

## **The Status of Trumpeter Swan Reintroduction in Ohio (February 2015)**

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In 1996, Ohio initiated a reintroduction of Trumpeter Swans with the release of 15 birds at the Magee Marsh Wildlife Area in northwest Ohio along the shore of Lake Erie. Historical records indicate that the trumpeter swan was extirpated from Ohio by the early 1700s because of hunting by early settlers. Additional releases occurred from 1997-2003 at other wetland wildlife areas in six different counties throughout Ohio (Figure 1). Approximately 150 birds were released through two different methods: 1) introduction of captive-raised adults (2 years old and older) from zoos and private propagators, and 2) introduction of captive-reared juveniles hatched from the eggs removed from nests of wild Alaskan Trumpeter Swans. In 2003, the population reached 15 breeding pairs, fulfilling the reintroduction goals and signaled an end to release efforts. Ohio biologists continued monitoring the Trumpeters, which have steadily increased since 2003 and spread to additional habitats and counties. In 2013, Trumpeter Swans were changed from state endangered to state threatened as a result of multiple factors, including a peak number of 35 breeding pairs (Figure 2), production of 2.4 cygnets per nest, and presence in 12 (of 88) counties in the state in 2011.

The number of Trumpeter Swan breeding pairs and productivity decreased in 2012 and 2013, but Ohio's trumpeter swan population rebounded again in 2014 with robust productivity (2.26 cygnets per nest) and a record high of 40 breeding pairs (Figure 2). Sites with the greatest number of breeding trumpeters include Ottawa National Wildlife Refuge, Cedar Point National Wildlife Refuge, Magee Marsh Wildlife Area, and Big Island Wildlife Area. As of July 2014, the Ohio flock included 246 individuals. According to Ohio's Swan Management Plan, if the number of breeding pairs of Trumpeter Swans persists at a level of 40 or above, and the birds are seen in at least 15 counties during the breeding season for three consecutive years, they would be considered for delisting from state threatened status.

While the growth of the Trumpeter Swan population and pioneering into other parts of the state is encouraging, the Ohio Division of Wildlife is concerned regarding the threat of non-native Mute Swans (*Cygnus olor*) in Ohio and throughout the region. Mute Swans compete with Trumpeters, are destructive to native ecosystems, and populations have been increasing throughout the Great Lakes region. For example, Michigan estimated its 2014 numbers of Mute Swans at approximately 9,100 (down from 17,500 in 2013, likely because of the severely cold winter of 2013-14). While Ohio has only a few hundred Mute Swans, limited wetland habitat in the state and the existence of larger numbers Mute Swans in the surrounding states led to development of a management plan for Ohio. In the spring of 2014, Ohio began implementing its Swan Management Plan, which calls for the removal of Mute Swans from public wildlife areas. Approximately 175 mute swans were removed in 2014 from western Lake Erie marshes, which are important breeding areas for Trumpeter Swans. The strong increase in Trumpeter Swan numbers in 2014 may be partially in response to Mute Swan control, but monitoring will continue to determine the long term effects of Mute swan Control on Ohio's Trumpeter Swans.

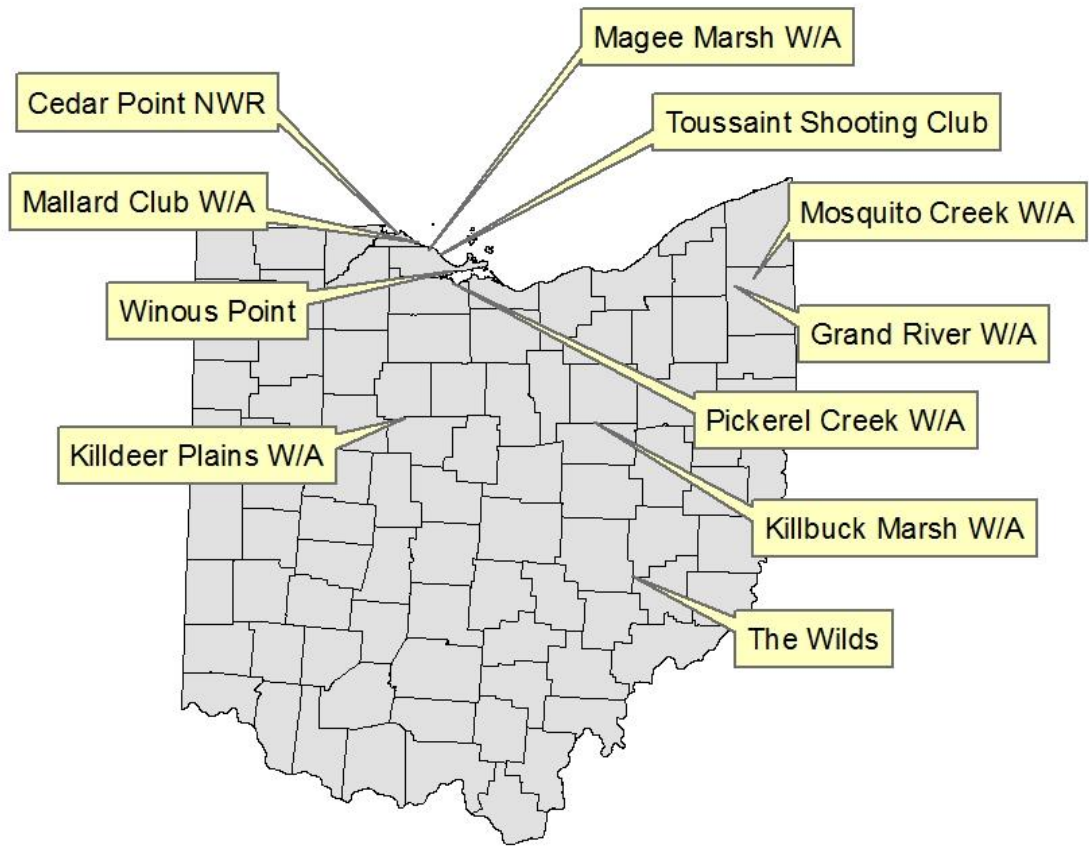


Figure 1. Location of release sites for Trumpeter Swans (*Cygnus buccinator*) in Ohio, 1996-2003.

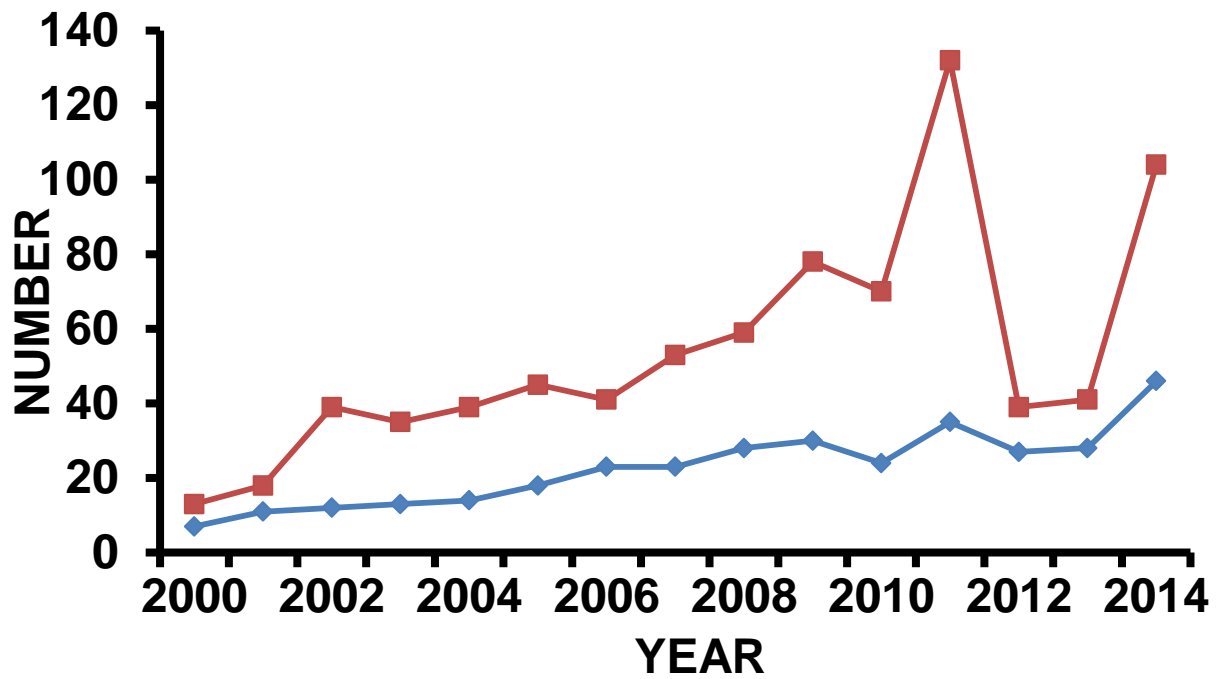


Figure 2. Ohio trumpeter swan (*Cygnus buccinator*) productivity, 2000-2014, based on summer surveys of public wildlife areas. The top line with squares (red) represents the number of cygnets produced, and the bottom line with diamonds (blue) represents the number of breeding pairs, both successful and unsuccessful.