



# Skunks

## Integrated Pest Management for Home Gardeners and Landscape Professionals

Two species of skunk are found in California, the spotted skunk (*Spilogale gracilis*) (Figure 1) and the striped skunk (*Mephitis mephitis*) (Figure 2), which is the species most commonly found around homes. Although originally considered members of the weasel family, recent genetic research has placed skunks into their own family Mephitidae. Both skunk species produce an oily, yellow sulfur-alcohol compound that contains sulfuric acid. This pungent liquid is stored in two separate scent glands located on each side of the anus and can be squirted accurately at targets as far as 6 to 10 feet away as a self-defense mechanism. The secretion is acrid enough to cause nausea and can produce severe burning and temporary blindness if it strikes the eyes.



Figure 1. Adult spotted skunk, *Spilogale gracilis*.

### IDENTIFICATION

Skunks have a triangular-shaped head and a moderately elongated body with short, muscular legs and long, sharp non-retractable claws. 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.

### BIOLOGY AND BEHAVIOR

Striped skunks are primarily active at dawn, dusk, and at night but can be active during the daytime, particularly in human-use areas. Spotted skunks rarely venture out during the daytime. Both skunk species consume a highly-varied diet including insects, grubs, earthworms, small rodents, snakes, lizards, frogs, mushrooms, berries and fruit, pet food, and garbage. Skunks will also opportunistically feed on bird eggs, which can result in substantial losses to ground-nesting birds when skunk densities are high. Food items found in their diet will vary seasonally depending on availability.

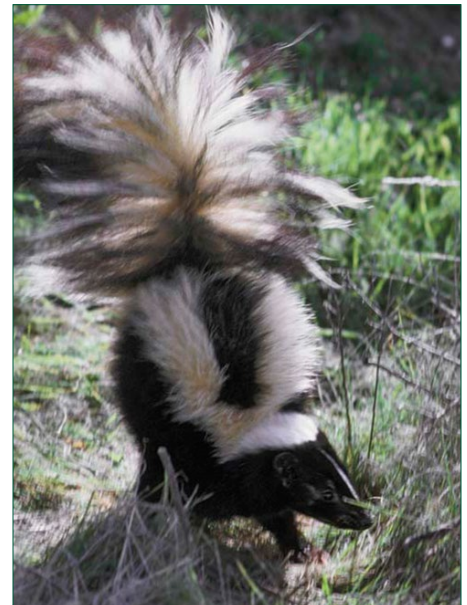


Figure 2. Adult striped skunk, *Mephitis mephitis*.

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Breeding usually occurs during February and March for the striped skunk; gestation time is about 9 weeks and litters range from 4 to 6 kits. After 2 to 3 months, the kits can be seen following their mother as she makes her nightly rounds in search of food. Skunks are capable of breeding the

spring following birth. The average life span of skunks is around 2 to 3.5 years, although they can occasionally live up to 7 years in the wild.

Skunks often den in burrows. They will often use abandoned burrows dug by ground squirrels, foxes, or coyotes and

will enlarge them 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. If other suitable dens are unavailable, skunks will dig their own dens. Skunks do not hibernate; but in regions with colder weather, they may congregate in communal dens during the winter.

Skunks are attracted to residential areas by the availability of food, water, and shelter. They become a nuisance when they live under porches, decks, garden tool sheds, or homes. Their scent is usually not welcome around homes, and they often spray dogs that bark and approach rapidly. They like to feed on ripening berries and fallen fruit and cause 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.

Skunks have an excellent sense of smell and good hearing, but they have very poor vision. This poor vision explains why they are often hit by cars when crossing roads. A skunk may not react if a person more than 10 feet away is quiet and standing still or moving slowly. Healthy skunks are mild-tempered animals. They are not aggressive and, given the opportunity, prefer to flee rather than fight. They usually only defend themselves when suddenly frightened, cornered, or harmed. Skunks usually provide a warning before discharging their scent by stamping their forefeet rapidly, hissing, and arching their tail over their back. Skunks prefer not to spray given the time required to replenish their spray supply. Therefore, using caution around skunks should substantially reduce the possibility of being sprayed.

Disease concerns occur when skunks take up residence in an urban or suburban setting. In California, skunks are one of the most common carriers of rabies, a viral disease transmitted by the bite of an infected animal. Skunks

can also be carriers of other diseases including leptospirosis, listeriosis, canine distemper, canine hepatitis, Q-fever, and tularemia.

## LEGAL STATUS

The California Fish and Game Code classifies skunks as nongame mammals. The owner or tenant of the premises may lethally remove nongame mammals that are injuring or threatening 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 California Department of Fish and Wildlife. The prevalence of rabies in the skunk population is one of several major reasons for denying requests for relocation. For further information on the legal status of skunks, contact the California Department of Fish and Wildlife ([www.wildlife.ca.gov](http://www.wildlife.ca.gov)).

## 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. Some private pest control companies will also trap and remove skunks for a fee. The skunk's tendency to spray their musk-laden spray is sufficient to make them unwelcome visitors, especially in close proximity to homes. However, removing a skunk from a property may not offer a permanent solution if nothing is done to deter other skunks from the property. Several actions can be taken to make gardens, yards, and residences less attractive to skunks.

## DETECTION

Because they are usually active only at low-light hours and at night, many people never see skunks as they travel through 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 and other structures.

## Habitat Modification

The most effective way to make your property less attractive to skunks is by reducing access to food, water, and shelter that the animals need. To reduce food sources, fallen fruit and spilled seed from bird feeders should be removed frequently. Garbage cans should have tight-fitting lids, and food items or table scraps should not be placed in compost bins; use "hot" rather than "cold" compost method to process organic waste. Food placed outdoors for pets should be removed by nightfall. Intentionally feeding a wild skunk, even when done with good intentions, is a harmful practice. The skunk or its young may become dependent on the unnatural food source and lose their fear of people. This increases the chance that an adult or child may be bitten. Also, the skunk may be trapped or killed when it wanders into another yard where it is not welcome.

It is also suggested that the management of grubs and other insects in lawns can reduce food for skunks. In theory, this will deter the animal from further digging. If your lawn is infested with insects or grubs, see *Pest Notes: Lawn Insects* or contact your local University of California Cooperative Extension office.

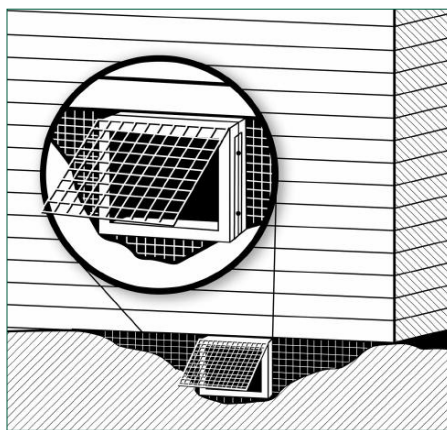
Potential den sites can be limited by cutting back overgrown shrubbery and by stacking firewood tightly, preferably at least 18 inches above the ground. Remove boards, rocks, and debris lying on the ground, as insects that skunks

feed on hide under these objects. Also, control mice and rats so that their numbers do not build up and provide an abundant food source for skunks.

### Exclusion

As with many other vertebrate pests, the best solution for 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 at least 6 inches to discourage skunks from digging under.

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. Skunks will push it open to leave but will not be able to push it inward to re-enter. 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



**Figure 3. A one-way door constructed to allow an animal to exit but not to return.**

outward through the skunk's entry point will often assist in driving them away from a location.

### Trapping

Skunks can be caught 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. If a wire live trap is used, cover the back end with an old blanket when setting the trap. The blanket serves two purposes. First, it provides shelter for the skunk. Secondly, it allows the trapper to slowly cover the entire trap once the skunk is captured. Skunks are less stressed when in dark environments and thus are less likely to spray. Be careful when placing the blanket on the back end of the trap so that it does not interfere with the trigger mechanism. Once the trap has been completely covered with the blanket, the trap can be relocated to a carbon dioxide gas chamber ([icwdm.org/pages/CO2.aspx](http://icwdm.org/pages/CO2.aspx)) for euthanasia. If in a remote area, shooting can also be used to euthanize the trapped skunk. However, skunks usually spray when shot, so shooting may not be the best approach. Note that drowning is not an acceptable or legal form of euthanasia. Once euthanized, skunks can be double-bagged and disposed of in the garbage.



**Figure 4. Cage trap with blanket covering the back end.**

Traps can be baited with a variety of foods including sardines, canned cat food, tuna, or bacon. Sweeter foods also work (e.g., peanut butter, apples, melon rinds, marshmallows, doughnuts, etc.) and may be less likely to capture cats.

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 California Department of Fish and Wildlife will issue one.

### Other Control Methods

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 firearms can be used and it is safe to do so, skunks may be shot. Since they may spray in the process, be selective in the location chosen for this control method.

There are no registered toxicants for poisoning skunks. Poison baits sold for the control of rodents should never be used in an attempt to remove skunks. The penalty for such pesticide misuse can be substantial, and illegal poisoning usually comes to light as a result of the accidental poisoning of someone's pet.

A few commercial products are available for repelling skunks, but unfortunately they are not very effective. A rag soaked with ordinary household ammonia has been used with some reported success as a home remedy repellent for driving skunks from beneath buildings. However, ammonia and other repellents with a strong odor should not be placed under an occupied building since fumes can enter the interior space, especially if air is drawn from beneath the building by a furnace or climate control system.

### 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 neutrolem-alpha or can tell you where it can be purchased. Do not use neutrolem-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
- and 1 teaspoon liquid soap.

Once the hydrogen peroxide is mixed with the baking soda the mixture is unstable and generates oxygen and 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. However, care should be taken to keep the mixture out of the eyes. Rinse pets thoroughly with water after treatment.

### Skunk Bites

Rabies, an infectious disease caused by a virus, is found in the saliva of infected animals. It affects only mammals and is transmitted most commonly by a bite. People can survive the bite of a rabid animal but only if medical attention is received in time. A physician should promptly 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 in an unusual manner 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. People with a high risk of occupational exposure to rabies should also consult with their physician about the possible benefit of being vaccinated.



## REFERENCES

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## WARNING ON THE USE OF PESTICIDES

Pesticides are poisonous. Some pesticides are more toxic than others and present higher risks to people, nontarget organisms, and the environment. A pesticide is any material (natural, organic, or synthetic) used to control, prevent, kill, suppress, or repel pests. "Pesticide" is a broad term that includes insecticides, herbicides (weed or plant killers), fungicides, rodenticides, miticides (mite control), molluscicides (for snails and slugs), and other materials like growth regulators or antimicrobial products such as bleach and sanitary wipes that kill bacteria.

Always read and carefully follow all precautions and directions provided on the container label. The label is the law and failure to follow label instructions is an illegal use of the pesticide. 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, and animals. Never place pesticides in food or drink containers. Consult the pesticide label to determine active ingredients, correct locations for use, signal words, and personal protective equipment you should wear to protect yourself from exposure when applying the material.

Pesticides applied in your garden and landscape can move through water or with soil away from where they were applied, resulting in contamination of creeks, lakes, rivers, and the ocean. Confine pesticides to the property being treated and never allow them to get into drains or creeks. Avoid getting pesticide onto neighboring properties (called drift), especially onto gardens containing fruits or vegetables ready to be picked.

Do not place containers with pesticide in the trash or pour pesticides down the sink, toilet, or outside drains. Either use all the pesticide according to the label until the container is empty or take unwanted pesticides to your local Household Hazardous Waste Collection site. Contact your county agricultural commissioner for additional information on safe container disposal and for the location of the Hazardous Waste Collection site nearest you. Follow label directions for disposal of empty containers. 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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**This and other Pest Notes are available at [ipm.ucanr.edu](http://ipm.ucanr.edu).**

For more information, contact the University of California Cooperative Extension office in your county. See your telephone directory for addresses and phone numbers, or visit: [ucanr.edu/County\\_Offices](http://ucanr.edu/County_Offices).

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