

## San Francisco Garter Snake

Thamnophis sirtalis tetrataenia

OrderSquamataFamilyColubridaeGenusThamnophisSpeciessirtalisSubspeciestetrataenia



**Geographic Range:** Western portion of San Francisco peninsula, along hillsides from San Francisco city line south to Crystal Springs Reservoir and along the coast to Año Nuevo State Nature Reserve.

Habitat: Dense vegetation bordering ponds and wetlands with nearby open hillsides

Niche: Terrestrial, semi-aquatic, diurnal, carnivorous

Wild Diet: Frogs, toads, newts, small fish

Life Span: Unknown in the wild, 8 – 15 in captivity

**Appearance:** Body is black with turquoise and red stripes. Weight is between 120 – 190 grams, length is 18 – 51 inches, males are generally half as heavy as females.

Adaptations: Female San Francisco garter snakes release pheromones to attract mates. They mate in the spring or fall and females give birth to live young with an average of 16 offspring. These babies are 5 – 7 inches long when born and will mature at two years of age. During dry summer months, when prey is hard to find, San Francisco garter snakes will sometimes aestivate in rodent burrows. When threatened, San Francisco garter snakes will escape into the water or try and defend themselves by releasing a powerful musk with their feces, this makes them smell and taste bad.

**Fun Facts:** The San Francisco garter snake was one of the first species to be listed as Endangered after the Endangered Species Act was passed. These non-venomous snakes will grab their prey and swallow it whole. They are one of the few animals able to eat the toxic California newt. The San Francisco Zoo is one of the only zoos in the country with San Francisco garter snakes.

**At the Zoo:** We currently are home to gopher snakes and CA king snakes found in the Koret Animal Resource Center.

**Comparison:** San Francisco garter snakes have similar defense mechanisms to other kinds of snakes. When threatened, a snake will first try and escape. Depending on the type of snake this could be up a tree, under a rock, into a burrow or in the case of the San Francisco garter snake, into the water. If unable to escape, snakes will then resort to 'bluffing' such as a rattlesnake rattling or a cobra raising its hood. Lastly, they will try to retaliate; venomous snakes might strike and non-venomous snakes such as the San Francisco garter snake will emit a foul-smelling substance so that their attacker will release them.

## Status and Conservation: Endangered

**Threats:** Habitat loss and fragmentation, preyed upon by introduced species, pet trade, decline of food sources, specifically the endangered California red-legged frog

**Bibliography:** Nature Trail Handbook, Animal Diversity Web, Woodland Park Zoo website



Photo by Ferry Van Stralen



Photo by David Cardinal



Photo by Amy Frankel

