



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**White-throated Sparrow
*Zonotrichia albicollis***

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

SPECIES DESCRIPTION: The White-throated Sparrow is a familiar songbird that breeds in coniferous forests throughout much of Canada, the Great Lakes region, New England and New York. A wide-spread migrant, this species is often encountered at feeding stations on its wintering grounds across the eastern United States, the desert southwest and the Pacific coast of California and Oregon. Known for its distinctive song, the White-throated Sparrow also is unique for its dimorphism in both plumage and behavior. Within populations there are white-striped and tan-striped individuals that seek out the opposite morph as mates, resulting in the perpetuation of clearly dimorphic individuals.

DISTRIBUTION AND ABUNDANCE: In Massachusetts, White-throated Sparrows are fairly common breeders from Worcester County west, but are considered rare and local breeders in the eastern part of the state. They are absent as breeders on Cape Cod and the Islands. They are especially found in the higher elevations of Worcester County and throughout the Berkshires.

Breeding Bird Survey data indicate that the population of the White-throated Sparrow has experienced an overall decline of 0.7 percent annually from 1966-2002. The region of greatest decline is Southern New England (11.0%), with the individual states of Connecticut (15.2%) and Massachusetts (8.3%) showing the most dramatic downturns. Overall, populations have been shown to increase during spruce budworm outbreaks, and to decrease after especially cold winters.

HABITAT DESCRIPTION: Breeding White-throated Sparrows are found in coniferous and mixed forests, especially those with low, dense vegetation. They are particularly attracted to areas of second growth, such as beaver meadows, open bogs, forests affected by logging, fire, or insect damage, and areas of low, dense trees near the tree line. Nest sites are generally on or near the ground under dense vegetation along the edge of a clearing. In Massachusetts, White-throated Sparrows are found in the coniferous and mixed forests of the western counties, and in the east, can occasionally be found breeding in Red Maple and White Cedar swamps.

THREATS: The primary threat to White-throated Sparrows in Massachusetts is loss of suitable breeding habitat due to development. Secondly, the succession of breeding territories toward a more mature, closed canopy structure is a limiting factor in the amount of available breeding habitat.

White-throated Sparrows have been shown to be particularly sensitive to the aerial spraying of Fenitrothoin over breeding territories, which can lead to both adult mortality and reduced reproductive success. High winter mortality during especially severe winters is also a contributing factor in local declines.

In primarily suitable forested landscapes, early successional forest patches should be included in rotational forest management where several small and several large early successional patches are rotated through the forest matrix. Where suitable habitat currently exists, efforts should be made to protect the landscape from development.

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

Massachusetts Division of Fisheries & Wildlife

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REFERENCES:

- Falls, J.B., and J.G. Kopachena. 1994. White-throated Sparrow (*Zonotrichia albicollis*). In *The Birds of North America*, No. 160 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.
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