

HISTORY OF TRUMPETER SWAN RESTORATION  
HENNEPIN PARKS/THREE RIVERS PARK DISTRICT  
November 2015

Trumpeter Swans originally nested throughout Minnesota, but they were extirpated by early settlers who hunted them for feathers and food. The last Trumpeter Swan nesting was in Meeker County in 1884.

Hennepin Parks, through the initiative of Park Commissioner Fred E. King, began its efforts to reestablish the Trumpeter Swan as a breeding species in Minnesota in 1966. In that year, the Park District received one pair of adult swans from Red Rock Lakes National Wildlife Refuge (NWR) in Montana. Over the next few years, an additional 40 sub-adult Trumpeters were received from Red Rock Lakes NWR.

Initial efforts to bring back the Trumpeter were not very successful. Some birds were shot, others died from disease and injury, and a few were stolen. By 1973, the flock had diminished to 13 swans. The program was changed at this time to emphasize captive breeding to rebuild the flock. Four cygnets were hand reared that first year. Over the next few years, cygnets were raised by hand and by adult swans. Young Trumpeters were kept clipped within fenced refuge areas until they were of breeding age (2-3 years). 1979 was the first year that swans raised at Hennepin Parks produced their own young - a milestone for the program. In addition, 1979 was also the first time since the early years of the program that Trumpeters were allowed to fly free. However, the next year was a disaster for the program. Five pairs nested in 1980, but only nine cygnets reached flight stage. Nineteen swans were allowed to fly free, but nine of them were shot, including two nesting pairs. Other swans died from various causes throughout the year. Flock size decreased to 34, including eight free flyers.

Flock management in the 1980's consisted of maintenance of a few captive breeding pairs; release of their offspring at two years of age; maintenance of winter refuges for both captive and free-flying birds; and monitoring of the free flying flock. Offspring of flighted pairs were allowed to fly free with the adults in the fall. Another major milestone came at the end of 1984 when 29 Park District Trumpeters migrated south (the total swan population was 84, 43 of which could fly). This represented a major step in restoring a free-flying, self-sustaining population of Trumpeters. Ten swans left Carver Park Reserve on 12 December and 19 swans left Lake Rebecca Park Reserve on 28 December. Reports of the Park District swans came from Iowa, Missouri, Nebraska, Kansas, and Oklahoma. Of the 29 birds that left in December 1984, 18 could be accounted for in the spring of 1985. The others were presumed to be dead. Free-flying pairs began ranging further and further from Hennepin Parks in 1985. A pair was seen throughout the summer around Grand Rapids, Minnesota, 150 miles north of their natal site. A pair nested near St. Cloud, and another pair spent the summer at Carlos Avery Wildlife Management Area, near Forest Lake, Anoka County, Minnesota.

Two other swans spent the summer near Gordon, Wisconsin. This pair apparently harassed a pair of non-native Mute Swans sufficiently to prevent them from nesting. However, after 1984, the number of swans choosing to migrate each year dwindled. During winters through 1990, only one or two family groups went to Iowa, Nebraska, Missouri, Kansas or Oklahoma, depending on

where they found open water and food. Trumpeter Swans migrate as family units, not flocks. The tradition is passed on from one generation to the next. It is very difficult to reestablish a migratory tradition once it has been broken. The death of a migratory swan is a major setback for developing migration traditions.

Hennepin Parks' initial goal was to restore a free flying flock of 100 Trumpeter Swans with at least 15 nesting pairs in East Central Minnesota. High mortality suffered by the free flyers continued to plague the Hennepin Parks' effort. Sub-adults disappeared during the summer, probably due to lead poisoning; older birds died in the fall and winter. Birds of all ages died of lead poisoning and shooting and young birds succumbed to accidents, especially power line collisions and disease. Progress toward the goal of 100 free flyers was slow in the 1980's.

The Trumpeter Swan Society was founded at Hennepin Parks in 1968 by Fred King, Chairman of the Board, staff Cliff French, Don Cochran, and Robley Hunt along with biologists Al Hochbaum and Peter Ward of Delta Waterfowl Research Station in Manitoba. The Society's goal was the gathering and exchange of information about restoring and raising the Trumpeter Swan and to advocate for this species that was not managed.

The Minnesota DNR Nongame Wildlife Program (MNDNR) began working toward a similar sized Trumpeter Swan flock in west central Minnesota with swan releases in the Detroit Lakes area beginning in 1987 and continuing through 1994. In general, Hennepin Parks conducted small releases averaging about 12 birds per year while MNDNR did large releases totaling 227 swans 1987-1994. Beginning in 1995, the MNDNR switched to small releases along the Minnesota/Iowa border.

Hennepin Parks and the Minnesota DNR Nongame Wildlife program worked together to the benefit of both programs. The Hennepin Parks' flock gained greater visibility and protection because of the DNR's statewide publicity campaign aimed at the hunting public. The flock also got a genetic boost when the DNR traded four Alaska birds for four Hennepin Parks' origin birds. In return, Hennepin Parks provided expertise to the DNR program. Eventually there was some mixing of the two flocks and by the late 1990s, the swans were no longer counted as separate flocks.

The momentum gathered for a Mississippi Flyway flock of Trumpeter Swan despite still high mortality from migration attempts, power line collisions and lead poisoning. Death from lead was especially high January 1988 through February 1989 due to severe drought conditions. A total of 57 dead or sick Trumpeter Swans was admitted with lead poisoning to the Raptor Center, University of Minnesota. Of these, 33 swans were from Sunny Lake Waterfowl Refuge at Carver Park Reserve. Low water levels made decades-old spent lead shot accessible to the swans that forage in the sediments for seeds, roots and tubers.

In 1989, Wisconsin Department of Natural Resources began releasing Trumpeter Swans in western Wisconsin. Stock came from zoos and from swan eggs collected in Alaska. Even with the heavy mortality suffered by free-flying birds, the cooperative efforts of the agencies and the large number of birds being released helped to promote success for Trumpeters in this region.

The Trumpeter Swan Society provided expertise and an opportunity for biologists throughout North America to compare and improve upon restoration techniques.

Hennepin Parks' Trumpeters were initially marked with yellow collars with black codes and leg bands and silver U.S. Fish and Wildlife Service leg bands. Later, in the early 1990s, Park District swans were banded with green collars. However, due to collar icing concerns, in 1997, a switch was made to band with green wing tags. The Minnesota DNR banded its swans with orange wing tags with black numbers. The Wisconsin DNR banded with collars. Michigan, Ontario, Ohio, and Iowa soon followed with their own Trumpeter Swan restoration programs and various marking protocol.

Residents with backyards along the Mississippi River in Monticello, Wright County, were privately feeding waterfowl in the late 1980s. In March 1986, an adult Trumpeter with Park District bands and a cygnet showed up at one feeding site on Mississippi Drive. In the winter of 1987-88, 15 Trumpeter Swans, a number of them banded and released by Hennepin Parks, showed up for winter feeding of corn. One resident, Sheila Lawrence, contacted the Wildlife Section of Hennepin Parks to report her swan observations. By winter 1996-97, the wintering flock of Trumpeters had grown to about 200 birds. Sheila carefully recorded winter observations and also noted that a number of MN DNR and WI DNR banded swans were spending the winter on the ice-free river. The Monticello nuclear power plant keeps 10 miles of water open between Monticello and Elk River. The wintering flock at this location was estimated to be ~740 swans in January 2003. At the same time, about 50 swans were reported wintering in Heber Springs, Arkansas, at a private ranch on Magness Lake. This winter migration tradition began with MNDNR-banded Trumpeters in 1991. However, as fewer Trumpeters hatched in the wild were banded, the origin of the swans was more and more unknown. All feeding of the swans at these sites was by private donations only. Hennepin Parks Wildlife staff believed the winter feeding brought the swans into healthy breeding condition and almost certainly helped to produce large and healthy broods in May and June.

Back at the Park District, the swans were flourishing by the early 1990s. Captive swan round ups and releases were popular biannual NRM activities. Park District Distinguished Volunteers looked forward to participating in the annual spring round ups and releases on the breeding marshes.

In 2003, the Minnesota Trumpeter Swan population estimate was 1,500 with a total of 12 nesting pairs within the Park District. Due to their highly territorial nature and need for large marshes, the Park District discontinued releasing Trumpeters in its parks. Instead, the District donated offspring from its two captive pairs to the Iowa DNR swan restoration program in hopes of encouraging migration to the south.

In November 2010, Three Rivers Park District's closed a chapter in one of its most successful restoration programs. Four remaining flightless Trumpeter Swans were transferred to the Iowa DNR swan breeding program and the Park District no longer maintained captive swans for the first time in 48 years. The Park District continued to accept rehabbed Trumpeter Swans, typically swans rescued from power line collisions or other injuries that need added protection until able to regain flight. Free-flying Trumpeters now have filled available territories in all of our Park Reserves. Captive birds are difficult to keep safe from harassment by free-flyers because swans

are so aggressive. Breeding well into their 20s, and typically raising a brood each summer, Trumpeter Swans are a common sight now throughout the Park District and neighboring wetlands.

The Park District will continue to monitor the growing flock, participating in continent-wide population counts, rescue injured birds where safe to do so and, when possible, work with utility companies to reduce the impacts of power lines. The Park District will also continue working with The Trumpeter Swan Society and the states in the Mississippi Flyway to encourage the expansion of wintering locations south of Minnesota.

During late fall and early winter, many people had visited the swan refuges maintained at Baker and Rebecca Park Reserves to view the swans. Water was kept open by wells and corn provided. The swans congregated at the District's refuges late October through December by the hundreds. The Baker Refuge was discontinued in 2011 when the water pump broke and became too expensive to repair. As surrounding lakes freeze, many of the swans move to the Mississippi and other rivers to spend mid-winter. As in other areas of North America, swans in Minnesota gradually adapted to field feeding on harvested crops, especially corn. It is likely Park District-origin Trumpeters field feed in Wright and Sherburne counties just to the west of Three Rivers Park District. Private individuals feed swans throughout Minnesota, especially during the winter months. The Monticello to Elk River Mississippi River wintering population essentially leveled off to about 2,000 swans in 2010. Other traditional Minnesota wintering congregations have been identified on the Otter Tail, Pelican, Fishhook, Crow Wing, Crow, Minnesota, and St. Croix rivers and at Sylvan, Pillager and Gull dams. It is believed that these wintering flocks probably also contain western Ontario Trumpeter Swans.

The 2010 North American continent-wide Trumpeter Swan survey was published by the U.S. Fish and Wildlife Service (USFWS) in 2012. The estimate for the Interior Population (IP) was 9,809. Minnesota, counted at 6,070 birds, was the largest population of the IP. Minnesota's count was based on an actual count of winter flocks within the State (5,470) and an estimated 600 swans that moved south out of the State. The winter count likely included swans of southwestern Ontario's Kenora District since they are believed to be largely an extension of the Minnesota flock and would likely winter in Minnesota. In contrast to previous Minnesota swan surveys, the 2015 5-year survey was held May-June 2015. Park District staff played a key role in helping to coordinate the survey and The Trumpeter Swan Society provided partial funding. The USFWS will publish the completed 2015 survey in early 2016.

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