. Provide recommendation for future surveys.

Minto Flats State Game Refuge:

6. Describe variation in temporal patterns of nesting distribution of trumpeter swans prior to (before 2004) the start of natural gas exploration on this refuge;
7. Describe variation in temporal patterns of trumpeter swan production prior to the start of natural gas exploration on this refuge;
8. Develop spatially explicit models of the relationship between development activities and changes in trumpeter swan nesting distribution and production.

**Summary of Accomplishments**

1. Objectives 1 and 3 have been completed and have been written up for committee review. Committee comments must still be incorporated and then the manuscript will be ready for journal submission later this year. We estimated that adult populations grew at a rate of 5.9% annually and cygnet production grew at a rate of 5.3% annually on average.
2. Work has been slowed for objectives 2, 6, and 7 due to a lack of availability of digital habitat data for several regions, especially the Minto Flats area. The digitization process is over 50% complete and should be finished early this fall. All areas of the Cordova, Tetlin NWR, and Kenai NWR regions have been digitized, and the analyses for Cordova and Tetlin

T-1-6-8 Trumpeter swans  
FY07 Annual Performance Report

are nearly complete. We expect to finish this analysis for the remaining areas later this winter.

**Significant Deviations**

1. We have been told that survey design issues have or will be addressed within the U.S. Fish and Wildlife Service, so we are not currently pursuing objective 5 (as stated in 04-05 and 05-06 reports).
2. Objective 8 will not be addressed because the amount of development in the Minto Flats area has been much less than expected prior to the initiation of this study. Due to the small amount of development that has occurred, we would not be able to detect any direct effects of development on breeding swans at this time (as stated in 05-06 report).

**Project Leader:** Mark Lindberg