

# *Wild Things in Your Woodlands*

## Flying Squirrels



Northern (*Glaucomys sabrinus*) and southern (*Glaucomys volans*) flying squirrels are the smallest species of squirrels in New York State, weighing just a few ounces. Similar in appearance, the northern flying squirrel is larger (10 to 15 inches long) and reddish-brown in color, while its relative is smaller (8 to 10 inches in length) and mouse-like grey in color. Both species have soft, dense, silky fur, with white belly hair, and broad, flattened, furry tails that are about 5 inches long. Like most nocturnal animals, their

gleaming black eyes are large and round. Prominent flaps of skin stretch from their wrists to their ankles giving them the ability to glide through the forest. In both species, males and females are similar in size. Mating takes place early in the spring, and the young are born in May or June. In the wild, flying squirrels typically live to be four or five years old.

Because of their nocturnal habits, few people are fortunate enough to have seen a flying squirrel in the wild, and many are unaware that these night-time creatures exist. Emerging at dusk, they glide from the forest canopy down to the forest floor to feed. Although they don't truly fly (bats are the only mammals that do), they have two large flaps of skin that extend from their wrists to their ankles and act as miniature parachutes. When leaving a tree, they initially drop straight down for about 3 feet or so before flattening out into a glide. Like a miniature hang glider, a flying squirrel can move its legs to change the position of its membranes and swerve around obstacles. The higher a squirrel is when it drops out of a tree, the greater the speed and distance it can travel. From heights of 100 feet, they can reach speeds of up to 20 mph, and glide as far as 50 yards (over half the length of a football field).

Two species of flying squirrels are common in New York State and their ranges overlap, though the northern flying squirrel is more common in the northern part of the state, and the southern flying squirrel is most prevalent south of the Mohawk River Valley. In regions where their ranges overlap, they usually separate by habitat. Both species require large areas of very mature, deciduous or mixed forest with large trees and cavities for nesting and escape cover. Flying squirrels usually occupy old woodpecker holes in the winter, but in warmer months often build or re-use existing leaf nests in the crotch of trees. They line their nests with shredded bark, lichens, grasses, and moss. Forest stands inhabited by these animals need to be relatively open beneath the tree canopy to provide unobstructed gliding areas for movement from tree to tree, and from tree to ground.

In addition to providing adequate nesting sites, older forests support the lichens and fungi that the northern flying squirrel relies on for food, including truffles, the fruiting bodies of underground fungi that live in association with tree roots. These fungi are important to forest health because they increase the ability of trees to absorb nutrients and water from the forest soil. By feeding on the fungi and depositing the spores in the soil through their droppings, squirrels spread the spores throughout the forest, maintaining ecological processes that are important to forest health. Other foods of the northern flying squirrel include seeds, buds, fruit, insects, and small animals. Similarly, the southern flying squirrel eats seeds, berries, fungi, bark, flowers, insects, and other animal matter. However, the southern flying squirrel prefers hickory nuts and acorns, and is found most often in oak/hickory forests.

During the cold winter months, the southern flying squirrel will forage less often and at times become inactive, while the northern flying squirrel remains active even at the coldest temperatures. Flying squirrels are sociable creatures, and will curl up together to conserve energy. Up to 50 animals have been found huddled up in one nest!

In mature woodlands, landowners can enhance habitat for these wide-eyed creatures of the night by retaining live and dead trees that contain holes, or cavities. An ideal den is an old woodpecker hole about 8 to 20 feet from the ground with an entrance hole of about 1.5 to 2 inches in diameter. In New York, large beech trees often provide cavities for nesting wildlife, and produce seeds that serve as food. In forests without many cavity trees, landowners can install artificial nest boxes on trees to provide shelter for flying squirrels. Retaining or providing woody debris and rotten logs on the forest floor will provide additional sites for flying squirrels to take refuge from predators when foraging, and promote growth of fungi for food.

Landowners wishing to catch a glimpse of a flying squirrel can sometimes catch them feeding at bird feeders after dark. The best way to see a flying squirrel in the daylight is to tap or scratch on dead trees or hollow limbs containing abandoned woodpecker holes. If a squirrel is inside, it will often stick its head out to see what is amiss!

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*educational programs at the Arnot Forest can be found by visiting the Arnot Conservation Education Program web site at [arnotconservation.info](http://arnotconservation.info)*

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