



SQUIRRELS IN RHODE ISLAND



There are about 275 species of tree, ground, and flying squirrels throughout the world, ranging from the five-inch pygmy squirrel of Africa to the three-foot giant squirrel of Asia. 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.

Eastern Gray Squirrel (*Sciurus carolinensis*)

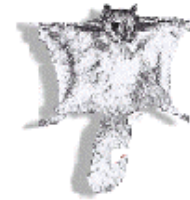


Gray squirrels are the most common species of squirrel in Rhode Island. They are a tree squirrel, but spend much of their time on the ground as well, and have adapted well to humans' altered environments. They are commonly found in urban and suburban environments. Gray squirrels are grayish-brown to gray to black, with a white or light brown underside. Adults range in size from 15-20 inches, and between 1-1 1/2 pounds. Their bushy tail accounts for almost half of their length. Gray squirrels may live between four and eight years in the wild, but in captivity have been known to live up to 10. They are active mainly during the day, and do not

hibernate, but in the winter 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.

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, but rather 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 cold weather. Flying squirrels do not hibernate.



Red Squirrel (*Tamiasciurus hudsonicus*)

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

Eastern Chipmunks and Woodchucks

Chipmunks and woodchucks are two more members of the squirrel family commonly found in Rhode Island. The eastern chipmunk *Tamias striatus* is a member of the squirrel family that lives primarily on the ground. It is an excellent climber and often climbs to get food. They are small animals, ranging from

5-8 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 for feeding.

The woodchuck, also known as the groundhog or gopher, 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 become quite a nuisance when they feed from fields and on crops, and are commonly trapped and killed. More information is available in the Rhode Island woodchuck publication, available at <http://www.state.ri.us/dem>, or at Rhode Island Fish and Wildlife headquarters.

Feeding and Diet:

The Rhode Island squirrel species share similar diets, consisting mainly of buds of trees in the spring, fruits and berries during the summer, nuts and seeds in the fall, and tree bark in the winter, supplemented by cached seeds and nuts gathered in the fall. Red squirrels store food in their nests, while gray squirrels bury it throughout their habitat. 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 add insects, birds and eggs, and mushrooms to their diets. In areas of human population, squirrels take advantage of gardens, orchards, and birdfeeders. Some squirrel species 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.



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Damage and Control

Because of their ability to adapt quickly and live in a variety of conditions, squirrels have come to live in close contact with humans, and some squirrels have benefited from human activity. In certain cases they cause damage, such as digging up lawns and gardens, inhabiting buildings, eating from birdfeeders, stripping trees and 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. With a little information, it is possible to maintain a healthy relationship between humans and wildlife.

Squirrels in the House:

Homeowners commonly find squirrel-infested attics and upper levels, especially during the cold 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.

Place a noise making motion detector near the entrance.

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.



Squirrels are fond of vents, such as those for clothes dryers, stoves, or bathrooms. These can also be covered with sturdy mesh or screen.

Squirrels are opportunistic and quite persistent. If there is any questionable area, they will do their best to get into it, and are in most cases successful. 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.

Gardens and Crops:

Squirrels often take advantage of plant matter intended for humane use. While usually not costly to the average person, it becomes quite an irritation when animals steal carefully tended produce; however, there are a few ways to defend your garden.

- Spread a layer of dog hair (can be found at a pet groomer) over newly planted bulbs and seeds.
- Mulch the ground to look as undisturbed as possible after planting.
- Press pinecones down into dirt in the area of planting.
- Blood meal spread over the ground will repel squirrels, but may attract larger carnivores.
- Spray bitter apple spray onto shoots and leaves.
- If possible, plan ahead and plant a little extra for the animals.
- Plant crops that are undesirable to the squirrels' tastes. This may take some experimentation and observation.

Trees and birdfeeders:

Trees are a squirrel's natural habitat, both in the wild and in areas of human residence. This is generally a conflict-free arrangement, but when inhabiting fruit or flower bearing trees, especially in an orchard environment, squirrels are able to cause substantial damage. They eat young fruits of 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 5-7 feet from the ground will offer some protection, but 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 are notoriously lazy, and 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.

General Control:

- Place a noise making motion detector in the affected area.
- A pet cat or dog will help control the local squirrel population, and will deter many newcomers.
- Keep garbage cans out of the way and securely covered.
- Squirrels are fond of barbecue grills and will sometimes get inside and nest, so make sure to keep grills clean and covered.
- Pepper spray and other products made with hot peppers have been used to discourage squirrels, but this is not recommended. It is not favored by the animals, but a hungry squirrel will ignore it. There is also the risk of blindness if the product comes into contact with the eyes.

Trapping:

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. Also, under Rhode Island State law, the gray squirrel is a protected furbearer, and killing is regulated. For more information contact the Division of Fish and Wildlife at (401) 789-0281. Trap only when absolutely necessary, and when all other resources have failed. 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.

Squirrels do not pose a great risk to humans on the health front. They 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. For the most part, they try to distance themselves from humans as much as possible. The only problem they pose is inconvenience, and if the above suggestions are followed, we can create and maintain a harmonious relationship. As long as people continue to live in wooded areas, we will always have contact with wildlife, and can learn to live with them.

Further Reading:

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Cronan, John M, and Brooks, Albert. The Mammals of Rhode Island. Rhode Island Department of Natural Resources, Division of Conservation, 1968.

Whitaker Jr., J.O, and Hamilton Jr., W.J. Mammals of the Eastern United States. Cornell University, 1998.

Pictures courtesy of:

<http://www.bear-tracker.com/gsquirrel.html>

<http://www.nenature.com>

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