

## Eastern Spotted Skunk

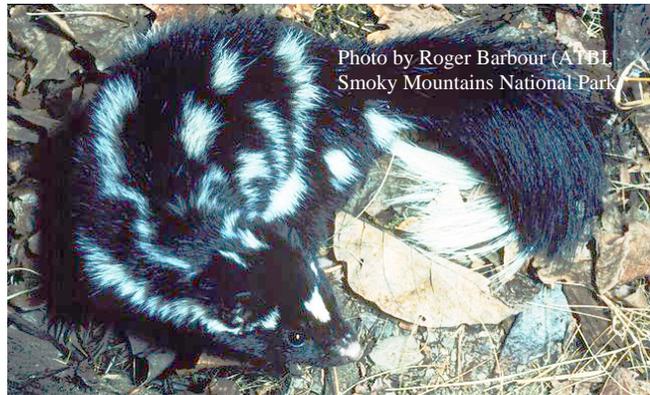
### *Spilogale putorius*

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#### DESCRIPTION

##### Taxonomy and Basic Description

The eastern spotted skunk was described by Linnaeus (1758) and classified as *Viverra putorius*. In 1875, Coues reclassified the species *Spilogale putorius*, which essentially means, “stinking spotted weasel.” Traditionally, the spotted skunk was classified by taxonomists in the Mustelidae, or weasel family, and frequently listed in the subfamily Mephitinae (Jones et al. 1992; Kinlaw 1995). More recently, however, skunks have been classified as the separate family Mephitidae (Dragoo and Honeycutt 1997).



The spotted skunk is smaller than the more common striped skunk (*Mephitis mephitis*). The spotted skunk ranges from 0.5 to 1.8 kg (1 to 4 pounds) in weight and from 250 to 688 mm (10 to 27 inches) in overall length (Crabb 1944; Hall and Kelson 1959; Walker 1964; Patton 1974). Males are approximately 10 percent larger than females (Van Gelder 1959). Pelage is typically dark black with 4 to 6 broken white stripes, which give the animal the appearance of being spotted. An inverted white triangle-shaped nose patch is usually present and is separate of the broken white stripes. The fur is denser and finer than that of the striped skunk (Zeiner 1975).

Spotted skunks breed in late winter or early spring and may delay implantation for up to two weeks. Gestation lasts 45 to 60 days. One litter per year generally produces one to six young. Young are born from April through July and are weaned by about eight weeks of age; May and June are the peak breeding months for this species (Contantine 1961).

Like other members of the genus, spotted skunks have well developed scent glands that are often used for defense. The paired anal glands are located in nipples just inside the anus. Musk is discharged after the nipples protrude through the anus as the tail is elevated (Crabb 1948). One of the more curious behaviors displayed by the spotted skunk is a headstand that is used in defensive posturing. The skunk will move towards the threat, balance itself on its forelegs and direct the anal sacs towards the opponent (Johnson 1921).

##### Status

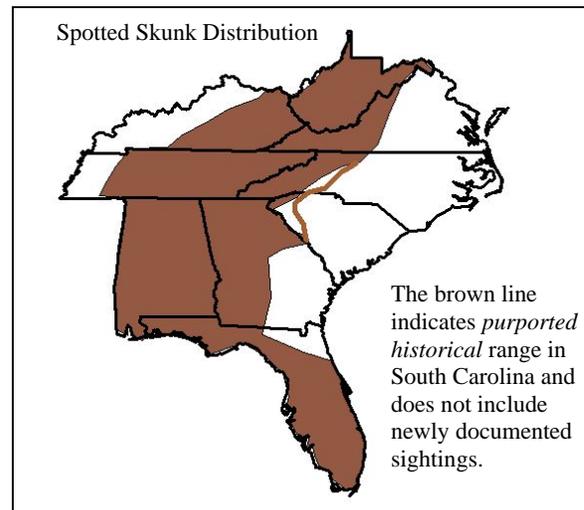
The spotted skunk is currently ranked as apparently secure in South Carolina and Georgia. The species is considered rare or vulnerable in North Carolina and Tennessee. Kentucky and West Virginia rank the eastern spotted skunk as rare and imperiled, respectively (NatureServe 2004).

Few records of spotted skunks are included in the South Carolina Rare, Threatened, and Endangered Species Inventory and little is known about its true status in South Carolina. Accounts are only listed for Aiken, Edgefield, Greenville, Oconee and Pickens Counties. In many cases the lack of information about the spotted skunks in the state may be due to the lack of knowledge about the species' population status and distribution.

## POPULATION SIZE AND DISTRIBUTION

The eastern spotted skunk's range extends from southern Pennsylvania, down the Appalachian Mountain range and into Florida, with a portion of the eastern edge of its range encompassing the western portion of South Carolina. Unlike the striped skunk, which has a more uniform distribution within its geographic range, the spotted skunk is typically more localized in its distribution.

Little is known about the population distribution and size of the spotted skunk in South Carolina. No data specific to the spotted skunk has been recorded because annual commercial fur harvest data does not differentiate between the two species of skunks found in South Carolina. The annual take by commercial fur harvesters has averaged 120 skunks per year over a 28-year period, most of which are presumed to be striped skunks.



## HABITAT AND NATURAL COMMUNITY REQUIREMENTS

The spotted skunk inhabits woods and brush and has a strong propensity to be near farmyards. It prefers dense cover like that which occurs along fences, embankments, gullies and hedgerows. Spotted skunks will also use barns and out buildings for cover. These animals are also found in rock outcrops (Crabb 1948). Spotted skunks are generally less tolerant of humans than the striped skunk (Henderson 1976).

Biologists on the Savannah River Site have documented spotted skunks associated with old fields, open forests and hedgerow habitats. Dead and downed trees and abundant coarse woody debris are important microhabitats required by spotted skunks.

Spotted skunks are omnivorous, feeding on small mammals, insects, reptiles and amphibians. Their diet may vary seasonally with the availability of food items (Howard and Marsh 1982).

## CHALLENGES

Both habitat fragmentation and destruction and public persecution of skunks are the most common challenges to spotted skunk populations. The mountain area of South Carolina is

rapidly being developed and habitat for spotted skunks could be lost. As natural areas are transformed to developed areas, skunk populations are expected to decline. Because skunks prefer dense cover and such areas are generally not found in developed areas, habitat loss will lead to these population declines.

Further, humans tend to be very intolerant of skunks due to the animals' defensive behaviors. Skunks that do not attempt to relocate as development occurs are likely to be considered nuisance wildlife and may be removed or destroyed as development continues.

The lack of knowledge about the distribution of the spotted skunk in South Carolina represents another threat to this species. Little data about this species has been collected; what is known is the result of subjective reports from residents and conservation staff.

## CONSERVATION ACCOMPLISHMENTS

In South Carolina, considerable portions of the Blue Ridge ecoregion have been protected for conservation by federal and state agencies including SCDNR and the U.S. Forest Service. While these areas were not designated to further conservation of this species, they are largely dense forest areas that are used by spotted skunks.

## CONSERVATION RECOMMENDATIONS

- Conduct education programs to promote early-successional vegetation adjacent to open areas in order to provide habitat for spotted skunks and other wildlife species.
- Manage currently protected lands for more early-successional vegetation by increasing the use of fire and silvicultural treatments.
- Cooperate with a multi-state effort to evaluate the genetic relationship of spotted skunks throughout the southeast using mtDNA analysis.
- Determine the distribution, abundance, and habitat requirements of spotted skunks in South Carolina. Inventories should target the upper piedmont and Blue Ridge ecoregions.
- Adjust reporting requirements of annual commercial fur harvest to differentiate between striped and spotted skunk harvests and utilize this data to evaluate long-term trends.
- Research ways to improve monitoring techniques for spotted skunks that will provide more precise information than scent station surveys that are conducted for all furbearers.
- Educate residents about the beneficial aspects of spotted skunks; these animals are predators that help control rodent populations that can be beneficial to humans in addition to their ecosystem value.

## MEASURES OF SUCCESS

As research and management needs are identified, projects should be proposed and prioritized by those with the greatest conservation applicability. Surveys and density estimates in the southern

region should provide some population estimations that will be used to more accurately rank the species and prioritize future management needs.

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