

MISSISSIPPI FLYWAY COUNCIL POLICY MANAGEMENT OF MUTE SWANS

Introduction

This document briefly describes the history, status, selected biology, management concerns, and recommendations for the management of mute swans (*Cygnus olor*), a non-native, invasive species that has become established in several locations in the Mississippi Flyway (e.g., Illinois, Indiana, Michigan, Ohio, Ontario, and Wisconsin). Although the populations are relatively low in most Flyway states, establishing and implementing a Flyway policy is important because the birds have high reproductive potential and have negative impacts on native species and damage aquatic habitats. In recent years, the numbers have continued to increase. The policy recommendations below represent the consensus of wildlife agencies in the Mississippi Flyway with respect to management of this species. The purpose of this document is to provide direction for the cooperative management of mute swans by natural-resource agencies in the Flyway.

Background

Introduction and Populations - Mute swans are native to Eurasia. Although once severely reduced in numbers by market-hunting and war within their natural range, they have been domesticated for centuries and are now widely distributed throughout Europe. The Eurasian population is estimated at 1 million. Mute swans were introduced into North America during the late 1800s as decorative waterfowl and have now established feral populations in all four Flyways due to escaped and released birds. Nelson (1997) estimated a population of 18,000 mute swans in North America, with most being in the Atlantic Flyway. By 2000, Nelson estimated a total of 6,800 mute swans in the Mississippi Flyway, with feral populations occurring in 9 of 17 states or provinces. Mid-winter inventories in the Mississippi Flyway indicate an average annual increase of 10% during 1991-2000. The majority of mute swans in the Mississippi Flyway currently occur in Michigan and Ontario. The mute swan population in Ontario has grown 16 percent per year during the last 25 years reaching more than 3,000 in 2011, based on summer brood surveys (Canadian Wildlife Service, unpublished data). Michigan's spring breeding waterfowl surveys have shown a 9 – 10 percent annual increase of mute swan since 1949, to more than 15,000 in 2011. In addition, mute swan numbers have increased dramatically in WI, IL, IN and Ohio. It is not known to what extent this species crosses state and provincial lines during the non-breeding season.

Regulations - Mute swans are not protected under United States federal law. State laws regarding mute swans vary. Mute swans are protected under state regulations in 8 of the Mississippi Flyway states: AL, AR, IL, KY, MI, MS, OH, and WI. They are not protected in IN, IA, LA, MN, MO, and TN. In addition, they are classified as a regulated exotic species in MN. In Canada, all swan species are protected federally under the Migratory Bird Convention Act.

Biology and Management Concerns

Mute swans are relatively sedentary and their nesting territories are relatively small compared to native North American swans. Mute swans feed extensively on aquatic vegetation such as *Potamogeton sp.*, *Chara sp.*, *Myriophyllum sp.*, and *Vallisneria americana*. Mute swans can build to relatively high densities on high-quality wetlands. They can alter vegetative communities and foraging is competitive with native wildlife. They aggressively defend their nesting territories against other wildlife such as loons, Canada geese, ducks, and other white water-birds (testimony at Wisconsin Natural Resources Board hearing on mute swan management). They sometimes kill birds and their young (Stone and Masters 1970, Reese 1980, Kania and Smith 1986). There is evidence that mute swans can compete with native trumpeter swans for foraging habitat. Mute swans have been responsible for numerous complaints involving attacks upon people, some of which resulted in personal injury (Michigan DNR files).

POLICY GUIDELINES

Management Goal

Maintain mute swan populations in the Mississippi Flyway at levels that will minimize or eliminate their harmful ecological impacts to native waterfowl species and habitats.

Objectives

Reduce the Flyway population to 4,000 or fewer birds by 2030.

Prevent mute swans from establishing new breeding populations in areas where they do not currently exist.

Strategies

Encourage states and provinces within the Flyway to:

- Monitor populations of mute swans (preferred survey methods include spring breeding waterfowl survey or summer brood survey)
- Remove pioneering mute swans
- Reduce existing mute swan populations
- Set state and provincial mute swan population objectives
- Discourage possession of captive mute swans
- Prohibit the release to the wild of rehabilitated mute swans
- Prevent the escape or release of mute swan from captive breeding pairs
- Develop partnerships to assist in the management of mute swans
- Develop programs to raise public awareness (impacts to native waterfowl and waterbirds, their habitats, and associated recreational use and appreciation)

Develop a Flyway-wide publication that informs the public about the threats associated with mute swans

Literature Cited

- Kania, G.S. and H.R. Smith. 1986. Observations of agonistic interactions between a pair of feral mute swans and nesting waterfowl. *Connecticut Warbler* 6:35-37.
- Nelson, H.K. 1997. Mute swan populations, distribution and management issues in the United States and Canada. *North American Swans* 26 (2): 14-22
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- Stone, W.B. and A.D. Masters. 1970. Aggression among captive mute swans. *N.Y. Fish and Game Journal* 17:51-53