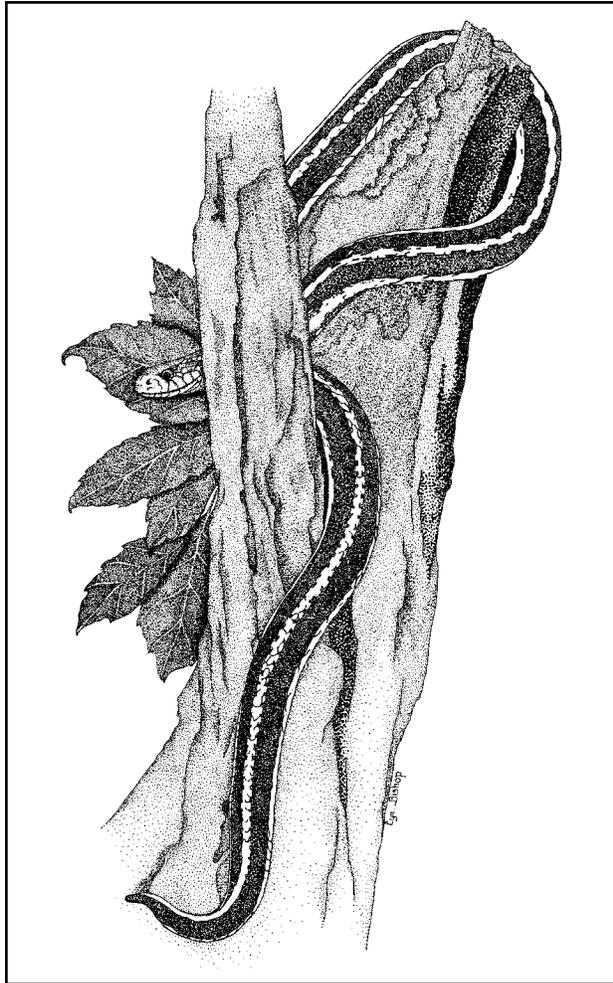
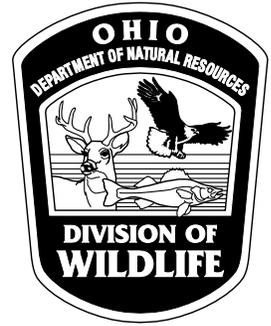


# Eastern Garter Snake

Scientific Name: *Thamnophis sirtalis sirtalis*



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## Description

The pattern can vary, but the Eastern garter snake is marked with a pattern of three light stripes on a dark body. One narrow stripe runs down the center of the snakes' back and then there is a broad stripe on each side. The stripes are usually yellow, but can be shades of blue, green, or brown. Between the center and each side stripes are two rows of alternating black spots. The scales of the Eastern garter snake are keeled (have ridges) and the snake's belly is yellow or pale green. These snakes range between 18 and 26 inches in length.

## Introduction

The Eastern garter snake is one of the three garter snakes in Ohio. The other two are Butler's garter snake and the Eastern Plains garter snake which is a state endangered species. The Eastern garter snake is the most abundant snake in Ohio. It is recognized by its pattern of three yellow stripes on a black or brown body. It can be found in almost every habitat type in the state.

The garter snakes derive their name from the resemblance of their stripes to old-fashioned sock garters.

The Eastern garter snake is found throughout Ohio. It is found from Maine to central Missouri and from central Ontario to Florida in North America.

## Habitat and Habits

The Eastern garter snake occupies a variety of habitats including pond and stream edges, wetlands, forests, fields, rocky hillsides and residential areas. They are often seen basking on wood piles, stone walls, hedges, and rocks. Garter snake activity is closely associated with weather conditions. Temperature, wind, and the amount of cloud cover influence the snake's behavior. Snakes are cold blooded and derive heat from outside the body; environmental conditions must be warm enough—between 68 and 98.6 degrees Fahrenheit—for the snake to adjust its body temperature to a preferred range and to become active.

As winter approaches and temperatures drop to the minimum the Eastern garter snake can tolerate, these animals will begin to group together to hibernate for the season. The grouping is also referred to as an aggregation.



Aggregations provide several benefits to the snakes: they help slow the initial body heat lost as temperatures drop and they bring males and females of the species together. The latter expedite mating in the spring when the snakes emerge from their hibernation den. Unlike other species that can seek out a mate and engage in courtship behavior in the cooler periods of late winter, garter snakes are still hibernating until temperatures stabilize somewhat. Thus their opportunity for mating timewise is greatly reduced. Aggregating well in advance of the mating period allows the species to cut out a step or two and go directly to reproductive behaviors as a new season of activity begins.

The Eastern garter snake is active during the daylight hours and is most active in July when temperatures are in its preferred range of 84.2 to 86 degrees Fahrenheit. As the Eastern garter snake moves about, it feeds on a variety of small animals. Mice, minnows, salamanders, frogs, toads, and earthworms are eaten; earthworms and amphibians are the primary prey.

The saliva of the Eastern garter snake appears to be toxic to amphibians and other small animals and a bit may produce swelling or a rash in some people. The Eastern garter snake eats its prey alive and whole. Snakes are usually able to swallow prey whole and larger than themselves because of an unusually flexible jaw mechanism. The jaw drops down and back allowing the snake to open its mouth

wide enough to ingest its prey; the prey is advanced through the mouth as the snake advances one side of the jaw and then the other.

Another unique adaptation of all snakes is the forked tongue. The split, two-pointed tongue, often seen darting from the mouth, is an organ used by the snake to interpret its world;

the tongue provides the snake with a sense of touch and smell. Odorous particles adhere to it, the tongue is withdrawn into the mouth, and the tip is projected into a specialized part of the nasal cavity called the Jacobson's Organ. There, what the tongue has attracted is interpreted and passed on to the snake's brain allowing it to identify what is in its surroundings; not only food, but other snakes and animals that may be attempting to prey on it.

## Reproduction and Care of the Young

The Eastern garter snake mates upon emerging from hibernation in March or April. Males are polygamous, meaning they will mate with more than one female. Gestation lasts between 90 and 100 days and young emerge alive from the body of the mother. Many other species of snakes lay eggs from which the young hatch. During gestation, each young snake is protected and nurtured in a thin saclike membrane that contains a yolk. Young emerge from the mother anytime between July and October. The size and number of young

depend on the age, size and condition of the female. A typical Eastern garter snake litter ranges from 10 to 40 individuals. The young receive no parental care and disperse immediately upon birth.

Female and male Eastern garter snakes do not reproduce until two years of age. Little is known about how they select a mate.

## Management Plans

The Division of Wildlife doesn't manage its areas specifically for Eastern garter snakes. However, these snakes can be found at many of our state wildlife areas where suitable habitat—pond and stream edges, wetlands, and fields—exist. Many management activities at these areas benefit the Eastern garter snake.

## Viewing Opportunities

Eastern garter snakes can be seen as close as your own backyard and that is likely where most people encounter them. The eastern garter snake, like most other snake species, is a shy, nonaggressive creature and if you unexpectedly encounter one when you're gardening or doing other yardwork the snake is likely as startled as you are. This snake is harmless and you should not harm it. If you encounter a snake in your yard or out on a walk in the woods, observe and enjoy it and allow it to go on its way. Again, wildlife areas that feature habitat the Eastern garter snake prefers are good places to find them for a Watchable Wildlife trip. Deer Creek Wildlife Area (marsh), Big Island Wildlife Area (wetland), Ottawa National Wildlife Refuge (marshland), Woodbury Wildlife Area (fields and wetlands), and Tranquility Wildlife Area (fields and small ponds) are choice spots to see this and a host of other wildlife species.

## Do Something Wild!

The Eastern garter snake is among the majority of wildlife species in Ohio that are not hunted. All these animals are vital parts of our overall ecosystem and contribute to wildlife diversity in the state. Helping us to manage and research these species are the generous citizens of the state of Ohio. With money they either donated through the state income tax checkoff, the purchase of wildlife conservation license plates, or their direct contribution to the

Endangered Species Special Account, the Division is able to purchase critical habitat essential to sustaining wildlife diversity or to provide educational materials and opportunities on wildlife to children and adults.

Contributions to our Endangered Species and Wildlife Diversity Program are accepted throughout the year. To make a donation, please send a check to: Endangered Species Special Account, Ohio Division of Wildlife, 2045 Morse Road, Bldg. G, Columbus, Ohio 43229-6693. All contributions, whether made on your income tax or directly, are tax deductible.

## At a Glance

Mating: Polygamous

Peak Breeding Activity: March and April

Gestation Period: 90-100 days; young born July-October

Litter Size: 10-40 young snakes; 20 is average

Young are Born: Able to care for themselves; they receive no parental care and disperse shortly after birth

Number of Litters Per Year: One

Adult Weight: Unknown

Adult Length: 18-26 inches

Life Expectancy: 7-9 years

Migration Patterns: Does not migrate; year-round resident

Feeding Periods: During daylight hours; feeding can depend on appropriate weather conditions.

Typical Foods: Earthworm and amphibians

Native to Ohio: Yes