



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**Northern Flying Squirrel
*Glaucomys sabrinus***

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

SPECIES DESCRIPTION: Northern Flying Squirrels have large black eyes and thick, soft fur with a rich brown-gray color above and white below. They have belly fur that is white at the tips and gray at the base to the skin. The tail is dark brown above and white below with a flattened appearance. A membrane or folded layer of loose skin exists between their forelegs and hindlegs, giving them the ability to glide through the air between trees. They have been known to cover more than 150 feet in a single glide. Northern Flying Squirrels are slightly larger than the Southern Flying Squirrel at 10 to 12 inches in length.

SIMILAR SPECIES: Northern Flying Squirrel is larger on average than Southern Flying Squirrel (*Glaucomys volans*, 8 to 10 inches in length). The belly fur of Northern Flying Squirrel is white at the tips and gray at the base to the skin, distinguishing it from Southern Flying Squirrel, which has white belly fur throughout.

DISTRIBUTION AND ABUNDANCE: Northern Flying Squirrel individuals may occur in northern portions of Massachusetts, but have not been confirmed in over 40 years. Distribution of the species in Massachusetts is unclear. Massachusetts is considered the southernmost portion of the Northern Flying Squirrel range.

HABITAT DESCRIPTION: Northern Flying Squirrels prefer coniferous and mixed forests. Northern Flying Squirrels may exist in Massachusetts in hardwood forests with old dead trees that provide nesting holes. They live in snags, woodpecker holes, nest boxes, and abandoned bird or squirrel nests.

THREATS: Northern Flying Squirrels may be vulnerable to anthropogenic forces and climate change (Weigl 2007). Boreal, coniferous, and mixed forests are preferred habitats for Northern Flying Squirrels. Climate

change may cause these preferred habitats to shift north out of Massachusetts (Iverson and Prasad 2001). Potential range overlap with Southern Flying Squirrels may be harmful to Northern Flying Squirrel populations due to an intestinal parasite (*Strongyloides robustus*) that infects both species but appears to only negatively affect Northern Flying Squirrels (Pauli et al. 2004)

REFERENCES:

- Iverson, L.R., and A.M. Prasad. 2001. Potential changes in tree species richness and forest community types following climate change. *Ecosystems* 4:186-199.
- Pauli, J.N., S.A. Dubay, E.M. Anderson, and S.J. Taft. 2004. *Strongyloides robustus* and the northern sympatric populations of northern (*Glaucomys sabrinus*) and southern (*G. volans*) flying squirrels. *Journal of Wildlife Diseases* 40:579-582.
- Weigl, P.D. 2007. The northern flying squirrel (*Glaucomys sabrinus*): A conservation challenge. *Journal of Mammology* 88:897-907.

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

Massachusetts Division of Fisheries & Wildlife

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