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SKUNKS

KUNKS, OF COURSE, ARE INFAMOUS as the producers of an odor so powerful that it brings everything from elephants to cartoon characters to an abrupt and humorous stop. "Don't mess with me" is the message these animals communicate (Figure 74). Their primary defense is a complex chemical musk produced in the anal glands that can be sprayed fifteen feet or more. A person or animal hit in the eyes

will experience an intense discomfort that will serve as a reminder of the encounter long after the pain is gone. In fact, the characteristic black and white pelage of the skunk is said to be aposematic, that is, warning coloration that is easily recognizable. The efficiency of this chemical defense, combined with their rather poor eyesight and slow gait, means that skunks often stand and face even large and dangerous threats. This works against most wild animals, who can be dissuaded from attacking, but it is useless against nonrational contrivances, such as automobiles. Consequently, many skunks die on roadways. This is unfortunate, because skunks are placid and retiring animals. They deserve much better press than they usually

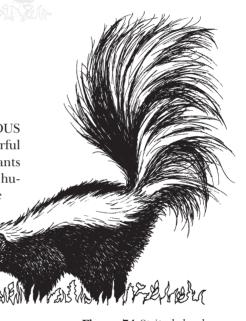


Figure 74 Striped skunk

- Striped skunks are able to spray at as young as eight days of age. At this age the skunks' eyes are still closed and they are unable to "aim."
- Skunks can spray two or three times without "recharging" their scent glands and need only a half-hour to recharge.
- One of the first radio-telemetry studies of skunks followed one animal for three months who was completely blind.

get because they eat many insects and rodents humans regard as pests.

Classification and Range

Historically skunks were considered members of the mustelid family (*Mustelidae*), which includes weasels, otters, wolverines, and badgers. Recent genetic evidence leads many authorities to suggest that skunks belong in their own family (*Mephitidae*). All skunks live in North and South America. The striped skunk (*Mephitis mephitis*) is the most commonly encountered and widely distributed, living throughout the United States and most of Canada in a variety of habitats.

Spotted skunks (Spilogale spp.) are less common than striped skunks and live in much of the United States, except for states immediately south of the Great Lakes and north of Florida along the Atlantic coast (Figure 75). The hooded skunk (M. macroura) and hog-nosed skunk (Conepatus spp.) are limited to the Southwest. Striped skunks are about cat-size or smaller, weighing between six and fourteen pounds. The little spotted skunk rarely gets over two pounds. Whatever species you encounter, the black and white coloration is a hallmark that communicates the message that this animal is to be treated with respect (even if it takes one or more encounters to learn this salient fact).

Habits

Striped skunks are adaptable to a variety of open, scrub, wooded, and developed habitats. Spotted skunks seem to prefer agricultural landscapes but also inhabit rocky terrain and prairie. Unlike other skunks, spotted skunks are good climbers who can go up and down trees. Normally, skunks do not engage in long travels and have home ranges that typically encompass a few hundred acres. However, within their home ranges, they are nomadic and rarely linger for long in any one spot, except while rearing young. Skunks are primarily nocturnal and usually solitary, except when mothers appear with offspring in tow

(Figure 76). Skunks can be active all year, although they remain in dens through the coldest spells in the northern parts of their range, where females, and occasionally males, will share a winter den.

Skunks will eat a variety of plant and animal foods, but they are primarily insectivorous. All skunks will dig for grubs, but hognosed skunks are specialists at this task. Of the many kinds of insects that skunks eat, a fair number are pests to humans. Wild fruits and garden vegetables are occasional dietary items. In winter and spring, skunks consume small vertebrates, such as mice, and will take the eggs of ground-nesting birds. Spotted skunks, in particular, eat many rodents. As a true omnivore, the most common skunk, the striped, is also the least finicky eater.

Skunks are capable of delayed implantation, meaning that after mating, the female can store the male's sperm and delay initiating pregnancy for some weeks. Breeding usually occurs in late winter or early spring. Gestation also varies in length, but averages sixty to seventy-five days, so that young usually are born any time from the end of April through early June. Yearling females breeding for the first time often mate and give birth later than older skunks. The western spotted skunk breeds in fall and early winter but, with the longest period of delayed implantation, does not give birth until the following spring. Litters range from three to as many as ten young, who remain in the den for about two months, after which they begin to follow their mother as she forages.

All skunks can dig their own burrows, but when some other animal or human beings have done the work for them, they are content with what is at hand. Favorite den and resting sites include abandoned woodchuck burrows, hollow logs, wood or rock piles, and under buildings, stone walls, hay or brush piles, and (occasionally) trees or stumps. Dens generally are used only for brief periods before the skunk switches to another. These dens may be solitary or communal, depending on the season and the gender of the skunk.



Figure 75 Spotted skunk

Public Health Concerns

The skunk is one of four wild animals (including the fox, raccoon, and bat) considered to be primary carriers of the rabies virus and is, therefore, classified as a rabies vector species. Skunks have also been known to carry leptospirosis.

Problems

Skunks are usually announced more by smell than sight. Musk odor may linger for days where a skunk has sprayed. Persistent, faint musk smells under a building or woodpile may suggest that a skunk has taken up residence, although foxes have their own musky scent that may cause misidentification. While foraging for grubs, skunks may dig small, shallow holes in the lawn, similar to those made by squirrels. Occasionally skunks will eat ripening garden crops, including corn. When damage is limited to the lower ears and the plant is not knocked over, skunks could be dining. Poor climbers with weak eyesight, skunks can tumble into window wells and similar steep-sided pits and become trapped. Occasionally a skunk will wander into an open garage or shed, a compelling reason to secure all outbuildings.

Solutions

Tolerance

Occasional skunk sightings in a neighborhood are not a cause for alarm. Given their way skunks will not bother people. They use their powerful defense only when they or their young are threatened and they cannot escape, and even then, only after they give warning. Heed the ample warnings when you encounter a skunk-stamping front feet, a raised tail, hissing, short forward charges, and, especially, twisting the hind end around in your direction. Spotted skunks will even contort into a characteristic handstand. rump in the air with eves still fixed on the threat. Move away slowly and quietly. Dogs, being dogs, tend to ignore these warnings, so it is imperative that they be restrained for their own good.

It may be hard for people to tolerate skunks living under the deck or an old shed in their yard. But such shelter is what skunks need when they are most vulnerable (during the coldest parts of the winter and when raising young). The nocturnal habits of skunks, their unaggressive and retiring ways, and the generally beneficial role they play in consuming harmful insects and rodents are all good reasons to leave them alone until they have moved on their own accord (which they readily do) or can safely be harassed away from an area where they are not wanted.

Habitat Modification

Preventive measures, such as removing attractants around houses, will decrease the likelihood of an unpleasant skunk encounter. Attractants include garbage and pet food left out at night and convenient denning sites, such as wood and rock piles, elevated sheds, openings under concrete slabs and porches, and access to crawl spaces under houses. Secure trash and feed pets indoors or remove food immediately after pets eat.

Skunks dig for grubs in lawns when wet soil conditions push grubs close to the surface. When the soil dries, the grubs move



Figure 76 This mother skunk is moving her young after being disturbed. She will make one more visit to the old den than there are babies to move, since she is not good at counting.

deeper, so if you do not overwater lawns, this problem is generally short-lived.

Exclusion

Exclusion techniques should be used proactively to prevent denning before an animal moves in. A suspected skunk den should be checked first to determine if it has a current resident. This may be done by loosely filling the hole (or holes) with soil, leaves, straw, crumpled paper, or similar material. If a skunk is present, the animal will easily push his way out overnight and reopen the hole. If the plug remains undisturbed for two or three nights (and it is not winter, when the skunk may be inactive for long periods), it is safe to assume that the hole is unoccupied and can be filled. Permanently exclude skunks (and other den-seeking creatures) with an L-shaped footer or similar barriers. If a skunk is using the den, either harassment or eviction using a one-way door system is recommended.

Harassment

When it is safe to displace skunks, mild harassment can be very effective. This can be as simple as loosely repacking the den hole with leaves or straw or other material to see if the skunk gets the message and moves elsewhere. Mild repellents, such as used kitty litter, can be placed near or inside the burrow to one side so the skunk has to pass them to get out; commercial or homemade capsaicin or

castor oil repellents may also be tried. Adding light and noise to make an attractive (quiet, dark) space unattractive may help. Make sure the skunk is not close by before placing the disturbing stimulus. Apply a couple of hours before dusk, and the nocturnally active skunk should get a strong message.

Eviction

Skunks that have wandered into a garage or shed can simply be allowed to wander back out by making sure the door is open before dusk. You can tell the skunk has left by watching him, or (if you wish to go to this trouble) by sprinkling a band of flour on the floor and checking for footprints heading outside.

A skunk may be evicted from an active den by installing a one-way door over the entrance to allow the skunk to leave but not to get back in. It is imperative to be sure that dependent young are not present. When in doubt, assume they are and consider using the door after they start following their mother to forage. Leave the door in place for two or three nights to a week to be sure the skunk has left.

Repellents

Repellents are advertised and sold to deter skunks from gardens, flower beds, and lawns. Some are the predator urine products that we believe are inhumane and inappropriate for use. Others, such as the powerful capsaicin-based hot sauces, must be used with extreme care because of the consequences for both people and pets who may inadvertently come into contact with them.

Removal from a Window Well

If a skunk becomes trapped in a window well or similar steep-sided pit, provide a means of escape. Place a rough board (or one with cleats, carpet, toweling, chicken wire, or other material to give the animal traction) that is long enough to serve as a ramp out of the well. Skunks are poor climbers, so the board should lean no steeper than a 45-degree angle. Approach the well low enough to be out of sight of the skunk, and then slowly and

carefully lower the board. If possible, a second person with a vantage point high enough to see the skunk (perhaps from an upstairs window) can warn of any signs of agitation. Another method of placing the board is to tie it to the end of a long pole and lower it by holding the opposite end of the pole. Once the board is placed, keep people and pets away from the area until nightfall, when the skunk should leave.

If the skunk cannot climb out due to the well's depth or steepness, the Connecticut Wildlife Rehabilitators Association recommends a technique it uses successfully that involves a plastic rectangular garbage can and really smelly cheese. The cheese is placed at the bottom of the can, which is lowered on its side with the open end facing the skunk, who enters and begins to dine. The person elected to perform this operation carefully tilts the can up a bit, raising it elevator style out of the window well, then gently tips it on its side again so the skunk can amble out. The Connecticut group claims never to have had a spraying incident and always to have been successful using this method, which we pass along for that reason. Regardless of how you end up getting the skunk out, to prevent the situation from recurring, install covers over window wells.

Neutralizing Odors

The traditional remedy for a "skunking" is a tomato juice bath. To really neutralize the smell, however, the chemicals in the spray must be changed into a different type of molecule, and tomato juice does not do that. Tomato juice, vinegar, and any other mildly acidic solution can wash off the oily spray to reduce the smell. People may believe it works, because the human nose quits smelling extreme odors (olfactory fatigue) after a period of exposure and will, instead, smell new odors, such as the tomato juice. To neutralize skunk spray odor on dogs, skin (not eyes), and clothes, mix:

1 quart of 3 percent hydrogen peroxide 1/4 cup baking soda

1 teaspoon liquid soap (laundry or dishwashing soap)

Use immediately, and outdoors, if at all possible, to keep the volatile skunk spray out of your house. Rinse after five minutes and repeat if needed. Do not store this mixture—use it immediately after mixing. (If left in a closed container, the oxygen gas released could make the container burst.) This mixture can bleach fur and hair color.

You can also buy commercial products from veterinary and pet supply outlets.

Clothes or other fabric items sprayed directly may be best thrown away. Fabric that picked up the smell indirectly, as well as buildings and similar surfaces, can be washed with one cup of liquid laundry bleach per gallon of water. (This may bleach colors.) Commercial products containing neutroleum alpha will also neutralize the odor. Liberal flushing with cold water will ease the discomfort of skunk spray in the eyes, but it is best to consult your physician for treatment.

Skunk odors in the house usually can be traced to occupancy beneath or a discharge outside an open window. During courtship, skunks may be more prone to let loose, or lose control, of their normal scent management patterns. There are odor neutralizers on the market that work with amazing effectiveness to eliminate the stray skunk smells that might need occasional attention.

Lethal Control

People will go to extreme lengths to avoid getting sprayed by a skunk, even those who bill themselves as wildlife-control professionals. Among the latter it is sometimes in vogue to kill skunks by injecting chemical solvents, such as acetone (aka fingernail polish remover), into the animal's chest using a very long pole syringe. This keeps the trapper well away from the animal so the skunk is less likely to become agitated and come within range to spray. How solvents kill skunks is not known, but common sense suggests that it most likely would cause significant pain and distress. We strictly advise that unless veterinary science has studied and validated a killing method as humane, it

should not be used in dispatching any animal, domestic or wild. Skunks are at particular risk for all sorts of unacceptable killing methods, including drowning, because people's desire to avoid getting sprayed overrides every other concern.

A Last Word

People remember encounters with skunks, whether or not they are sprayed. It is common knowledge among those who work closely with these animals that it actually takes a lot to get sprayed, although those who do get blasted undoubtedly consider it no sort of honor. How many skunks are killed each year simply because of someone's fear of being sprayed is not known, but it is surely a large number. One hopes that all of us can become better educated about and more tolerant of these animals in the future, recognizing their role as part of the natural scene, even in towns and cities.

Resources

There are amazingly few books devoted to skunks or descriptive of their natural history. We hope that will change.



