

CENTRAL FLYWAY PERSPECTIVES ON TRUMPETER SWANS

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ABSTRACT

The Central Flyway is responsible for migratory waterfowl and other birds, including Tundra (*Cygnus columbianus*) and Trumpeter Swans (*C. buccinator*). One restoration and one pioneering flock of Trumpeter Swans exist within the Central Flyway and other restoration efforts occur to the east and west. Tundra Swan hunting seasons occur in three Central Flyway states. Approximately 1,000 swans are harvested annually, with North Dakota harvesting the most swans. While restoration flocks of Trumpeter Swans are nearing or exceeding population objectives, continued success will likely depend on the availability of suitable migration and wintering areas and their ability to adequately support Trumpeter Swans without impacting other waterfowl populations and associated hunting programs.

INTRODUCTION

The Central Flyway is a coalition of 10 states, two Canadian provinces and two Canadian territories that works in conjunction with the respective federal governments to manage migratory waterfowl and other birds and their habitats throughout a large sector of North America. Most of the conservation programs for migratory birds in a significant portion of mid-America, particularly for waterfowl, are delivered by Central Flyway states in cooperation with federal agencies and non-governmental partners.

Included under the responsibilities of the Central Flyway and associated federal agencies is the management and conservation of Tundra (*Cygnus columbianus*) and Trumpeter Swan (*C. buccinator*) populations. The two species have differing management considerations in the Central Flyway that may at times directly conflict with each other (Vaa *et al.* 1999). To deal with issues concerning swans, a special subcommittee of the Central Flyway Waterfowl Technical Committee has been established to review and initiate actions or recommendations to deal with those issues. However, collaboration and communication with agencies or organizations outside the borders of the Central Flyway is necessary to foster understanding and identify those programs that are important to agencies within and outside of the Central Flyway. Thus, the objectives of this paper are to review the status and background of swans in the Central Flyway, review Tundra Swan hunting seasons in the Central Flyway, discuss possible migration and wintering areas and habitats for Trumpeter Swans in Central Flyway states, and offer Central Flyway perspectives on these issues.

SWANS IN THE CENTRAL FLYWAY

There are two populations of Trumpeter Swans in the Central Flyway. The larger of the two is the High Plains Flock which is located at Lacreek National Wildlife Refuge (NWR) in South Dakota and the Sandhills region of Nebraska as part of a restoration effort begun in the 1960s (Figure 1). The other flock is located in eastern Saskatchewan and western Manitoba (Figure 1). This Canadian flock is likely the result of Lacreek NWR swans pioneering into the region, but only discovered in the early 1990s. Currently, both populations are doing well, with the High Plains Flock numbering approximately 360 birds in fall 2005 (Kingfisher and Vrtiska 2005) and the Canadian flock numbering approximately 113 birds (Gerard Beyersbergen, pers. comm.).

Just east of the Central Flyway, restoration flocks have been established in Minnesota and Iowa (Figure 1). Both of these efforts also appear successful and swans from these efforts have been observed in the Central Flyway. These trumpeters are a part of the Interior Population of Trumpeter Swans that includes several other states and Ontario. Finally, there are restoration efforts for Trumpeter Swans to the west of the Central Flyway states in the Pacific Flyway portions of Wyoming and Montana (Figure 1).

A large portion of the Eastern Population of Tundra Swans migrates through the Central Flyway in fall and spring, primarily through the province of Saskatchewan and the states of Montana, North Dakota, and South Dakota (Figure 1). Staging areas are confined to southern Saskatchewan, northeastern

Montana, large portions of North Dakota and northeastern South Dakota (Figure 1). The swans are attracted to large open wetlands for roosting and those containing adequate amounts of sago pondweed (*Potamogeton pectinatus*) for foraging (Earnst 1994).

Although relatively few in number, Mute Swans (*C. olor*) do occur in the Central Flyway in limited numbers. However, they do not appear to be causing damage to aquatic habitats as they have in the Atlantic Flyway (Maryland Department of Natural Resources 2003) or causing other management dilemmas.

SWAN HUNTING SEASONS

Currently, three states in the Central Flyway (Montana, North Dakota, and South Dakota) hold Tundra Swan hunting seasons in compliance with the *Eastern Population Tundra Management Plan* (Ad Hoc Tundra Swan Committee 1997). Harvest of Tundra Swans is managed by a permit system, with Montana, North Dakota, and South Dakota currently receiving 500, 2,200, and 1,300 permits, respectively. North Dakota typically issues all of their allotted permits, while Montana and South Dakota are issuing just under their allotment.

Harvest of Tundra Swans has ranged from just under 1,700 to less than 400 (Kruse 2005) (Figure 2). Annual mean harvest of swans is approximately 1,000 birds in the Central Flyway (Kruse 2005) (Figure 2). North Dakota annually harvests more Tundra Swans than Montana and South Dakota, and Montana harvests the least number of Tundra Swans. Total harvest also appears to be decreasing over time (Figure 2). However, even with Tundra Swan hunting seasons, population indices and 3-year averages derived from winter counts indicate the population has remained relatively stable since 1990 (Kruse 2005) (Figure 3).

Swan hunting in these states is popular among hunters (Vaa *et al.* 1999). There also appears to be little conflict between Tundra Swan hunting seasons and restoration flocks of Trumpeter Swans (Vaa *et al.* 1999). Montana and South Dakota obtain bill measurements on harvested swans to ascertain if any trumpeters are harvested during their Tundra Swan seasons (Jim Hansen, Montana Fish, Wildlife and Parks, and Spencer Vaa, South Dakota Dept. of Game, Fish and Parks, pers. comm.). Despite few anticipated conflicts and effects to Trumpeter Swan restoration flocks, the Central Flyway is currently not interested in pursuing a general swan season similar to that in the Pacific Flyway. Recent controversies

and subsequent lawsuits over swan seasons in the Pacific Flyway have made us cautious about such an approach. Despite differences in affected swan populations and circumstances between Pacific and Central Flyway hunting seasons, we believe a general swan season could potentially jeopardize current Tundra Swan seasons. Further, we also question the true motives behind lawsuits in whether they were initiated to protect Trumpeter Swan populations or ultimately abolish swan hunting.

TRUMPETER SWAN RESTORATION

The Central Flyway has observed the success of Trumpeter Swan restorations within and outside the Flyway. Undoubtedly, propagation and restoration of Trumpeter Swans flocks can be accomplished. However, despite successes with breeding populations, we are concerned about the viability of these populations in relation to their use of new migration and wintering areas. We believe the continued success of Trumpeter Swan restoration and support of restoration efforts by Central Flyway states will involve making restoration flocks independent of supplemental feeding and encouraging trumpeters to naturally pioneer to suitable migration and wintering areas. We are concerned about artificial feeding of Trumpeter Swans in both in terms of creating and perpetuating unnatural swan behavior as well as creating illegal baiting situations during waterfowl hunting seasons.

Inquiries about the availability or location of possible migration or wintering sites in the Central Flyway have been met with caution. First, we are not sure of any specific criteria or habitat requirements needed by Trumpeter Swans. Without knowledge of specific criteria, determining appropriate areas is difficult. If such criteria were known, use of analytic tools such as Geographic Information Systems (GIS) could more accurately depict and quantify possible migration and wintering areas.

Additionally, some work is needed in identifying the current quantity and quality of wintering habitat available to the High Plains and Canadian flocks. While these populations have been increasing steadily, they may be limited in the near future by the amount of available wintering habitat. That information also needs to be reconciled with the amount of possible breeding habitat available to Trumpeter Swans in the Sandhills of Nebraska. Finally, we remain concerned about Trumpeter Swan restoration and possible impacts to hunting programs (Vaa *et al.* 1999). Within the management plan for the Interior Population of Trumpeter Swans,

management strategies are detailed to deal with conflicts between hunting programs and Trumpeter Swan restoration programs (Subcommittee on the Interior Population of Trumpeter Swans 1997). Those strategies need to be included in future updates of the Interior management plan. Increased incidental take is likely, given increases in Trumpeter Swan flocks. However, we still believe that incidental take shall not be grounds for any changes in existing hunting programs and that incidental take will not harm Trumpeter Swan restoration efforts (Vaa *et al.* 1999).

The Central Flyway is willing to cooperate in updates of the Interior Population of Trumpeter Swans Management Plan and with other flyways, groups, and organizations concerning all swan management issues. Open and frank communication is necessary to continue or further programs that all groups promote or support, including Trumpeter Swan restoration.

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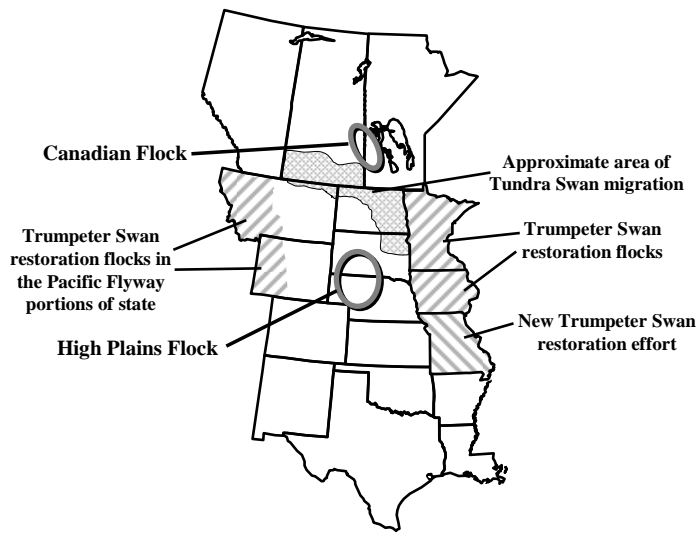


Figure 1. Location of Trumpeter Swan restoration populations adjacent to the Central Flyway.

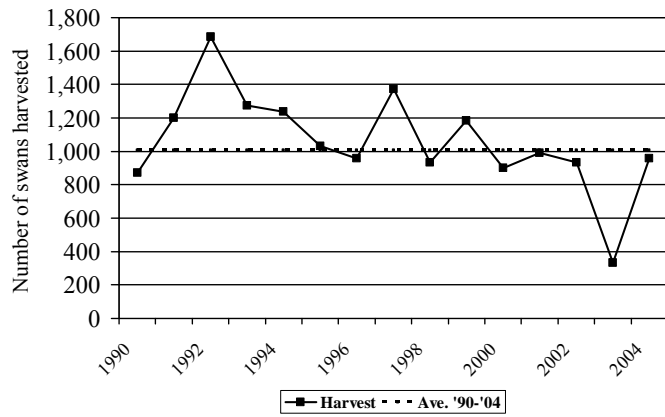


Figure 2. Harvest of Tundra Swans in the Central Flyway, 1990-2004.

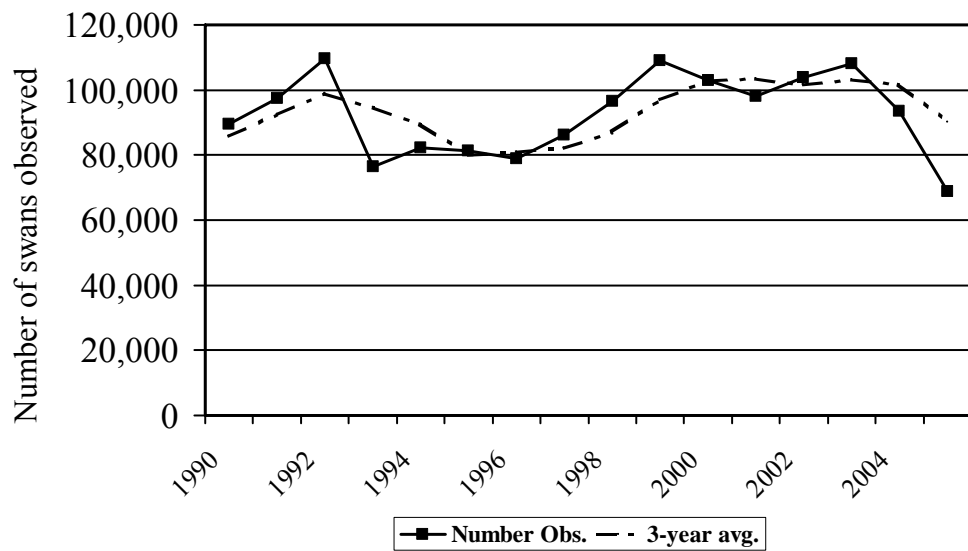


Figure 3. Counts (solid line) of the Eastern Population of Tundra Swans observed during the Mid-Winter Survey, 1990-2004. Mean count is dotted line.