

Mute Swan

Cygnus olor

A native of Eurasia (Ciaranca et al. 1997), the Mute Swan was introduced to North America in the mid-1800s, as a showy addition to ponds in mid-Atlantic estates and parks. Pairs frequently escaped, however, and feral populations have become well established in marine wetlands along the East Coast between Virginia and New Hampshire. Farther inland, pairs also have bred along the Hudson River and northward to Lake Ontario in recent years (Badzinski 2007, McGowan 2008). Highly territorial towards other waterfowl—and considered destructive because they overgraze aquatic vegetation—Mute Swans constitute a serious concern for waterfowl managers. Despite active efforts to control them, local populations are firmly established on the East Coast, in the Great Lakes, and in the Pacific Northwest. Ironically, the Mute Swan is the only introduced bird species in North America protected by the Migratory Bird Treaty Act, based on a court decision rendered in 2001.

Mute Swans inhabit aquatic habitats with shallow shorelines and emergent vegetation, often nesting in *Phragmites* (Ciaranca et al. 1997), invasive wetland plants that have been blamed for the degradation of many marshes. Sexual maturity is reached at 2 to 3 years of age, clutches are large (5 to 6 eggs), and individuals may live for a quarter of a century; these characteristics have allowed the species to spread rapidly throughout the Northeast from established populations in the south and west. The species has been reported in Vermont more than 50 times since 1985 (and annually since 1993), usually from the Connecticut River or Lake Champlain (eBird 2010). In 1993, breeding was documented at Lake Arrowhead in Georgia (Franklin County), and November sightings of three and four individuals in Chittenden and Bennington counties, respectively, suggest that breeding also may have occurred elsewhere in the state (T. Murin pers. comm.). Although nesting was not recorded during the first or second atlases, additional breeding attempts seem likely in the near future.

The second New York atlas found that Mute Swan block occurrence had nearly doubled, and various estimates put the population increase at between 8 and 18 percent per year (McGowan 2008). Although New York's Mute Swan population has exploded along Lake Ontario,

there were no nesting records in counties bordering Lake Champlain. In Maryland, the number of occupied blocks more than doubled (Ellison 2010), while in Pennsylvania the number of occupied blocks more than tripled between the first and second atlases (Wilson et al. 2012).

Vermont has undertaken a campaign to prevent Mute Swans from threatening native waterfowl populations and wetland habitats. Since 2002, the Vermont Fish and Wildlife Department has enforced a policy prohibiting the establishment of wild Mute Swan populations in the state and regulating their treatment in captivity. Captive birds are required to be pinioned, and their sale or importation is prohibited. The ultimate success of these efforts may rely in part on the actions of neighboring states. It has been estimated that the Mute Swan population, if unchecked, could double every twelve years in eastern North America (Atlantic Flyway Council 2003). Unless control measures are enacted and enforced throughout the region, targeting both established and colonizing populations, Vermonters will have to be vigilant for many years to come.

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