



IOWA DEPARTMENT OF NATURAL RESOURCES

Wildlife Diversity News

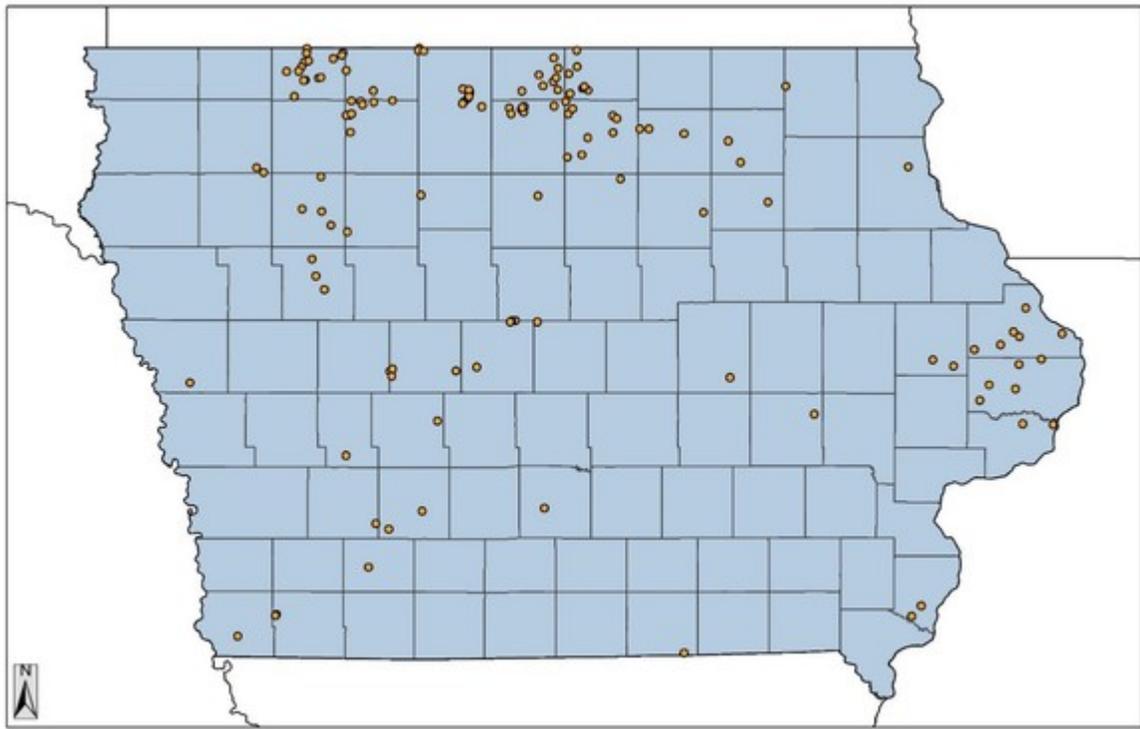
Conservation and Recreation

October 18, 2022

Trumpeter Swans in Iowa



The Trumpeter Swan is one of Iowa's great conservation success stories. This native species was extirpated from the state in the 1800s due to wetland habitat loss and unregulated harvesting and the species remained absent for over 100 years. The Iowa DNR started a captive breeding and reintroduction program in 1994 which has successfully re-established a population of Trumpeter Swans in the state. The initial goal of the reintroduction was to establish 15 breeding pairs. This goal was first met in 2004 and the breeding population has slowly increased ever since. The DNR tracks the number of nesting attempts each summer in order to quantify a population trend. The results for 2022 confirm an increasing population with a record 135 Trumpeter Swan nesting attempts across the state (Figure 1).



2022 Trumpeter Swan Nest/Brood Observations

Figure 1.

DNR and other natural resource professionals and private citizens reported observations of Trumpeter Swan nest attempts during May-September, 2022. Additional information on nest success, number of cygnets hatched, and number fledged was recorded when available. Reports were evaluated to remove any duplicates that may have occurred.

A total of 135 Trumpeter Swan nest attempts were reported in 2022, a 13% increase from the 119 nests reported during the last count in 2020 (figure 2). Nests were distributed across 41 counties (Table 1), an 11% increase over the 37 counties where nests were reported in 2020. Kossuth and Dickinson counties had the highest number of nest attempts (15) followed by, Cerro Gordo and Palo Alto (9), Worth and Winnebago (8), Hancock (7), and Jackson (6). The remaining 33 counties had five or fewer nest attempts each. There were five counties that reported nest attempts in 2020 but did not report nest attempts in 2022. This may represent biological reality in some cases (e.g. territory abandonment), but may also be the result of inconsistent observation effort and reporting.

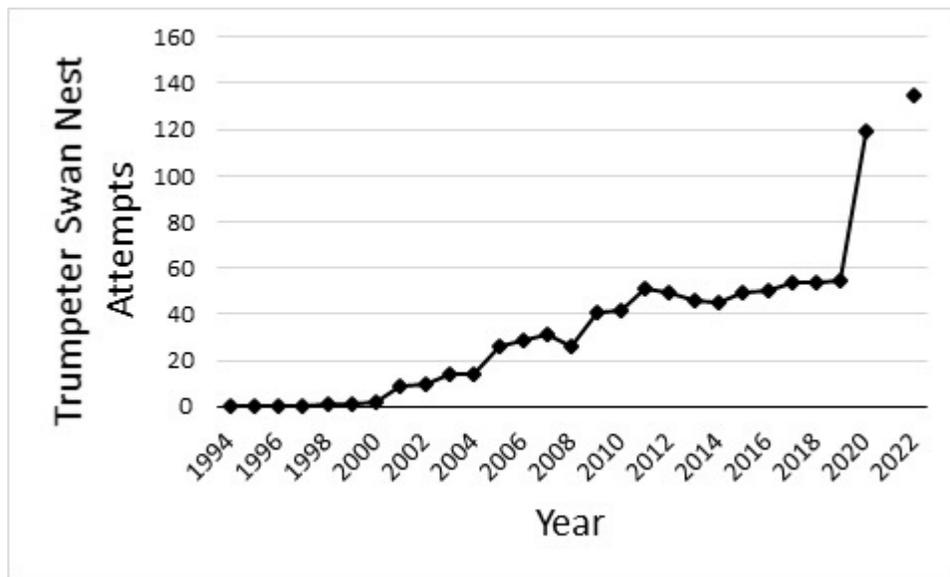


Figure 2: The number of reported Trumpeter Swan nest attempts in Iowa from 1994 to 2022.

<u>County</u>	<u>Nest Attempts</u>	<u>County</u>	<u>Nest Attempts</u>
Adair	2	Hancock	7
Adams	1	Humboldt	1
Audubon	1	Iowa	1
Boone	3	Jackson	6
Bremer	1	Jones	2
Buena Vista	4	Kossuth	15
Butler	1	Monona	1
Cass	1	O'Brien	2
Cerro Gordo	9	Page	2
Chickasaw	2	Palo Alto	9
Clayton	1	Pocahontas	1
Clinton	5	Sac	3
Des Moines	2	Scott	2
Dickinson	15	Story	1
Emmet	3	Tama	1
Floyd	3	Warren	1
Franklin	1	Winnebago	8
Fremont	1	Winneshiek	1
Greene	4	Worth	8
Guthrie	1	Wright	1
Hamilton	1	TOTAL	135

Table 1: 2022 Trumpeter Swan nest attempts by county.

Eighty-nine nests were reported as successful; however, the fate of many nests was unknown. The average number of cygnets hatched per successful nest was 4.2 (standard deviation of 1.70). This value was similar to previous years, indicating a relatively stable productivity rate for Trumpeter Swans. If this level of production is driving the increase in nest attempts, it seems likely that strong population growth will continue into the future.

It is important that the trumpeter swan population continue to be monitored at frequent intervals in the future so we can continue to track the population trend. With the large population expansion documented in 2020 and 2022, a more robust and systematic survey will need to be developed. As the population increases, the number of unreported nests will likely increase, which may increase bias in our counts and render the current methodology increasingly ineffective.

The Iowa DNR Trumpeter Swan Management Plan is currently under revision along with the development of an Integrated Population Model (IPM). The information from the 2022 nest survey, along with additional information gathered from ongoing research, will inform the IPM and provide the basis for a revised management plan.

THANK YOU!

A huge thank you to all the professionals and volunteers who contributed reports to this year's Trumpeter Swan nesting survey, your help was invaluable!