
SKUNKS

Integrated Pest Management Around the Home and Landscape

Two species of skunk are found in California, the striped skunk (*Mephitis mephitis*) (Fig. 1), which is the most commonly found species, and the spotted skunk (*Spilogale gracilis*). Both are members of the weasel family and are equipped with a powerful and protective scent gland that can shoot a potent and pungent liquid as far as 6 to 10 feet. The secretion is acrid enough to cause nausea and can produce severe burning and temporary blindness if it strikes the eyes.

BIOLOGY AND BEHAVIOR

The striped skunk is about the size of an adult house cat and its fur is mostly black with white on top of the head and neck. In most animals the white extends down the back, usually separating into two white stripes. Spotted skunks are black with white spots or short white streaks. They are smaller than the striped skunk, about half the size of a house cat.

Skunks are nocturnal, hunting at night for insects, grubs, small rodents, snakes, frogs, mushrooms, berries and fruit, pet food, bird food, and garbage. Skunks have a high preference for eggs and, as a result, ground-nesting birds suffer losses.

Breeding usually occurs during February and March for the striped skunk; gestation time is about 9 weeks and litters range from four to six kits. After a few months the kits can be seen following their mother as she makes her nightly rounds in search of food. Skunks do not hibernate, but in regions of colder weather females may congregate in communal dens during the winter.

Skunks often den in burrows, but because they prefer to do as little digging as possible, they will use abandoned burrows dug by ground squirrels, fox, or coyotes,

enlarging them only if necessary. If dens are scarce, they will readily use brush piles, hollow logs, and culverts. In urban settings, they den under decks, porches, or beneath buildings.

There is cause for concern when skunks take up residence in an urban or suburban area because in California they are primary carriers of rabies, a viral disease transmitted by the bite of an infected animal. Skunks are also carriers of other diseases including leptospirosis, listeriosis, canine distemper, canine hepatitis, Q-fever, tularemia, and trypanosoma.

Skunks are attracted to residential areas by the ready availability of food, water, and shelter. They become a nuisance when they live under porches, decks, garden tool sheds, or homes. They like to feed on ripening berries and fallen fruit and cause many other garden problems by digging while in search of grubs and other insects. They often search for food in lawns by digging small pits or cone-shaped depressions that range from 3 to 5 inches across. Like raccoons, they may also damage lawns by rolling back sections of sod in search of insects.

LEGAL STATUS

The California Fish and Game Code classifies skunks as nongame mammals. Nongame mammals that are injuring or threatening property may be taken by the owner or tenant of the premises at any time and in any legal manner. Fish and Game regulations prohibit the relocation of skunks and other wildlife without written permission of the Department of Fish and Game. The prevalence of rabies in the skunk population is one of several major reasons for de-



Figure 1. Adult striped skunk.

nying relocation. For further information on the legal status of skunks, contact the California Department of Fish and Game.

MANAGEMENT

Because rabies is endemic in the skunk population, some city or county health departments assist in the control of skunks by providing trappers to remove them from residential areas. The skunk's propensity to spray their musk-laden spray is sufficient to make them unwelcome visitors, especially in close proximity to homes. Several actions can be taken to make gardens, yards, and residences less attractive to skunks.

Detection

Because they are usually active only at night, many people never see skunks as they travel through their neighborhoods or yards. Barking dogs may be the first apparent sign of their presence, and the odor resulting from a skunk/dog confrontation will provide positive evidence. If skunks repeatedly travel

through your yard or garden, sooner or later you will detect a faint skunk odor, even if the skunk has not sprayed. As with raccoons, an occasional visit by a skunk or a family of skunks may not be cause for concern, but if these visits become commonplace, some action is probably warranted. During the breeding season, males frequently spray when fighting over females. The presence of these odors in late winter is a signal that skunks might be nearby and that it could be necessary to take appropriate measures to prevent pregnant females from accessing potential nesting sites underneath buildings.

Habitat Modification

Potential den sites can be limited by cutting back overgrown shrubbery and by stacking firewood tightly. To reduce food sources, fallen fruit should be removed frequently. Garbage cans should have tight-fitting lids, and food items or table scraps should not be placed in compost bins. Food placed out-of-doors for pets should be removed by nightfall.

Exclusion

As with many other vertebrate pests, the best solution to skunk problems beneath porches or buildings is to screen or block them out. Close off all potential entrances or openings under houses, garden tool sheds, mobile homes, porches, and decks with ¼-inch mesh hardware cloth. The advantage of using the small mesh is that it will also exclude rats and house mice if installed correctly. Skunks will work hard to get into a desirable denning space, so take care to make fittings good and tight. If there is soil underneath the potential entrances, bury the wire 6 inches to make a good seal.

Once skunks have made their home beneath a building, the problem is a little more difficult because you have to be sure the animals have left before blocking the opening. One way to determine this is to sprinkle a smooth, ⅛-inch thick layer of flour just in front of the point of entrance to form a tracking patch. Examine the tracking patch soon after dark; the presence of footprints will indicate that the animal has left and the opening can be closed.

However, blocking the entrance is more problematic if there are several young left behind. If you are not sure that all the skunks beneath a building have left, a one-way, outward-swinging gate can be fashioned that will allow any remaining skunks to leave but not to re-enter. This gate can be constructed from ½-inch mesh hardware cloth hinged at the top of the frame and left loose on the other three sides. It must be larger than the opening so that it can only swing outward (Fig. 2). Skunks will push it open to leave but will not be able to push it inward to reenter. This is ineffective, of course, if the kits are not yet mobile; kits not yet able to walk may have to be removed by other means. The placement of one or more floodlights beneath the building facing outward through the skunk's entry point will often assist in driving them away from a location.

Trapping

Skunks can be trapped with an enclosed cage-type, live-catch trap. Plastic box traps are superior to wire traps because they are completely enclosed, thus reducing the risk of getting sprayed while removing the trapped animal from the site. Individuals who have no experience trapping skunks should hire a professional wildlife control operator. Professionals have the experience and all the necessary equipment to trap and dispatch the animal. An experienced trapper is also much less apt to be sprayed, an event to be avoided if at all possible. Skunks cannot be relocated without a permit, and because of the potential for rabies it is unlikely the Fish and Game Department will issue one.

Other Control Methods

A few commercial products are available for repelling skunks, but unfortunately they are not very effective. Ordinary household ammonia has been used with some reported success as a home remedy repellent for driving skunks from beneath buildings.

It is sometimes also suggested that food for skunks can be reduced by managing grubs and other insects in lawns. This is done with the hope that the animal will

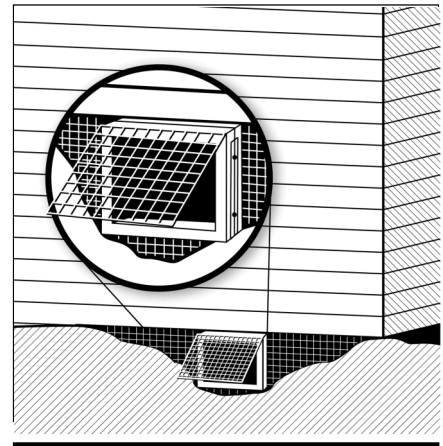


Figure 2. A one-way door constructed to allow an animal to exit but not to return. Screen door must overlap frame to prevent reentry.

refrain from further digging. If your lawn is infested with insects or grubs, see *Pest Notes: Lawn Insects*, listed in References, or contact your local Cooperative Extension office.

Burrow fumigants such as gas or smoke cartridges may be used in rural areas if the burrows used by skunks can be located and are not under or near buildings. They are not generally recommended for use in residential areas because of the risk of fire and penetration of the gas into buildings. These cartridges are ignited and pushed into the skunk's burrow. The burrow is then sealed off with soil and packed tightly to prevent the toxic and asphyxiating smoke from escaping. Follow the product instructions carefully.

In rural areas where it is safe to do so, skunks may be spotlighted at night and shot. Since they may spray in the process, be selective in the location chosen for this control method.

Odor Removal

There are several options for odor removal. The chemical neutrolem-alpha is one of the most useful neutralizers for removing the unpleasant skunk scent on furniture or in buildings, but this material and products containing it are not readily available. There are also other commercial products sold for neutralizing or masking skunk odor. If

you cannot find such products easily, contact a professional wildlife control operator, who may be able to provide neutroleum-alpha or can tell you where it can be purchased. Do not use neutroleum-alpha on pets or people. If your dog or cat has confronted a skunk, call your veterinarian to determine current recommendations for washing the animal to get rid of skunk odor.

A home remedy formulation reported by some to be effective is as follows:

- 1 quart 3% hydrogen peroxide
- ¼ cup baking soda
- 1 teaspoon liquid soap.

Once the hydrogen peroxide is mixed with the baking soda, the mixture is unstable and generates oxygen, and thus cannot be bottled or stored. Apparently, oxidation changes the chemical composition of skunk scent so that it no longer smells. When the

fresh mixture is applied to items contaminated by skunk odor, the smell diminishes quickly. Any leftover mixture should be diluted several fold with water and poured down the drain. Hydrogen peroxide mixtures can be used safely on pets and people as well as on clothing and furniture. Rinse pets thoroughly with water after treatment.

Skunk Bites

Rabies, an infectious disease caused by a virus organism, is found in the saliva of infected animals. It affects only mammals and is transmitted most commonly by a bite. With the exception of bats, the disease is almost always fatal. People can survive the bite of a rabid animal, but only if medical attention is received in time.

A physician should attend to ALL skunk bites, no matter how minor, and the local health department should be notified of the incident.

Skunks that seem tame or listless and wander about during daylight hours should be treated with great caution because this behavior is symptomatic of rabies. Also, if they exhibit no fear of people or pets and show some aggressive behavior, chances are quite high that they are rabid.

If you live in an area where skunks occur, be sure your dogs and cats are routinely vaccinated against rabies. Some dogs will confront skunks whenever they get an opportunity. Even though they suffer when they get sprayed, some dogs never learn.

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For more information contact the University of California Cooperative Extension or agricultural commissioner's office in your county. See your phone book for addresses and phone numbers.

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To simplify information, trade names of products have been used. No endorsement of named products is intended, nor is criticism implied of similar products that are not mentioned.

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WARNING ON THE USE OF CHEMICALS

Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property being treated. Avoid drift onto neighboring properties, especially gardens containing fruits or vegetables ready to be picked.

Do not place containers containing pesticide in the trash nor pour pesticides down sink or toilet. Either use the pesticide according to the label or take unwanted pesticides to a Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Household Hazardous Waste Collection site nearest you. Dispose of empty containers by following label directions. Never reuse or burn the containers or dispose of them in such a manner that they may contaminate water supplies or natural waterways.

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