

Foxes


Species' names:

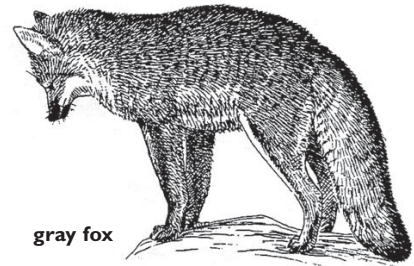
- Red fox, *Vulpes vulpes*
- Gray fox, *Urocyon cinereoargenteus*

Size:

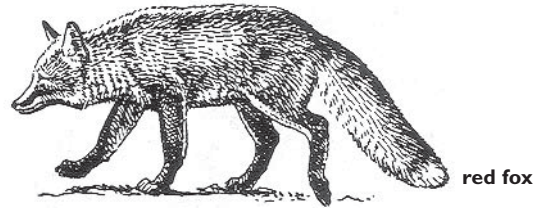
10–15 pounds. Body is 20–25" long. Gray fox is smaller.

Signs of their presence:

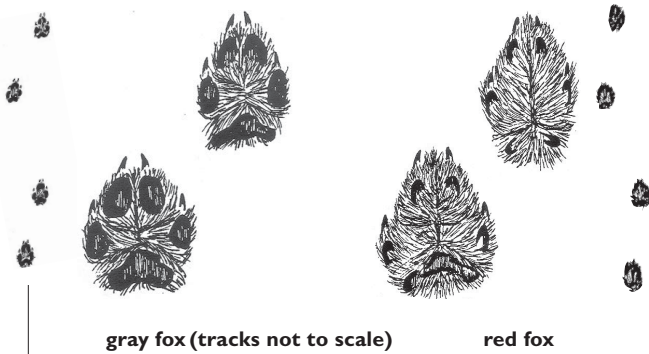
- Sounds: May scream, yap, growl, or bark.
- Scats: twisted, often contain hair or berries, deposited on rocks or logs. 
- Odor: Their scent markings have distinctive odors. Red fox urine smells skunky, while gray fox urine smells musky.



gray fox



red fox



gray fox (tracks not to scale)

red fox

Diet:

Opportunist. Foxes eat mostly mice, voles, bird eggs, rabbits, insects, and native fruits such as blueberries, blackberries, chokecherries, and black cherries. They'll also eat poultry, lambs, piglets, carrion, and cats. Both species will bury food for later use, especially around the den site, when they're raising their pups.

Typical activity patterns:

Social style: Solitary except during breeding season, when mated pairs and their young live as a family unit.

Daily activity: Both day and night, but generally most active at dawn and dusk.

Hibernator? No.

Migrates? No.

Where found:

Distribution in NY and the Northeast: Throughout, in rural and suburban areas and parks.

Habitat: The red fox prefers woodland edges along open fields, meadows, and lawns, while the gray fox tends more toward forested and brushy areas. Typical den sites: red foxes may dig their own den or use an abandoned woodchuck burrow. Gray foxes often den in wood or brush piles, rocky outcrops, or hollow trees. Foxes will often reuse these dens from year to year.

Territory and home range: Varies. Sometimes the red fox is aggressively territorial; other times it has overlapping home ranges. Perhaps this varies according to season, breeding cycle, habitat, or population density.

Breeding habits:

Pair bonding style: Polygamous and promiscuous. Among red foxes, males rarely help females raise the young, but male gray foxes may help raise the pups. Sometimes, females will raise their young alone, and sometimes one male and several females den together, with more than one female raising young. Both species will cache food around the den for the pups.

Breeding dates: December through March, peaking in late January. Gestation takes about 52 days.

Litter size: Red fox: 4–9. Gray fox: 3–7. Most average 4–6 pups.

Birth period: March through April. Most red fox pups are born in mid-March, with the gray foxes following a few weeks later.

Weaning dates: 2–3 months.

Amount of time young remain with parents beyond weaning date: Most disperse in the fall, between September and December.

Common nuisance situations:

Time of year: Any time of year.

What are they doing?

- Their mere presence may frighten some people.
- Getting into the chicken (or turkey, duck, or goose) coop or yard. May take piglets, lambs, and small pets.
- In the spring, they may den underneath a porch or in a yard for a while, while they’re raising their pups. Foxes generally use more than one den to raise their pups and may move them as many as 2–4 times, so this may be a short-term situation. They’ll usually leave by the end of June at the latest. These dens aren’t used during other seasons.
- Foxes (and coyotes) will chew holes in irrigation pipes in fields and orchards.
- Disease risks: Rabies, distemper. Red foxes, but not gray, get mange.

De-bunking myths about foxes:

- Foxes are much smaller than many people think. They’re about the weight of a house cat (10–12 lbs.).
- They don’t often attack dogs or people (unless the fox is rabid). These are relatively small predators which usually hunt mice.
- Pups that are alone during the day have not necessarily been abandoned. Their parents are probably out hunting for food for them. (This is also true of coyotes.)
- A fox that’s active during the day is not necessarily rabid. Most likely, it’s a healthy animal that’s feeding more often than usual, because of the demands of their young.

Legal status in New York:

Both are protected. Both are game species with set seasons. From ECL 11-0523: “6. Raccoons, coyotes or fox injuring private property may be taken by the owner, occupant or lessee thereof, or an employee or family member of such owner, occupant or lessee, at any time in any manner.”

Best practices

Do nothing:

In some cases, the mere presence of a fox will be perceived as a nuisance. As mentioned above, foxes will sometimes den for a short time under a porch. They will leave on their own, usually by the end of June. Can you educate your customers and convince them to tolerate the situation? If you can’t persuade

your customers to wait until July, then nonlethal controls, such as harrassment to scare the foxes away from the den site, will likely work. Legally, a fox must cause damage to private property before it can be removed.

Scare them away:

This is most likely to work when you have access to their den. It’s easy to harass a red fox enough to convince them to move their pups (this also works with gray foxes and coyotes, although not as easily).

- Make noise near their den site. Run motors, shout, increase your activity in that area.
- Use slingshots or a shotgun loaded with rubber buckshot to frighten a fox that’s further away (45 ft). You don’t have to hit it to scare it off, but if you can, that will more effectively train the fox to stay away (this refers to the use of the less lethal projectiles mentioned above).
- Experiment with noisemakers, such as bangers and screamers. You may be able to use predator calls (such as the Coyote Howler™) to frighten foxes away from their dens.
- One scare device, the Critter Gitter®, combines a siren and flashing lights. It’s triggered by a motion detector. The device switches patterns, so it should be effective longer than a scare device that doesn’t vary.

Remove artificial food sources (garbage, compost, pet food):

- If anyone is feeding the foxes, persuade them to stop.
- “Fox-proof” garbage cans or dumpsters with a tight-fitting lid. Secure garbage can with heavy-duty straps or bungee cords, or attach it to a post, or keep it out of reach in the garage (close garage doors at night), or place the can in a covered and locked bin.
- Enclose compost piles in a framed box using hardware cloth or welded wire; in a sturdy container, such as a 55-gallon drum; or in a commercial composter.
- Feed pets indoors. Any food left outdoors should be removed at night. Bring pet food dishes inside, too.
- Remove and properly dispose of livestock carcasses.

Keep foxes out of yards, prevent them from denning under porches and decks, and protect vulnerable livestock:

- Close and tightly fasten the doors to poultry houses.
- Bring livestock into sheds or paddocks when they’re ready to have their young.

- Well-trained guard dogs, usually Great Pyrenees or Akbash breeds, may prevent predation on sheep.
- Fences will help a great deal, but foxes will try to climb over, burrow under, or squeeze through fences. So build them right and keep fences well-maintained. You can fence the whole yard, or just the area underneath the deck, porch, or around the poultry house or other vulnerable spot.
 - Use a 2" net wire fence, hardware cloth, welded wire, or galvanized sheet metal. (You may wish to recommend the use of smaller mesh because this will also prevent other animals, such as skunks and woodchucks, from gaining access). Create a "rat wall." Attach the hardware cloth to the bottom of the deck. Then bury the bottom of your "wall" 6–12", with a foot-wide shelf that sticks out, to prevent animals from digging underneath the barrier (this will look like the letter "L").
 - Three-wire electric fences, with wires spaced at 6, 12, and 18 inches, can repel foxes.
 - Combination net wire and electric wire fence: If there's an existing net wire fence, add an electric strand that's placed 6–8" above ground and 8–10" outside the fence, using an offset bracket. If the foxes are climbing over the fence, add a top wire that's also outside the fence.
 - Invisible fences may be an attractive solution for keeping pets within an area but they will not keep wildlife *out*. To protect pets from predators, switch to a traditional fence design.

If young are present, remove the entire family before blocking the entrance to their den:

- See fur or feathers outside the den during the early summer? That shows the adult fox is bringing food to young pups.
- Can you wait it out? They'll leave on their own once their pups are old enough (usually 12–14 weeks old).
- Cage traps may be effective in capturing young foxes. Place the trap near the den's entrance.
- A device called a "mechanical wire ferret" may help you chase the young out of the den. It's a long piece of steel wire that has a spring and wooden plug on one end, and a handle on the other. Twist the spring through the den to flush out the foxes so you can capture them directly, using a dip net, net bag, or cage trap as they leave the den. The mechanical

wire ferret can become entangled in a young fox's fur, so use it carefully.

- If young are separated from their parents, you can place the pup in a different litter. As long as that female is nursing, she'll probably adopt the pup.

Trapping strategies:

Live capture:

- Trapping foxes requires great skill. The amateur is likely to simply *educate* the fox, thus making it difficult for even experienced trappers to succeed later.
- For adult foxes, use foothold traps, # 1½ or # 1¾ coilspring. For pups, use a cage trap or #1 coilspring. Offset, padded, or laminated jaws may reduce injuries.
- You may be able to use a cage trap to capture a young red fox in an urban area, but don't expect to catch adult red foxes in cage traps. This may work to remove young from a den, too.
- Set traps along trails or at entrances to fields.
- In the fall and winter, a dirt-hole set may work best. Flat sets and urine post sets are generally more effective during the summer.
- Traps should be dyed and waxed, or cold-dipped in a commercial product.

Preferred killing methods:

- CO₂ chamber (if caught in a cage trap, simply place the trap in the chamber. If caught directly, using a catchpole, for example, stun the fox, then transfer it into the chamber)
- Shooting, using a shotgun with #6 shot or larger, or a .22 caliber rifle (target the head, if no rabies testing is needed, or the heart/lungs). Especially with gray foxes, may be able to successfully call the fox into the area with a predator call.
- Lethal injection of barbiturate, if possible

Acceptable killing methods:

- Stunning and chest compression (rabies risk: handle them carefully).

Control strategies that don't work particularly well, or aren't legal in New York:

- In New York, it's not legal to fumigate a fox den with carbon monoxide bombs (a.k.a. "smoke bombs," "gas cartridges," and "smoke cartridges").

Foxes

- There's a poison that you may read about, M-44®— it's not legal in New York, but it is in some states, primarily out west. USDA-APHIS wildlife services staff may use this device.
- Noisemakers, such as propane cannons, radios, and tape recordings, may convince the foxes to move a den, but these techniques aren't generally effective in preventing livestock depredation.
- The same holds true for flashing lights such as strobe lights or beacons. They're most effective in an enclosure or small area, when used intermittently with other techniques.
- Cable restraints are not legal for use on foxes in New York.