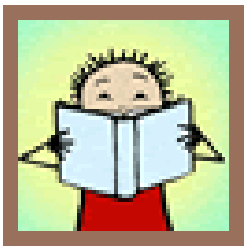
BIOLOGY, LEGAL STATUS, CONTROL MATERIALS, AND DIRECTIONS FOR USE

Skunks

Family: Mephitidae

Fig. 1. Striped skunk (*Mephitis mephitis*)

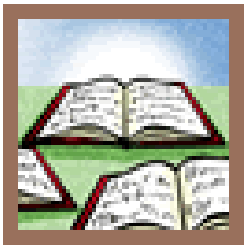
Fig. 2. Western spotted skunk (*Spilogale gracilis*)



Introduction: Two species of skunk are found in California; the striped skunk and the rarer western spotted skunk. Skunks were originally included in the weasel family, but recent genetic research has shown sufficient difference to place them in their own family (Mephitidae). Both skunk species are equipped with a powerful and protective scent gland that can spray a potent and pungent sulfur-alcohol liquid up to 10 feet with accuracy. The secretion is acrid enough to cause nausea and can produce severe burning and temporary blindness if it strikes the eyes. The spotted skunk is fewer in numbers throughout the state and less tolerant of human activity.

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 (Fig. 1) is about the size of an adult house cat, 2 to 3 feet long, including tail, and weighing 10 to 15 pounds, with the familiar black fur and white coloring on the top of the head and neck. In most animals the white extends down along the back, separating into 2 white stripes. Conversely, spotted skunks are black with white spots or short streaks of white (Fig. 2). They are smaller than striped skunks by about 50%.

Because skunks are active at night, many people never see them as they travel through their neighborhoods or yards. Barking dogs may be the first apparent clue. If skunks travel through your yard or garden repeatedly, you should be able to detect a faint skunk odor, even if the skunk has not sprayed. The presence of skunk odor in late winter is a signal to keep an eye out for the presence of skunks. At this time, appropriate measures may be necessary to deny pregnant females access to potential nesting sites underneath buildings.



Legal Status: The California Fish and Game Code classifies skunks as nongame mammals. The owner or tenant of premises may lethally remove nongame mammals that are injuring or threatening property at any time and in any legal manner. California Fish and Game regulations prohibit the relocation of skunks and other wildlife without written permission from the California Department of Fish and Wildlife. The prevalence of rabies in the skunk population is one of several major reasons for denying relocation. For further information on the legal status of skunks, contact the California Department of Fish and Wildlife.

Damage: Skunks are often a nuisance, but do not frequently cause property damage. They are attracted to residential areas by the availability of food, water, and shelter. They become a nuisance when they live under open porches, decks, and garden sheds, or if access is possible, beneath homes. Ripening berries and fallen fruit are a skunk favorite. Many garden problems are caused by their digging activities while in search of grubs and other insects. In lawns, they may dig small pits or cone-shaped depressions from 3 to 5 inches in diameter in search of food. Also they may roll back sections of newly laid sod searching for insects. Obviously, their spray is quite objectionable.

Range: Striped skunks are found throughout California except at elevations above tree line and in xeric desert habitats. Western spotted skunks are far less numerous that striped skunks, but they can be found in most of the same locations.

Striped Skunk Western Spotted Skunk

Habitat: Although very generalist in nature, striped skunks do prefer open grasslands, earlier seral-stage forests, residential areas, and numerous edge habitats. Western spotted skunks utilize many of the same habitats, although interspersion of these habitats is more important for spotted skunks than for their striped skunk counterparts. Spotted skunks also have a stronger preference for open forested sites and riparian areas, and they are not consistently found in urban or residential areas.

Biology: Striped skunks usually breed during January through March, with litters born about 9 weeks later. Western spotted skunk litters are generally born during the same time-period, although breeding occurs September through October. Litter sizes average around 4 for both skunk species. Within a few months, the young are seen following their mother as she makes nightly rounds searching for food. Skunks are capable of breeding the spring following birth. Average life-span of striped skunks is around 2 to 3.5 years, although they can occasionally live up to 7 years in the wild. Western spotted skunks rarely live past 1 to 2 years, although individuals have made it to 10 years of age in captivity.

Skunks often den in burrows but prefer to do as little digging as possible. They will use and enlarge an abandoned burrow dug by a ground squirrel, fox, or coyote. If dens are scarce they will readily use brush piles, hollow logs, and culverts. In urban areas, they den under decks, porches, or beneath buildings. Skunks do not hibernate, but in regions with cold weather, they will den communally during winter.

Skunks are crepuscular or nocturnal, hunting for insects, grubs, small rodents, snakes, frogs, mushrooms, fruit, pet food, bird food, and garbage in urban and suburban areas, although their diets vary seasonally. Skunks regularly consume eggs and are serious predators of ground nesting birds. Striped skunks will occasionally wander out during daylight hours; spotted skunks are observed less frequently during daylight.

Skunks are a primary carrier of rabies in California (skunks are also carriers of other diseases including leptospirosis, listeriosis, canine distemper, canine hepatitis, Q-fever, tularemia, and trypanosome). Thus their preference for urban and suburban settings is a cause for concern. Rabies is an infectious disease caused by a virus that 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 if medical attention is received in time, although he disease is almost always fatal if untreated. 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. However, keep in mind that just because they are active during daylight hours does not mean they are rabid as skunks are occasionally active during daylight periods.

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.

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.

Damage Prevention and Control Methods: Control methods focus on making the garden, yard, and residence less attractive to skunks; trapping can be used if these methods are not sufficient.

Exclusion: As with many other vertebrate pests, the best solution to skunk problems is to screen or block them out. To do this, all potential entrances and openings under houses, garden sheds, mobile homes, porches, and decks should be closed with ¼-inch mesh hardware cloth. This small mesh will also doubly serve to exclude rats and mice if installed correctly. Note that skunks will work hard to get into a desirable denning space, so make sure the screen fits tightly. If there is soil underneath the screen, bury the screen 6-inches deep to make a good seal.

When skunks inhabit a building or den space, exclusion is more difficult. First, you must make sure the animals, and their young if present, have left before blocking the opening. This can be accomplished by sprinkling a smooth layer of flour or construction caulk about ⅛-inch thick in front of the entrance to form a "tracking surface". The tracking surface should be examined shortly after dark to determine if the skunks have left. If they have vacated the area, the opening can be closed.

If you are unsure if the skunks have left or if young are present, you can install a one-way outward swinging gate made from ½-inch mesh hardware cloth. The gate should be hinged at the top and left loose on the other 3 sides. The gate should be made 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. If the young are still immobile, an alternative option includes placing one or more floodlights beneath the building opposite the entry point. A well lit area is not conducive to denning, causing skunks to leave.

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 methods 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 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. Therefore, removal of these food sources may reduce or eliminate skunk damage on lawns.

Potential den sites can be limited by cutting back overgrown shrubbery and by stacking firewood tightly, preferably at least 18 inches above the ground. The removal of boards, rocks, and debris lying on the ground is helpful, as insects that skunks feed on hide under these objects. Also, controlling mice and rats reduces a potential food source for skunks.

Frightening: Nothing proven effective.

Fumigants: Burrow fumigants, such as gas or smoke cartridges used on ground squirrels, may be used in rural areas provided that their use is allowed on the product label. These fumigants, however, are not recommended in residential areas due to the risk of fire and the potential of gas penetrating into the buildings.

Repellents: Commercial products are available for repelling skunks. Unfortunately, they are not very effective. The odor of mothballs or ordinary household ammonia has been used as a home remedy repellent. However, the use of these products in this manner is not legal, nor recommended given the potential for these fumes to enter buildings.

Toxic bait: None registered.

Trapping: Skunks can be trapped with an enclosed cage-type live trap. Plastic box traps are superior to wire traps because they are completely enclosed, 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 2 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 for euthanasia. Note drowning is not an acceptable or legal form of euthanasia. Once euthanized, skunks can be double-bagged and disposed of in the garbage. Skunks cannot be relocated without a permit, and it is unlikely the California Department of Fish and Wildlife would issue such a permit because of the risk of spreading rabies or other wildlife diseases.

A variety of different bait types can be used for trapping skunks including, but not limited to, canned cat food, sardines, tuna, or bacon. It is recommended that individuals who have no experience in trapping skunks hire a professional wildlife control operator. Wildlife control professionals have the experience and all the necessary equipment to trap and dispatch the animal. Because rabies is endemic in the skunk population, some city and county health departments assist in their control by providing trappers to remove them from residential areas.

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

Odor removal: There are several options for odor removal. The chemical neutroleum-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 been sprayed by 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 of baking soda
- 1 to 2 teaspoons of liquid dish 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. 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.

REFERENCES AND ADDITIONAL READING

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