

Formerly called the Humane Society of the United States

# Humane Wildlife Conflict Resolution Guide



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## **Answering the call**

### Is your agency or organization overwhelmed with panicked calls from the public about wildlife problems? Do you spend staff time and energy dealing with these calls? If so, this manual is for you!

Whether you're an animal control officer, police dispatcher, shelter staffer, wildlife rehabilitator or veterinary or nature center staffer, this manual will give you the answers you need. Our aim is to help you provide easy, practical solutions—over the phone—for the wildlife dilemmas you encounter daily.

What are the benefits of phone advising?

- Helps you resolve problems in a matter of minutes, rather than having personnel respond on site. The labor savings can be huge.
- Provides effective and humane advice for common wildlife problems.
- Corrects public perceptions about seemingly "orphaned" wild animals and helps people understand when animals truly need help.
- Reduces the number of wild animals who may otherwise be trapped, relocated or killed in misguided attempts to solve conflicts.
- Increases public tolerance for wildlife and builds goodwill toward your facility or agency.

This manual contains our best tips and tricks based on decades of experience running a wildlife hotline and providing hands-on work in the field resolving conflicts with wildlife. It includes three main sections:

- **1.** Species-specific profiles that provide relevant natural history tips and solutions for common problems
- **2.** Relevant topics (preventing orphaning, rabies myths and the reality, what's wrong with trap-loan programs, etc.)

**3.** Appendix information, including web resources and training available from Humane World for Animals

We hope this manual helps you handle the public's wildlife problems more humanely.

### Sign our Wild Neighbors pledge

Humane World for Animals works with animal care and control professionals to put in place and enhance humane and effective protocols for responding to wildlife conflicts. We invite you to become a part of this movement by signing our Wild Neighbors pledge. The Wild Neighbors pledge is a commitment to using humane solutions for conflicts with wildlife and promoting coexistence with your community's wild neighbors.

Go to humanepro.org/wildneighborspledge to learn more.



## **Troubleshooting tips**

### Ten high-level tips for troubleshooting wildlife issues over the phone, including questions to ask and approaches to keep in mind.

#### Calm down the caller!

- Be sure to convey empathy.
- BE NICE! Panicked people may be rude, but they're probably just anxious or scared. Help them along!

#### **2.** Encourage cooperation and resolve problems by:

- Being receptive.
- Taking away the threatening elements of the situation.
- Educating callers about the animal in a way they can relate to.
- Presenting a viable solution.
- **3.** Get good information!
- Ask enough questions—and get enough details—so that you can visualize the situation in your head.
- **4. Confirm what the person is reporting:** Are they interpreting the situation correctly? At the very least ask about the following.
- Confirm species
  - Ask about appearance, movement, size, type of injury/ damage, when the animal is active, footprints, scat.
- Circumstances
  - How long has the animal been there?
  - Could she have been attacked by a dog or cat?
  - What human activities or changes in the immediate environment could have created the situation?
- Orphan?
  - What is the animal's approximate age? (Eyes open or shut? Naked or downy? Fully feathered/furred?)
  - Would you expect the animal to be with his mother at that age?
- Has something happened to the mother? Is she trapped? Was a dead adult seen nearby recently?

- How long has the animal been at that site?
- How is the animal behaving? (Crying? Wandering? Running up to people?)
- Is the animal dehydrated? (Eyes sunken? Skin "tenting"?)
- Is the animal obviously sick or injured?
- Why does caller think the animal is orphaned? Remember age-specific behavior differences.
- Remember: Most animal problems are really people problems! Figure out how the caller's behavior could be causing the problem.
- **6.** For nuisance problems, eliminate the problem, not the animal! What is attracting the animal? Food? Nesting or denning opportunity? Identify what really needs to be removed.
- 7. Assure the caller that the animal is not "out to get them." Explain why the animal is doing what she's doing (finding food, creating a nesting site, enjoying mating season).
- 8. Assess the person's comfort level if you give them something hands-on to do. Make sure they understand each step and what to expect.
- **9.** Have good references handy! Try the *Wild Neighbors* book, published by Humane World for Animals, or visit *wildneighbors.org*.

#### **10.** Make good referrals

- Use *humaneworld.org/wildliferehab* to find a wildlife rehabilitator; make sure the rehabilitator handles the species before referring the call.
- Review our guidelines for working with a nuisance wildlife control operator (p. 54).



## **Orphaned animals**

People want to assist baby wildlife—help them understand whether and how they can.

#### **Relevant natural history**

Is that seemingly helpless baby wild animal really abandoned? In spring and summer, people frequently find baby animals who fall from trees or mysteriously seem to appear, and they assume the babies are orphaned.

To determine whether a baby is actually orphaned, you'll need to know the animal's approximate age, species and circumstances, and you'll want to get a sense of how accurately the caller is interpreting the animal's behavior. Some animal mothers leave their young alone for long time periods (deer, rabbits), while others closely supervise them (raccoons). The tips below will help you determine whether a given animal is truly an orphan—and, if so, what to do. A note on containment: Tell the caller not to touch or feed any baby wild animal. If the animal is truly orphaned and/or injured and already in their possession, they should put the animal in a secure, ventilated container and keep her in a warm, dark and quiet place until a rehabilitator or ACO can assist. Let the caller know that loud noises can badly stress baby animals, and the wrong foods (like milk and lettuce) can kill them. Therefore, the caller should not feed the animal at all. If the caller must handle the animal, they should wear heavy gloves at all times.

To learn more about how you can help orphaned animals, visit *humaneworld.org/babywildlife*.

#### What to tell callers

#### **Baby deer seen alone**

ADVICE: Leave the baby alone. This is normal behavior. Mother deer carry a scent that can attract predators, but baby deer, called fawns, do not. So for the first month, a mother deer will leave her fawn alone the majority of the day for protection. The mother typically returns briefly twice a day, near dawn and dusk, to nurse her young. After about a month, the fawn will begin to venture out with her mother.

**REFERRAL:** If the fawn is wandering around and crying for hours, appears injured or is covered in flies, or if there is a dead doe (female deer) nearby, the fawn may be orphaned, and the caller should contact a rehabilitator.

#### **Baby opossum**

ADVICE: Baby opossums stay in their mother's pouch until they are 3 months old and the size of a mouse. At this age, they ride on her back and sometimes fall off without mom noticing. **REFERRAL:** If the baby opossums are smaller than 7 inches long (not including tail), they are too young to be on their own. Refer the caller to a wildlife rehabilitator. If their body length is longer than 7 inches (not including tail), then they're big enough to be on their own.

#### Baby foxes or coyotes seen with no parents

**ADVICE:** Fox kits and coyote pups will often appear unsupervised for long periods of time while both parents are out hunting. If the kits seem energetic and playful, tell the caller to let them be. When they're old enough to go on hunting trips with the parents, you'll see them less often.

**REFERRAL:** Refer to a rehabilitator only if the kits or pups appear sickly or weak, or if you have reason to believe that no parent is returning to care for them (or have evidence that both parents are dead).

#### **Rabbits alone in nest**

ADVICE: If the nest is intact and the babies are not injured, advise the caller to leave them be! Like deer, mother rabbits only visit their young two to three times a day to avoid attracting predators. So finding babies alone in the nest is normal. If the nest has been disturbed, or if the babies might be orphaned, the caller can put a tic-tac-toe pattern of sticks, string or yarn over the nest to assess whether the mother is returning to nurse them. If the pattern is displaced or pushed aside but the nest is still covered after 12 hours, the mom has returned. Tell the caller not to touch the baby rabbits, as mother rabbits are very senstive to foreign smells and may abandon their young if handled.

**REFERRAL:** Refer to a wildlife rehabilitator if the tic-tac-toe pattern is undisturbed after 12 hours or if a cat has had a baby in his mouth.

Note: It is vital to keep cats and dogs away from helpless young rabbits. Emphasize to the caller the importance of keeping cats inside, both for their own safety and for the safety of wildlife. Refer them to humaneworld.org/indoorcats for tips on how to make the transition.

#### **Baby raccoon seen alone**

ADVICE: If the baby raccoon has been alone for more than a few hours, he has most likely lost his mother, since mother raccoons closely supervise their young and don't let them out of their sight much. When a mother raccoon has been trapped or killed, the hungry babies will start chittering and wandering away from their dens after about three days without mom. The caller can put an upside-down laundry basket over the baby (with a one-pound weight on top) and monitor it for a few hours. The caller must resist the urge to touch or pick up the babies and should ask around to see if anyone in the neighborhood trapped an adult raccoon or saw one hit by a car.

**REFERRAL:** Refer to a wildlife rehabilitator if the mother doesn't try to retrieve her cub after a few hours.

#### **Baby skunk seen alone**

**ADVICE:** Baby skunks are nearsighted and follow their mothers nose-to-tail. They sometimes lose sight of her when a car or dog scatters them. The caller must resist the urge to touch or pick up the babies and should put a plastic laundry basket upside down over the skunk to temporarily contain him while waiting for the mom to return. Advise the caller to approach the skunk slowly and talk softly—if the skunk gives a warning by stamping his front feet, the caller should stand still or back off. They can try to approach again after the skunk calms down. Then they should monitor from a distance to see whether the mom returns. The caller might want to ask around to see whether a neighbor has trapped and/or removed an adult skunk (a common cause of "orphaned" skunk babies).

**REFERRAL:** Contact a wildlife rehabilitator if the caller repeatedly sees the baby outside alone and/or a dead skunk has been found in the caller's yard or neighborhood.

#### **Orphaned duckling**

ADVICE: If the caller knows which pond the duckling came from, they should take him back to rejoin his family. If the duckling was left behind and his origin is unknown (e.g., he was fished out of storm drain or spillway), they can contain the duckling with an upside-down laundry basket and monitor from a distance to see if Mom returns. The mother will see the duckling through the lattice sides of the basket and make contact. If she returns, the caller should approach slowly and overturn the basket so the mom can collect her young.

**REFERRAL:** If the mother does not return after several hours, contact a wildlife rehabilitator.

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#### **Orphaned gosling**

**ADVICE:** The caller should try to reunite the gosling with her family if possible. If this isn't possible, know that Canada geese will accept unrelated goslings and raise them as their own; the caller can try releasing the gosling close to a goose family with similarly aged young. Monitor from afar to ensure the gosling is accepted. As a last resort, contact a wildlife rehabilitator.

#### Baby squirrel fell from tree

**ADVICE:** If tree work was done recently, give the mother a chance to reclaim her baby (as long as he's uninjured) by leaving the baby at the tree base. They should not cover him with a blanket or put him in a deep box; the mother may not find him. If there are free-roaming cats or dogs around, they can put the squirrel in a berry basket or something similar with drainage and attach the container securely to the tree trunk as high as they can safely place it. The baby squirrel must remain within the immediate vicinity of where he fell or the mother will not find him.

- If it is chilly outside, or if the baby isn't fully furred, he'll need a heat source, such as a hot water bottle or a chemical hand warmer. Instruct the caller to place a piece of soft fabric, such as flannel, between the animal and the heating device and check to make sure both stay warm but not hot.
- Instruct the caller to give the mother an entire day to retrieve her young. It may take her that long to find him or make a new nest. Be sure to mention that they should not feed the baby—not only because babies require a specialized diet, but also because the baby's hunger cries will help attract Mom.

**REFERRAL:** Call a wildlife rehabilitator if the baby isn't retrieved by dark (mother squirrels are not active after dusk). If the weather warrants, the caller can bring the baby inside overnight and then attempt a reunion again early in the morning.

#### Baby squirrel following or trying to climb person

**REFERRAL:** Refer to a rehabilitator. This behavior indicates a juvenile baby squirrel who has lost his mother and needs help.

#### Baby bird fell from nest

**ADVICE:** The caller should put the baby bird back in the nest if they can—it's a myth that parent birds will abandon babies if they've been touched. If the original nest is unreachable or destroyed, place the babies in a wicker basket secured close to where the original nest was. Wicker and other stick-like baskets resemble natural nests and prevent the birds' legs from becoming splayed while allowing rain to pass through so the birds don't drown. However, an alternative nest will only work for older nestlings who are feathered and can maintain body heat. Make sure the basket isn't more than 4 inches deep—adult birds will not jump into something they can't see out of. The caller should watch carefully for at least an hour to make sure that the parents return to feed their chicks—parent birds can be very secretive, so they should glue their eyes to the nest! Let callers know that the presence of feces indicates that the bird is being fed. **REFERRAL:** Refer to a licensed wildlife rehabilitator if parent birds definitely don't return.

#### Baby bird who can't fly

**ADVICE:** If the bird is almost full-sized and fully feathered but has short or seemingly no tail feathers, he's a fledgling who left the nest before he could fly. This is normal. The bird will spend a few days on the ground being fed by parents. The caller can check whether whitish/gray-colored feces are on the ground around him. If so, that's a sign that the parents are feeding him, since baby birds defecate after being fed. Instruct the caller to monitor from a distance, and they'll usually see the parents return. They'll have to watch closely; birds can be quick and secretive. Fledglings are very vulnerable at this stage, so it's essential to keep all pets indoors during this period—especially cats.

**REFERRAL:** Refer to a wildlife rehabilitator if the parents clearly aren't feeding the baby bird.

#### Bear cub seen alone

**ADVICE:** While bear cubs may wander away from mothers for a short while, Mom is usually pretty close by or looking for wayward cubs. A mother bear can be extremely protective and will not react well to people or pets close to her cubs. The caller should NOT approach the bear cub, who will typically be found soon by Mom. **REFERRAL:** If cubs are seen several days without the mother, seem to be in distress or are constantly vocalizing or approaching people, contact a state wildlife agency. Ensure that the caller does not offer food to any bear, as they have very specialized nutritional needs and can quickly become habituated to humans.

#### Baby animal injured by cat

**REFERRAL:** Refer to a wildlife rehabilitator for help. Cat bites tend to become infected quickly and should be treated right away.







It can be distressing when a bat is discovered in a living space; help the caller understand what needs to be done to resolve their concerns.

#### **Relevant natural history**

Bats have been plagued by centuries of superstitions, but they are actually one of nature's gentler creatures. They are also very beneficial: A single bat can consume up to 500 insects in just one hour, and a colony of 100 little brown bats can consume more than a quarter of a million mosquitoes and small insects each night! That's why many people put up bat houses. Helping bats is increasingly important because white-nose syndrome has devastated their populations worldwide. Bats also pollinate crops we depend on, such as bananas, mangos, peaches and agave, while devouring huge numbers of crop-destroying insects. Perceived problems arise, however, when bats take up residence in attics and other dwellings to raise young. But people need not panic there are humane ways to exclude bats.

#### What to tell callers

#### Bat seen in daytime

**ADVICE:** Bats are nocturnal, but they may be seen during the day, especially during the early morning and evening. Unless the bat appears injured or sick (no fear of humans, aggressive, agitated), instruct the caller to leave the bat alone.

#### **Bat acting sick**

**ADVICE:** If the bat shows no fear of humans, appears aggressive or agitated, or shows signs of physical impairment, she could be sick. Instruct the caller to keep pets and children away and dispatch an officer.

#### Bat found on the ground

**ADVICE:** If the caller finds a bat on the ground outside, it doesn't mean the bat is rabid. She may be sick, temporarily stunned from flying into a window, too chilled to fly (if the weather is colder) or "grounded" (most bats cannot take flight from the ground and need to launch off a high wall or branch in order to get lift). Bats are not aggressive, but they may bite if handled or provoked. If the caller is willing to move the bat, ensure the caller knows not to touch the bat bare-handed. If the bat can be safely contained, instruct the caller to put on leather or heavy gloves, then cover the bat with a small box or plastic container. Slip a cardboard or plastic cover between the ground and the container and lift the bat to a tree branch or high wall.

**ACTIONABLE:** If the caller is unwilling to move the bat, or if they try placing the bat on a branch or wall and the bat drops to the ground, they should return the bat to the container and wait for assistance. While waiting, they should make sure the bat cannot escape from the container (if she's captured) and that there are small holes (no bigger than a half-inch) in the container that let the bat breathe. They should also make sure that the container does not get too hot or too cold. Dispatch an officer or licensed wildlife rehabilitator to assess the bat.

**ACTIONABLE:** If the caller moves the bat and he is still in the same spot for 24 hours, dispatch an officer to assess.

#### Found a baby bat

**ACTIONABLE:** The mother may have dropped the pup while flying or attempting to move her, or she may be orphaned. Dispatch an officer or refer the caller to a licensed wildlife rehabilitator to assess and pick up the bat.

#### Pet bitten by bat

**ACTIONABLE:** Instruct the caller to put on gloves and immediately confine the pet. If it is possible for them to do so safely and without touching the bat, instruct them to confine the bat by placing a box (such as a shoebox) or plastic container (with a few small air holes, no bigger than a half-inch) over her so she can be captured and submitted for rabies testing. Instruct the caller to call their veterinarian for medical advice regarding their pet. Dispatch an officer to pick up (and capture, if necessary) the bat and submit her for testing.

#### Person bitten by bat

**ACTIONABLE:** Advise the caller to immediately wash the wound with soap and water and then call their physician and local health department. If it is possible for the caller to do safely and without touching the bat, instruct them to place a box or plastic container (with a few small air holes, no bigger than a half-inch) over the bat so she can be easily captured and tested for rabies. Dispatch an officer to capture the bat and submit her for rabies testing.

#### Bat in the house (inside living space)

ACTIONABLE: Sometimes a bat may accidentally find her way into a home. If the bat is not flying, instruct the caller to check draperies or other places where the bat can hang easily. If the caller is positive that the bat has not bitten anyone or been in anyone's bedroom overnight while they were sleeping or incapacitated, and if the caller is willing, instruct them to wear leather or heavy gloves and capture the bat. Place a shoebox or similar container over the bat, then gently slide a piece of cardboard or plastic underneath. Then carry the bat outside for release, putting her on a tree branch or high wall. (Bats cannot fly up from the ground.) Advise them to avoid direct contact with the bat to help ensure that they don't get bitten. (If the bat has bitten someone, see the instructions above.)

If the bat is flying in the room, instruct the caller to stand back against the wall to avoid accidental contact with the bat. Tell the caller not to be alarmed; although it may feel like the bat is trying to "attack," she is just trying to maintain lift while flying. If the caller is positive that the bat has not bitten anyone or been in anyone's bedroom overnight while they were sleeping or incapacitated, instruct them to confine the animal to one room and open a window or exterior door. The flying bat will locate the opening by echolocation and leave.

Once the bat is removed, it's important for the caller to ascertain whether this was an accidental intrusion (which is common) or if there might be a colony living in a void within the house. If the latter, the first step is to seal up the home interior so that no more bats can access the living space. Advise the caller to contact a professional wildlife control company that specializes in bat eviction and exclusion services to identify whether a colony is present and develop a strategy for eviction and exclusion. The caller can also put up a bat house to provide alternate roosting sites (refer them to *batcon.org* for details).

**ACTIONABLE:** If the caller cannot rule out exposure, dispatch an officer to capture the bat and submit her for rabies testing.

#### Bat in attic or walls

**REFERRAL:** Callers should hire a professional wildlife company experienced in bat eviction and exclusion if there are bats in their attic or walls. Refer callers to *batcon.org* or *humaneworld. org/bats* so they can understand humane and effective bat exclusion methods before selecting a company. A caller can locate bat entry holes by watching at dusk to see where the bats emerge. Bats don't make holes to get into buildings; instead, they enter structures through already existing entry points at dormer intersections, in the eaves, at side attic vents, in cracks around windows and through spaces under or around ill-fitting or damaged siding or trim boards. They can squeeze through openings as small as a half-inch wide, so when the bats are gone, the caller must make sure to repair or patch all entry points,



which are usually discernable by oily stains and smudges. Instruct the caller to ensure that the company does not seal any holes from May to September, as they will trap dependent juvenile bats inside. They must take steps to ensure that all bats can exit through the eviction device and/or that all bats are gone before sealing any entry points on the home. Remind the caller that they must comply with all state and local laws protecting bats during the exclusion process.

#### Bat hanging under house eaves

**ADVICE:** A bat hanging under the eaves or porch ceiling may be resting close to her food source, such as insects attracted to a home's outdoor lights. Typically this does not mean that a colony is present within the home, but if the caller is concerned, they can do a bat watch to determine whether there are bats inside their home. This requires watching along the roofline starting approximately a half hour before dusk to see whether bats emerge from the home. As long as the bats are not able to get into the home's interior living space, encourage the caller to let bats stay in the attic or void space until dependent young are capable of leaving and the colony can be humanely evicted and properly excluded from the home (see information above). **REFERRAL:** If the caller is not willing to let the bats stay, make

sure they contact a professional wildlife control company that specializes in humane bat evictions. Make sure they understand that bat eviction work is very delicate and can only occur during a few small windows of time throughout the year, and that they must comply with all state and local laws protecting bats.

#### **Bat behind shutters**

**ADVICE:** Shutters provide a nice roosting spot for bats. As long as there are no entry points into the home, the caller can leave them alone. Emphasize that they will perform excellent insect control services! If they're too close for comfort, the caller can wait until dusk—when the bats have left to forage—and remove the shutters. Leave them off for one or two weeks to discourage the bats from returning.

#### Guano (bat droppings) on siding or porch

**ADVICE:** Bat droppings, called guano, contain mostly indigestible insect chitin (the exoskeleton of bugs). Small quantities on a porch, stoop, house siding or other areas exposed to direct sunlight are of little concern. However, guano can present an issue when it accumulates over time in very large quantities in humid environments. This exceedingly rare situation—unlikely to be found in a home environment—can create conditions that support the growth of fungal spores, which can cause a histoplasmosis infection.

Large-scale accumulations of guano may require the services of a professional cleaning company, but small amounts may be safely cleaned up by individuals who take proper precautions. The caller should wear an N95-rated dust mask and wet the area down with a general disinfectant cleaner (a mixture of 10% bleach solution is recommended) to reduce the chance of exposure to fungal spores. They should use a shovel to pick up the guano and dispose of it in a large plastic contractor-style garbage bag while continuing to wet the area as they proceed. Then they should spray a general disinfectant cleaner (again, a mixture of 10% bleach solution is recommended) on the area and allow the disinfectant to sit for several hours before hosing down the area.

For more information about histoplasmosis, visit *cdc.gov/ histoplasmosis/about/index.html*. Go to *humaneworld.org/bats* to learn more about bats.



### **Black bears**

Seeing a bear in a residential area can be frightening to the public—here are some tips for common questions you might get.

#### **Relevant natural history**

The American black bear is one of three species of bear found in the United States, along with brown (grizzly) bears and polar bears. Black bears are the smallest species, are the most adapted to urban and suburban areas, and are found in 40 states. They are solitary animals, although cubs stay with their mothers for two to three years. Bears have an extraordinary sense of smell, allowing them to find a variety of foods—including those enticing morsels on grills and in garbage cans and dumpsters. They are particularly voracious in late summer/early fall as they put on extra fat for winter's long hibernation. During this time (called hyperphagia), they can consume 20,000 calories a day!

#### What to tell callers

#### **Bears getting into trash**

**ADVICE:** Trash provides a huge enticement to bears. The only solution is to prevent access by using bear-proof trash containers

or by storing trash in a way that does not attract or allow access by bears. This means never letting garbage pile up—or letting odors develop—by storing garbage in tightly closed plastic bags and secure trash containers, putting trash out just before curbside pickup, and never storing garbage in places like porches or open garages. It's also important to not discard cooking grease in the yard. There are a variety of effective bear-proof dumpster and garbage container companies and designs available; see *bearsmart.com* for examples. Once the bears are no longer able to access this easy food source, they will go elsewhere.

#### **Bears raiding bird feeders**

**ADVICE:** Ideally, people living in bear country should avoid putting out bird feeders from April 1 to Nov. 30. Birdseed is a big attractant for bears, bringing them into neighborhoods where they may also start taking advantage of trash and other food items. If the caller must keep out bird feeders, we recommend switching to sunflower hearts (instead of whole seeds), avoiding seed mixes with millet (birds toss it out) and cleaning up any spillage each day. Callers can also try hanging feeders from a thick cable out of reach of bears, at least 11 feet off the ground. They can then wrap metal flashing around tree trunks to prevent bears from climbing up to access the cable. Go to *bearsmart.com* to find bear-proof feeder designs.

#### Bear sighting in yard/neighborhood

**ADVICE:** If the caller is inside, tell them to stay there until the bear leaves. If the caller is outside, tell them to stand and face the bear directly, raise their arms over their head and yell toward the bear. They may also bang pots and pans or use other noisemaking devices. (Tell the caller not to run away from a bear; they can easily outrun humans, and a running human can trigger a bear to charge.) Once the bear leaves, have the caller examine their yard and neighborhood to find and remove any food source that may have attracted the bear, such as trash, bird feeders, open compost, uncleaned barbecue grills, etc.

#### Fear of being attacked by bear

**ADVICE:** Black bear attacks on people are extremely rare. Most black bears are very wary of people and are easily scared away by the hazing tips given above. In the rare event that a bear aggressively approaches a person, they should raise their arms over their head, yell at the bear and back away slowly (never running away). If callers believe they might encounter a bear, they should equip themselves with bear spray. If the bear makes contact and attacks, they should fight back—but make sure they know not to play dead.

**ACTIONABLE:** If the caller, a family member or pet is actually attacked by a bear, tell them to wash the wound with soap and water (wear gloves if handling a potentially bitten pet) and to contact the local health department and their own doctor (or veterinarian) for guidance. Gather as much information about circumstance and context (such as whether or not feeding or pets were involved, etc.) and contact the state wildlife agency as appropriate.

#### Bears getting into pet food

**ADVICE:** The golden rule is to never feed pets outdoors, especially in bear country. Doing so literally trains bears and other wildlife to come to people's homes for food. If pets must be fed outside (for example, if someone takes care of a community cat colony), instruct the caller to leave the food outdoors for an hour at most and to clean up the leftover food immediately. Community cats are adaptable and will quickly learn this new feeding schedule.

#### **Bears raiding compost piles**

**ADVICE:** Instruct the caller to keep compost as odor-free as possible by constantly turning it and using lime and dry grass clippings to hasten decomposition. Never introduce meat, fish,

oil, grease or dairy products into compost; these items will attract bears. Most importantly, tell callers to use a bear–proof composter (see *bearsmart.com* for more information and examples).

#### **Bears eating from fruit trees**

**ADVICE:** Bears have a sweet tooth and love fruit. In bear country, it's best to landscape with non-fruit-bearing trees and shrubs, especially around busy paths, children's play areas and other high-use locations. If the caller already has established fruit trees, tell them to pick fruit just before it ripens, diligently remove fallen fruit from the ground below and use electric fencing to protect orchards and gardens from hungry bears.

#### Bears interested in chicken coops

**ADVICE:** To protect chickens from bears—as well as many other wild and domestic predators—it is crucial to predator-proof their enclosures. For nighttime protection, keep chickens in bear-resistant coops that are fully enclosed using solid wood construction and heavy-gauge wire (14-gauge or better) fastened with screws and washers over any vents or openings. Any access doors to the coop should have locks. During the day, runs and other areas enclosed by electric fencing can protect chickens from bears. Although bears can get through many barriers, they do pay attention to electric fencing, making it both necessary and effective. A well-trained guard dog or other guard animal can also be helpful in preventing bear intrusions.

#### **Bears raiding beehives and gardens**

**ADVICE:** Electric fencing—including portable electric fences is highly recommended. Not only does it deter bears, but it teaches them to stay away from callers' food sources. This kind of fencing can be used to protect fruit orchards, livestock enclosures, beehives and grain storage areas. Callers can enhance the effect by attaching foil strips to the top wire (at 24 inches of height) and smearing peanut butter or honey on the strips. This will encourage the bear to interact with the fence, giving him a quick jolt and teaching him to stay away. Go to *bearsmart.com/work/beekeepers* for more information about electric fencing.

To learn more about dealing with bears, go to *humaneworld. org/blackbears.* 



### **Bobcats**

#### Conflicts with these elusive, wild felines are rare and preventable.

#### **Relevant natural history**

Named for their stubby tails, bobcats are so elusive that most people would be lucky to catch a glimpse of one in their lifetime. The bobcat is 10 times smaller than a cougar but two times larger than a housecat, and often confused with both. Males average around 21 pounds on a frame that is between 30 and 36 inches long, while females usually weigh less than 15 pounds and can be as light as 10 pounds. Bobcats' prey focus is on rabbits and an array of small mammals and other animals such as mice, voles, squirrels, grouse, bird eggs, snakes, frogs and crustaceans. They range throughout the United States but are absent from a large part of the Midwest. Bobcats do well in small, forested areas and will utilize open grasslands as well as brush land and semiarid desert, if some cover is available. They generally avoid dense urban areas where there is significant human activity. However, bobcats do use the edge of urban areas and have the potential to thrive in overlapping human-occupied and natural habitats. Because of their smaller size, solitary nature and reliance on natural prey, bobcats are less likely to be involved in conflicts with humans relative to other wild animals in communities, such as raccoons and coyotes.

#### What to tell callers

#### Daytime sighting of a bobcat

**ADVICE:** It is perfectly natural behavior for a bobcat to be outside during the day, especially during the spring and summer when they are busy hunting rodents to feed their young. Simply because a bobcat is active during the day doesn't mean the animal is rabid.

#### **Orphaned bobcat**

**ADVICE:** Advise the caller that mother bobcats often leave kittens alone for hours at a time while they hunt for food. If the kitten seems energetic and playful, let him be! Mom will be back soon to check on him. The caller may also place an inverted laundry basket over the kitten, to contain him until mom can come back to retrieve him (she can tip over the basket). It is important to not keep checking on the kitten as Mom may not come back due to human activity.

**REFERRAL:** Refer to a rehabilitator only if the kitten appears sickly or weak, or if there is reason to believe that the mother bobcat is dead. In this case, instruct the caller to use gloves to place the bobcat in a cat carrier and take him to a wildlife rehabilitator immediately. The caller should not offer food to the kitten(s).

#### Fear of being attacked by a bobcat

**ADVICE:** Tell the caller that bobcats are much more afraid of us than we are of them! Although bobcats are elusive and are primarily nocturnal, they may be seen during the day while hunting/foraging for food, especially during baby season (when they have more mouths to feed). Simply seeing a bobcat by day does not mean that the animal is rabid, sick or aggressive.

In the event of an encounter with a bobcat, the caller should pick up any small children and/or pets, back away slowly (do not run), make eye contact, and if the animal does not leave or approaches, make noise and wave your arms. Do not bend or crouch down. If at home, the caller should then do an inventory of their yard to look for and eliminate any food attractants that may have enticed the bobcat near their home, and make sure to keep pets inside.

**ACTIONABLE:** If the caller, a family member or pet is actually bitten by a bobcat, they should wash the wound with soap and water (wear gloves if handling a potentially bitten pet) and contact the local health department and their own doctor (or veterinarian) for guidance. Gather as much information about the incident as possible (such as whether the person was intentionally feeding the bobcat, etc.) and dispatch an officer as necessary.

#### **Brazen bobcat**

**ADVICE:** Bobcats may lose their natural fear of people when they find free sources of human-associated food (e.g., pet food left on porches) in neighborhoods and have repeated contact with people with no negative consequences. You can teach an overly bold bobcat to be wary of people by using negative conditioning or "hazing." To do that, be big and scary: Raise your arms over your head, yell or blow a whistle and bang metal pot tops together as you move toward the animal or spray the animal's hindquarters with a hose or water gun. Hazing works best if you keep the negative reinforcement going until you deter the bobcat from the property. If at home, the caller should then do an inventory of their yard to look for and eliminate any food attractants that may have enticed the bobcat near their home, and make sure to keep pets inside.

#### **Predation on pets**

**ADVICE:** The best way to protect pets from bobcats is to never let pets outside unsupervised, and to keep dogs on a leash while walking in public areas. Tell the caller to reduce food attractants around their home by keeping a tight lid on their garbage cans, putting garbage out the morning of pickup and not the night before, feeding pets indoors, cleaning up around or removing bird feeders, removing bird baths, and not feeding wildlife. They may also wish to trim shrubs and grasses near the home so that bobcats do not have a place to hide. For community cats, have the caller feed the cats once per day in the middle of the day, then clean up the food shortly after.

#### Predation on chickens and other farmed animals

**ADVICE:** Assure the caller that cases of bobcats killing sheep or other domestic farmed animals are extremely rare and may be a case of mistaken identity. To protect these animals, have the caller enclose them all in a secure pen with a predator-proof roof (as bobcats can climb) from dusk to dawn. To protect young animals during the day, use electric wires along fences over 6 feet high. Note any nearby tree branches that might provide an easy route for bobcats to enter fenced areas. Motion-detecting lights and sounds may work temporarily to scare away bobcats.

Regarding chickens, it is important that the caller boost their coop's security and use harassment techniques to deter wild animals who are tempted to break in, because chickens, eggs and supplemental feed such as corn (which attracts rodents) will continually draw in wildlife. A secure coop must have perimeter fencing that is buried down into the ground or run 12-plus inches outward and horizontally to the ground. (This is called an L-shaped footer; visit *humaneworld.org/digginganimals* for





more information.) You must also reinforce the walls, the door and roof of the structure because bobcats (and other wildlife) can climb. Chicken wire alone is not wildlife-proof. Heavy, 16-gauge welded wire with 1-inch-by-1-inch openings is a good choice, as is electric fencing. Although reinforcing a pen may be a temporary inconvenience, once an animal pen is wildlifeproofed, the problem is solved for the long term.

#### **Bobcat den on property**

**ADVICE:** If a caller is concerned about a bobcat den on their property, assure them that bobcats pose little threat and that they will likely move along on their own with the change of the season. If the presence of bobcats can't be tolerated, humane harassment strategies can encourage them to leave: At dusk, light the den area. Turn a radio on a 24-hour talk or rap station and place at the den. Place rags soaked in apple cider vinegar at the den.

Never use moth balls or ammonia to harass wildlife. The chemicals released are harmful to both humans and animals. **BETTER OPTION:** After learning that their fears were unfounded, many people find that letting the bobcat family stay is the easiest option and a memorable treat! Encourage callers to just enjoy them, but to practice safe behaviors around them, such as not getting too close, not leaving food outdoors and keeping pets away.

#### Bobcat under a deck, porch or shed

**ADVICE:** Bobcats may occasionally make their dens under human-made structures such as porches, decks and sheds, though it is rare. Bobcat kittens emerge from the den when they are just over 1 month old and accompany Mom on hunts at 3 months. If possible, it's best to leave the den undisturbed until this point so that mom doesn't have to move the kittens one at a time. Then, they can accompany her to the new den on their own. If the bobcats must be moved immediately, the harassment techniques described above (under "Bobcat den on property") can be effective. It is important to exercise extra caution in the spring with exclusion techniques to avoid separating Mom from her kittens.

The caller can permanently prevent bobcats and other wildlife from using the space under the structure by installing an L-shaped footer. When installing the barrier, first make sure no animals are present. If the caller can't verify whether an animal is there, they can install a one-way door that gives any animals inside a way out. Or they can test the opening by blocking the entrance with material that the bobcat can push aside, which will let them know a bobcat is still present.

#### **Public health concerns**

**ADVICE:** Assure the caller that although bobcats are susceptible to rabies (like most mammals), the incidence of this disease is very low in these animals. Bobcats may also carry Bartonella (cat scratch fever) and Toxoplasmosis (much like domestic cats), but transmission to humans is very rare. Assure the caller that if they are not feeding or petting the bobcat, or handling her feces, there should be no risk of disease transmission.

#### **Bobcat with mange**

**ADVICE:** Bobcats who scratch a lot, seem disoriented or weak and who have missing fur patches (or are completely bald) are afflicted with mange, which is an ailment caused by tiny mites under the skin. Bobcats with mange may be seen closer to human development because they are too weak to hunt. Because mites can live up to 24 hours without a host, it's important that the caller keep pets away from the area if possible.

**REFERRAL:** Refer to a wildlife rehabilitator.

**ACTIONABLE:** Dispatch an animal control officer if the bobcat is acting sick or approaching people.

#### Why not set a trap?

**ADVICE:** Trapping hardly ever solves wildlife problems and can often result in starving young left behind. It's much more effective to exclude wild animals from areas where they're not wanted rather than to continually remove all animals who may be attracted to a good food source or den/nest site. (Refer to the "Why not trap and relocate wildlife" chapter to help the caller understand the problems with trapping.)

To learn more about bobcats, go to humaneworld.org/bobcats.



## **Canada geese**

Although seen as nuisances by some, conflicts with Canada geese are easily solved with humane deterrents.

#### **Relevant natural history**

After nearly being driven to extinction by over-hunting and habitat loss, Canada geese rebounded when wildlife managers bred captive flocks in the 1960s and released them throughout the country. The descendants of these captive-bred birds—who had clipped wings—never learned to migrate, giving rise to what we now call resident Canada geese: Those who stay in the lower 48 states year-round. The United States also provides home to migratory Canada geese, who migrate to Canada to nest in the spring. Migratory and resident Canada geese differ in behavior but not in biology; they are the same species of geese and are both protected by the Migratory Bird Treaty Act.

Now, populations of resident Canada geese are increasing throughout most of the U.S. The impeccably mowed lawns found in our suburban landscape (parks, golf courses, cemeteries, lakeside communities, etc.) provide perfect habitat and nesting opportunities for these grass-grazing birds. Conflicts with resident Canada geese mainly occur in spring and summer when people take exception to all the droppings appearing in backyards and recreational areas.

#### What to tell callers

#### Geese pooping in yard

**ADVICE:** The caller can discourage geese from a yard using motion-activated sprinklers (like the Scarecrow), a squirt gun, a simple low fence or even Mylar balloons placed around the yard, tied to a weight and set 3 feet off the ground. Remind the caller that they may not harm the geese in any way, however, as geese are protected by the Migratory Bird Treaty Act.

### Concern about goose droppings on playground or other public areas

ADVICE: The freshly mowed and fertilized lawns in soccer fields,

parks and golf courses are very attractive to Canada geese due to their succulent grasses and clear sightlines, which allow them to easily see any potential predators. The best way to lower goose numbers in these areas is to use a multifaceted approach that includes habitat modification, aversive conditioning, humanely reducing the population through egg addling and reducing the feeding of geese by the public. Go to *humaneworld.org/geese* to learn more.

### Aggressive goose chasing people (during nesting season; typically March-May)

**ADVICE:** If a goose is acting aggressively and/or chasing people during the spring, it is likely that she is defending a nearby nest. It's common for Canada geese to nest outside entrances to shopping malls and other commercial buildings, with both the male and female protecting the nest by chasing away anyone who walks by. Tell the caller to avoid the area if possible. If they must walk by it, they can open and close an umbrella, pointed toward the goose, to act as a shield.

**ACTIONABLE:** The best solution is to section off the area and redirect people away from that entrance, if possible. The goose will incubate the eggs in her nest for 28 days and then move on. If sectioning off the area is not possible, it may be necessary to remove the nest and eggs. To do this, the property owner will need to first register with the U.S. Fish and Wildlife Service. (See *humaneworld.org/eggaddling* for registration information and details about humane nest removal.)

Geese will usually nest in the same location year after year, so take steps before nesting season the next year to prevent geese from using the same problematic nesting site. In February and March, place deterrents in the area, such as Mylar balloons attached to weights and placed 3 feet off the ground or a motion-activated sprinkler (such as the Scarecrow).

### Aggressive goose chasing people (not during nesting season; typically June-February)

**ADVICE:** If a goose is chasing or acting aggressively toward a person outside of nesting season, the goose most likely became accustomed to being fed by people and is demanding more. Advise the caller to scare the goose away by opening and closing an umbrella pointed in the goose's direction.

**ACTIONABLE:** Use water guns or air horns as aversive conditioning to teach aggressive geese to stay away from people. Investigate sources of feeding and take steps to reduce these as much as possible.

#### Canada goose nest on a roof or balcony

Canada geese will sometimes nest on a roof or balcony, seemingly not thinking ahead to how they will get their goslings safely down after they hatch. Goslings cannot fly until they are about 10 weeks old, and thus have no way to get down safely from a roof or balcony that is more than two stories above ground, the vertical distance the goslings can fall without injury. **ADVICE:** Geese will usually nest in the same location year after year, so advise the caller to take steps before nesting season the next year to prevent geese from using the same problematic nesting site. In February and March, place deterrent devices in the area (such as Mylar balloons tied to weights and placed 3 feet off the ground or rooftop, or a motion-activated sprinkler such as the Scarecrow). These deterrents should prevent geese from nesting in the problematic area.

**ACTIONABLE:** If a goose has already laid and hatched eggs on a roof or balcony, dispatch an officer or contact a rehabilitator to help the goose and her goslings get down from the roof. A nest with eggs cannot be moved to a better site because the parent birds won't follow it. Unfortunately, in that case, the only option is to wait until the eggs hatch, then assist the goslings in getting off the roof. If possible, capture the male and female geese as well and release the geese and goslings next to a body of water.

#### People feeding geese

**ADVICE:** Geese who are fed human food like bread can become malnourished and suffer a permanent deformity called Angel Wing, which renders them unable to fly. Eliminate feeding in the area by introducing fines or adding educational signage. Signs should explain that human food—especially bread—is unhealthy for geese and creates bad behaviors that result in tragic outcomes for the birds. Try diplomatically explaining these points to the goose feeders first, then instituting and enforcing a feeding ban if necessary and possible.

### Geese (and goslings) crossing road and creating traffic hazards

During the summer, it's common to see Canada geese and their goslings crossing the road on foot. This happens for two reasons. One, goslings can't fly until they are about 10 weeks old, so they must make the trek from their nesting site to a water source (which may be up to a mile away) on foot. Second, adult Canada geese undergo a six-week molt of their flight feathers in early summer, which means they're unable to fly until these feathers grow back in. During this time, it is common to see large groups of geese crossing roads in search of water and food.

**ADVICE:** Advise callers that they should not put themselves in harm's way to escort the geese and goslings across the road. If it is safe to do so, they can stop their vehicle and signal to other cars when the birds are crossing.

To learn more about Canada geese, go to *humaneworld.org/* geese.





Coyotes in urban and suburban settings tend to inspire fear, so you might need to calm nervous callers.

#### **Relevant natural history**

A member of the canid family, coyotes look similar to mediumsized dogs and are often confused with German shepherds. But they are actually smaller, weighing in at an average of 25-35 pounds. Contrary to popular myth, coyotes do not generally show aggression toward people or pets and are typically quite wary of humans. They seek out small easy prey like mice, chipmunks, shrews, rabbits and squirrels, providing people with free rodent control. However, they will take advantage of human-produced food—such as garbage or outdoor pet food—which can bring them closer to homes. Coyotes adapt easily to the presence of people in their landscape, yet people's exaggerated fears, often based on perceptions about coyotes being akin to the "big bad wolf," result in panic and calls for coyotes to be removed.

#### What to tell callers

#### Daytime sighting of coyote

**ADVICE:** It is perfectly natural behavior for a coyote to be outside during the day, especially during the spring and summer when they are busy hunting rodents to feed their young. Just seeing a coyote during the day doesn't mean the animal is rabid, aggressive or dangerous.

#### **Brazen coyote**

**ADVICE:** Coyotes may lose their natural fear of people when they find free sources of human-associated food (e.g., pet food left outside) and have repeated contact with people with no negative consequences. You can teach an overly bold coyote to be wary of

people with negative conditioning or "hazing." To do that, be big and scary: Raise your arms over your head, yell or blow a whistle and bang metal pot tops together as you move toward the animal or spray the animal's hindquarters with a hose or water gun. Hazing works best if you keep the negative reinforcement going until you deter the animal from the property.

#### Keeping coyotes out of yards

**ADVICE:** You can prevent coyotes from visiting your yard by taking a few precautions:

- Do not leave pets outside unattended.
- Do not leave pet food outside.
- Keep garbage in a secure container, and only put it outside on the morning of pickup.
- Do not put any meat scraps in compost heaps.
- Pick up fallen fruit from underneath trees.
- Cut back brush around your property that might provide cover for coyotes or their prey.

Coyotes can easily get over fences 6 feet tall or shorter. For fences at least 6 feet tall, the Coyote Roller (available from Roll Guard, 619-977-6031 or *coyoteroller.com*) is an effective device to keep dogs in and coyotes out. This free-standing cylinder attaches to the top of a fence and literally "rolls" off any animal who is attempting to climb over.

#### Fear of family being attacked

**ADVICE:** Coyote attacks on people are extremely rare. Most, if not all, of the few cases of coyotes biting humans that occur nationally each year are directly related to coyotes being fed by humans, whether intentionally or not. Take proactive measures to ensure the property contains no food—such as garbage or pet food—that will entice animals and use hazing techniques to scare away any overly bold coyotes.

**ACTIONABLE:** If the caller, a family member or pet is actually bitten by a coyote, tell them to contact their local animal control officer immediately. Tell the caller to wash the wound with soap and water (wear gloves if handling a potentially bitten pet) and to contact the local health department and their own doctor (or veterinarian) for guidance. Gather as much information about circumstance and context (such as whether feeding or pets were involved, etc.).

#### Concern about coyote vocalizations/howling

**ADVICE:** Coyotes are quite vocal animals, capable of producing more than a dozen different sounds including howls, yips and barks. A group of just a few coyotes can sound like 10 or 20 coyotes. A common misconception is that coyotes howl after celebrating a kill (which the public often assumes to be a dog

or cat). Assure the caller that coyotes do not hunt in packs (they don't need to; their diet mostly consists of small rodents), nor do they vocalize after hunting. Their vocalizations are simply greetings between family members or coyotes defending their territory from other groups.

#### Possibly rabid coyote

**ADVICE:** A daytime sighting alone does not indicate rabies. Coyotes are normally active by day, and rabies is rare in these animals. **ACTIONABLE:** Dispatch an officer if the coyote is acting sick or showing abnormal behaviors that might indicate rabies, such as partial paralysis, circling, staggering as if drunk or disoriented or self-mutilating, or if the animal exhibits unprovoked aggression or unnatural tameness. Tell callers to keep their family and pets inside while waiting for help.

#### **Coyote with mange**

Coyotes who scratch a lot, who seem disoriented or weak and who have missing fur (or are completely bald) are afflicted with mange, which is an ailment caused by tiny mites under the skin. Coyotes with mange may be seen "languishing in yards" or taking advantage of pet food left outside because they are too weak to hunt. Because mites can live up to 24 hours without a host, it's important that the caller keep pets away from the area if possible. **REFERRAL:** Refer to a wildlife rehabilitator.

**ACTIONABLE:** Dispatch an ACO if the coyote is acting sick or approaching people.

#### **Attacks on domestic pets**

**ADVICE:** It is normal behavior for coyotes to prey on outdoor cats, which is why it is so important for people to keep cats indoors. Small dogs left outside unattended are also at risk of coyote attacks, especially in the spring and summer when coyotes are hunting to feed their pups. To protect pets, instruct people never to let their pets—regardless of size—outside unattended and to keep pet food inside. It's also important, especially during the winter months when it's coyote breeding season, to keep large dogs on a leash; coyotes may view large off-leash dogs as a threat to their mates.

#### **Coyotes and chicken coops**

**ADVICE:** The only effective way to protect your chickens is to reinforce the coop so coyotes and other animals can't get in. Because chickens, eggs and supplemental feed like corn (which attracts rodents) will continually draw in wildlife, it's important to boost your coop's security and use harassment techniques to deter wild animals who are tempted to break in. A secure coop must have perimeter fencing that is buried down into the ground or runs 18-plus inches outward and horizontally to the ground. (This is called an L-shaped footer; visit *humaneworld.org/* 

*digginganimals* for more information.) You must also reinforce the walls and door of the structure. Chicken wire alone is not wildlife-proof. Heavy, 16-gauge welded wire mesh with 1-inch-by-1-inch openings is a good choice. Although reinforcing a pen may be a temporary inconvenience, once an animal pen is wildlife-proofed, the problem is solved for the long term.

#### Coyote pups playing in the yard

**ADVICE:** In the spring, it is normal to see coyote pups romping and tumbling in the yard, playing like puppies. The play activity helps the pups prepare to go out on hunting trips with their parents. They will be accompanying pups soon, and their use of the den and yard will only last a short while longer. As cute as the pups are, callers should be advised not to feed them or initiate contact so they don't lose their fear of humans. Instead, they should be left alone. If they get too close, callers can clap their hands and yell to scare the pups and teach them to associate humans with a negative stimulus. Orphaned pups are very rare, as both parents aid in the rearing of their young (unlike most other mammals, who are raised by the mother only).

#### Coyote den on property

**ADVICE:** People are often surprised to discover a coyote den near their property. This is no cause for alarm. It can be a lot of fun (and a great photo opportunity!) to watch a coyote family grow up. If the animals absolutely must be evicted, humane harassment strategies can encourage them to leave.

- Place dirty, sweaty socks or rags sprinkled with cider vinegar inside the den entrance, along with a blaring radio. This should make the coyotes uncomfortable and motivate them to move on. However, they may be resistant—it's a lot of work to find and excavate a new den.
- Sprinkle a capsaicin-based repellent (such as Critter Ridder) or used kitty litter around the den hole and then mix it with the dirt before loosely filling the hole. Capsaicin-based repellents irritate the eyes, nose and mouth of most animals (including humans) and can be an effective deterrent.
- Never use mothballs or ammonia to harass wildlife. The chemicals released are harmful to both humans and animals.

**BETTER OPTION:** After learning that their fears were unfounded, many people find that letting the coyote family stay is the easiest option and a memorable treat! Encourage callers to just enjoy them, but to practice safe behaviors around them, such as not getting too close and not leaving food outdoors.

#### Coyote under a deck, porch or shed

**ADVICE:** Coyotes may occasionally make their dens under manmade structures like porches, decks and sheds. Letting the coyote family stay throughout the baby-rearing season is the easiest and



most humane answer to this "problem." If tolerance is not an option, the harassment techniques described above can be effective.

After pup-rearing season, the caller can permanently prevent coyotes and other wildlife from using the space under the structure by installing an L-shaped footer. When installing the barrier, make sure no animals are present. If the caller can't verify whether an animal is there, they can install a one-way door that gives any animals inside a way out. Or they can test the opening by blocking the entrance with material that the coyote can push aside, which will let them know a coyote is still present. Go to *humaneworld.org/digginganimals* to learn more.

#### Why not set a trap?

**ADVICE:** Trapping hardly ever solves wildlife problems. Even in studies where all the coyotes were trapped out of an area, others from the surrounding area quickly moved into the vacated niche. In addition, trapping often leads to starving young being left behind. It's much more effective to exclude wild animals from areas where they're not wanted rather than to continually remove all animals who may be attracted to a good food source or den/nest site. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more about coyotes, go to humaneworld.org/coyotes.



### Crows

Securing trash and other food attractants are easy solutions for preventing conflicts with these intelligent, roosting birds.

#### **Relevant natural history**

The American crow (Corvus brachyrhynchos) is one member of a large family of birds, the Corvidae. This group also includes many varieties of jays and magpies as well as the common raven (C. corax), which tends to be larger and inhabit more wild areas than its cousin the crow. Crows began abandoning traditional roosting areas in rural areas for towns and cities in the 1950s. Crows find safe havens in our cities, where they are less likely to be hunted by humans (they receive protection under the Migratory Bird Treaty Act) and animals. Like our other wild neighbors, they thrive in the habitat we create; lawns, gardens and accessible and reliable refuse serve as buffets for the birds, while paved roads provide opportunities to scavenge dead animals. Crows' sociability can impact people when large winter roosts form in cities and towns. The noise and mess of a large winter roost can make for hard feelings among human neighbors. Fortunately, these conflicts can be resolved humanely.

#### What to tell callers

#### **Crows in the trash**

**ADVICE:** Keeping crows out of the trash is easy: Tell the caller to consistently use intact and secure trash containers with tight-fitting lids. Crows are visual scavengers, so do not leave trash bags and overfilled bins out, as they will invariably attract crows who easily open the bags to remove what they want. Let the caller know that crows visit trash by day; trash that is scattered overnight is the work of others—dogs, or perhaps raccoons (see our raccoon chapter for tips on keeping raccoons out of the trash).

#### **Crows in gardens**

**ADVICE:** It's important to note that crows get blamed for garden damage caused by other animals, and the benefits from crows eating insects, grubs and waste grain outweigh a little damage. If a caller is concerned about crows in the garden, tell them to set Mylar® streamers strategically around the garden. To protect seedlings, use fabric row covers. To protect ripening corn, place a

paper cup or bag over each ear after the silk has turned brown. Crows can usually be deterred by hanging effigies (makeshift sculptures) of dead crows (never the real thing) upside down with the wings spread, or by playing recorded crow distress calls. Any visual deterrent such as an effigy or streamers must be moved often to remain effective. Note that some tactics have proven ineffective, such as devices aimed at scaring birds with ultrasonic sounds (birds can't hear ultrasonic sounds) and plastic owls and inflatable snakes. Visit *humaneworld.org/crows* for more information.

#### Competition with other backyard birds

**ADVICE:** Fun fact—crows are songbirds! Therefore, any food left out to attract smaller songbirds will also attract crows. Advise the caller to simply use feeders that exclude larger birds and to use seed crows dislike, such as thistle seed. (Or better yet, take down bird feeders altogether and provide natural sources of food for birds instead.)

#### Crow who cannot fly (fledgling or nestling)

**ADVICE:** If a caller reports a crow who cannot fly, ask a few more questions to determine if the crow is injured or potentially a nestling or fledgling. If the crow has blue eyes, is fully feathered and the parents are around (perhaps even dive-bombing passersby!), then it's likely the crow is a fledgling, meaning they're learning to fly and should be left alone. If the crow is not fully feathered (a nestling) and a nest can be located and reached, tell the caller to put gloves on and put the bird back in the nest. If the crow is covered in flies or has an obvious injury, refer to the section on injured crows. **REFERRAL:** If the nestling needs to go in a nest that is high in a tree, call a local bird wildlife rehabilitator who might volunteer their time to help, or contact a tree company.

#### **Injured crow**

**ADVICE:** Crows can live with and recover from many injuries, so if possible, it's best to leave the crow alone. If the injury is likely to prevent the crow from feeding herself or escaping from predators, or if the injury looks severe, tell the caller to put on thick gloves and capture the crow either directly with their hands, by cornering the crow into a box, or by carefully using a net. The caller should place the crow into a box with ventilation and keep the box in a warm, dry, quiet place until they can transport the crow to a wildlife rehabilitator. Advise the caller not to feed or offer water to the crow unless directed to do so by a wildlife rehabilitator. Visit *humaneworld.org/wildliferehab* for help locating a wildlife rehabilitator.

#### **Public health concerns**

**ADVICE:** If a caller is concerned by possible disease (West Nile virus, histoplasmosis or avian Influenza) transmission from crows to humans, assure them they have little to fear. Crows do not give people West Nile virus (mosquitoes do), and people don't generally tend to become sick from histoplasmosis unless they

live or work where bird or bat droppings have accumulated over a period of many years, or explore caves where large number of bats roost. Songbirds such as crows don't usually carry avian Influenza and therefore don't pose much of a risk to people or backyard chickens.

#### Large winter crow roosts

**ADVICE:** Winter roosts can contain hundreds to tens of thousands of birds and may present an aesthetic problem due to accumulated droppings under the roosting area; they also present concerns regarding noise. If someone calls concerned about droppings or noise from a crow roost, it might help to encourage tolerance if you advise them that roosting is a seasonal activity and roosts (typically forming in late fall) will be gone by spring as they break up for the nesting season. When roosting is occurring, site occupancy begins around dusk, and crows leave at dawn the following day, thus avoiding the major period of typical human activity. Tolerance through education is an important step in solving conflicts and setting expectations about roosting crows. Assure the caller that the crows will not attack them and dispel myths about disease transmission (see the "Public health concerns" section).

Steps can be taken at the community level to discourage crows from roosting in a particular location, such as hazing and habitat management. Hazing or aversive conditioning employs a variety of frightening techniques to displace roosts under the implied threats crows feel from them. Examples include the use of pyrotechnics, lasers, Mylar® tape, effigies, distress calls and misting and fogging with a chemical repellent (methyl anthranilate), among others. Habitat management typically involves removal of 30% or more of the branching structure of roost trees but could also include manipulation and alteration of lighting schemes at some sites.

Crows receive protection under the federal Migratory Bird Treaty Act and may be protected under certain state statutes when actions are planned that would involve a "take" (i.e., killing) of birds. Harassment, aversive conditioning and habitat management are not activities that are regulated by law, except certain anticruelty statutes if malpractice in the implementation of techniques leads to harm, injury or suffering.

#### **Crows damaging trees**

**ADVICE:** If the caller is worried about damage to trees from crows, tell them to selectively trim and prune the trees, and to place a motion-sensor light that lights up the trees when the crows land. Early intervention leads to greater success. The combination of having trees nearby that the crows are "allowed" to roost in comfortably, in addition to the mild harassment in the trees where they are "not allowed" to roost, should help keep the crows away from where they are unwanted.

To learn more about crows, go to humaneworld.org/crows.

HEATHER FONE/HUMANE WORLD FOR ANIMALS



### Deer

Conflicts with deer in the garden are best solved with fencing and repellants, not by attempting to reduce the number of deer.

#### **Relevant natural history**

Suburban development has created an environment in which deer thrive; our backyards provide the "edge" habitat (where forest meets field) they prefer, offering ample supply of the woody browse, berries, bulbs, nuts and flowers that deer like to eat (much to the chagrin of some gardeners). Mule and blacktailed deer are restricted mostly to the middle to western parts of the continent, while white-tailed deer are found throughout the continent. Although social structures change with the seasons, deer generally live in matrifocal family groups consisting of the doe and her female offspring from this and previous years, while bucks are more solitary. Increased activity during the rut (mating) season in the fall can lead to an increase in deer-vehicle collisions, unless motorists exhibit extra caution. Controversies in communities about having "too many" deer are common, but most conflicts with deer are not density-dependent and are best addressed site by site.

#### What to tell callers

#### "Orphaned" fawn

**ADVICE:** Leave the fawn alone. Deer will commonly "park" their fawns in yards and fields during the day, only coming to nurse

them twice a day. She stays away the rest of the time since her odor will attract predators (fawns are odorless). Once the fawns are about a month old, they will travel around with their mother. If the fawn was mistaken as an orphan and picked up by the caller, instruct the caller to quickly return the fawn to the original site and leave the area so that the mother can reclaim her young. **ACTIONABLE:** A fawn brought in should be returned to where she was found as soon as possible. Only if the fawn is injured, is covered in flies, is wandering and vocalizing all day, a dead lactating doe is found nearby and/or in the rare case it is not clear where the fawn was found, should the fawn go to a licensed wildlife rehabilitator.

#### Deer in the garden/backyard

**ADVICE:** The best way to prevent deer damage to gardens is to replace plants attractive to deer with more deer-resistant or deer-resilient native species and to protect highly desirable plants with repellents or fencing. Deer are curious and motivated by their need to eat, so they may test and retest the barriers and deterrents used. Stay a step ahead of them by changing what is applied so they don't get accustomed to any one strategy. Go to *humaneworld.org/deer* for more tips.

Adjust what you plant: Take a look at what is attracting the

deer and where it is planted. Replace hard-hit flowers and other plants with more deer-resistant or deer-resilient species. A local Cooperative Extension Service office can be an excellent source of seasonal information on what types of flowers and ornamentals deer avoid in that area.

**FENCES:** Where deer browsing is a serious problem or concern, the best way to protect crops or plants is with fencing. For larger areas it may be best to use electric fencing, and for smaller areas a fence at least 8 feet tall, although shorter fences can have a deterrent effect. When constructing a fence, consideration regarding design and materials should be made to keep deer from getting caught or impaled. Spiked, pointed, picketed or extended vertical bars of metal should be avoided, even on shorter fencing (and remediated if already constructed). Gaps between wood fence slats and metal bars should also be minimized to avoid entrapment. For deer-specific exclusionary fencing, consult your local Cooperative Extension Service for guidelines on setting up fencing using netting and or wire.

To help deer learn to stay away from electric fences (and the vegetation inside), use bait attachments that entice the deer to make contact with the fence—after which they receive a mild jolt to their nose or tongue and learn to stay away. (Aluminum foil squares containing a dab of peanut butter can provide the same "enhancement" when folded over single or multistrand electric fences.) Electric fences must be maintained with regular voltage checks and mowing so that overgrowth doesn't short out the lower wires.

"Buck rubs" refers to the damage caused by bucks rubbing against trees to remove the velvet from their antlers. Prevent buck rubs by wrapping trees with any commercial product sold for that purpose, or by placing cylinders of hardware cloth or corrugated plastic sleeves around the trunks. To prevent browsing on young saplings, use small-scale, temporary fencing enclosures or individual tree "shelters" (plastic or hardware cloth cylinders) until they reach a height of 4 to 5 feet.

**REPELLENTS:** A variety of repellent products used singly or better yet—in combination, can create an effective multisensory deterrent to repel deer. Some examples of popular repellents include Liquid Fence®, Trico®, Bobbex and Deer Away® Big Game Repellent. Liquid Fence and Deer Away Big Game Repellent score consistently high in studies assessing repellent effectiveness. Do not use any product with predator urine; studies show they have poor efficacy, and these products come from animals raised for fur in inhumane conditions. See *humaneworld.org/deer* for tips on applying repellents.

**SCARE DEVICES:** The key to using scare devices is to couple them with other strategies (repellents, for example) to vary the kind used and to change their location in the yard or garden. Some scare devices include a motion-activated animal repellent sprinkler, such as the Havahart® Spray-Away Elite Motion Detector, the Havahart® 5250 Electronic Deer Repellent or the Bird Gard® Deer Shield.

RICHARD ELLIS/HUMANE WORLD FOR ANIMALS

#### Avoiding deer-vehicle collisions/deer at the roadside

**ADVICE:** To reduce deer-vehicle collisions, scan the road from side to side while driving, especially in areas of low visibility, where shrubs or grasses are near the road. Be extra cautious during dusk and dawn (when deer are most active) and in the fall (when bucks are on the move due to rutting season). Deer often travel in groups; if one deer crosses the road, slow down and watch for more to follow. Try to drive straight and avoid swerving around wildlife; rather, try to brake firmly and blow your horn. See *humaneworld.org/resources/drive-safely-give-wildlife-brake* for details.

#### Deer hit by vehicle

**ADVICE:** Ask the caller for the exact location of the struck deer (milepost marker, etc.). Tell them to keep away from the deer and to not attempt to move deer or direct traffic on their own if the deer is still in the road.

**ACTIONABLE:** Dispatch an officer as soon as possible. If upon arrival you determine the deer has sustained injuries that would make for a sure and prolonged death (e.g., broken leg, blood from nose, etc.) shoot the deer with a gun in the head to destroy the brain by aiming the projectile according to the guidelines in the latest edition of the AVMA (American Veterinary Medical Association) Guidelines for the Euthanasia of Animals.

#### "Aggressive" deer/deer behaviors

**ADVICE:** It's rare, and subject to interpretation, but on occasion a deer will show aggression toward dogs or people. This is typically the result of humans feeding deer, going into enclosures where bucks are in rut, or going near a deer protecting her fawn. Ways to avoid incidents include not feeding or approaching deer, keeping dogs on leashes and hazing (using deterrents to move an animal out of an area or to discourage an undesirable behavior or activity). However, it's important to remember that deer are typically afraid of dogs and humans.

#### Deer with object caught in antlers

**ADVICE:** Inform the caller that sometimes objects get ensnared or caught on antlers, but as long as the object is not impeding their ability to move, eat or drink, intervention is not necessary. After the mating season, male deer shed their antlers (and any object will drop off with them) between January and April.

**ACTIONABLE:** Dispatch an officer if the caught object is impeding the deer's ability to move, eat or drink. Evaluate the deer's health and decide if capture is possible to remove the object, or if euthanasia is the only option to prevent a prolonged death.

#### Deer caught in fence

**ADVICE:** Tell the caller to stay away from the deer and keep pets away, too. Also let them know for the future that the best way to prevent deer injury or death is to build or modify fences to be deer-friendly. See the "Deer in the garden/backyard" section for more tips on fence construction.



**ACTIONABLE:** Dispatch an officer as soon as possible. Assess the deer for injuries and euthanize if the deer faces a prolonged death (see "Deer hit by vehicle" for tips on euthanizing a deer in the field). Note that deer, like most wild animals, have remarkable abilities to survive serious physical injuries and can manage with a broken leg, for example. If the deer has superficial injuries, work with a team to remove the deer from the fence using bar spreaders (bottle jacks, come-alongs, etc.), being mindful of hooves and antlers and giving the deer an escape route. If chemical immobilization is necessary, work with an individual or team trained in chemical immobilization to develop a plan with stress reduction and human and deer safety as primary goals.

#### Sick/injured deer

**ADVICE:** Ask the caller for details about the deer's location, and tell them to keep pets away from the deer. It is important to say they should not try to feed or provide water until the situation has been assessed, and then only under the advisement of a wildlife rehabilitator.

**ACTIONABLE:** If a caller reports a sick or injured deer, dispatch an officer to assess the situation. Deer, like most wild animals, have remarkable abilities to survive serious physical injuries and can manage with a broken leg, for example, but can die from various other diseases. Individual deer presenting with neurological symptoms such as stumbling, drooling, listlessness and weight loss should be reported to state wildlife agency personnel.

#### Why not to feed deer

**ADVICE:** Never intentionally or unintentionally (unsecured garbage, pet food left outside, etc.) feed wildlife, including deer. Doing so can lead the animal to become aggressive (as they might demand a handout), disrupt an animal's natural behavior and diet, and bring animals closer together and closer to homes, potentially creating conflicts and allowing for diseases to spread more easily.

#### Fear of lyme disease

**ADVICE:** The black-legged tick spreads Lyme disease by ingesting and spreading a bacterium that is transmitted through blood. Originally, the black-legged tick was called a "deer tick," a misnomer that has perpetuated the false belief that deer alone are responsible for Lyme disease. In truth, Lyme disease has numerous hosts, deer being the most visible. While deer may play a role in the complex ecology of Lyme disease, they don't spread the disease to ticks or any other host. The best way to avoid getting ticks is to reduce skin exposure (wear long pants and sleeves, tuck in shirttails, tuck pants into socks, etc.), stay on well-maintained trails, wear light-colored clothing to make ticks easier to see, and check your body immediately for ticks when you get home. Visit *humaneworld.org/resources/lyme-disease* for more information.

#### "Too many" deer

**ADVICE:** People often complain about "too many deer," but the reality is that many deer problems are totally unrelated to their numbers. For instance, even if there is only one deer in a community, she may still find her way to any and all tulip gardens, because deer love tulips. Therefore, the focus needs to be on managing deer conflicts, not deer numbers. The most promising way forward is a combination of techniques to modify landscapes so that deer will be less attracted to them.

#### Why killing doesn't work

**ADVICE:** Deer are highly prolific, and their high reproductive rate can quickly compensate for declines in their population. When deer numbers are reduced after killing programs, the remaining female deer may respond to greater food abundance by giving birth to twins or triplets (even normal reproduction is more than sufficient to compensate for a population reduction from killing programs). Fawns also have higher survival rates and earlier onset of sexual maturity. To be successful, a killing program must not only significantly reduce the deer herd, but it must also sustain enough pressure to prevent this bounce-back effect, while also preventing deer from the surrounding area from wandering in. All of these requirements pose an insurmountable challenge in most urban and suburban communities.

To learn more about deer, go to humaneworld.org/deer.





Surprised at seeing a fox in the neighborhood, many callers will require reassurance that pets and children aren't in danger.

#### **Relevant natural history**

Like coyotes, foxes are a member of the canid family. There are five species of foxes in North America, but only two—the red and the gray—are found in urban settings. The most accurate way to tell a red fox from a gray fox is by looking at the tail: red foxes have a white tip at the end of their tail, while gray foxes have a black tip.

People sometimes worry that foxes are going to prey on them or their children, not realizing that foxes prefer to seek out small, easy prey, such as mice, chipmunks, shrews, rabbits, frogs, snakes and squirrels. In fact, foxes actually provide people with free rodent control. They may also take advantage of human-produced food, such as garbage or pet food left outside. Much to many people's surprise, foxes are not much bigger than a domestic housecat, weighing in at an average of 8-12 pounds. They are adaptable opportunists who don't mind living close to people in suburban and urban settings, and their presence often goes unnoticed. However, people may be surprised to see a fox in their backyard and that surprise often leads to unnecessary panic.

#### What to tell callers

#### Daytime sighting of a fox

**ADVICE:** It is perfectly natural behavior for a fox to be outside during the day, especially during the spring and summer when they are busy hunting rodents to feed their young. Simply because a fox is active during the day doesn't mean the animal is rabid.

#### **Brazen fox**

**ADVICE:** Foxes may lose their natural fear of people when they find free sources of human-associated food (e.g., pet food left on porches) in neighborhoods and have repeated contact with people with no negative consequences. You can teach an overly bold fox to be wary of people by using negative conditioning or "hazing." To do that, be big and scary: Raise your arms over your head, yell or blow a whistle and bang metal pot tops together as you move toward the animal or spray the animal's hindquarters with a hose or water gun. Hazing works best if you keep the negative reinforcement going until you deter the fox from the property.

#### **Possibly rabid fox**

**ADVICE:** A daytime sighting alone does not indicate rabies. Foxes are normally active by day. Like any mammal, foxes can contract rabies, but it is not common.

**ACTIONABLE:** Dispatch an officer if the fox is acting sick or showing abnormal behaviors that might indicate rabies, such as partial paralysis, circling, staggering as if drunk or disoriented or self-mutilating, or if the fox exhibits unprovoked aggression or unnatural tameness. Advise callers to keep their family and pets inside while waiting for help.

#### Fox with mange

Foxes who scratch a lot, seem disoriented or weak and who have missing fur patches (or are completely bald) are afflicted with mange, which is an ailment caused by tiny mites under the skin. Foxes with mange may be seen "languishing in yards" because they are too weak to hunt. Because mites can live up to 24 hours without a host, it's important that the caller keep pets away from the area if possible.

**REFERRAL:** Refer to a wildlife rehabilitator.

**ACTIONABLE:** Dispatch an ACO if the fox is acting sick or approaching people.

#### Attacks on domestic pets

**ADVICE:** People often worry that their cat or dog will be attacked by a fox. They don't realize that foxes focus on small, easy prey that won't hurt them, like rodents, and only weigh on average 8-12 pounds and are about the size of an adult cat. Smaller pets (such as kittens, rabbits, chickens or guinea pigs) left outside could be at risk, though, and should either be kept indoors or in secure enclosures outside.

#### Fear of family being attacked

**ADVICE:** Fox attacks on people are extremely rare—and that is why they are highly publicized the few times they do happen. Neither the Centers for Disease Control and Prevention nor any other health authority has classified foxes as a human safety risk. Instruct the caller to take proactive measures to ensure the property contains no food—such as garbage or pet food—that will entice animals and to use hazing techniques to scare away any overly bold foxes.

**ACTIONABLE:** If the caller, a family member or pet is actually bitten by a fox, they should wash the wound with soap and water (wear gloves if handling a potentially bitten pet) and contact the local health department and their own doctor (or veterinarian) for guidance. Gather as much information about the incident as possible (such as whether the person was intentionally feeding the fox, etc.).

#### Foxes and chicken coops

**ADVICE:** The only effective way to protect chickens is to reinforce the coop so foxes and other animals can't get in. Because chickens, eggs and supplemental feed like corn (which attracts rodents) will continually draw in wildlife, it is important that the caller boost their coop's security and use harassment techniques to deter wild animals who are tempted to break in. A secure coop must have perimeter fencing that is buried down into the ground or runs 12-plus inches outward and horizontally to the ground. (This is called an L-shaped footer; visit *humaneworld.org/digginganimals* for more information.) You must also reinforce the walls and door of the structure. Chicken wire alone is not wildlife-proof. Heavy, 16-gauge welded wire with 1-inch-by-1-inch openings is a good choice. Although reinforcing a pen may be a temporary inconvenience, once an animal pen is wildlife-proofed, the problem is solved for the long term.

#### Fox kits playing in the yard

**ADVICE:** In the spring and summer it is normal to see fox kits romping and tumbling in the yard, playing like puppies. The play activity they are exhibiting is all in preparation to go out on hunting trips with their parents, but they are not quite ready yet. It may be a matter of several weeks. As cute as the kits are, it is important that callers are advised not to feed them or initiate contact so they don't lose their fear of humans. Instead, they should be left alone. If they get too close, callers can clap their hands and yell to scare the kits and teach them to associate humans with a negative stimulus. Since both parents rear their young—with the occasional help of other related adults—it's pretty uncommon for both parents to have died or have been killed.

#### Fox den on property

**ADVICE:** People are often surprised to discover a fox den near their property. This is no cause for alarm. Foxes only use the den for a short time, and it can be a lot of fun (and a great photo opportunity) to watch a fox family grow up.

If the animals absolutely must be evicted, humane harassment strategies can encourage them to leave. However, be aware that if you use these techniques during baby season, the young may be unable to move away from the irritants on their own.

• Place dirty, sweaty socks or rags sprinkled with cider vinegar



inside the den entrance, along with a blaring radio. This should make the foxes uncomfortable and motivate them to move on. However, they may be resistant—it can be a lot of work to find a new den.

- Sprinkle a capsaicin-based repellent (such as Critter Ridder) or used kitty litter around the hole under the fence and mix it with the dirt before loosely filling the hole. Capsaicin-based repellents irritate the eyes, nose and mouth of most animals (including humans) and can be a highly effective repellent. The caller can also attach Mylar<sup>®</sup> balloons to weights and place them 3 feet off the ground around the den opening. Shiny balloons bobbing in the wind can enhance the harassment effect.
- Never use mothballs or ammonia to harass wildlife. The chemicals released are harmful to both humans and animals.

**BETTER OPTION:** After learning that their fears are unfounded, many people find that letting the fox family stay is the easiest option, and one which becomes a memorable treat. Encourage callers to just enjoy them and take lots of photos, while reminding them to keep a distance and avoid leaving food outside.

#### Fox under a deck, porch or shed

**ADVICE:** Foxes occasionally make their dens under man-made structures such as porches, decks and sheds. It's important to

let the caller know that the foxes will eventually leave on their own, so letting the fox family stay until the young are ready to go is the easiest and most humane option. If the caller insists they go, harassment techniques such as those mentioned above can be effective.

After baby season—and only if necessary—the caller should consider permanently preventing foxes and other wildlife from using the space in the future by installing an L-shaped footer. When installing the barrier, make sure no animals are present. If the caller can't verify whether an animal is there, they can install a one-way door that gives any animals inside a way out. Or they can test the opening by blocking the entrance with material that the fox can push aside, which will let them know a fox is still present. Go to *humaneworld.org/digginganimals* to learn more.

#### Fox "screams"

**ADVICE:** During breeding season, foxes will make eerie, loud vocalizations that people may misinterpret as human screams or even paranormal activity! There is nothing that can be done about this other than waiting it out and realizing that this is all part of a fox's natural breeding behavior and that it will end soon.

#### Why not set a trap?

**ADVICE:** Trapping hardly ever solves wildlife problems. Even in studies where all the foxes were trapped out of an area, others from the surrounding area quickly moved into the vacated niche. In addition, trapping often leads to starving young being left behind. It's much more effective to exclude wild animals from where they're not wanted rather than trying to remove all animals who may be attracted to a good food source or den/nest site. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more about foxes, go to humaneworld.org/foxes.



## Groundhogs/Woodchucks

Callers who want to prevent groundhogs from nibbling their gardens should use humane exclusion methods rather than trapping and removing the critters.

#### **Relevant natural history**

Groundhogs are shy, timid creatures—despite their burly looks. Also called woodchucks, gophers and even whistle-pigs, they pop up in yards after a long winter hibernation. Their burrows usually have several entry and exit points that they scurry into when alarmed. Suburbia provides the perfect habitat: Our raised decks, stoops and sheds provide cover and a welcoming site to raise young, and our lush lawns and gardens provide a virtual buffet. Most woodchuck conflicts occur in summer, when the war is on for who gets to eat the garden vegetables. Summer is also when baby-rearing season occurs, which is why orphaned young will be left behind unless problems are resolved correctly and humanely.

#### What to tell callers

#### Woodchuck seen in daytime

**ADVICE:** This is normal; woodchucks are usually active in the daytime. This does not indicate rabies.

#### Fear of woodchucks harming children

**ADVICE:** Woodchucks are timid creatures who scamper off when scared. Remember that even a small child looks like a giant

predator to the woodchuck. There is no cause for alarm—healthy woodchucks aren't interested in children or pets; their diet is 100% vegetarian. If chased, woodchucks will quickly flee to their burrows.

#### Woodchuck acting aggressive, chasing people

**ACTIONABLE:** Dispatch an ACO and instruct the caller to keep people and pets inside.

#### Woodchuck circling and falling over

**ADVICE:** The woodchuck may be rabid, but she's more likely to be suffering from a brain parasite called roundworm. This parasite causes symptoms that look exactly like those caused by rabies. Either way, if someone reports these symptoms, dispatch an officer to assess and handle the situation. Instruct the caller to keep children and pets away from the animal while waiting for an officer to arrive.

#### Woodchuck under shed/deck

**ADVICE:** Many people decide to let woodchucks stay because their burrows don't tend to undermine foundations or damage sheds/decks. In spring and summer, it's most likely a mother nursing her young. After the young are old enough to leave the den, the caller can try to evict the family by putting some Critter Ridder granules (a capsaicin-based repellent available at most garden stores), urine-soaked kitty litter or sweaty, smelly gym shirts or socks into the woodchuck burrow. Once the animals are gone, protect decks or sheds using an L-shaped design (see *humaneworld.org/woodchucks*), but make sure there are no animals trapped inside or babies left behind to starve.

#### Woodchuck eating garden

**ADVICE:** The caller can exclude woodchucks from the garden by putting up a simple mesh fence (visit *humaneworld.org/ woodchucks* for details). They'll need a roll of 4-foot-high green garden mesh or chicken wire and stakes. Once the job is done, it won't matter how many woodchucks are in the neighborhood; they won't be getting into the caller's garden! There are two secrets for making a successful fence:

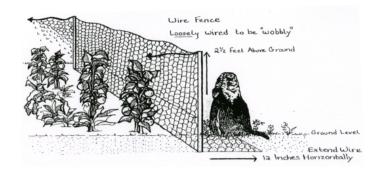
- **Tip #1:** The top part of the fence only needs to be 3 feet high, but it should be staked so that it's wobbly—i.e., the mesh should not be pulled tight between the stakes. Instead, the mesh should have some "give" so when the woodchuck tries to climb the fence, it wobbles and discourages him from climbing higher. After climbing over the fence fails, he'll try to dig under it, so ...
- **Tip #2:** Extend the bottom portion 12 inches outward, away from the garden, in an L shape that creates a false bottom. (Put this mesh "flap" on top of the ground, but be sure to secure it firmly with landscaping staples; otherwise the woodchuck will go under it.) When the woodchuck digs down and hits this mesh flap, he'll think he can't dig any farther and give up. It won't occur to him to stand back a foot and THEN start digging!

If the caller won't put up a fence, you can advise them to try the following scare techniques, which do work in some cases:

- Line the garden with helium-filled Mylar or "Scare-Eye" balloons (found on Amazon, the Bird-X website, most big-box stores). Attach them to weights and place them about about 3 feet off the ground. The bobbing balloons will scare the woodchucks.
- Put Critter Ridder (a capsaicin-based repellent) or blood meal fertilizer around the garden's perimeter, sprinkle cayenne pepper around plants or spray a taste repellent such as Ropel on the plants every two weeks.

#### Woodchucks burrowing under a fence to access yard

**Advice:** When a woodchuck makes an appearance through a hole under a fence, it's likely that the caller has some tasty fruits or vegetables in their yard! If the caller is unwilling to tolerate occasional visits, they can close the hole and prevent new openings, but only after first confirming that the hole is a direct pass-through to the other side and not the entry to



an underground burrow. They should also confirm that the woodchuck is not still in their yard before they close the hole. The caller can loosely fill the hole with dirt mixed with either urine-soaked kitty litter or a capsaicin-based repellent (such as Critter Ridder) to deter the woodchuck from trying to get through the hole again. Then, using a strip of wire screening or garden fencing material approximately 20 inches wide and the length of the affected fence, unroll the screening along the fence line. Secure the screening (along both the interior and exterior edges) tightly to the ground using landscaping staples (available at home improvement and/or gardening stores). If the woodchuck burrows under the fence from the neighbor's side, he will be surprised to find the screening blocking his exit on your side. The screening can be left uncovered or covered with dirt.

#### How to release a woodchuck from a trap

Animals in traps are highly stressed and should be released on site immediately. Explain that trapping in spring and summer leaves babies behind to starve, and trapping doesn't address the root cause of the problem. The caller can safely release the groundhog by putting a towel over the trap (creating a visual barrier to calm both the woodchuck and the caller), pointing the trap away from traffic and opening the door (while wearing gloves) or propping it open with a book. They shouldn't shake the trap. The groundhog will come out on her own. If they refuse to let the groundhog out, it's vital for animal control or a volunteer to assist so the animal is not left in the trap to suffer and die.

#### Why not set traps?

**ADVICE:** Trapping isn't likely to solve the problem. Even in studies where all the woodchucks were trapped out of an area, others from the surrounding area quickly moved into the vacated niche. In addition, trapping and relocating woodchucks often leaves behind babies who will starve on their own. It's much more effective to exclude woodchucks from where they're not wanted. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more about groundhogs/woodchucks, go to *humaneworld.org/woodchucks*.



## **Mountain lions/Cougars**

Taking simple precautions in cougar country can easily prevent conflicts.

#### **Relevant natural history**

Mountain lions (also called pumas, cougars, panthers and catamounts) can be found in 15 Western states, with an additional endangered population in southern Florida. Ranging in size from 80 to 180 pounds, mountain lions are known for their remarkable physical abilities: They're capable of reaching sprinting speeds of 50 mph and leaping up to 40 feet. The preferred prey for mountain lions is deer or other large herbivores, although they are opportunistic carnivores and will eat rabbits, squirrels, raccoons, skunks and other small mammals. They often drag prey to a hiding spot and feed on it for multiple days.

Mountain lions are not common suburban or urban inhabitants, but as towns, cities and recreational areas expand into natural areas, encounters become more common. Mountain lions will occasionally follow the trails of their prey into more inhabited areas. Young males—and occasionally females—will enter human communities on their way to find a mate or new territory. These dispersing young typically move through these areas without harm and avoid encounters with humans whenever possible. Drought and/or access to food, water and shelter may also draw mountain lions into populated areas. Still, mountain lions tend to be shy and nocturnal, and encounters with them are rare.

#### What to tell callers

#### Encountering a mountain lion in an urban/ suburban area

**ADVICE:** Occasionally a mountain lion will follow a natural corridor such as a waterway or open space into more populated areas. Generally they will not remain in the area for long. If the

caller spots a mountain lion, instruct the caller to move pets and children indoors and avoid approaching the animal. If the caller is not near shelter, instruct them to pick up small pets and children and face the cougar. They should make themselves look larger by raising their arms or opening their jacket over their head and talking or singing in a calm but loud voice. Instruct them not to approach the animal and especially not to run, as it may trigger the cat to chase. They can also blow a whistle or air horn at the mountain lion if they have one, open and close an umbrella or throw rocks in the direction of the mountain lion to scare him away.

If the mountain lion has entered the caller's yard, encourage the caller to remove any potential food attractants after the mountain lion has left. Ensure that trash is stored in well-secured containers, remove any pet food left outside, remove any meat from compost piles and stop feeding deer or other wildlife that may attract mountain lions.

**ACTIONABLE:** If a mountain lion is in a residential area (and especially if the mountain lion is approaching people), contact the state wildlife agency as necessary and dispatch an ACO to haze the mountain lion. Afterward, conduct a yard and/or neighborhood audit to remove potential food attractants that may have attracted the mountain lion.

#### Depredation of livestock by mountain lions

**ADVICE:** The best way to prevent future depredation of livestock by mountain lions is to provide adequate housing and protection for livestock. Chickens and other small animals must be kept in secure enclosures that are covered on all sides, including the top. Larger livestock are best protected by guard animals such as donkeys, llamas and specially trained dogs. Where possible, place livestock in enclosed sheds or barns at night. The use of flashing lights, sirens and electric fences can also help deter wildlife approaching livestock.

#### Attacks on domestic pets

**ADVICE:** Mountain lions do not commonly attack domestic pets, but free-roaming and unattended pets face risks from a variety of wildlife. The best protection for cats and other small pets (such as rabbits or guinea pigs) is to keep them exclusively indoors or to provide a secure enclosure for them outside that is covered on top and includes a floor to deter digging and/or jumping in or out. Dogs should be walked on leashes 6 feet or shorter and supervised when outside. It's important for the caller to understand that mountain lions are good climbers who can jump 12 feet or more vertically, so most fences will not protect unsupervised pets outside. The caller may also want to consider minimizing brush and cover in their yard; these materials can provide a hiding place for cougars. Flashing lights, sirens, motion-detecting sprinklers and electric fences may also deter mountain lions from approaching.

#### Attack on person by mountain lion

**ADVICE:** Attacks on people by mountain lions are very rare. Callers who are simply afraid of mountain lion attacks should be instructed to take the following precautions while hiking in mountain lion country: Take a friend along on the hike, be aware of surroundings, don't wear headphones, bring a whistle or air horn to make noise if an animal is encountered, keep children under the age of 16 close by and keep dogs on a leash 6 feet long or shorter. Additionally, recreating in lion country during daylight hours will reduce the chance of encountering a cat. Callers should be advised to not recreate from dusk to dawn, which are peak lion activity hours.

**ACTIONABLE:** In the rare event of a mountain lion attack on a person, the victim should yell and fight back by punching the mountain lion or hitting him with objects. It's important that they use what they have. People have stopped attacks by hitting the animal with sticks, their hands, garden tools and even baseball caps.

Dispatch an ACO and notify the state wildlife agency for the appropriate protocols. Ensure that the victim receives immediate medical attention.

To learn more about mountain lions, go to *humaneworld.org/ cougars*.





### Opossums

You can help defend the much-maligned opossum by informing callers about the important insect-eating services these animals provide.

#### **Relevant natural history**

Opossums are shy, nonaggressive creatures who have the misfortune of scaring people due to their rather odd appearance. They aren't fierce at all, and they actually have little ability to defend themselves. They don't run fast or fight well, so their best defense is to try scaring off potential attackers. Their swaying, drooling and hissing routine is a bluff—and if that bizarre behavior doesn't work to scare you, they fall over and play dead. Unfortunately, this bluff routine is often wrongly perceived as the symptoms of rabies. Opossums are very beneficial animals; they provide free pest control by eating things some people don't like, such as bugs, small snakes, mice and even baby rats.

#### What to tell callers

#### Opossum seen on lawn or in tree

**ADVICE:** This is normal behavior, not cause for alarm. Opossums are typically active at dawn and dusk but can be seen at any time. They are not looking to attack or bother anyone; they are actually very gentle and harmless creatures (despite their scary looks!).

#### Concern about potentially "rabid" opossum

**ADVICE:** Surprisingly, opossums rarely—if ever—get rabies. If the opossum is hissing, drooling, swaying and/or opening her

mouth really wide (so you can see all 50 teeth), she's just doing a bluff routine to scare you or a dog off. What you're seeing is normal defensive behavior. Tell the caller to move away or bring in their dog for a little while, and the opossum will leave once she realizes that the threat is gone.

#### **Baby opossum alone**

**ADVICE:** Baby opossums stay in their mother's pouch until they are about two and a half months old and the size of a mouse. At this age, they ride on Mom's back and can sometimes fall off without her noticing.

**REFERRAL:** If the baby opossum is fewer than 7 inches long (not including the tail), she is too young to be on her own. Refer the caller to a wildlife rehabilitator. If the baby's body length is longer than 7 inches (not including the tail), then she's big enough to survive on her own.

#### **Opossum in trash can**

**ADVICE:** Opossums are attracted to trash cans by the smell of food but get stuck inside and can't climb out. Slowly tip the can on its side, and the opossum will come out when he's ready. (They don't move when scared, so it may take a while.) If the caller is uncomfortable doing this, they can also use a broom to gently tip the trash can over. Remind them to get a secure lid for the trash

can (or use bungee cords or get the Animal Stopper brand trash can) so the problem doesn't recur.

#### **Opossums eating garbage**

**ADVICE:** Like most wildlife, opossums will take advantage of open or spilled garbage containers, so the solution is better containment. People can secure trash lids with bungee cords, get an Animal Stopper brand trash can (which has built-in bungee cords), put the garbage out the morning of trash pickup or get an outdoor storage enclosure for trash cans from a home-building store. Trapping won't solve the problem; as long as there's a food source, the animal will return to it.

#### **Opossum in garage**

**ADVICE:** Opossums may wander into garages if the door is left open. Remove access to food, birdseed bags or trash. Then open the garage door before dusk, sprinkle an 8-inch band of white flour under it and watch for exiting footprints. Shut the door once the animal leaves.

#### **Opossum stuck in fence or in tree**

**ADVICE:** Make sure the opossum is really stuck! If a dog has run him up a tree or onto a fence, he won't move until the threat is long gone. If the opossum is truly stuck in a fence, dispatch an officer for help.

#### **Opossum under deck/shed**

**ADVICE:** No need to do anything. Opossums are nomadic and will leave on their own very soon. They are gentle and nonaggressive animals who will not attack anyone. If the caller won't tolerate them, the caller can seal off the deck or shed using an L-shape barrier design, but it is critical not to entrap animals or separate parents from babies who will starve without them (note that there may be other wildlife using the deck or shed). We recommend sealing off the deck with mesh while leaving one exit hole and putting a one-way door (or animal excluder, available from Tomahawk Live Trap Co.) over that hole so the opossum can leave but not return. Leave the door in place for at least three days. **Note:** Tell the caller never to use mothballs or ammonia to harass wildlife. The chemicals are harmful to both humans and animals.

#### **Opossum in window well**

**ADVICE:** Put a 3-inch-thick branch or two-by-four board in the window well so the opossum can climb out. Rest assured—he won't jump up and attack! Be sure to get a window well cover (inexpensive from home-building stores) after the opossum is gone or this problem may happen again.

#### **Opossum in trap**

**ADVICE:** Most people don't realize that opossums are nomadic and really don't pose problems, so there's rarely any reason to trap them. They're often caught in traps set for other animals. The most important task for a caller is to get the opossum out of the trap quickly. Ask the caller to first cover one end of the trap; this creates a visual barrier and reduces the caller's and the animal's stress. Then instruct them to open the trap door and prop it open with a rock or a book so the opossum can leave on his own after he has recovered from his own fear response. When opossums are scared, they hiss and open their mouth wide in fear, but they hold their ground. Tell the caller to stay a good distance from the trap, and the opossum will leave once the coast is clear. Remind the caller that the opossum won't come out and attack; he's too scared!

#### **Dead opossum**

**ADVICE:** If a clearly dead opossum is found in the road in late spring or summer, and it is safe for the caller to do so, have the caller check whether there are any surviving babies in her pouch that need to be detached. Because the babies are born as embryos, as many as 13 may be in the mother's pouch nursing. They can be difficult to detach from her teats but can be gently "unscrewed." The babies should immediately be taken to a wildlife rehabilitator.

Another possibility is that the opossum is just playing dead, which is a defense mechanism they use to protect themselves from predators. When an opossum is playing dead, no amount of disturbance (loud noise included) will get her to move until she's ready! If the caller is not sure whether an opossum is dead or playing dead, ask them to leave the area for an hour and check back to see if she's gone. If they're unsure whether her pouch contains babies, they can gently nudge her with a stick and see if there's any movement.

#### Why not set a trap?

**ADVICE:** Trapping rarely, if ever, solves wildlife problems. In fact, it usually makes matters worse. Even in studies where all the opossums were trapped out of an area, others from the surrounding area soon moved into the vacated niche. In addition, trapping often leads to starving young being left behind. It's much more effective to remove whatever is attracting the animal (food source, den site) and exclude animals from areas they're not wanted rather than try to continually remove all the animals themselves. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more about opossums, go to *humaneworld.org/* opossums.



## Raccoons

Conflicts with raccoons come in many shapes and sizes, but all can be resolved humanely.

#### **Relevant natural history**

Raccoons are intelligent and highly adaptable mammals. They are primarily nocturnal, but they may be active during the day, especially when caring for their young. Suburban and urban landscapes suit them perfectly. Chimneys and attics provide great denning sites; pet food and trash left outside provide a free buffet. They adapt easily to our lifestyles, yet people often have wrong ideas about raccoons—for example, that a raccoon seen during the day must have rabies. Raccoons are very beneficial animals; they provide free pest control by eating things some people don't like, such as bugs, grubs, small snakes, mice and even baby rats. People also wrongly assume that raccoons are vicious animals, not realizing that healthy raccoons don't take on opponents much bigger than a mouse. Of course, like any animal, they'll try to defend themselves if cornered.

#### What to tell callers

#### Raccoon in the garbage

**ADVICE:** Uncovered trash cans provide an open invitation to hungry raccoons. Trash must be well-contained to stop garbage raids. Callers can secure trash lids with bungee cords, get an Animal Stopper brand trash can (equipped with a built-in bungee cords), put the garbage out the morning of trash pickup or get an outdoor storage enclosure for trash cans from a home-building store. Trapping won't solve the problem; as long as there's a food source, the raccoon will return to it.

#### **Raccoon in dumpster**

**ADVICE:** The raccoon smelled good things and jumped into the dumpster, but now she's stuck because she can't climb the slippery sides of the dumpster to get out! Tell the caller to provide an exit route: Put a strong branch (2 inches in diameter or larger) or plank-like piece of wood in the dumpster at a 45-degree angle so the raccoon can climb out. Emphasize that the branch must run from top to bottom and be thick enough to support her weight. Assure the caller that the raccoon won't jump out and bite them; she will huddle nervously in the corner. If public dumpster lids are left open all the time, encourage the caller to post a big sign advising people to keep the lid closed so animals don't keep getting trapped inside.

#### Raccoon seen in daytime

**ADVICE:** This is not necessarily cause for alarm. Raccoons are active by day when people leave out pet food or when the raccoons have hungry young to feed.

**ACTIONABLE:** Assess whether the raccoon is acting strangely is she circling, dragging herself or acting injured, lethargic, unresponsive or unusually aggressive? If yes, dispatch an officer for assistance.

## Raccoon disoriented, falling down, circling or showing unprovoked aggression

**ACTIONABLE:** Dispatch an officer to handle the situation.

#### **Raccoon eating pet food**

ADVICE: It's no wonder raccoons are responding to the free buffet. Who wouldn't? The best solution is to feed pets indoors. If pets must be fed outside, the caller should be advised to feed them only at a certain time in the morning or midday, then quickly take away any uneaten food. Pets will get used to the new schedule and modify their behavior accordingly. Trapping the raccoon won't help. Other wild animals will be attracted to the pet food, and baby raccoons will be left behind to starve if their mother is trapped.

#### **Raccoon in bird feeder**

ADVICE: There are effective squirrel baffles that also work to keep raccoons out. A good one is shaped like a stovepipe and placed on the pole portion of the bird feeder. It allows the raccoon to climb up the pole and into the closed pipe, but prevents her from going farther. The pipe must be at least 24 inches long to prevent the raccoon from climbing over it and set at least 4 feet off the ground (up to the bottom part of the baffle) to keep her from jumping over it.

#### **Raccoon in garage**

ADVICE: If a raccoon wandered through an open door, remove access to food, birdseed bags or trash. Open the garage door before dusk, sprinkle an 8-inch band of white flour under it and watch for footprints. Close the door once the raccoon is gone.

If this problem occurs in spring or summer, and the garage door has been open for a longer period, it is most likely a mother with babies. She is likely to be in the rafters or on a high shelf with her cubs, and you don't want to separate her from her babies. In this case:

SELF-HELP OPTIONS: Let them stay until they leave on their own (the kindest and best option) or evict them by placing vinegar-doused rags and a blaring radio in the garage near the den site. It may take the mother a while to find a new den and move her cubs, however. Typically moms will move their young in response to harassment, but she may be resistant to leaving right away. A nuisance wildlife control specialist can be called (for a fee), but it's vital for the caller to emphasize they want the family evicted, not trapped and killed or trapped and relocated. Unfortunately, many nuisance wildlife control businesses routinely kill or relocate wildlife, so we don't recommend this option.

#### **Baby raccoon following people**

**REFERRAL:** Refer to a wildlife rehabilitator. He's likely a hungry orphan who will follow anything that moves, but he could also be sick.

#### Raccoon coming through cat or dog door

ADVICE: The best solution is to feed pets indoors and not use a pet door. However, if the caller must have a pet door, recommend that they purchase a strong, electrically controlled door that only lets your designated pet in through a signal transmitted by her collar. These doors can be found at local pet supply stores.

#### Raccoon eating fish out of pond

ADVICE: It is difficult to have a delicacy like fish in an area and expect raccoons not to notice! The best solution is to maintain a higher water level (at least 3 feet deep) and stack cinder blocks, large rocks or ceramic pipes in the bottom of the pond so the fish can escape from the raccoon and take refuge.

#### **Raccoon damaging lawn**

**ADVICE:** When it rains heavily or a lawn is over-watered, grubs come to the surface—where raccoons smell them and start digging. Once the lawn dries out—and if homeowners are careful not to over-water-the grubbing should cease. Callers can apply natural products like Grub Away Nematodes (gardensalive.com) or Milky Spore (found in gardening/landscape/ home improvement stores) to the lawn to reduce grub numbers; they are very effective if applied properly (i.e., watered into the ground and applied at the right time of year). Callers can also sprinkle cayenne pepper or nontoxic, capsaicin-based repellents on localized digging areas for a temporary effect.

#### Raccoon in chicken coop

ADVICE: The only effective way to protect chickens is to reinforce the coop so raccoons can't get in. Explain that chickens, eggs and supplemental feed like corn (which attracts rodents) will continually attract wildlife, so it's important to boost their coop's security. Any part of the structure not enclosed by wood including window openings and doors-should be covered or reinforced with wildlife-proof mesh. Chicken wire alone is not wildlife-proof. Instead, use 16-gauge, 1-inch-by-1-inch galvanized welded wire to prevent raccoons from reaching through or breaking the wire mesh. Although it's an inconvenience, once an animal enclosure is reinforced and maintained, the problem is permanently solved.

#### **Raccoon under deck**

ADVICE: If it's spring or summer, it's likely to be a mother with her young. Raccoons move to multiple den sites within their home range for many reasons. The family may leave on its own, but if tolerance is not possible, harassment can speed up the process. It's also possible to evict the raccoon using a one-way door (which allows animals to exit but not enter) and attach wire mesh in an L-shaped design (to prevent digging under the mesh barrier), but it's critical to make sure no animals are entrapped or babies are left behind to starve. Refer the caller to *humaneworld.org/raccoons* for details on harassing and evicting the raccoons. You can also refer the caller to a humane exclusion specialist, but be sure to emphasize the importance of humanely evicting the animals. There's no need to trap and kill them or trap and remove them, which is what most nuisance wildlife control companies do.

ROLF NUSSBAUMER PHOTOGRAPHY/ALAMY STOCK PHOTO

To harass away the raccoon, instruct the caller to:

- Place a radio (set to a talk radio station or loud music with a beat) near the area where the raccoon is staying. This alone is often enough to encourage the mother to move her young.
- Place a motion-triggered sprinkler or compressed air device near the spot the raccoon has been spotted entering. Each time she walks by, she will be sprayed with water or a burst of air.
- Place cider vinegar-soaked rags or a hot pepper-based repellent (such as Critter Ridder) near the entrance.

**Note:** Ensure that the caller knows not to use mothballs or ammonia. The chemicals released are harmful to both humans and animals.

#### Raccoon using porch/patio as a latrine

Raccoons defecate in communal sites called latrines. This can be frustrating if they've chosen an area the caller frequently uses, but it can also be a health concern: Raccoons are the primary host of Baylisascaris procyanis, a roundworm that can be passed to humans who inadvertently ingest fecal matter laced with eggs. To stop raccoons from using the area as a latrine, the caller must clean the area (wearing gloves). Roundworm eggs in newly deposited feces are not infectious for two to four weeks, but it's a good idea to clean it up as soon as you see it. (Refer them to *humaneworld.org/raccoons* for instructions.) Next, they should liberally use a repellent such as Critter Ridder (granular form). Instruct them to reapply the repellent until the raccoon stops using the area. Other measures include setting up a motion-triggered sprinkler or compressed air device near the area to scare away the raccoon when he goes to defecate in the area.

#### Baby raccoons around dead mother

**REFERRAL:** Refer to a licensed rehabilitator. Tell the caller to put an upside-down laundry basket over the babies so they don't wander off.

#### **Raccoon in trap**

**ADVICE:** Animals in traps are highly stressed and must be released as soon as possible. Explain that trapping raccoons is not advised for many reasons. In spring and summer, babies are often left behind to starve, and trapping never solves the root cause of the problem.

**BETTER OPTION:** The caller can safely release the raccoon by putting a towel over the trap (for a visual barrier, which will calm both the raccoon and the caller) and opening the door (while wearing heavy gloves). They shouldn't shake the trap. The raccoon will come out on his or her own. If they refuse to let the raccoon out, dispatch an officer or a volunteer so the animal is not left in the trap to suffer and die.

#### Raccoon in attic or chimney

**ADVICE:** In spring and summer, mother raccoons take advantage of chimneys and attics to raise cubs. A humane wildlife control

company can exclude raccoons professionally, but callers may want to do it themselves.

**SELF-HELP OPTIONS:** If the caller wants to try evicting the raccoons themselves, know that raccoons want a quiet, dark and non-noxious-smelling place to raise their young. By creating the opposite conditions, raccoons can be encouraged to move on.

- Evicting chimney-dwelling raccoons: Keep the damper closed and put a blaring radio (tuned to a rock or rap station) in the fireplace. Then put a bowl of vinegar on a footstool near the damper. Apply these deterrents just before dusk; mother raccoons may not want to move cubs in daylight. Be patient it may take a few days for the mother to move her young. Once the raccoons are gone, call a chimney sweep to clean the flue and install a National Fire Protection Associationapproved expanded metal chimney cap so the situation doesn't happen again.
- Evicting attic-dwelling raccoons: Leave all the lights on and place a blaring radio (tuned to a rock or rap station) and vinegar-doused rags or tennis balls around the attic. Apply these deterrents just before dusk; mother raccoons may not want to move their cubs in daylight. Be patient—it may take a few days. The mother may resist leaving if she doesn't have a suitable alternative den site nearby. Once the raccoons are gone, promptly seal any entry hole so the situation doesn't happen again.

**Note:** It can be hard to verify whether the raccoons are gone. Before sealing any entry hole, stuff it first with newspaper and see if the paper stays in place for three successive nights. Callers can also install a wildlife camera to watch for the animals' departure from the entry point. If they catch the animals leaving, the den has been vacated. After sealing the entry hole with hardware cloth, make sure no raccoons are left behind by leaving a sardine or dog food in the attic and checking whether it is uneaten after 24 hours. Or you can sprinkle flour in front of the entry hole and check for the footprints of a raccoon trying to get out.

#### Why not set a trap?

**ADVICE:** Trapping hardly ever solves wildlife problems. In fact, it usually makes matters worse. Even in studies where all the raccoons were trapped out of an area, others from the surrounding area soon moved into the vacated niche. In addition, trapping often leads to starving young being left behind. It's much more effective to remove whatever is attracting the animal (food source, den site) and exclude animals from areas they're not wanted rather than try to continually remove all the animals themselves. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more about raccoons, go to *humaneworld.org/* raccoons.





## Although many people are afraid of snakes, most are non-venomous—and most try to avoid human contact altogether.

#### **Relevant natural history**

Snakes are extremely beneficial to their environments, helping to regulate rodent and rabbit populations. Despite a common fear of snakes among the public, these animals pose little actual danger. Of approximately 128 species of snake in the U.S., only 20 species are considered venomous, and most bites from venomous snakes are nonlethal. Bites from snakes most commonly occur when a person is trying to handle, move or kill a snake or when a snakehas been injured or threatened by human activity. Otherwise, snakes are elusive and avoid potential threats (including humans!) by remaining still and relying on their camouflage. Most snakes have poor vision but are highly sensitive to vibration. They also have an auxiliary sense of smell, meaning they essentially smell with their tongue. Snakes are cold-blooded and must warm themselves with external sources, which is why people may find snakes sunning themselves on porches and sidewalks. In winter, snakes hibernate or become less active depending on the temperature.

#### What to tell callers

#### Snake in window well

**ADVICE:** Insert a slanted board or thick branch in the window well and then leave the area, giving the snake the opportunity to climb out on her own. After the snake is gone, make sure to cover the window well to keep animals out. If the snake seems unable to get out, you can use a branch or long tool to try and help move her up the side of the wall and out.

#### Snake in yard

ADVICE: If the caller regularly sees a snake in their yard, that means their yard provides both shelter and a good source of food, namely rodents and insects. That's a good thing! Snakes are beneficial and should ideally be left alone. If the caller is still concerned, they can first try to identify the snake, which can be tricky since there are many "look-alikes" to venomous snakes. (Most state wildlife agencies or extension offices have helpful identification resources online.) If the snake is nonvenomous, the caller can stomp their feet 6-10 feet away from the snake and then move away so the snake can leave. If the snake is venomous, the caller should bring pets and children indoors. The snake does not need to be killed; he will likely leave on his own. After the snake is gone, the caller can remove attractants that draw in rodents by removing brush and woodpiles, sweeping up spilled birdseed under feeders, securing trash, fully enclosing compost and cleaning up clutter around their home.

#### Snake on porch or walkway

**ADVICE:** Snakes are cold-blooded and must warm themselves using external sources. This is why people often find snakes sunning on warm porches and sidewalks on cool days. Snakes are beneficial and should ideally be left alone. The caller can also try to identify the snake; most state wildlife agencies or extension offices have helpful identification resources online. If the snake is nonvenomous, the caller can stomp their feet 6-10 feet away from the snake and then move away so the snake can leave. If the snake is venomous, the caller should bring pets and children indoors. Remind the caller that the snake does not need to be killed.



#### Snake in house

**ADVICE:** Most snakes who find their way into homes are rat snakes (also known as black snakes) looking for mice living inside. If the snake is visible, the caller should slowly and quietly move toward the snake and place a tall garbage can on its side next to him, then use a long broom to gently push the snake inside. Set the can upright and carry it outside to release the snake.

If the caller saw the snake entering a hole, the caller should cover the opening. If the hole is on the outside of the house, a cone-shaped "excluder" made out of fiberglass window screen or similar mesh can be placed over the hole. The excluder should be about 2 feet long or more and come to a point so the snake can slither out but not climb back in. It can be difficult to locate snakes after first seeing them in the house; they often seem to disappear. They can sometimes be drawn out by placing a heating pad (set on low) on the floor. Check from a distance every few hours to see whether the snake has been drawn to the heat. Once the snake is visible, proceed to capture and remove the snake using the garbage can technique described above.

The only way to prevent recurrence is to realize that the snake probably followed a food source—most likely a rodent—indoors. The caller should look around their house and seal openings, such as those found around washer/dryer connections, near pipe fittings under sinks and by holes in closets and behind the stove.

#### **Snake bite**

**ADVICE:** If a nonvenomous snake bite breaks the skin of a human or companion animal, the caller should treat the wound like any other puncture wound that can get infected and immediately consult a physician. (The caller can consult the Centers for Disease Control and Prevention to determine whether the snake is venomous by visiting *cdc.gov/niosh/outdoor-workers/about/ venomous-snakes.html*.)

If a venomous snake bites a human, immediately call 911 or transport the victim to the hospital. Instruct the victim to stay calm and inactive to slow the spread of the venom. Do not cut open the bite wound to bleed or suck out the venom. If possible, secure the snake for identification.

If a venomous snake bites a companion animal, immediately transport the animal to the closest veterinary hospital. Keep the animal calm and inactive to slow the spread of the venom. Do not cut open the bite wound to bleed or suck out the venom. If possible, secure the snake for identification.

To learn more about snakes, go to humaneworld.org/snakes.



# **Skunks**

#### The fear of getting sprayed can lead to panicked calls and overreactions.

#### **Relevant natural history**

Gentle animals who tend to be nocturnal, skunks are sometimes out during the day. They have a tough time in our suburban and urban landscape. Because of their extreme nearsightedness, they are prone to falling into uncovered window wells and other similar pit-like perils from which they are unable to escape. It's well known that skunks have a noxious-smelling spray that they use to defend themselves, but it's less commonly known that they can't "reload" quickly and that they will not spray unless they feel really threatened. So before escalating to this drastic option, they will stamp their front feet as a warning, giving you ample opportunity to back off. Skunks are extremely beneficial creatures, and their important ecological role is often overlooked because of myth and stigma surrounding their spraying abilities. They provide free pest control by eating things many people don't like, including bugs, mice and even baby rats.

#### What to tell callers

#### Skunk seen in daytime

**ADVICE:** This behavior by itself is not cause for alarm. Skunks are sometimes active by day when people leave out pet food or when adults have hungry young to feed. Ask the caller to monitor the skunk's behavior.

**ACTIONABLE:** Assess whether the skunk is acting strangely—ask the caller whether he's circling, dragging himself, acting injured or seeming unusually aggressive. If he is, dispatch an officer to assess and handle the situation.

## Adult skunk following people, disoriented, falling down, circling or acting aggressive

ACTIONABLE: Dispatch an officer for assistance.

#### Dog sprayed by skunk

**ADVICE:** Provide the caller with this effective recipe for quickly de-scenting dogs: Mix a quart of hydrogen peroxide, ¼ cup of baking soda and a teaspoon of liquid dish soap in a large bowl. Apply with a washcloth, rinse and then shampoo the dog (or anything that was sprayed). The odor will disappear within minutes. The dog may have bad breath for a while, though, if he was sprayed in the face. Remind the caller to keep their dog on a leash. The curiosity of an off-leash dog can lead to his peril!

#### Baby skunks around dead mother

**REFERRAL:** Refer to a licensed rehabilitator. In the meantime, ask the caller to put an upside-down laundry basket over the baby skunks so they don't wander off.

#### **Bad odor in house**

**ADVICE:** A vial of Odors Away can be purchased from a hardware store to neutralize the smell. Put a few drops in a bowl and place it in a smelly room. Add new drops every day. If the odor persists for weeks, it may be caused by a dead skunk—advise the caller to seek professional assistance.

#### Skunk in garage

**ADVICE:** Skunks wander into garages when the door is left open. To get them out, instruct the caller to open the garage door just before dusk, sprinkle an 8-inch band of flour under it, watch for exiting footprints and then close the door. Make sure the caller understands the timing; many people leave the garage door open all day, when the skunk is sleeping, then close it at dusk, just when the skunk would be waking up and trying to get out!

#### Skunk eating garbage

ADVICE: Contain the trash better so that other animals are not

able to push cans over or spread trash on the ground for the skunk to find. The caller can secure trash lids with bungee cords, get an Animal Stopper trash can (which has built-in bungees), put the garbage out the morning of trash pickup or get an outdoor storage container for trash cans from a home-building store. Trapping won't solve the problem; as long as there's a food source, animals will keep being attracted to it.

#### Skunk in window well

Skunks fall into window wells because they don't see well, and then they get stuck because they're poor climbers.

**SELF-HELP OPTIONS:** The caller can try putting a wide board slanted at a 45-degree angle into the window well if it isn't too deep. Attach a towel or mesh for traction. Another very effective option is to wear gloves and slowly lower a small rectangular plastic trashcan (with cheese inside as bait) into the well. Make sure the can is on its side so the skunk can easily walk into it. Then tip the can up a bit (so the skunk doesn't fall out while he's eating the cheese), raise it to ground level then slowly lower it on its side so the skunk won't spray you—they respond to fast movement coming at them. Be sure to tell the caller they must get a window well cover (homemade or inexpensive from home-building stores) after the skunk is gone. Otherwise, this problem may occur again.

## Skunk with head stuck in yogurt cup or other food container

**SELF-HELP OPTIONS:** If the caller is determined and capable of helping, tell them that the skunk won't spray anything he can't see, so the caller can grab hold of the food container while wearing gloves. Upon feeling resistance, the skunk will pull back and his head should pop out. Stand motionless—the skunk will usually blink a few times and then make a beeline for home.



**Referral:** Refer to a rehabilitator or dispatch an officer to help remove the food container if it is on too tight or if the caller is not willing to try the self-help option. Have the caller put a laundry basket or milk crate (with a heavy rock on top) over the skunk to keep him from wandering off. When his head is entrapped, he may run frantically into the street and cause car accidents or get hit.

#### Skunk fell into pool

**ADVICE:** Skunks fall into pools fairly often because of their poor eyesight. The caller can put a pool skimmer or broom underneath him and gently lift him out. The skunk may be exhausted from swimming and may need some time to recover. If the skunk does not leave on his own after two hours, contact a wildlife rehabilitator. Consider adding a floating ramp to the pool so wildlife who accidentally fall in can escape; commercial products include the Frog Log or Skamper Ramp.

#### Skunk damaging lawn

**ADVICE:** When it rains heavily or the lawn is overwatered, grubs come to the surface, where skunks smell them and start digging. Once the lawn dries out, and if the caller doesn't overwater, the grubbing should cease. Callers can apply natural products like Grub Away Nematodes (*gardensalive.com*) or Milky Spore (found in gardening/landscape/home improvement stores) to the lawn to reduce grub numbers; they are very effective if applied properly (i.e., watered into the ground and applied at the right time of year). Callers can also sprinkle cayenne pepper or nontoxic, capsaicin-based repellents on localized digging areas for a temporary effect.

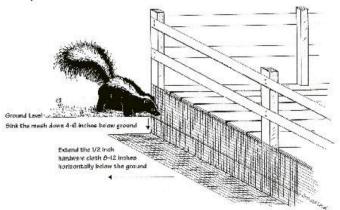
#### Skunk in garden

**ADVICE:** If the caller has a skunk in the garden, let them know that they're lucky! Skunks eat insect pests that plague gardens— Japanese and masked chafer beetle larvae included. The best one can hope for is that the skunk stays in the garden to perform this free insect control service. Because skunks focus on insects and don't bother with flowers or garden vegetables, they don't tend to cause problems.

#### Set a trap for a woodchuck but caught a skunk

**ADVICE:** Assure the caller that they can let the skunk out without getting sprayed. Skunks have terrible eyesight and only spray when something comes at them fast, like a big dog who isn't paying attention to the skunk's warnings. If you move slowly and talk soothingly, you won't get sprayed. Skunks stamp their front feet as a warning when they're nervous, so if the skunk stamps, just remain motionless for a minute until he stops stamping, then proceed. The caller can slowly drape a towel over the trap prior to opening it, which creates a visual barrier that will calm both the caller and the skunk. Once the trap door is opened, the skunk will

L-shaped barrier for excluding animals from under decks, sheds, etc.



make a beeline for home. Emphasize to the caller that they should never leave traps open at night; otherwise other skunks will surely wander into the trap. (Refer to p. 51 to help the caller understand the problems with trapping.)

**REFERRAL:** Dispatch an officer or refer to a rehabilitator to help release the skunk.

#### **Skunk under deck**

Skunks will take advantage of cavities under decks and sheds to raise their young. However, they leave as soon as the young are old enough.

**ADVICE:** The simplest option is to wait for the skunks to leave on their own and then seal off their entry hole with 16-gauge, 1-inch-by-1-inch square galvanized mesh. Trapping can result in starving young left behind. Callers can seal off the deck themselves using an L-shaped design, but it's critical to make sure that no animals are entrapped or babies are left behind to starve. See *humaneworld.org/digginganimals* for a description of what steps and precautions need to be taken.

#### Why not set a trap?

**ADVICE:** Trapping hardly ever solves wildlife problems. In fact, it usually makes matters worse. Even in studies where all the skunks were trapped out of an area, others from the surrounding area soon moved into the vacated niche. In addition, trapping often leads to starving young being left behind. It's much more effective to remove whatever is attracting the animal (food source, den site) and exclude animals from areas they're not wanted rather than try to continually remove all the animals themselves. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more about skunks, go to humaneworld.org/skunks.



# **Squirrels**

Ubiquitous in suburban and urban areas, issues with squirrels can be addressed with patience and humane deterrents.

#### **Relevant natural history**

Squirrels prosper in suburban and urban areas due to their supreme agility and adaptability. Gray squirrels are a familiar sight almost everywhere, yet not a welcome one when their quest for a suitable den leads them to take advantage of open attic vents to gain access to a wall or ceiling void in your house. Gray squirrels are active by day (diurnal), yet their more secretive cousins, flying squirrels, are active by night (nocturnal). Squirrels are high-strung animals, which is why they may behave erratically when trapped in an enclosed living space—they often run, frenzied, all over a house instead of merely going out an open door. Squirrels have two litters each year, in early spring and again in the late summer or early fall. If squirrels are heard scampering in the attic at those times of year, it's most likely a mother with her babies.

#### What to tell callers

#### Squirrel raiding bird feeder

**ADVICE:** Several specialized feeders and baffles are available to deter squirrels. One very effective commercially available baffle is shaped like a stovepipe and placed on the pole portion of the bird feeder. This allows the squirrel to climb up the pole and into the closed pipe, but will not allow him around it. The pipe must be at least 15 inches long to prevent the squirrel from climbing over it and set at least 4 feet off the ground to prevent the squirrel from jumping over it.

#### Squirrel digging in yard/plants

**ADVICE:** Squirrels must bury nuts so they have a food source in winter. Although unsightly to some people, their digging of shallow holes won't damage the lawn; it's just a temporary cosmetic issue. Cayenne pepper or repellent products that contain capsicum can be sprinkled on the lawn or plants to prevent digging if absolutely necessary.

#### Baby squirrel following people/trying to climb a person

**REFERRAL:** Refer to a rehabilitator. This behavior indicates a juvenile baby squirrel who has lost his mother and needs to be taken to a wildlife rehabilitator.

#### Squirrel circling, falling over

**ADVICE:** Squirrels are very susceptible to a parasite called roundworm, which creates rabies-like neurological symptoms once the parasite infects the animal's brain. This condition is fatal and not treatable. Leave the animal alone. If people—particularly children—can't be kept away, dispatch an officer.

#### Squirrel inside living space of home

**ADVICE:** Squirrels inside a home usually get there by accident. They can be quite skittish and run everywhere but out the open window or door. To get them out, instruct the caller to shut the interior doors and open ground floor doors and windows. They can put some bread with peanut butter on window ledges or in front of the door to tempt them out, then go to another part of the house to allow the squirrel a chance to leave. Another option is to set a live trap baited with peanut butter near the squirrel and leave her alone for a few hours. Once the squirrel gets in the trap, the caller should immediately release her on site so she can get back to her young and stay in the habitat she knows. Traps can be obtained from hardware and home supply stores.

Once the squirrel is out, the caller should try to identify and close entry points. Tracks in soot around the fireplace or holes where daylight streams through the attic may offer clues as to how the squirrel got in. Before sealing up any hole or installing a chimney cap, the caller needs to ensure no animals are left behind, particularly babies. Go to *humaneworld.org/squirrels* for more detailed instructions.

#### Squirrel in attic, roof or walls

**ADVICE:** Squirrels in these areas usually have young. They have two litters a year, which means mothers care for babies spring through fall. The caller may want to contact a professional wildlife company to address the situation, but that should happen only after the babies are fully mobile and seen coming out of the house with their mother. At that point, they should insist the company use one-way doors to evict the squirrels rather than traps that kill or separate them and result in high mortality. Squirrels in attics can also be evicted by using scare devices like the Squirrel Evictor or a strobe light, yet their eviction must be followed up with closing any entry holes. As long as access points exist, squirrels or other animals will find their way back into the dwelling. However, before closing off any hole, it's vital to ensure the cavity is no longer active by stuffing it with newspaper and seeing whether the paper is pushed in or out. After three days of no activity, the caller can assume the nest site has been abandoned.

#### **Squirrel in chimney**

**ADVICE:** The squirrel has most likely fallen in and can't get out. Putting a thick rope down the flue, secured to the chimney, will enable the squirrel to climb out. If this is not feasible, it will be necessary to open the firebox doors and let the squirrel out of the house by shepherding him through an exterior door, but this may require the help of a wildlife expert. Squirrels get panicky in houses and may run anywhere except out an open door. If attempted, all interior doors should be shut and the area cleared so the squirrel has no choice but to exit out an open exterior door. Once the squirrel is out, emphasize to the caller that installing a chimney cap is the only way to prevent this situation from recurring. Before doing so, they should check for other squirrels and confirm that there was only one in the chimney.

#### **Baby squirrel fell from tree**

**ADVICE:** If tree work was done recently, give the mother a chance to reclaim her baby as long as he's uninjured. Leave the baby at the tree base. Don't cover him with a blanket and don't put him in a deep box; the mother may not find him. The baby squirrel must remain within the immediate vicinity of where he fell.

- If it's chilly outside, or if the baby isn't fully furred, he'll need a heat source, such as a hot water bottle or a chemical hand warmer. Tell the caller to place a piece of soft fabric between the animal and the heating device, and check to make sure both stay warm.
- Be sure to give the mother an entire day to retrieve her young. It may take her that long to find a new nest site. Tell the caller not to feed the baby; you want his hunger cries to attract her. Sometimes mother squirrels don't claim their young until just before dark. If the baby is not retrieved by dark, a wildlife rehabilitator should be called to help decide if the baby should be taken in overnight and a reunion attempted early the next day.

#### **Squirrel in trap**

**ADVICE:** Animals in traps are often highly stressed and should be released on site immediately. Explain to the caller that trapping and relocating squirrels creates problems; in spring and summer, babies are left behind to starve, and in winter a relocated squirrel is separated from the vital food cache (buried nuts) and will often starve. In addition, trapping rarely addresses the root cause of the problem. Instead, callers can safely release the squirrel by putting a towel over the trap (to create a visual barrier), pointing the trap away from dangerous areas and opening the door (while wearing heavy gloves) or propping it open with a book. If they refuse to let the squirrel out, it's vital for animal control or a volunteer to respond so the animal is not left in the trap to suffer and die.

#### Why not set a trap?

**ADVICE:** Trapping hardly ever solves wildlife problems. In fact, it usually makes matters worse. Even in studies where all the squirrels were trapped out of an area, others from the surrounding area soon moved into the vacated niche. In addition, trapping often leads to starving young being left behind. It's much more effective to remove whatever is attracting the animal (food source, den site) and exclude animals from areas they're not wanted rather than try to continually remove all the animals themselves. (Refer to p. 51 to help the caller understand the problems with trapping.)

To learn more, visit humaneworld.org/squirrels.



# (Wild) mice and rats

Making small changes can lead to big results when addressing issues with these small, wild rodents.

#### **Relevant natural history**

**RATS:** The two rat species people are most concerned about are the Norway (or brown) rat and the roof (or black) rat. The Norway rat is established throughout the country, while the roof rat is typically found along the coastal areas of the United States. Norway and roof rats use areas of about 75 to 500 feet in diameter as a typical home range, although this might vary greatly, depending on the location and availability of food resources. Norway rats can live inside walls, in yards, under stacked lumber or other construction material, and anywhere human clutter and attractants are allowed to build up. Roof rats are accomplished climbers and are sometimes found in upperlevel void spaces of buildings when access at the roof line is available. They often build loose, spherical nests of shredded material in trees or in vines well above the ground. Both roof and Norway rats are omnivores, incredibly intelligent and adaptable, and breed year-round, although peak breeding occurs during the warmer months. Rats reach breeding age at about 3 months, and the average litter size is eight. Life expectancy in the wild is one to two years.

**MICE:** The house mouse is often confused with native mice (white-footed, harvest and deer mice, and voles). This chapter focuses on the house mouse, but the principles can be applied generally across all mouse species. The house mouse (herein referred to as "mouse" or "mice") is 2 to 3 inches long, gray/brown in color, with a naked tail as long as or longer than the body. They are omnivores, preferring starches as well as seeds, grains and nuts. They typically don't travel farther than 50 feet from their nest. They prefer to live inside buildings, within wall and ceiling voids or behind cabinets and appliances. Mice breed year-round and can raise eight litters or more per year with an average of four to seven pups per litter. Their lifespan averages one year.

#### What to tell callers

#### **Bite/disease transmission from mouse or rat**

**ADVICE:** Both mice and rats can carry a variety of diseases transmissible to humans through bites, feces and urine, including leptospirosis, salmonellosis, hantavirus (predominately in the western U.S.) and bubonic plaque (by flea vector). Securing human food in mice and rat chew-proof containers, cleaning up mice and rat droppings while wearing a mask and using gloves, and using disinfectant regularly can help prevent disease transmission. If the caller has been bitten by a mouse or rat, advise them to seek medical attention immediately.

#### Mice or rats in and around the home

ADVICE: Advise the caller that there are two main tenets for successfully managing conflicts with rats and mice. The first is to identify the source of food (what's attracting them), and the second is to remove or interrupt it (which is done through concurrent habitat modification, exclusion and the use of repellents). HABITAT MODIFICATION: The goal with habitat modification is to make the area as unappealing to mice and rats as possible. Keep things clean indoors by sweeping floors and counters often and storing food, garbage and compost in rodent-proof containers (glass, metal or very thick plastic with lids). Always keep doors and windows closed or screened.

Keep things tidy outdoors as well. Clean up spilled birdseed, don't leave pet food outside and remove access to compost. Don't provide hiding places for rodents; store materials such as lumber and boxes on a rack with a clean, open area underneath. Get rid of unused materials and junk that may provide harborage, and remove vegetation such as ivy and tall grass. Place trash outside shortly before pickup, especially if it's not stored in rodent-proof containers; don't leave plastic garbage bags out overnight. **EXCLUSION:** The goal of exclusion is to keep mice and rats out of the spaces where they are unwanted. Both mice and rats can squeeze into very small spaces (approximately the size of a guarter for rats and a dime for mice). Inspect your basement, house and garage for cracks and holes that might be potential entry points. Seal any openings larger than one-half inch with mortar (if concrete or brick) or the appropriate in-kind replacement material, or repair/replace them with rodent-proof material. Around doors and windows, use robust threshold and perimeter seals and, when necessary, a metal or rodent-resistant threshold seal to prevent rodents from gnawing and entering underneath or around door entryways. Block off access to the structure by sealing around HVAC and other gas, electrical, water

or cable service access points. Physical exclusion products include galvanized woven wire mesh with one-quarter-inch square openings (16-gauge wire or larger is preferred for excluding rats), aluminum flashing, copper mesh for stuffing entry points on structures, and Xcluder® products for a number of different types of potential entry points on a structure.

**REPELLENTS:** Any repellent must be used in conjunction with habitat modification and exclusion. No single repellent will likely be 100% effective by itself; the caller must have a plan for monitoring and responding to activity with various repellents to prevent reestablishment.

Possible repellents include urine-soaked kitty litter (use outside to deter rats and mice); Bonide® Mouse Magic (packets—indoor use for mice); Nature's Defense® Mouse and Rat Repellent (outside and inside for mice and rats); or Critter Ridder® Animal Repellent granular form (outside for mice and rats). For significant problems, a more concentrated repellent is available: DeTour® Gel for Rats (apply on structure and within burrow). Treat active areas with repellents, and continue to do so until there is no sign of activity.

Note: Humane World for Animals does not endorse any product(s). Use all products in accordance with label directions.



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#### Mice or rats in the car

ADVICE: Mice are more likely than rats to take up residence in a car. For prevention, advise the caller to keep the car as clean and food-free as possible. This means not storing pet food (or feeding pets nearby) or grass seed in the trunk (or anywhere near where car is parked); cleaning up crumbs that have fallen in between the seats; and keeping snacks out of the glove box when the car is unattended. Keep the car away from food sources such as garbage cans, pet food bowls, bird feeding or feeders or fruit trees. If mice are in the car, you can encourage them to leave by leaving a portable radio on when you're not in the car, and the car radio on when you're in it; opening the hood; and moving the car around frequently. Items that may scare the mice away include a Mylar<sup>®</sup> balloon of a face with eyes; tie the balloon low to the ground near the car. In some cases, it may be helpful to utilize repellents that are capsaicin- or mint-based to deter mice from loafing within the engine compartment or cabin, and to potentially deter mice from chewing on exposed wires (refer to product label for proper application).

#### Desire to trap mice or rats with a live trap

**ADVICE:** Let the caller know that live trapping creates welfare concerns for the animal. For example, a mouse who comes from generations of mice born and sheltered indoors may not fare well if forced outdoors. If the mouse can be moved to an unoccupied

outbuilding or place of cover (e.g., a brush pile), her chances of survival increase. Traps must be checked on a regular basis preferably more frequently than every eight hours, as trap stress can kill relatively quickly. Most importantly, if the source of the problem isn't addressed (e.g., the garbage isn't secured, pet food is left outside, etc.), conflicts with mice and rats will only continue.

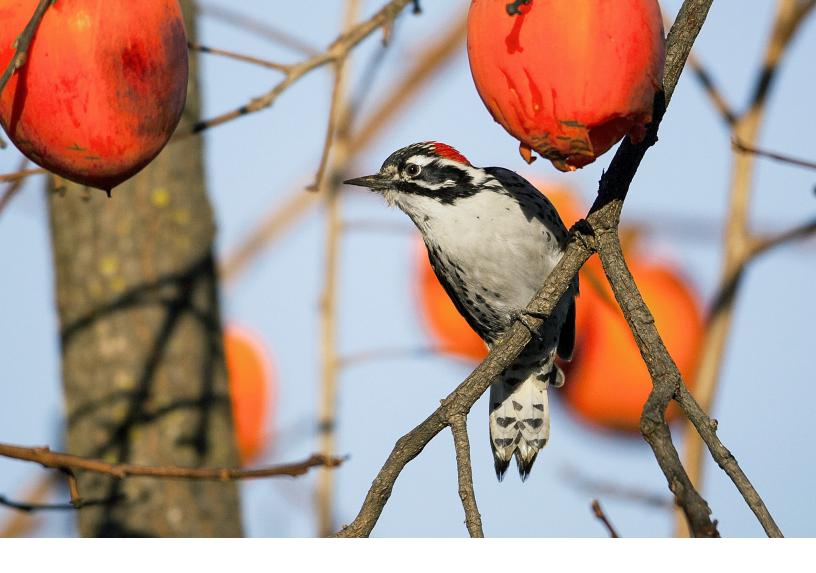
#### Desire to kill mice or rats

**ADVICE:** Steer the caller away from lethal control, which does not address the root cause and does not solve the problem; rather, it leads to an endless cycle of killing. Poisons and glue boards cause considerable suffering and should never be used. These methods are the most inhumane forms of lethal control and cause significant and lengthy suffering for the rodents they are used on, and they also present welfare impacts (including lethal consequences) for other animals.

#### **Request for alternative to killing**

**ADVICE:** Some communities have had success reducing rodent populations by creating habitat for predators. According to the organization Raptors Are the Solution, a single barn owl can catch 1,400-plus rodents a year. Consider tolerance for predators who eat rodents (such as skunks, foxes, raccoons, etc.) and providing habitats (including perches, ambush spots and boxes) that support these predators. Make sure to cease all rodenticide use in the area, as studies show these toxins travel up the food chain. If attempts have been made to physically exclude rats and to restrict their access to food and nesting opportunities, and the rat population is still significant, consider utilizing a fertility control product to humanely reduce their number. SenesTech's ContraPest<sup>®</sup> is a fertility control product for reducing rat populations. It is available to the public via the ContraPest® Online Store. (It's available in California, Connecticut and New York, but it must be applied by a licensed pest control operator).

To learn more about wild mice and rats, go to *humaneworld*. *org/wildmice* and *humaneworld.org/wildrats*.



# Woodpeckers

Because woodpeckers are protected by the Migratory Bird Treaty Act, callers will need to use humane deterrents to manage conflicts.

#### **Relevant natural history**

One of the most recognizable sounds in nature is the rat-a-tat hammering of a woodpecker. Woodpeckers drill for several reasons: to excavate a nesting cavity, to find food (insects), to store food, or even to get a girl (unlike other birds, woodpecker males don't sing to attract females, they drum!). Woodpeckers' stiff tail feathers and specially adapted toes with strong claws help prop them up on the tree trunks or branch as they work. Their bills, head and neck are uniquely adapted for hammering, and many woodpeckers even have a long tongue that enables them to probe deep into the cavities of trees and dead wood to capture and feed on burrowing insects. But how can they cause all that noise without giving themselves a splitting headache? Fortunately, their skulls have special air sacs that cushion the brain from impact. Even the fine feathers around their nostrils help by filtering wood dust. When woodpecker conflicts occur, it is important to act early to prevent further damage and to break the problematic behavior cycle. Deterrents are the tool of choice to address conflicts, and you'll want to remind callers that woodpeckers—and their active nests—are legally protected by the Migratory Bird Treaty Act. As such, the birds cannot be moved, harassed or killed.

#### What to tell callers

#### Woodpecker attacking house

**ADVICE:** Woodpeckers don't attack houses. Instead, they hammer on the home's wood to reach food or drum on metal areas to

attract a mate and announce their territory. Excavating and exploring wood siding or trim boards for food often sounds irregular and occurs in different places around the house. Conversely, drumming for a mate is typically rhythmic, concentrated in one area that often contains something metallic (e.g., a metal gutter or metal siding) and heard in the spring. To figure out whether the woodpecker is hammering for food, the caller should check whether the wood is rotting or infested with insects like carpenter ants or carpenter bee larva. Although woodpeckers typically prefer decaying wood, an inexperienced juvenile might not know better. If the wood is rotting and/or has wood-boring insects in it, the caller must address those issues in order to stop the activity and protect the house from potential water intrusion. If the wood is healthy, the caller should fill the holes with an appropriate putty and scare off the woodpecker. The most effective way to deter them is to hang 2-foot-long strips of Mylar<sup>®</sup> reflective tape (such as Irritape) above the area. The intense reflection of prismatic light and loose ends moving in the wind will encourage them to move on. If the woodpecker is drumming for a mate, he will drill on a surface that allows for good reverberation, such as a metal chimney cap or gutter; his goal is to make as loud a noise as possible. Drumming rarely does damage to the area and usually ceases by the summer. If the activity is especially disruptive, the caller can use the techniques described above to ward off the woodpecker.

#### Woodpecker drilling brick mortar

**ADVICE:** Woodpeckers primarily peck at mortar for one of two reasons: to find grit to help process food or to access calcium in the mortar to make up for a mineral deficiency. Because it's impossible to know which one the bird is doing, the caller should act quickly before too much damage is done—and before a habit is formed.

To discourage pecking mortar for grit, place some sand on a nearby flat surface. This will provide an easier source of grit. To discourage pecking mortar for calcium, either put some finely crushed eggshells on a flat surface or in the bird feeder or purchase a calcium block (often sold at pet stores) and hang it on a nearby tree.

Once the alternative grit and calcium sources are provided, the caller should repair the mortar and repel the woodpecker by hanging strips of Mylar<sup>®</sup> reflective tape (such as Irritape) over the area or attach a Scare Eye balloon to the mortar area for a few days.

#### Woodpecker nesting in a home's siding

**ADVICE:** Occasionally, woodpeckers will excavate a nest site in a home's wood siding or take advantage of a knot that has popped out (due to the wood drying out). The hole will be just big enough for the bird to enter. If this happens during the spring or summer,

there is likely a nest with chicks inside. It is illegal to harass or move them during this period, so the caller must wait until the chicks have fledged (left the nest) before closing off the entry point. This typically occurs in midsummer to late summer. Once the caller has confirmed the chicks are gone, they can clear the nesting material and repair the hole.

#### Woodpecker putting acorns in fence posts or home's siding

**ADVICE:** Acorn woodpeckers are famous for storing food, primarily acorns. They do this by drilling hundreds (sometimes thousands!) of individual holes in a single tree, called a granary, and placing a single acorn in each hole. Although trees are preferred, they're not always available. So acorn woodpeckers will create a pseudo-granary in a fence post or house siding. The key is to catch the behavior quickly and to immediately install deterrents. In this case, the caller should hang 2-foot-long strips of Mylar® reflective tape (such as Irritape) from the top of the area and allow the strips to move in the wind directly in front of the holes.

To learn more about keeping woodpeckers out of your home, go to *humaneworld.org/keepwildlifeout*.

# Why not trap and relocate wildlife?

Setting a trap for an animal may sound like a good idea, but the truth is that live-trapping and relocating wildlife is not a humane or viable solution.

Trapping an animal is perceived as a quick fix, but it's not likely to solve your problem. In many cases, it makes the problem worse:

- Trapping and removing wildlife is a short-term solution because it doesn't address what is attracting animals to a specific site in the first place. As long as food attractants (garbage, outdoor pet food) and den sites remain at the initial location, other animals will soon replace those who are removed.
- Trapped animals are often nursing mothers whose young get left behind when the mom is taken away. As a result, the young die of starvation. (Baby raccoons who have been orphaned can suffer for up to 10 days before dying.)
- Setting a trap does not guarantee that you will catch the individual or even the species of animal causing the conflict; it's common for other animals (including pets) to be lured into the trap.
- Despite being marketed as humane, live traps can be dangerous and cause animals to suffer. Trapped animals can severely injure themselves in their frantic attempts to escape. When left too long in a trap or when exposed to extreme weather conditions, they can even die.

Relocating animals may sound like a good solution, but it's not. Studies show that relocated animals have extremely low survival rates due to:

- Territorial disputes with resident animals.
- Inability to find food, water and den sites.
- No knowledge of safe areas or "escape corridors" to hide or get away from predators.
- Increased movement across roads in an effort to return "home" or to get back to their young.

Furthermore, state wildlife laws may prohibit the relocation of certain species due to the fact that relocating animals outside of their home range may spread disease to surrounding wildlife populations.

Euthanizing healthy wildlife is not an acceptable solution; it should not be considered as an alternative to relocation. It is costly, time-consuming and entirely unnecessary for successful conflict resolution.

In addition to the ethical issues mentioned above, trapping, relocating or euthanizing wildlife won't solve the root causes of conflicts among people, pets and wildlife. These "solutions" are, therefore, ineffective. Please visit *wildneighbors.org* for tips on humanely and effectively dealing with wildlife conflicts.

#### What's wrong with trap-loan programs?

As a local shelter or animal control facility, you might loan traps to the public in an attempt to accommodate public calls about wildlife conflicts and to let callers handle issues themselves. Humane World for Animals strongly discourages trap-loan programs because they not only amplify the consequences detailed above, but they significantly burden your facility. The staff and facility resources spent on this service and field response could otherwise be put toward providing information that solves people's wildlife problems for the long term.

As a far better alternative, we encourage "information loan" programs where people who have wildlife conflicts are given information instead of a trap. Only when the problem can't be resolved with self-help information should the caller be referred to someone who can intervene. The result of an "information loan" program is that nuisance wildlife complaints drop dramatically, the burden on animal control officers and shelter staff is greatly reduced, and people learn to resolve their problems in a more effective and humane manner.



#### All Animals article

# **Strangers in a strange land**

Why trapping and relocating wild animals is not the humane choice the public thinks it is

**It starts out mildly enough:** Heading to work on the subway, you realize you forgot your wallet. No big deal, you think. I'll borrow money to get home.

Soon the lights go out and the train hurtles toward the sky, speeding through the atmosphere. Time passes—it's hard to tell how long. The subway is grounded, the doors swing open, and unfolding before you is a city you don't recognize.

A few things are familiar—the Starbucks on every block, the cars, the English phrases on signs. But it's cold, you're hungry, you're penniless and the sun is setting. You think of your children who will be waiting to be picked up from school. Who will get them home safely? What will they eat for dinner?

With gathering dread, you notice a sinister-looking man eyeing you from a storefront. You want to escape but have no idea where to go. Where am I? you wonder, wracked with fear. What's happening?

Surprise! You've been trapped and relocated. An unlikely scenario for most humans, the nightmare is a reality for many backyard creatures. The squirrel eating the birdseed, the fox near the shed, the groundhog munching the flowers, the opossum inspecting the compost pile—one minute they're going about the business of survival, and the next, without warning, they're whisked away from the only home they've ever known.

Many people who live-trap believe they've found a compassionate solution to home and garden woes. They set their captives free by a stream, a field, a grove of trees or some other human-conjured ideal that's usually a short drive away but might as well be in another galaxy for relocated animals. Upon arrival, these involuntary immigrants face such serious dangers that most are unlikely to survive long. One analysis looked at squirrels relocated from suburban yards to a forested environment. After just 88 days, 97% had died or disappeared. Research on other species shows similarly poor survival rates for wild animals who are forcibly relocated.

The squirrels "were getting nailed by predators because they

didn't have escape routes," says former Humane World for Animals senior scientist John Hadidian, who co-authored the study. "When a squirrel in your backyard is threatened by cats or hawks or other predators, they know exactly where to go. They have a map in their head of where they live."

Without that cognitive geography, relocated animals struggle to find food and den sites. Some die along the way or become ill from extreme stress. Once transported, animals may introduce disease to the new environment, some scientists believe. And too often, they leave behind something precious: their babies.

Aside from the negative effects on the animals themselves, trapping rarely solves conflicts. Sometimes animals left behind are juveniles still learning to find food and shelter; without parents as guides, they may turn to garbage and other human food sources, compounding the very problem a homeowner is attempting to address. And removing animals from an environment without considering what brought them there in the first place effectively puts out a vacancy sign. "The standard thought about nature is that it exists somewhere else, outside the perimeter of my house," says John Griffin, senior director of urban wildlife programs for Humane World for Animals. "But animals don't recognize the difference between human-built habitat and 'natural' habitat. Habitat is habitat to them. If it can support them, if it has food, if it has shelter, it doesn't matter if a human built it. If it's a tree or a chimney or a shed, it doesn't matter."

In a society relatively out of sync with the rhythms of the natural world, however, the mere sight of a fox family under a porch can cause panic in people unfamiliar with the quiet ubiquity



of foxes. Some homeowners have spent thousands of dollars trapping them, a practice so pointless Griffin likens it to trying to catch birds out of the sky. "Oftentimes foxes are here right under our noses," he says. "They're just so good at using marginal habitat that we don't even realize it."

Learning the natural history and behaviors of backyard species can go a long way toward living peacefully alongside them. While humane solutions to common problems exist, the kindest strategy of all—especially for wild animal families raising their young—is to watch, wait, enjoy and realize that animals are more like us than not. They need to feed their babies, avoid danger and stay warm. They aren't trying to take over our properties, steal our gardens, attack our children or invade our homes. From their perspective, this is their home, after all, and their world, too. —*Nancy Lawson* 

## **Humane solutions**

**Get species smart:** Respect for those around us starts with greater understanding of their habits and needs. One of the most maligned backyard species—the opossum—is also the most benign. Beneficial to gardeners because of an appetite for insects and rodents often considered pests, they're also wanderers who typically den in other animals' burrows for short periods before moving on. "To do anything to a possum is just the silliest thing in the world," says John Griffin of Humane World for Animals. With a little perspective, we may realize we don't really have a problem at all.

**Humanely evict:** Waiting for nesting animals to leave on their own is preferable, but the next best strategy is to gently encourage them to move along to a new site. Try to humanely exclude parents from re-entry into structures while helping ensure they can transport their young to alternate dens. Gentle harassment techniques such as cider-vinegar-soaked rags, blaring radios and lights encourage unwanted house-guests to hit the road.

**Reshape the environment:** Once animals have moved on and it's clear that no babies are left in a given space, animalproofing the structure is key to preventing the entry of more furry guests. Griffin suggests adding chimney caps, seal porches and sheds, and creating other barriers to re-entry. For gardeners, temporary or permanent fencing is the most effective deterrent.

# Referring a wildlife control company to a constituent

To ensure a wildlife control operator uses humane practices, we recommend using a specific set of guidelines.

If animal care and control, wildlife rehabilitators and government agencies refer calls to nuisance wildlife control operators, we strongly recommend that you use the following guidelines. Their objective is to elicit assurances from the NWCO that their practices will be responsible and humane. It is important that your agency insist that the practices of any wildlife control company are in accord with your humane mission, since companies providing wildlife control services are often only lightly regulated. In addition to reviewing these guidelines with the operator you intend to refer, you may wish to have a written and signed statement of agreement. It is helpful as well to do a ride-along with any NWCO to whom you give referrals so you can evaluate their practices firsthand. These guidelines will help your agency and your constituents determine whether a company will follow humane approaches, help protect the public from questionable business practices and provide a better chance of a lasting and environmentally responsible resolution to the wildlife conflict.

#### Suggested agreements regarding NWCO practices

- **1.** Receive assurance that the company's practices comply with federal, state and local laws and regulations. Make sure that they have the required permits, licenses and appropriate levels of insurance to conduct control activities in your jurisdiction.
- 2. The company will provide a full site inspection to identify all wildlife entry points as well as other potential sources of conflicts. Merely trapping the animal will not solve the problem if the attractant remains—other animals will quickly replace those who are removed. The company should provide an onsite inspection and assessment to diagnose the problem that will include physically inspecting rooflines, attics, foundations and relevant elements of the structure.

- **3.** The company will inform homeowners about nonlethal options and provide information about the use of eviction and exclusion methods to resolve the problem for the long term. Ensure that the company provides a full range of wildlife-proofing, exclusion and prevention services (e.g., install chimney caps, repair holes). The NWCO's goal must be to address the source of the problem (an open entry point or food source), not just the symptom (the animal). For animals in structures, insist on the use of exclusion strategies involving one-way doors and/or hands-on removal and reunion of families on site.
- 4. Information should be presented in a firm written quote for work that addresses both the immediate conflict and any additional problems found. The work should come with a guarantee against re-entry by the animals. It is inadvisable to sign a contract with an open-ended clause that allows a company to charge for removal of any wild animal captured on the customer's property. This is unrelated to the customer's problem, as well as unnecessary, expensive and unethical.
- 5. The company will demonstrate a commitment to humane capture and handling techniques. When removing animals from inside a structure and in the use of live-catch box traps, operators must use methods that reduce stress and keep animals from unnecessary harm. If live-catch box traps must be used, traps will be checked at least once daily, covered appropriately and not be set in bad weather (such as extremes of heat or cold or predicted heavy precipitation) unless the trap is protected within a dwelling. The company will encourage homeowners to allow on-site release so the animal remains in his own habitat and has the best chance of survival. If a trap must be used, the NWCO will check all trapped mammals

prior to release for signs of lactation (enlarged nipples) during the birthing and rearing seasons (spring–fall) to ensure that a mother is not separated from her young and that the young are not left behind to starve.

- **6.** The company will use methods that prevent orphaning of dependent young. Since the bulk of NWCO work occurs during wildlife birthing and rearing seasons, NWCOs should adhere to the following protocols:
  - a: The NWCO will do a thorough inspection to see if young are present.
  - b: If young are found, the NWCO will encourage the homeowner to give the animal family a "grace period" (i.e., let the mother raise her young and leave on their own), as long as the animals are not damaging the house or property or creating any human health or safety risk.
  - c: When a grace period is not possible:
    - If the babies are not yet mobile (i.e., not yet following the mother during outdoor forays), the operator will hand-capture the babies to be reunited outside (on-site) and use an appropriate method, such as a one-way door, to encourage the mother to self-evict. Or the NWCO will use harassment to encourage the mom to relocate young and will confirm the mother and all young are no longer within the structure before proceeding with exclusion of the entry point.
    - A one-way door should be used only if the young are mobile enough to leave with the mother or if they can be placed outside near the one-way door or in an appropriate reunion container for the mother to retrieve them.
  - d: Every reunion effort will adhere to the following standards:
    - Extremely young animals (eyes closed, barely furred) will be provided with a heat source—such as a heating pad wrapped in a towel—when placed for retrieval so they don't become compromised and then die or get rejected by parent(s).
    - The young will be placed in a reunion box immediately outside the entry hole, den or one-way door, or on the ground (if parent(s) in immediate area) for the mother to retrieve. The young will be monitored to ensure retrieval. Reunion boxes must contain the babies but have a doorway that the mother can push through to get her young. The box or container must be placed in an appropriate spot shielded from heat, out of reach of predators and at the appropriate time of day when the parent is active. Many animals won't find their young if the babies are not left at the den/nest site or extremely close to it.

- If the young are not retrieved, the NWCO will make every effort to take the orphan(s) to a wildlife rehabilitator for placement.
- 7. The company will not use inhumane capture or killing methods such as drowning, car exhaust, acetone injections, kill traps (conibear traps, neck snare devices), glue traps, poisons or smoke bombs. All animals can be released on site in every state, and no state requires that animals have to be killed.
- **8.** The company will only euthanize animals if they are mortally injured, sick or endangering public safety.

**Note:** With rabies-vector species (e.g., raccoon, skunk, fox) the NWCO usually has two options according to state policies: to release on-site or euthanize. The NWCO should make every attempt to release (with the homeowner's permission) and seal off the animals' denning cavity rather than killing healthy animals.

Acceptable euthanasia methods are those approved by the American Veterinary Medical Association, which include: carbon dioxide chamber (CO<sup>2</sup>), proper carbon monoxide (CO) chamber (NOT car exhaust), gunshot where firearm discharge is legal, or lethal injection by veterinarian. The NWCO must agree to follow the most recent AVMA Guidelines on Euthanasia (see most recent Euthanasia Panel Report of the AVMA), excepting any extenuating circumstances that involve human health or safety.



People may be surprised to find raccoon families denning in their chimney, yet this is a rather common occurrence. We urge people to cap their chimneys if they don't want unexpected guests, even if this is just a temporary fix until the final and more major repair can be done by a professional.

# **Rabies: The myth and the reality**

#### Fears about rabies are common and frequently overblown. Here's what to tell callers with concerns.

People often panic about rabies due to misleading media and folklore. They mistakenly think rabies is an airborne virus or that any raccoon seen during the day is a threat to their family's health and safety. Given all the media attention, it's surprising to find out that on average only two to three people contract rabies in the United States each year. Human fatalities due to lightning strikes, jellyfish and bad hamburgers far exceed the number of human deaths caused by rabies.

Of course, this doesn't mean we shouldn't be concerned about rabies. Instead, it means we should arm the public with knowledge and help callers take sensible precautions when it comes to preventing exposure to rabid wildlife. People can prevent the contraction of rabies by vaccinating their companion animals, not approaching or feeding wildlife and getting prompt treatment from appropriate medical personnel after direct contact with a potentially rabid animal. (Visit the Centers for Disease Control and Prevention at *cdc.gov* for more general information about rabies.)

#### What to tell callers

#### **General concerns**

#### If I see a raccoon or skunk out by day, is he rabid?

No, not if the animal is acting normally otherwise. There are many reasons you may see a typically nocturnal animal (such as a raccoon or skunk) out during the day. They could be displaced from their den, taking advantage of freshly put out cat food, gathering food for their young or even just taking a break from the demand of nursing babies for a while!

#### Which animals carry rabies?

Any mammal, including humans, can contract and carry rabies.

### How will I be able to tell if an animal has rabies? What signs do I look for?

In the active ("furious") form of rabies, wild animals may appear to

be agitated, bite or snap at imaginary and real objects and show unprovoked aggression. In the inactive ("dumb") form, wild animals may appear uncharacteristically tame and show no fear of humans. Animals may also seem neurologically impaired; they may seem disoriented, look drunk or wobbly, appear partially paralyzed, drag a limb or even circle repeatedly. Although most of these neurological signs can be indicative of other things—such as distemper, head trauma or lead poisoning—there are two signs which seem exclusive to rabies: self-mutilation (e.g., chewing off toes) and a continual, high-pitched vocalization.

#### Can I get rabies from feces or blood?

No, rabies is not transmitted through the blood, urine or feces of an infected animal, nor is it spread airborne through the open environment. Saliva provides the primary transmission medium when the animal is in the clinical (visibly showing signs) stage of rabies. Yet before the rabies virus can get to the salivary glands, it has to travel first from the site of entry (usually a bite wound) through the animal's nervous system and on to the brain.

When the virus hits the brain, the rabid animal begins to show abnormal behaviors, depending on which part of the brain is infected. Finally, the virus travels to the salivary glands during the clinical stage of rabies, just prior to death. It is this latter stage of rabies when an animal is most infectious because the virus is in the saliva. If the rabid animal bites another animal in this stage, it can transmit the virus to a new mammal host.

## Can I get rabies by sitting on grass that a rabid animal drooled on?

No, the virus cannot penetrate intact skin. People can get rabies through a bite from a rabid animal or through scratches, abrasions, open wounds or mucous membranes contaminated with saliva or brain tissue from a rabid animal. But the virus dies on contact with air and isn't viable after the saliva dries. If you are handling a companion animal who has been in a fight with a potentially rabid animal, wear gloves to prevent contact with any still-fresh saliva. Other contact, such as petting a rabid animal or intact skin contact with the blood, urine or feces of a rabid animal, does not constitute an exposure.

#### Don't many people die every year of rabies in the U.S.?

The CDC has compiled statistics on the number and type of human rabies cases in the United States since 1980. The handful of human deaths from rabies annually (on average 2.4 a year, nationwide) has been largely due to a bat strain or canine strain from abroad. Most of the bat cases have been of the silver-haired bat strain, which is surprising: This species is rarely found around human houses.

Only one human has ever died from the raccoon strain of rabies, despite people's growing fears about raccoons. The low incidence of human rabies in the U.S. doesn't mean people can't contract rabies; it just means they need to take sensible precautions to prevent exposures and seek prompt post-exposure prophylaxis when advised to do so by health authorities.

Rabies is 100% preventable if the post-exposure prophylaxis is administered.

## What should I tell callers who have been bitten by a potentially rabid animal or handled their own animal who was in a fight?

They should be advised to wash the wound thoroughly with soap and water, monitor the biting animal's whereabouts and immediately contact their local animal control officer for assistance in capturing the animal for rabies testing. Then they should contact their local health department for instructions and to report the incident. Next, they should contact their physician for further advice. If they're unsure whether the bite broke the skin on their hands, they can put their hands in rubbing alcohol to see whether and where it stings. Questions about rabies should go to the health department.

#### What to tell callers

#### **Species-specific questions**

Don't a lot of bats carry rabies?

Actually, a very small percentage of bats carry rabies, much less than 1% of any population at any one time. However, if you suspect that a bat has bitten you or if a bat is found in the room where a person is sleeping or incapacitated, current health guidelines recommend that the bat be tested for rabies and that you contact your local health department and/or doctor for instructions.

#### Isn't a fox seen by day rabid?

Foxes haven't read the textbooks telling them to be nocturnal. They are active when mice and other small prey are active, which is why it's common to see foxes hunting by day. It's also normal for kits to be seen playing by themselves, seemingly without parental supervision, and showing little fear of people. Kits are left behind for short periods of time while the parents go off hunting, something that continues until the kits are old enough to go along.

#### I see a baby raccoon outside during the day—is he rabid?

It's possible that this baby has been temporarily separated from Mom or that she is truly orphaned. When baby raccoons are orphaned, they don't know night from day—they only know that they are extremely hungry. If the baby isn't retrieved by the mother after several hours (moms rarely leave their cubs alone for long), use heavy gloves or a trowel to push the baby into a cardboard box with a ventilated top and a flannel shirt for comfort. Do not touch the raccoon with your bare hands. Go to *humaneworld.org/wildliferehab* to locate a rehabilitator licensed to take in raccoons.

## There's a baby skunk running around by day—is the skunk rabid?

It's possible, but it's more likely that the skunk has lost sight of his mother because skunks are so nearsighted. Advise the caller to put a plastic laundry basket upside-down over the skunk to hold him in place and to give the mom a chance to retrieve him (the mother will be able to flip up the edge of the basket). If the skunk appears truly orphaned, go to *humaneworld.org/wildliferehab* to locate a rehabilitator.

### There's an opossum hissing and drooling at me—is the opossum rabid?

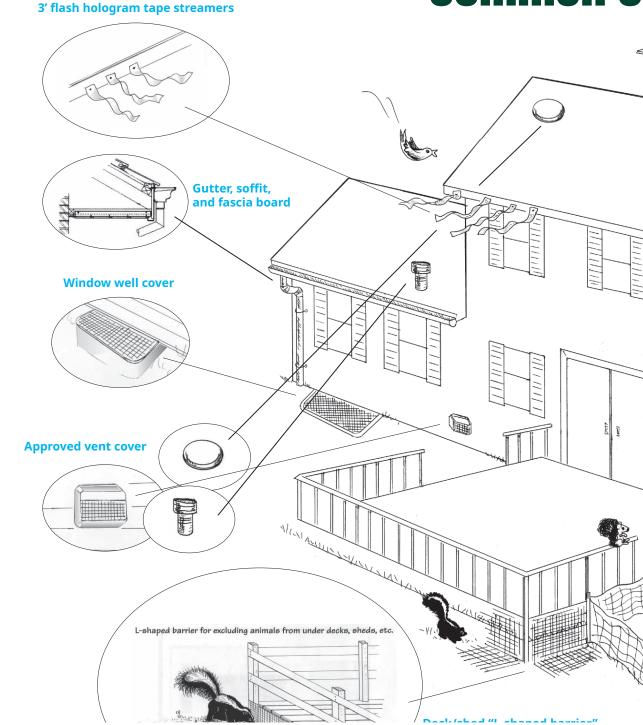
For unknown reasons, opossums are amazingly resistant to rabies. Hissing, drooling and swaying are part of the opossum's bluff routine to scare you and other predators away. Unlike other animals, opossums don't always flee when they're scared; they tend to hold their ground and rely on various behaviors to scare off the threat. Advise callers to leave the opossum alone, and eventually he'll wander off.

#### I see a woodchuck/groundhog circling and falling over is he rabid?

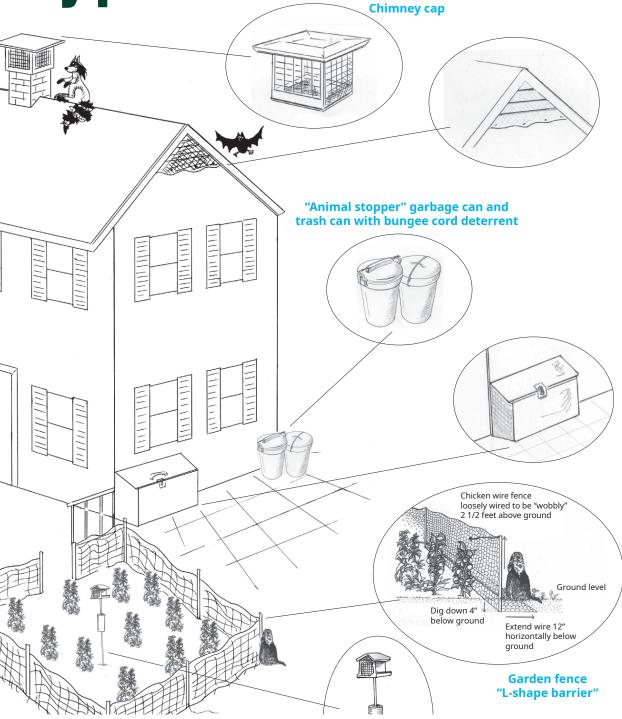
For unknown reasons, woodchucks are more prone to contracting rabies than other species of rodents. Woodchucks are also susceptible to the roundworm brain parasite, which causes behavior that can look very similar to rabies. Roundworm is transmitted through the ingestion of an infected animal's feces. Keep people and companion animals away from any sick-acting woodchuck, and contact your local animal control officer or rehabilitator for assistance.

## **Solutions for common entry points**

## Solution Common e



## ons for ntry points



# Web resources

Humane World for Animals' web resources are available for your use in providing information to callers about how to resolve conflicts with wildlife. Please feel free not only to provide these web addresses to callers but also to link directly to our main website (*wildneighbors.org*) or to our specific links below on your community and/or shelter website.

#### **Species conflicts**

Bats humaneworld.org/bats

Bears humaneworld.org/blackbears

**Beavers** humaneworld.org/beavers

**Bobcats** humaneworld.org/bobcats

**Canada geese** *humaneworld.org/geese* 

**Cougars** humaneworld.org/cougars

**Coyotes** humaneworld.org/coyotes

**Crows** humaneworld.org/crows

**Deer** humaneworld.org/deer

Foxes humaneworld.org/foxes

**Opossums** humaneworld.org/opossums

**Pigeons** humaneworld.org/pigeons Rabbits humaneworld.org/rabbits

Raccoons humaneworld.org/raccoons

Skunks humaneworld.org/skunks

**Snakes** humaneworld.org/snakes

Squirrels humaneworld.org/squirrels

Wild mice humaneworld.org/wildmice

Wild rats humaneworld.org/wildrats

Wild turkeys humaneworld.org/wildturkeys

Woodchucks (Groundhogs) humaneworld.org/woodchucks

Solving problems with wildlife (all) wildneighbors.org

#### Wildlife issues

Found an orphaned or injured baby wild animal? humaneworld.org/babywildlife

How to find a wildlife rehabilitator humaneworld.org/wildliferehab

Choosing a wildlife control company humaneworld.org/wildlifecompany

Scrap the trap humaneworld.org/traps

Fence out digging animals humaneworld.org/digginganimals

Keep wildlife out humaneworld.org/keepwildlifeout

**Preventing cavity nesters** *humaneworld.org/cavitynesters* 

**Protecting gardens from wildlife** humaneworld.org/protectgarden

Squirrels and birdfeeders humaneworld.org/squirrelproof

**Understanding rabies** *humaneworld.org/rabies* 

Lyme disease humaneworld.org/lyme

Wildlife rehabilitators:
Humane NWCOS:
Tree climbers:
Chimney service:
Volunteers/wildlife rescuers:
State wildlife dept:
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Other:



# Wildlife conflict resolution trainings

Humane World for Animals offers wildlife conflict resolution webinars for animal care and control professionals who want to know more about humanely solving conflicts with wildlife. Find them at *humanepro.org/wildlifewebinars*.

Humane World for Animals is an approved provider of content which enhances professional competence and aligns with the five domains of the CAWA Exam specifications. Every hour of training equals 1 CE towards CAWA Recertification.

Webinars that meet the eligibility requirements for NACA are approved for CEUs.

#### Webinar topics include:

- · Wildlife in our neighborhoods
- Top 10 tips for taking wildlife calls
- Handling "nuisance" wildlife calls
- Reuniting and renesting of orphaned wildlife
- · Working with wildlife control services
- · Becoming a more wildlife-friendly agency

- · Advanced wildlife handling protocols
- · Wildlife and rabies
- Cats and wildlife
- · Protecting your pets and wildlife from traps
- · Solving conflicts with:
  - Bats
  - Bears
  - Bobcats
  - Canada geese
  - Coyotes
  - Deer
  - Iguanas
  - Mice and rats
  - Pigeons
  - Prairie dogs
  - Raccoons

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## **Our mission**

Together, we tackle the root causes of animal cruelty and suffering to create permanent change.



humaneworld.org

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