



Squirrels and Allies

(*Sciuridae Spp.*)



There are about 275 species of tree, ground, and flying squirrels throughout the world, ranging from the five-inch pygmy squirrel (*Myosciurus pumilio*) of Africa to the nearly three-foot giant squirrel (*Ratufa indica*) of Asia. Currently, there are five species of squirrel found in Rhode Island: The Eastern gray squirrel, the Southern flying squirrel, the red squirrel, the chipmunk, and the woodchuck. Tree squirrels are those species that nest in trees, while ground squirrels nest in underground burrows. This publication is intended to provide information on the above species found in Rhode Island.

Eastern Gray Squirrel (*Sciurus carolinensis*)



Gray squirrels are the most common species of squirrel in Rhode Island. They are a tree squirrel, however they spend much of their time on the ground, and have adapted well to human-altered environments. They are commonly found in urban and suburban habitats. Gray squirrels can be grayish-brown, gray or black, with a white or light brown underside. Adults range in size from 15 to 20 inches, and between 1 to 1 ½ pounds. Their bushy tail accounts for almost half of their length. Gray squirrels may live between four and eight years in the wild, but they have been known to live up to ten years in captivity. They are active mainly during the day and do not hibernate. In the winter they spend days at a time in their nests, leaving only to gather food. Their habitat is mainly any wooded area with mast producing trees, where they live in tree cavities or leaf nests. Their home range varies between one and one hundred acres, depending on season and food availability.

Red Squirrel (*Tamiasciurus hudsonicus*)

The red squirrel, also known as the chickaree, is reddish-brown to copper, with a light gray or white underbelly. They are intermediate in size, between the gray and flying squirrel, ranging from 10 to 14 inches. In the winter they undergo a color change, becoming a deep red with a gray underbody. They also develop prominent ear tufts. They prefer to live in coniferous forests, but also occur in mixed hardwood stands as well. Red squirrels are more commonly found in rural areas and often do not occur in suburban or urban areas. The red squirrel is also most known for its vocalizations and can be heard scolding human trespassers.



Southern Flying Squirrel (*Glaucomys volans*)

At a size of eight to ten inches, with a three-inch tail, flying squirrels are the smallest species of tree squirrel in Rhode Island. Common throughout the mainland part of the state, they are rarely seen because of their nocturnal behavior. Flying squirrels do not actually fly. Instead, they glide from tree to tree with the aid of the flying



membrane, a loose flap of skin stretching from fore to hind legs on each side of the body. During a glide, which can transport an animal up to 150 feet in a single trip, the tail acts as a rudder, aiding in a successful landing. Because they are active mainly at night, they have large, protruding eyes. Flying squirrels commonly take up residence in attics and houses, often in groups of 10 or more individuals. In this way they are able to keep each other warm during the cold weather. Flying squirrels also do not hibernate.

Eastern Chipmunks (*Tamias striatus*)

Chipmunks are relatively common in Rhode Island; they are a member of the squirrel family that lives primarily on the ground. However, it is an excellent climber and often climbs to get food. They are small animals, ranging from 5 to 8 inches. They have distinctive coats, reddish brown with a light underbelly, and five black stripes along their backs. They live in dens located under logs or stones where they store nuts and seeds.



Woodchucks (*Marmota monax*)



The woodchuck, also known as a groundhog, gopher or land beaver, is the largest member of the squirrel family. They live in underground burrows in open fields, and they eat mainly clover, grasses, and other plants. During the winter they hibernate in their burrows, a period of inactivity stretching from late fall to early spring. During the spring season, woodchucks can become a nuisance when they feed from fields and on crops. For more information, see the *Woodchucks* information sheet on the Division of Fish and Wildlife page at www.dem.ri.gov.

Food Habits

The Rhode Island squirrel species share similar diets, consisting mainly of tree buds in the spring, fruits and berries during the summer, nuts and seeds in the fall, and tree bark in the winter, which is then supplemented by cached seeds and nuts gathered in the fall. Red squirrels store food in their nests, while gray squirrels bury it throughout their home range. Oftentimes, they will store more food than is needed, which leads to reforestation and diversification when the seeds sprout and take root. In addition to these staples, they will eat whatever is available, often including insects and other animal matter. Flying squirrels commonly consume insects, mushrooms and bird eggs to their diets. In areas of human population, squirrels take advantage of gardens, orchards, and birdfeeders. Some squirrel species, particularly gray squirrels, may occur at much higher densities in urban and suburban areas than in rural areas due to the abundance of food sources and lack of natural predators.

Disease Carriers

Squirrels carry very few diseases that affect humans. Like all mammals, squirrels can become infected with the rabies virus, however, rodents have a very low susceptibility to the virus. The Division of Fish and Wildlife occasionally receives reports of gray squirrels infected with fibromas, a virus that causes lesions and raised nodules or growths on the squirrel's body. Severely infected squirrels often die. There are no health implications for humans or domestic animals.

Damage and Control



Their ability to adapt quickly and live in a variety of conditions has allowed squirrels to live in close contact with humans. In certain cases they cause damage, such as digging up lawns and gardens, inhabiting buildings, eating from birdfeeders, stripping trees, eating crops, and shorting out power lines. In these situations, it is important to know how to prevent damage from occurring and how to deal with an offending animal.

Squirrels in the House:

Gray and flying squirrels will commonly construct nests in buildings, especially during the winter months. Entranceways can be as small as a quarter, so they may take some time to find and identify. Careful observation of a suspected area can help determine the point of entry. Once it has been located, there are a number of available options:

- **When the squirrel exits, or is removed**, block the entrance with mesh or wire screen, or repair the hole. It is important to make sure that the animal has exited the building before repairing entranceways; when trapped they will chew their way out, causing more damage.
- **Trim any overhanging branches** that may give the squirrel access. While this will not solve the problem, it will allow more time to repair any damage and prevent future access routes.
- **Install a chimney cap** to prevent access to chimney.
- **Squirrels are fond of vents**, such as those for clothes dryers, stoves, and bathrooms. These can also be covered with sturdy mesh or screen.
- **Squirrels are opportunistic and quite persistent.** To prevent entry, it is very important to keep the roof and upper levels of your home in excellent shape. Replace missing or broken shingles, paint or cover wood to prevent rotting, and close up any existing openings, no matter how small.



Trees and birdfeeders:

Squirrels can cause substantial damage to flower or fruit bearing trees, in a garden or orchard. They eat young fruits and nuts, and will occasionally strip bark and leaves. This kind of damage is difficult to address. In the case of a single tree, a metal band at least 1 ½ feet wide wrapped around the trunk 5 to 7 feet off the ground will offer some protection. Although, where there are multiple trees, the squirrel will find a way around almost any preventative measure. As for birdfeeders, there are a number of fairly successful options that will keep squirrels away:

- **Use a freestanding feeder** instead of a hanging model. Tree-hanging feeders allow the squirrel direct access simply by climbing down the rope or hook.
- **Trim branches** back from feeder, eliminating an access way.
- **Attach a metal cone** to the feeder pole to prevent squirrels from climbing up.



- **Consider supplying a squirrel feeder** in addition to a bird feeder, particularly one that is easier for the squirrel to access. Squirrels will target that which is more easily accessible; with a source of food within easier reach, they will be satisfied and stay away from a squirrel-proofed bird feeder.

Trapping:

Under Rhode Island State law, the gray squirrel is a protected furbearer, and killing is regulated. In Rhode Island, state law (RIGL 20-16-2) allows a property owner to kill, by legal means, any furbearer (as defined in RIGL 20-16-1) that is killing or attempting to kill any livestock or domestic animals, destroying crops, creating a health hazard, or causing economic damage to their property. However, the law does not allow for the random taking of wildlife, for the taking of furbearers for their pelts outside the open season, or for killing of animals outside the boundaries of the property of the person with the problem. Also, it does not allow for unlawful methods of take such as poisons, snares, foothold traps, or discharge of firearms in violation of state or local ordinances. The law states that animals taken must be reported to the DEM within 24 hours. For more information, contact the Division of Fish and Wildlife at DEM.DFW@dem.ri.gov or by calling (401) 789-0281.

In extreme cases, trapping may be a successful method of control. The Rhode Island DEM Division of Fish and Wildlife regulates the trapping of wild animals, types of traps to be used, and disposal of the animal after capture. Most squirrels can be effectively trapped using box or cage traps. Relocation, if done at all, must follow strict guidelines. Trap only when absolutely necessary and when all other resources have failed. The DEM does not recommend that property owners attempt to live trap nuisance furbearers unless they are prepared or willing to euthanize the offending animal. State regulations prohibit the live capture and translocation of furbearers. Captured furbearers can only legally be released on the property on which they were captured. Trapping causes a great deal of stress to the animal, and at best is only a temporary solution, as a new animal will eventually replace it. A more permanent solution is to identify and remove the attraction rather than remove a string of pests.

Selected References:

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Squirrel, chipmunk, and woodchuck photographs courtesy of the United States Fish and Wildlife Service.

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