



Eastern Gray Squirrel

Sciurus carolinensis

The gray squirrel is the most common and frequently sighted of all of North Carolina's four tree squirrel species. We look at gray squirrels from many perspectives depending upon whether we are watching them scamper around the park, hunting them in a mature bottomland forest or trying to keep them out of our attics.

History and Status

Gray squirrels were once our most sought-after game mammal, although today it is second in popularity to deer hunting. Historical accounts refer to massive squirrel "migrations" that were thought to have resulted from regionwide food shortages. Today, squirrel "migrations" occur on a smaller scale, the most visible evidence of which is large numbers of dead squirrels along highways. Gray squirrels are still plentiful in stands of old-growth hardwoods, while younger stands of hardwoods and forests dominated by pine trees shelter populations in lower densities.

Description

The gray squirrel's color, bushy tail and climbing ability are its most characteristic features and easily distinguish it from its relatives. The red squirrel of western North Carolina is much smaller and has red fur, while the fox squirrel of the Coastal Plain pine forests is almost twice as large and can be reddish, very light gray or black with a white nose. The small flying squirrel is olive brown, has large eyes and a loose flap of skin between its front and back



legs, and it is most active at night.

Habitat and Habits

Gray squirrels are common in rural, suburban and even urban woodlots. Their populations appear to be regulated to a great degree by winter food supply. In a year when acorns and other nuts are plentiful, numerous squirrels will survive the winter and each female will produce larger litters of young. But when food is in short supply the few that survive the winter are in poor condition and produce few young.

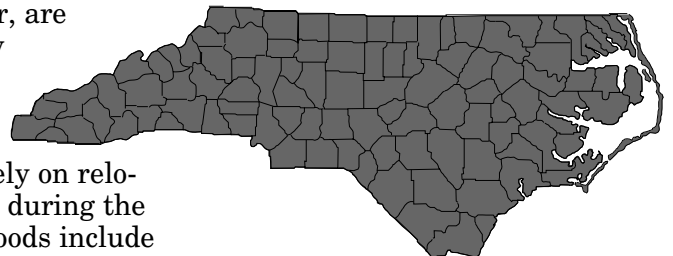
Nuts produced by tree species and used by wildlife for food are called "mast." Mast, fruits and seeds provide the bulk of the gray squirrel's diet. Hickory nuts, walnuts, pecans, gum berries, pine seed and numerous other mast can be important fall and winter foods. The squirrel's most important foods, however, are acorns produced by our numerous species of oak trees.

During late winter, squirrels rely on relocating mast buried during the fall. Early spring foods include tree buds and blooms as well as red maple seeds and bird eggs. In


summer, squirrels eat fruits such as mulberries, grapes and cherries. Mushrooms are commonly eaten when available.

Gray squirrels inhabit numerous forest types, although they are most abundant in hardwood forests containing a variety of mast-producing trees. Hardwood trees, especially old ones, contain many cavities—either from injury to the tree or by being excavated by woodpeckers—that provide squirrels with a secure refuge from enemies and cold, wet or snowy weather.

Gray squirrels also use nests constructed of leaves, though they are not as secure or as well protected from the elements as tree cavities. These nests are used more frequently in warm weather, in areas where tree cavities are less numerous, or at times when tree cavities become infested with fleas.



Range Map:

Found statewide 

Gray squirrels are vocal animals that use a series of calls referred to as “barks” or “chatters” to communicate potential danger to their neighbors. The wise woodsman becomes alert at the sound of a squirrel’s bark as the calls may signal the approach of a hawk, owl, fox or bobcat.

Range and Distribution

The gray squirrel ranges from southern Canada throughout the eastern United States westward to the fringes of the midwestern grasslands. Gray squirrels are found in mature forests and woodlots statewide in North Carolina.

People Interactions

Squirrels are hunted by stalking, still hunting and using “squirrel dogs” trained to bark at the base of a tree in which a squirrel is hiding. Squirrels are delicious fried, barbecued and prepared in pies and stews.

Hunting activities do not endanger squirrel populations. However, our land-use practices have a major impact on the species’s distribution and abundance. Large-scale conversion of hardwood woodlands to other uses decimates local populations.

Humans and squirrels often live close together. Conflicts occur when squirrels feed on garden or nut crops, move into occupied dwellings or chew on wooden structures. The most effective way to reduce squirrel damage, where practical, is by modifying the habitat. Removing aerial travelways by pruning back tree branches can sometimes stop squirrels from entering dwellings and eating fruit or nut crops. Slick metal skirts around the trunks of fruit trees can also prevent depredation. When



front



rear

habitat modification is impractical, trapping or shooting individual squirrels may solve the problem.

References

Barkalow, Frederick S. Jr. and Monica Shorten. *The World of The Gray Squirrel* (J. B. Lippincott Co., 1973).

Webster, William David, et al. *Mammals of the Carolinas, Virginia, and Maryland* (University of North Carolina Press, 1985).

Credits

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EASTERN GRAY SQUIRREL

Classification

Class: Mammal

Order: Rodentia

Average Size

Weight: 18 oz. on average.

Length: Including the long bushy tail, 18 in. long.

Food

Nuts, seeds, mushrooms, tree buds and blooms. Infrequently, bird eggs, insects or even young birds.

Breeding

Twice a year, mostly during December and January and during April through June.

Young

Young are born in two peaks during years following good mast crops. The late winter, early spring litter is born in February or March and the summer litter is born in July or August. The average gestation period is 44 days. The number of young produced in a litter varies from 1 to 6 and averages about 2.5.

Life Expectancy

Mortality is high in young gray squirrels. A nestling gray squirrel has only a 25 percent chance of surviving until its first birthday. Young squirrels that survive the first year have a 50 percent chance of surviving the next year. Typically the fall population is composed of about 50 percent young. A few squirrels survive for 7 or 8 years in the wild.