

## WILDLIFE NOTE

**Striped Skunk** 

The striped skunk (*Mephitis mephitis*) belongs to the Mephitidae family, which includes badgers. Three other skunk species live in the United States: hooded and hognose skunks, which inhabit the Southwest, and the spotted skunk, which is found throughout much of the country. In the eastern United States however, the spotted skunk extends north only to southwestern Pennsylvania.

The species commonly found in Pennsylvania is the striped skunk. Widespread, it is found in suitable habitat from sea level to timberline in all 48 contiguous states, southern Canada, and northern Mexico. The word "skunk" comes from the Algonquin Indian name for the animal, seganku. Other names include polecat and the French Canadian *enfant du diable*, or "child of the devil."

## **Biology**

Adult skunks are about two feet long, including a 7- to 10-inch tail. They weigh 3 to 12 pounds, depending on age, sex, physical condition and time of year. Males are, on average, 15 percent larger and heavier than females.

Skunks have small heads, with small eyes and ears and a pointed nose. They have short legs and wide rear ends. The bottoms of their feet are hairless, like those of bears or raccoons. And, like these two other mammals, skunks walk in a plantigrade manner—on the soles of their feet with heels touching the ground. The long and sharp claws of a skunk's forefeet are well-adapted to digging.

A skunk is colored black and white. Its body is often mostly black, with white occurring in a narrow blaze up the middle of its forehead. It typically has a broad patch on the back of its head, and a V-shaped mark over its shoulders, which forms stripes that continue along the animal's back and often unite at the base of its tail. Stripes vary in length and width among individuals. The tail is bushy and black and usually has a white tip. Sexes are colored and marked alike.



A skunk's pelt is composed of soft, wavy underfur overlain with long, coarse guard hairs. Skunks molt yearly, beginning in April and ending in September. Skunks make a variety of sounds, including hisses, growls, squeals, soft coos and churrings.

Skunks are placid and sluggish. They move at a deliberate walk, slow trot or clumsy gallop. Their top speed is about 10 miles per hour. They can swim, but are poor climbers. Their senses of sight, smell and hearing have been judged poor to fair compared with those of other wild mammals. Their sense of touch, however, is acute.

Skunks are armed with a potent defensive weapon: a pair of large scent glands found beneath the skin on either side of the rectum. These glands have nozzle-like ducts, which protrude through the anus. Skunks discharge their scent, or musk, through these nozzles, powering the stream with a strong hip muscle contraction.

Musk is an oily liquid, creamy or yellowish in color. Its active ingredient is a sulphide called mercaptan. Field guides refer

to the musk as "highly repellent to all mammals." In short, it stinks. Musk can make a predator sick or, if the skunk has been able to direct the substance into the animal's eyes, temporarily blind.

A skunk can shoot musk about twelve feet, but will use it as only a last resort, preferring, instead, to bluff an enemy. If threatened, a skunk drums its forefeet on the ground, snarls, arches its back and raises its tail. It can spray in any direction by twisting its rump toward the target. And, contrary to popular opinion, it can discharge when hoisted by the tail.

Striped skunks are omnivorous. What they eat depends on where they live and what is available. In summer, they feed heavily on insects (adult and larval form) including grasshoppers, crickets, beetles and wasps. They eat pests including potato bugs, tobacco worms and Japanese beetles.

Skunks dig out bumblebee nests and scratch at the entrances of beehives, catching and eating any honeybees that fly out. Frequently they leave evidence of their feeding: small, coneshaped holes in the soil, pine needles, leaf duff or suburban lawns mark where they have dug for grubs. Other summer foods include spiders, toads, frogs, lizards, snakes, mice, chipmunks and the eggs of turtles and ground-nesting birds.

In fall and winter, skunks eat fruit such as wild grapes and cherries; small mammals such as moles, mice, voles and shrews; plant items such as grasses, leaves and buds; mast and carrion. Skunks are chiefly nocturnal, hunting from dusk until dawn, except during the breeding season when they are frequently observed during daylight hours.

They den in ground burrows, stumps, wood and rock piles, overhanging creek banks and beneath buildings. Often, a skunk will use an abandoned woodchuck burrow, although if none are available it will dig its own. The burrow has a central chamber (12 to 15 inches in diameter) about three feet underground, connected to the surface by one or more tunnels 5 to 15 feet long. The central chamber is lined with dry grass and leaves. Skunks seem to prefer slopes for den sites, probably because these areas drain well. In spring, summer and early fall, a skunk may den in several different burrows; in winter, it tends to use just one.

Normally solitary, males and females get together for breeding in February and March. Males fight with each other, although they rarely discharge musk during these conflicts. They travel widely in search of mates and breed with several females if possible.

A mated female drives off males shortly after her three-day estrus period ends. After 60 days gestation, she bears 2 to 10 young (usually 5 to 7). Skunks are capable of breeding in their first year. Younger females may bear fewer young and give birth later in the year than older females.

At birth, striped skunks weigh less than an ounce. Although they are blind and unfurred, the pattern of their future blackand-white pelage shows on their pinkish, wrinkled skin. They develop quickly. After three weeks, their scent glands become functional; at four weeks, their eyes open; and at about two months the young are weaned and ready to leave the den for nighttime hunting forays.

By November, young of the year are as large as adults. While family ties are usually broken in August or September, some mothers over-winter with their offspring. Community dens have been found containing 12 or more skunks, mostly females and young.

Skunks do not hibernate, although they may remain dormant underground all winter. Their body temperature remains near normal. Females usually lose 10 to 30 percent of their body weight by spring; males lose only about 10 percent, as they are more inclined to leave their dens and feed during mild spells.

The great horned owl, which lacks a well-developed sense of smell and apparently is not bothered by the skunk's musk, is a predator. Dogs, foxes, coyotes and bobcats take an occasional skunk, but the skunk's potent musk warns off most predators.

Other mortality factors are diseases such as pneumonia, distemper, pulmonary aspergillosis, tularemia, brucellosis and rabies; highway kills, starvation and trapping. Skunks are host to fleas, lice, mites, ticks and various internal parasites. Most skunks live two to three years in the wild; in captivity, they have lived 10 years.

## **Population**

Striped skunks can be found throughout Pennsylvania, but the highest densities are associated with agricultural areas. Wildlife researchers have estimated an average of one skunk per 10 acres of prime habitat and 13.5 skunks per square mile of agricultural land.

Mephitis memphitis has proven highly adaptable. Along with the woodchuck, raccoon, Canada goose, mourning dove, several species of blackbirds and other wildlife, the skunk prospers wherever humans clear land for farming and remove or drive out larger predators.

Skunks can live in an area for years and, because of their nocturnal habits, remain unseen, although perhaps not "unsmelled," by most people. Some farmers welcome their presence, realizing that these small predators eat many pest insects and rodents.

Skunks are susceptible to distemper and rabies. Trapping may help minimize the impacts of disease on a skunk population. Local populations are also affected by severe weather, food scarcities and habitat change.

## Habitat

Skunks live in a variety of habitats. They favor mixed woods and brushland, rolling weedy fields, fencerows, wooded ravines and rocky outcrops in or near agricultural areas. For day retreats (resting cover), they use hayfields, pastures, fencerows and brushy borders of waterways. Cornfields are

good feeding areas, where skunks forage for grasshoppers, grubs and beetles. High corn plants also protect young skunks from airborne and land predators without impeding their movements.

Although they may cover several miles each night while hunting, established individuals rarely wander more than a half-mile from their home burrows. In general, adults range more widely than juveniles, males more widely than females.

