

## Fox squirrels (*Sciurus Niger*) in the City



### Identification:

Fox squirrels are the largest tree squirrel found in North America. Red to buff coloring, they are often seen in urban neighborhoods and parks with many trees.

### Natural history:

Fox squirrels are one of the most common squirrels found throughout the eastern United States, southern Canada and west through Colorado. They rely on trees to escape threats and live in forested areas and urban neighborhoods. Historically they were not in native prairies, but as we created urban forests we created great squirrel habitat. As mature forests are removed in other places, cities have become logical places for squirrels to go.

### Diet:

Squirrels are adaptable in their diet; they eat tree seeds, nuts, fruits, buds, insects, grains, eggs and even small reptiles. They like tree seeds and nuts the best. They store (cache) food by burying it in the ground and cache more than they can eat since they usually can't find all the food they bury. They find their food using their great sense of smell, before they bury it they rub all over it! Squirrels love backyard bird feeders and will empty and cache most of the seed, so if you don't want squirrels in your yard, don't feed the birds, or use "squirrel proof" bird feeders.

### Breeding:

Breeding is hard to predict with squirrels, which can mate at any time. They usually breed twice a year, roughly peaking in December and again in June. After a 45 day gestation an average of 2-3 blind and hairless offspring are born. Young are weaned by two months, and reach sexual maturity between 8 and 11 months. Mother squirrels protect newborns aggressively from any potential danger, watch your head if there are acorns nearby!

**Behavior in an urban environment:**

Squirrels are successful breeders and populations can expand rapidly when there is ample food and shelter. They are playful, active and intelligent and can be bold in areas where they are fed by people. Feeding squirrels increases chances of aggression and bites and should be avoided. Squirrels in some areas have become so bold that they forage in backpacks and at picnic lunches! Squirrels commonly make “leaf nests” for daytime and summer. Whereas, Birds will use mostly branches and feathers in their nests. Searching for warm, safe places in the winter can cause squirrels to move into attics, chimneys and crawl spaces. If there are small openings they can chew holes wide enough to enter.

**Benefits:**

As abundant animals low on the food chain, squirrels are key prey in urban ecosystems. Hawks, owls, eagles, foxes, raccoons and coyotes eat squirrels. Burying tree seeds and nuts also successfully plant trees throughout the city, adding value to property, and establishes mixed age tree communities. Many people enjoy their playful and active behavior. They are an easy way to watch and enjoy wildlife in your backyard.

**Protecting your bird feeder:**

**We always recommend NOT feeding any wildlife. But if you do feed birds and don't want squirrels in your yard, here are a few tips:**

1. Bird feeders attract squirrels to your yard. They can empty them frequently. No matter what techniques you try, accept that the squirrels will get some of the bird food.
2. Use “squirrel proof” feeders, but they are not foolproof.
3. Place a squirrel cone around feeder pole.
4. Make a separate squirrel feeder. If there is an easier place to find food they'll make less effort towards the bird feeder. Suet, corn cob, sunflower seeds or peanuts are popular.
5. Avoid hanging your bird feeder in or near trees. Squirrels jump from extremely long distances.
6. Use a slippery post. Metal or PVC is harder to climb than wood. Smear vegetable oil or Vaseline on pole.

**What to do if you find a baby squirrel:**

It is not uncommon for a baby to fall out of a nest. The mother will almost always retrieve her baby within two hours.

1. Keep pets inside.
2. Line a box with a t-shirt type material and place it in a nearby tree high enough to keep it safe until mother comes.
3. If the squirrel has obvious injuries, place it in a dark, lined box in a safe, warm place. Contact a local wildlife rehabilitator. (The Internet has a list of local wildlife rehabilitators)
4. If the mother does not come in 24 hours, contact a rehabilitator.
5. Baby squirrels are extremely fragile; keep them away from children, pets, and loud household noises. They can die from stress.
6. Do not attempt to feed the squirrel. Cow milk or human formula can kill it. A rehabilitator will have a formula specifically for young squirrels.

### **Squirrels in your house:**

In the spring and early summer, there may be baby squirrels in your house that are too small to get out. Do not close mother squirrel out at this time, she will aggressively try to return to them and the babies will die in your home. Babies are old enough to get out on their own at 12 weeks old. Adults closed inside can cause a great deal of damage trying to chew their way out.

### **Before using exclusion techniques to keep squirrels out, remove existing animals.**

#### **To get squirrels out:**

1. Leave on lights in areas where they are living.
2. Play a radio nearby, or something that makes noise.
3. If you find a nest, VERY GENTLY, move nest a few feet or slightly disturb it. In combination with lights and radio, mother will probably move babies out on her own. Give her adequate time to find or create a new nest (a day usually will suffice).
4. Use repellants: Ropel© or hot pepper oil.
5. Locate where squirrel enters and place a one way door. Attach a piece of hardware cloth over the top of the entrance. Leave bottom unattached with a two inch gap. The squirrel can push out, but not get back in. Leave this for several days. During spring or summer, if the squirrel is aggressively trying to return, open it and see if she removes babies. They will often remove them one by one; watch until she stops returning.
6. Once you are sure animals are out, seal off entrance point.
7. If a squirrel is stuck in a chimney or exhaust fan: use a knotted rope or old sheets, securely attach it to the opening and give them up to 24 hours to climb out. Cover opening with chimney cap or seal opening with hardware cloth.

#### **Exclusion techniques (keeping them out):**

1. Seal any small openings in siding, along vents, in soffits. They typically won't create holes, just widen existing ones. This is best done midmorning on a sunny day when squirrels are likely outside feeding.
2. Trim trees 6 to 8 feet away from house.
3. Smear Vaseline on areas they could potentially jump to.
4. Keep squirrels from traveling on wire. Take a light weight piece of PCV piping, cut one side to slip it over wire. When squirrels try to climb over it, it will rotate on the wire.
5. Stuff steel wool and secure into small holes.
6. Spray with Tabasco and water mixture to repel.

#### **Relocating squirrels:**

This is not recommended. Squirrels are territorial, and if a squirrel is removed, other animals quickly move into its territory. Relocation also usually results in the death of the relocated animal. Wildlife compete for the same habitat, so when another animal moves into another squirrels territory they may be injured or killed. They are often unable to find food, water or shelter in the new location.

#### **Is it legal to relocate squirrels?**

Colorado Parks & Wildlife allows relocation of fox squirrels from your property to a location no farther away than 10 miles from the catch site. You must however, have approval from the land owner at the relocation site.

## **YOU MAY NOT RELOCATE SQUIRRELS ONTO FEDERAL, STATE OR CITY PARK LAND OR OPEN SPACE.**

**Wildlife Diseases** – Plague is a common disease in squirrels and late summer-early fall is the time of year when we see plague outbreaks in squirrels. However, it can be found in rodents year-round, and can sometimes spill over into other wildlife species and domestic cats and dogs. Plague has been present in Colorado since at least the 1940's according to Colorado Department of Public Health and Environment (CDPHE).

CDPHE recommends to following simple precautions to keep the risk of transmission to humans very low:

- Do not directly handle wildlife – if you do, wear thick leather gloves.
- Keep pets away from wildlife, especially dead rodents and rabbits.
- Don't allow pets to roam freely.
- Treat all pets for fleas according to a veterinarian's advice.
- Do not feed wildlife – this encourages them to concentrate in areas and attracts them to your property, potentially increasing the risk of disease transmission.
- Be aware of rodent and rabbit populations in your area and report sudden die-offs or multiple dead animals to your local health department.

Plague is most commonly spread to people by the bite of an infected flea, but also may be transmitted by infected animal tissues, fluids, or respiratory droplets. Symptoms include sudden fever, headache, chills, weakness, and tender, painful lymph nodes. While there are no publicly available vaccines to prevent plague in people, if caught early, it can be successfully treated with antibiotics in both people and pets.

For more information about plague, visit [CDPHE's plague web page](#) or the [Centers for Disease Control and Prevention](#)

### **Resources**

Denver Parks & Recreation, <https://www.denvergov.org/content/denvergov/en/denver-parks-and-recreation/trees-natural-resources/wildlife.html>

Colorado Parks & Wildlife, [www.cpw.state.co.us](http://www.cpw.state.co.us) – (search fox squirrels)

Wikipedia, <http://en.wikipedia.org/wiki/Squirrel>