

PHYSICAL CHARACTERISTICS OF TRUMPETER, MUTE AND TUNDRA SWANS

Trumpeter, mute, and tundra swans all have white plumage as adults and appear similar from a distance. There are, however, several physical characteristics by which these three species can be distinguished.

Trumpeter swans are the largest waterfowl native to North America, with a wingspan that reaches over seven feet.

- They can weigh 21-38 pounds and stand about three-and-a-half feet tall.
- Adult bills are solid black (often they have a red border or stripe along the edge of the lower bill).
- They hold their heads with a semi-curve or straight up while swimming and straight out while flying.
- Their voice is a deep, resonant call some people liken to notes from a French horn or trumpet.

Mute swans are generally a little smaller (i.e. 25-30 pounds).

- They have orange bills with a fleshy black knob at the base.
- While swimming a mute swan carries its neck in an S-curve with its bill usually pointed downward.
- Despite their name, mute swans do vocalize with a series of hisses, snorts, and whistles, particularly when upset.
- Their wingbeats produce a distinctive noise that can be heard up to a mile away.

Tundra swans are smaller than the other two swans, with a six to seven-foot wingspan.

- They weigh only 12-19 pounds, but still stand three feet tall.
- They have black bills and often have a distinct yellow spot in front of the eye.
- Tundra swans hold their long necks very straight while flying and sometimes in a very slight curve when swimming.
- Their voice is high and sounds similar to dogs barking.

WISCONSIN'S EFFORTS TO CONTROL MUTE SWANS

- In 1997, backed with the support of the public and key organizations, the Wisconsin Department of Natural Resources established a policy with a long-term objective of achieving zero mute swan production in the wild by the year 2005. A Mute swan population control program was initiated and egg addling was done each spring from 1997-2000.

- During the 2000 control season, some negative public sentiment arose. As a result, the Department developed an interim policy for 2001 limiting mute swan population control measures. In 2002, the control policy was revived and adult/juvenile control methods were added to egg addling as allowable techniques, except in two townships in SE Wisconsin where mutes were not to be controlled.

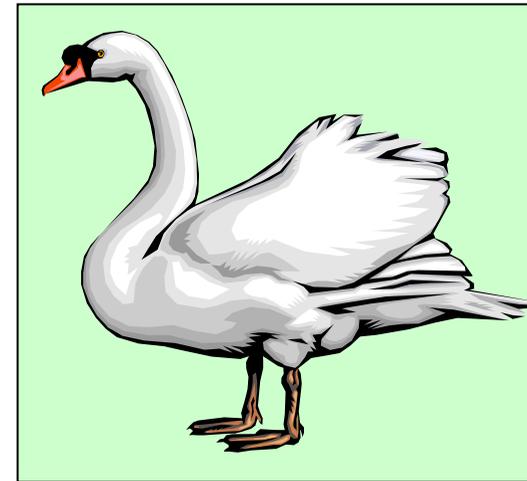
- In 2003, the assumption that Mute swans were not protected under the Migratory Bird Treaty was challenged, and control actions were suspended for the following year. Later, it was confirmed by the US Congress that the treaty did in fact exclude exotics such as the Mute swan and control resumed in 2005.

- Opposition from some lake residents in areas of SE Wisconsin again arose in 2006. A control policy similar to 2002 was approved by the Natural Resources Board in January 2007, with the exception of three counties in the southeast part of the state, where residents of these counties could sterilize and mark the birds in their area in 2007 only.

- In 2008, adult, juvenile and egg control measures are to resume statewide.

State law prohibits citizens from harming all swans in Wisconsin, and it is illegal to possess them without the proper permit. Wisconsin game farm regulations have been established to restrict the possession of mute swans. On game farms, mute swans must be enclosed within a covered pen unless pinioned and rendered sterile by a licensed veterinarian.

MUTE SWAN ISSUES IN WISCONSIN



A swan gliding across the water may be a beautiful sight. However, not all swans are native to our Wisconsin environment...

PUB WM-473-2007

Swans belong to the family Anatidae and there are three different species found in Wisconsin: trumpeter, mute and tundra.



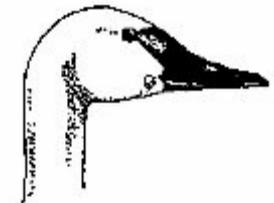
Trumpeter

Trumpeter swans (*Cygnus buccinator*) are native to Wisconsin, but their populations declined during the nineteenth century when they were hunted for their meat and feathers. By 1930, fewer than 100 trumpeter swans remained in the United States. The last documentation of trumpeter swans in Wisconsin was in 1937. In 1989, trumpeter swans were reintroduced to Wisconsin and placed on the state endangered species list. Most trumpeter swans migrate south each winter and return to Wisconsin in the spring.



Mute

Mute swans (*Cygnus olor*) are native to Eurasia and were brought to the United States in the 1800s as ornamental birds for estates, parks, and zoos. Over the years, many were released or escaped captivity and, by the 1970s, a resident population was established in Wisconsin and had been growing at an annual rate of 17 percent until the late 1990's. Mute swans may not migrate out of Wisconsin in the winter.



Tundra

Tundra swans (*Cygnus columbianus*) are found in Wisconsin primarily during migration, March through mid-May and mid-October to late December.

BEHAVIORAL DIFFERENCES OF TRUMPETER, MUTE, AND TUNDRA SWANS



All of Wisconsin's swans mate for life, though they will exchange mates or re-mate following a partner's death. They all have similar habitat requirements, but there are some differences in feeding and breeding patterns.

Trumpeter swans most often are seen in family groups of three to five, although in winter or during migration they occasionally will flock with other birds.

- They maintain breeding territories of 6-150 acres.
- Trumpeter swans may be aggressive in defending their territories against other swans and other animals, including humans.
- Trumpeter swans eat a variety of aquatic plant tubers, stems, leaves and seeds that they pull from underwater with the help of their long necks.

Mute swans generally neither flock nor migrate long distances or even migrate at all.

- Their breeding territories are 1-25 acres, so they can be much more concentrated in an area than trumpeter swans.
- They are extremely aggressive in defending those territories and will attack not only swans, but also other waterfowl and animals, including humans.
- They eat a variety of aquatic plant stems, leaves, flowers, seeds, and tubers.

Tundra swans are often seen flying in V's of 25-100 birds or congregating in flocks up to 1,000 while migrating through Wisconsin.

- Tundra swans feed in relatively shallow water on tubers and weeds and also will fly up to 15 miles inland to feed on waste grain or potatoes, unlike the other swans that prefer to stay in the water.

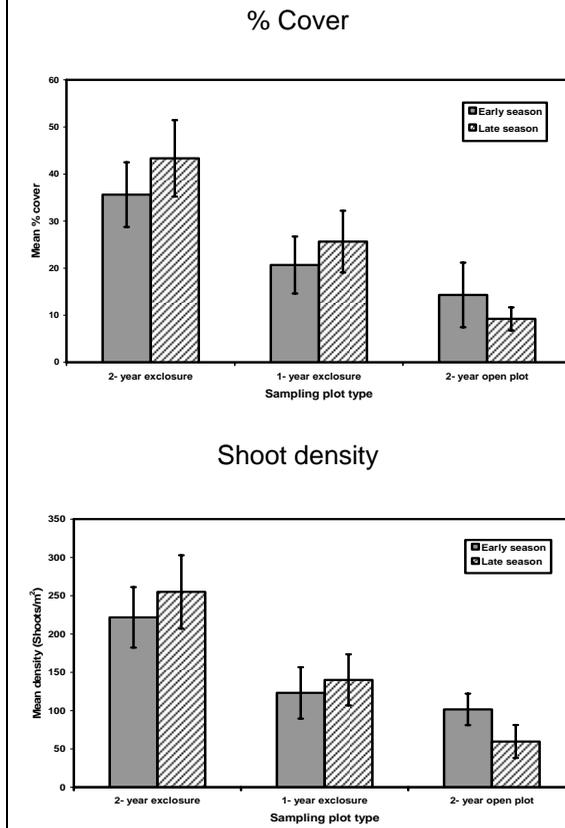
CONCERNS ABOUT MUTE SWANS

The mute swan is a non-native species and their population is growing at a rapid rate. In other states where the population has been growing longer than in Wisconsin, significant problems have developed. Concerns exist because mute and trumpeter swans may select similar breeding and feeding sites. The presence of mute swans in the wild has the potential to interfere with the restoration of the native trumpeter swan. Mute swans also compete for resources with other waterfowl such as loons, ducks, colonial waterbirds, tundra swans, and geese and will sometimes completely displace, or even kill, native waterfowl. While trumpeter swans may also compete with other waterfowl, this is a natural occurrence because it is between native species.

Due to the tendency of mute swans to concentrate in large numbers at productive feeding areas, there is concern that they deplete aquatic plants needed by native waterfowl. In flocks, mute swans can overgraze submerged vegetation to the point that this vegetation cannot fully recover (see figure). This causes a reduction in the quantity and quality of aquatic habitat that may affect the food web, impact resident and migratory waterfowl, and affect an area's biodiversity. While feeding, mute swans paddle their feet and rake the substrate. This behavior causes sediments to become suspended in the water column, which may reduce water quality.

Adult mute swans may become dangerously aggressive toward people and pets, especially in areas where they have become accustomed to food handouts. There are numerous cases

Mute swan studies in the Chesapeake Bay provide evidence of vegetation degradation by experimentation with exclosures. Exclosures kept the nearby mute swans from feeding on the vegetation inside.



Figures from Tatu et al. 2007, Mute Swan's Impact on Submerged Aquatic Vegetation in Chesapeake Bay

where mute swans have threatened and attacked people in parks, backyards, and small boats. Although this often involves some degree of bluffing, mute swans are capable of inflicting bruises, sprains, and bone fractures and, on at least two occasions on the East Coast, human fatalities have occurred. Aggressive tendencies vary widely between

individual swans but are most pronounced in territorial breeding males.



NATIONAL MUTE SWAN POPULATION CONTROL

Mute swans are a concern throughout the nation. The feral population is exploding along the Atlantic Coast from Massachusetts to Virginia and is expanding rapidly in the Midwest. Many state natural resource agencies have enacted mute swan control policies that include egg addling (which kills embryos), the removal of problem birds, and prohibitions against the import, export, possession, release or sale of these birds and their eggs. The U.S. Fish and Wildlife Service considers the mute swan a nonnative problem species and supports efforts to limit mute swan growth and range expansion.



For more information contact your local Department of Natural Resources Service Center or visit our website at www.dnr.wi.gov

The Wisconsin Department of Natural Resources provides equal opportunity in its employment, programs, services and functions under an Affirmative Action Plan. If you have any questions, please write to Equal Opportunity Office, Department of the Interior, Washington, D.C. 20240. This publication is available in alternate format (large print, Braille, audio tape, etc.) upon request. Call 608-266-8204 for more information.



PUB WM-473-2007