

WESTERN SPOTTED SKUNK

SPILOGALE GRACILIS (MERRIAM, 1890)

NATURAL HISTORY SUMMARY BY JESSICA CARRASCO

Classification

Kingdom: Animalia

Phylum: Chordata

Class: Mammalia

Order: Carnivora

Family: Mephitidae

Genus: *Spilogale*

Species: *S. gracilis*

Description

The Western Spotted Skunk (*Spilogale gracilis*) is a small, slender skunk. Its shiny fur is mainly colored black except for a white forehead spot and a series of at least four white stripes, broken into dashes, along its back. The spot pattern is unique to each individual (Eder 2002). The pattern normally includes a pair of dorsolateral white stripes starting at the back of their head, a pair of lateral stripes merging with the spots in front of the ears, and a ventrolateral pair beginning behind the forelegs and stopping around middle of the body. The posterior part of the body includes two irregular white bands, and a white spot on each side of the rump (Parr 2017). The tail is covered with long, sparse hair, and is primarily colored black; the underside of the tail is white for nearly half its length towards the tip, which is extensively white. The ears are short and low on the sides of the head. The Western Spotted Skunk has five toes on each foot, and its front claws are more than twice as long as those on its back feet (Hakkinen 2001). The face strongly resembles that of a weasel (*Mustela*) (Eder 2002). The average total length is 13-23 inches, the average tail length is 4-8.25 inches, and the average weight around 1-2 pounds. (Eder 2002) Typically, the male is larger averaging 16 inches in total length (5 inches for the tail). The female averages around 15 inches in total length (4.5 inches for the tail). Males weigh around 1.4 pounds, whereas females usually weigh about 1 pound. (Wildlife and Parks Montana Natural Heritage Program and Montana Fish 2017)

The Western Spotted Skunk's more extensive white markings help distinguish it from the Eastern Spotted Skunk (*S. putorius*). The black and white stripes on the Western Spotted Skunk's upper back are almost equal in width, while the Eastern Spotted Skunk's black area is more extensive. The Western Spotted Skunk's tail has a white tip while the Eastern Spotted Skunk's tail tip is black. Their breeding cycles, as well as distribution ranges also differ (Wildlife and Parks Montana Natural Heritage Program and Montana Fish, 2017). The Striped Skunk (*Mephitis mephitis*) has a small slender body, distinctive markings (two solid white stripes along the side of its body) and is twice as large as the Western Spotted Skunk (Wildlife and Parks Montana Natural Heritage Program and Montana Fish, 2017).

Distribution

The Western Spotted Skunk has a wide distribution range, from as far north as southwestern British Columbia, Canada down to the southern tip of Texas, and into Mexico (Eder 2002). *Spilogale gracilis*' [range map](#) is available at Cuarón et al. 2016.

Diet

The Western Spotted Skunk is a nocturnal and opportunistic forager that tends to stay close to its den when hunting. It has large feet, well-developed claws, and digging is its primary means of obtaining food (Washington Department of Fish and Wildlife 2017). Skunks are omnivorous, eating insects, berries, eggs, nestling birds, rodents (Rodentia), lizards (Squamata), and frogs (Anura). Skunks will roll caterpillars on the ground to remove the hairs before eating them. Rolling beetles (Coleoptera) causes them to deplete a defensive scent before the skunk eats it (Washington Department of Fish and Wildlife 2017). Its diet is primarily made up of meat. In the summer, insects such as grasshoppers (Caelifera) and crickets (Gryllidae) are a primary food source. In colder winter and spring months, when insects are less available, small mammals become a larger part of their diet (Eder 2002).

Habitat and ecology

The Western Spotted Skunk is found in a wide range of environments including: woodland, rocky areas, open grasslands, brushy canyons, semi-arid bushlands, and in

Mexico wet tropical forests. This skunk tends to make temporary dens in safe spots such as rock crevices, fallen logs, buildings, woodpiles, abandoned burrows, and tree cavities. When breeding, the female makes and keeps a den for an extended time, lining it with grass and leaves. During the winter, skunks may den together. (Eder 2002) Skunks play an ecological role in helping keep down populations of animals such as rodents and grasshoppers (Parr 2017).

Reproduction and life cycle

Males start to mature sexually in the spring (between March and May), reaching their peak in September when the females come into heat and the breeding season begins. The breeding season ranges from September to October (Hakkinen 2001). The Western Spotted Skunk has an extended period of delayed implantation. The fertilized eggs begin to develop, then stop growing at an early blastula stage and float freely in the uterus, where they remain “on hold” for 6-7 months. Once they finally implant into the uterine wall, growth begins again, typically, around March or April. Litters, ranging from 2 to 6 kits, are born about a month later, usually coinciding with a plentiful food supply (Smithsonian National Museum of Natural History 2017). Gestation lasts 210-230 days, total. Young females become sexually mature in only 4 or 5 months and the reproduction cycle begins again (Hakkinen 2001).

Conservation status

The International Union for Conservation of Nature (IUCN) Red List of Threatened Species' most recent (2016) listing for *S. gracilis* is: “Least Concern” as it is widely distributed in a variety of habitats including human-altered ones (Cuarón et al. 2016). *Spilogale gracilis* National NatureServe Conservation Status is ranked as Secure meaning that it is found in abundance and is not currently threatened or at risk (NatureServe, Inc. 2016). The species may be declining in parts of the United States but not at a rate fast enough to be threatened. Humans activity is the greatest threat and primary cause of mortality, specifically as a result of automobiles. In urban areas, Western Spotted Skunks have been seen as pests. They are also trapped, shot, and poisoned during predator control tactics. Pesticides present a significant threat since insects are a primary diet component (Parr 2017).

Cultural significance

Skunks help keep down populations of pests, such as rodents and grasshoppers, which can be detrimental to agriculture (Parr 2017). They are also known to eat scorpions (Scorpiones), which may be beneficial to people by keeping down the population of this poisonous arthropod, particularly near urban areas. People have started keeping them as pets because of their friendly nature and can be trained to use a litter box (Parr 2017).

Specimen-specific detail

The *S. gracilis* specimen from the [Burton Ostenson Museum of Natural History](#) at Pacific Lutheran University was collected in Bothell, King County, Washington, on October 14, 1936 by D.E. Brown. The specimen is a male and measures 393 x 120 x 48 mm. It was originally identified as *S. putorius* because at the time of its collection, *S. gracilis* and *S. putorius* were considered a single species (Cuarón et al. 2016). In 1936, many historical events occurred: the ill-fated airship Hindenburg embarked on its first flight, Hitler broke the Treaty of Versailles by sending troops into Rhineland, and later in the year he opened the 11th Olympic Games in Berlin. In England, Edward VIII announced in a radio broadcast that he was abdicating the British throne to marry Wallis Simpson (OnThisDay.com, 2017). In the United States, Franklin D. Roosevelt was president, the Great Depression, and the Dust Bowl were ongoing, (OnThisDay.com, 2017). Fred Astaire's "The Way You Look Tonight", Bing Crosby's "Pennies from Heaven", and Benny Goodman's "Goody Goody" were playing on the radio (Hawtin 2017).

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