



Trumpeter Swans

RESOURCE BRIEF

Importance

The trumpeter swan (*Cygnus buccinator*), named for its resonant, trumpet-like call, is North America’s largest wild waterfowl, with a wingspan of up to 8 feet. These swans require open water, feed mainly on aquatic plants, and nest in wetlands. Although they once nested from Alaska to northern Missouri, by 1930 habitat loss and hunting nearly extirpated the species in the lower 48 except for the Greater Yellowstone Ecosystem. The GYE population was thought to number only 69, and trumpeter swans no longer migrated to more productive winter habitats further south. Protection from hunting, establishment of the Red Rock Lakes National Wildlife Refuge, and captive breeding programs restored the lower 48 states’ population to more than 5,000 by 2005. However, the resident population in Grand Teton and Yellowstone has had low reproductive rates and high cygnet mortality for several decades.



Trumpeter swans in Grand Teton National Park.

number of fledglings averaging 1.4 (compared to 13.1 in the 1950s). Yellowstone had no fledglings in 2009 or 2010. The park’s total 2010 population of 5 adult resident swans included one nesting pair, one territorial (non-nesting) pair and a single female. Though poor survey conditions may have affected the count at some sites, this is the lowest in records going back to 1931.

Trends

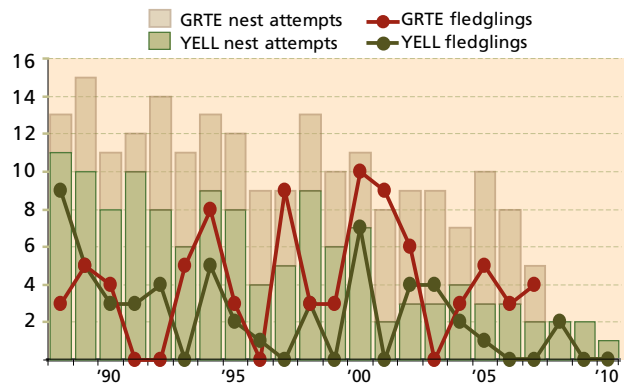
Even though the refuge discontinued its winter feeding program in 1992, trumpeter swans have not resumed migrations to areas south of the GYE. Nearly all of the Rocky Mountain population, which includes thousands of swans that migrate from Canada, now winters in the GYE, where they use waters kept ice-free by springs, geothermal activity, or outflow from dams. But only a small portion of these swans remain in the GYE during the summer to build their nests. The average number of nest attempts in Grand Teton each year from 2001 to 2007 was 5.1; the average number of fledglings, 4.3. The decline has been precipitous in Yellowstone, with nest attempts averaging 2.6 from 2001 to 2009 (compared to a 1978 recorded high of 17) and

Discussion

It remains unclear why the Grand Teton and Yellowstone resident populations have faltered while other trumpeter populations are thriving. Recent drought that has reduced wetland areas, seasonal flooding of nests, and egg predation may be limiting factors within the parks. The resident swans may be unable to successfully compete with the migratory flocks for habitat. The marginal winter habitat in the GYE may not provide enough aquatic vegetation for current numbers of wintering swans, Canada geese, and ducks. Concern about the GYE population has resulted in cooperative efforts between state and federal agencies to monitor swan distribution and productivity.



Current nesting range of trumpeter swans.



Total counted trumpeter swan nest attempts and fledglings in Yellowstone and Grand Teton national parks, 1988–2009.

