

# Flying Squirrels

By Budd Veverka, Mianus River Gorge Director of Land Management



Flying squirrels are fascinating creatures known for their remarkable gliding abilities and distinctive features. Part of the family *Sciuridae*, which includes all squirrels, they are primarily nocturnal and can be found in forests and woodlands across North America, Asia, and parts of Europe. The northern flying squirrel (*Glaucomys sabrinus*) and the southern flying squirrel (*Glaucomys volans*) are found in the Eastern US.

Flying squirrels are not only remarkable for their ability to glide but also for their role in maintaining the health of the forests they inhabit. Their adaptations and behaviors make them a subject of interest for wildlife enthusiasts and researchers alike. Understanding and protecting these enchanting creatures is crucial for their survival, for preserving biodiversity, and for the intricate balance of forest ecosystems. The research and findings of the Mianus River Gorge will help in this effort to understand and protect these fascinating animals and enrich our appreciation of the diverse world of wildlife. Whether

gliding silently through the treetops or nesting in cozy tree cavities, flying squirrels continue to capture the imagination of those fortunate enough to observe them in the wild.



### Physical Characteristics

Flying squirrels are characterized by their large, prominent eyes, which provide excellent night vision. They possess a patagium, a membrane that stretches from their wrists to their ankles, enabling them to glide gracefully through the air. This adaptation allows them to traverse distances of up to 150 feet. Their fur is typically soft and dense, and while the northern flying squirrel has gray or brown fur on its back, the southern flying squirrel may range from tan to reddish-brown. Southern flying squirrels are slightly smaller than northern flying squirrels.

### Behavior and Diet

Flying squirrels are predominantly nocturnal, coming alive at night to forage for food. They are primarily herbivorous, feeding on nuts, fruits, and fungi. They store food for winter use in den trees or underground. Their dietary preference not only sustains them but also plays a role in seed dispersal, contributing to the health of forest ecosystems.

Flying squirrels are highly social, often found in small groups and known to communicate through a series of vocalizations, including chirps and barks. During colder months, they may nest communally in tree cavities or nests made of leaves and moss to conserve heat. There are even reports of flying squirrels denning with other animals, including screech owls and bats.

## Reproduction and Lifespan

Breeding typically occurs from late winter to early spring. After a gestation period of about 40 days, female flying squirrels give birth to litters of two to four young in mid to late May. The young are born blind and helpless, relying entirely on their mother for care. They begin to leave the nest for short periods at about six weeks of age and begin taking their first “test flights” at three months. In the wild, flying squirrels can live up to six years, although they are important prey for a number of species. Owls are the primary predators of flying squirrels, but other predators include raccoons, foxes, weasels, bobcats, and snakes. House cats also often kill flying squirrels.

## Habitat and Distribution

The southern flying squirrel is widespread and common across the eastern and southern United States, as well as parts of Mexico. They inhabit a variety of forest types, including deciduous, mixed, and even urban areas, demonstrating a remarkable adaptability to diverse environments. In contrast, the northern flying squirrel is primarily found in the northern regions of North America, including Canada, Alaska, and parts of the northern United States.

This species prefers old-growth boreal forests that contain a heavy coniferous component, moist soils, and lots of downed woody debris.

As these old growth forests have become small, isolated fragments in the eastern US, northern flying squirrels have been forced to use mixed second growth conifer-deciduous forests, but only if they have some remaining old trees or are adjacent to older forest stands. Northern flying squirrels are typically found at higher elevations and in areas more densely forested than southern flying squirrels.



## Conservation Status

While the southern flying squirrel is considered common and has a status of least concern across its range, the northern flying squirrel, with its specific habitat needs, faces threats from climate change, logging, urban development, forest fragmentation, and competition from southern flying squirrels. The northern flying squirrel is declining across much of its range and is state endangered in Pennsylvania. Isolated populations in the high peaks of the southern Appalachians are federally endangered. Conservation efforts focus on preserving their natural habitats and promoting sustainable forestry practices. Public awareness and education about these unique creatures also play a crucial role in ensuring their survival.

## MRG Research

Little is known about flying squirrels within the Mianus River Gorge. MRG's Budd Veverka, who studied southern flying squirrels in Kentucky, and high school science research student Daisy are using field research to determine if there is a remnant

population of northern flying squirrels remaining in the old-growth conifer forests of the Mianus River Gorge. They are using a combination of remote cameras, acoustic recorders, and eDNA samples to learn about the flying squirrels that call the Gorge home. Their work will continue through 2026 with Daisy presenting her findings at the Northeast Natural History Conference and the NY Wildlife Society Conference.



To learn more about or support MRG's Wildlife Technician Program for high school students and other research initiatives, please visit [mianus.org](http://mianus.org).