



Natural Heritage & Endangered Species Program

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Massachusetts Division of Fisheries & Wildlife

Chimney Swift *Chaetura pelagica*

State Status: **None**
Federal Status: **None**

SPECIES DESCRIPTION: The Chimney Swift is a familiar aerial insectivore often observed flying over cities and towns across the eastern United States. It is easily recognized by its twittering call, diagnostic “cigar-with-wings” shape, and acrobatic flight pattern. Chimney Swifts are early spring migrants, arriving in Massachusetts toward the beginning of April, and often form communal roosts in chimneys during spring and fall migration, and nesting singly in chimneys during the breeding season. Prior to European colonization, Chimney Swifts primarily roosted and nested in large hollow trees, but quickly learned to exploit the new habitat resource of chimneys that were made available with settlement.

DISTRIBUTION AND ABUNDANCE: In Massachusetts, Chimney Swifts are widespread, somewhat common breeders across the state. They are especially found around urbanized areas, and are much less common in purely residential areas like Cape Cod, and open, undeveloped areas such as the Quabbin Reservation, Nantucket, and Martha’s Vineyard.

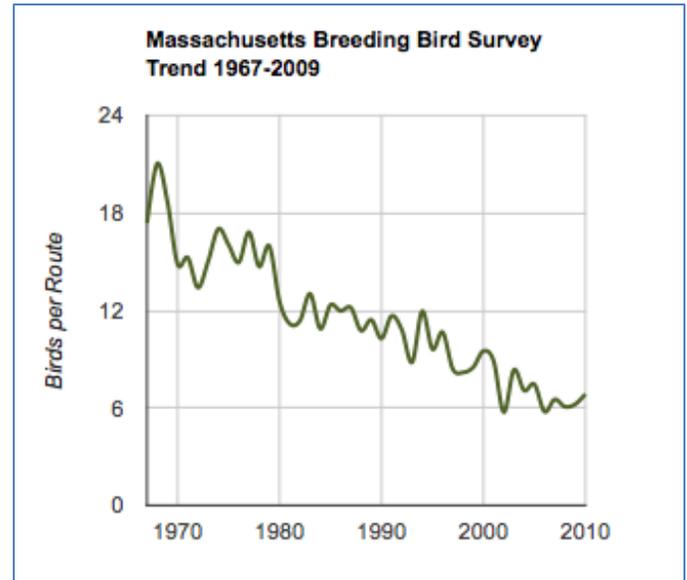


Figure 2: Massachusetts Breeding Bird Survey results, 1966-2009.

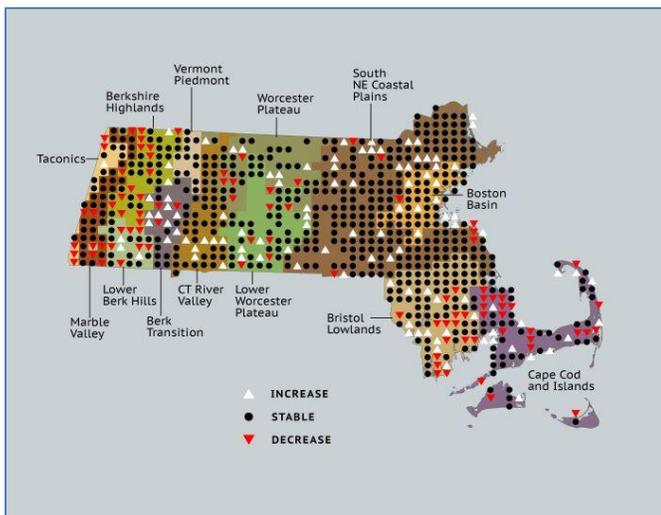


Figure 1: Changes between Breeding Bird Atlas 1 and 2.

Chimney Swifts were found to be still widely distributed in the Massachusetts Breeding Bird Atlas 2, although some areas of the state reported declines in breeding activity. The Taconic Mountains and Marble Valleys, both heavily occupied in Atlas 1, lost Chimney Swifts in 10 blocks combined. The decline was even steeper in the Berkshire Highlands, where Chimney Swifts were not found in 15 blocks overall. Similarly, the species was newly absent from 8 blocks overall in the Lower Berkshire Hills. Moving eastward, however, Chimney Swift breeding distribution was stable or even increasing. Gains outstripped losses in the Worcester Plateau regions, and the Connecticut River Valley didn’t lose Chimney Swifts in a single block. Always happy to live alongside humanity, Chimney Swifts also increased their breeding presence in the Coastal Plains and the Boston Basin. The Bristol/Narragansett Lowlands region both gained and lost Chimney Swifts in 15 blocks, but Cape Cod and the Islands posted a negative trend

A Species of Greatest Conservation Need in the Massachusetts State Wildlife Action Plan

Massachusetts Division of Fisheries & Wildlife

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overall. Using the most well-covered blocks during Atlas 1 and Atlas 2, overall Chimney Swifts modestly increased and remained stable in 548 blocks, were lost from 92 blocks, and colonized 108 blocks.

Breeding Bird Survey data shows that the population of Chimney Swifts has experienced an overall decline of 2.46 percent annually from 1966 to 2013. The range-wide trend is an annual decline of 2.3 percent annually (1966-2011).

HABITAT DESCRIPTION: Breeding Chimney Swifts are found most often in association with urbanized areas where they seek chimneys for nesting. Nesting structure seems to be the primary factor in determining habitat preference; as long as suitable nesting structure is available, Chimney Swifts have not been shown to favor any particular microhabitat.

A combination of microhabitat (chimneys for roosting) and macro-habitat appears to be important for migrating Chimney Swifts. Chimney Swifts will group into large feeding flocks over major river valleys during the day, and then convene into communal flocks in chimneys in the evening.

THREATS: Specific reasons for the overall decline of Chimney Swifts are not clear, but declining insect populations and changes in insect community structures are thought to be factors for guild-wide declines in North America. A lack of nesting opportunities does not appear to be an important cause of population decline where chimney availability has been studied. Short-term declines may be related to catastrophic weather events, such as prolonged cold and rain events.

MANAGEMENT: Protection of existing nesting structures should occur whenever possible, and can be best achieved through education campaigns that inform homeowners/property managers of mutually beneficial chimney maintenance techniques. Outreach to chimney sweeps through articles in professional publications or presentations at guild seminars can also have a conservation impact. Suitable nesting and roosting habitat can be created with the construction of artificial chimneys, also known as Swift Towers.

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