

Wild Things in Your Woodlands

Ring-necked Snake



The ring-necked snake (*Diadophis punctatus*) is a slender, small to medium-sized snake that grows to an average length of 15 inches. Females are sometimes longer than the males, but not significantly so. The head of the ring-necked snake tends to be wider than its neck and flattened in appearance. Its sides and back are brownish-gray or bluish-black, with a yellow to orange ring just behind the head. Smooth scales give the ring-necked snake a slightly glossy appearance. Its belly is bright yellow or yellowish-orange, typically without spots, or with just a few small black spots down the center.

As summer approaches and the weather becomes warmer the ring-necked snake, having emerged from hibernation in April, becomes most active in May and June. Generally found in or near moist, shady woodlands, the ring-necked snake is common in New York State in locations where appropriate cover is available. Specific habitat sites are varied and include mature or second growth forests, old fields, rocky hillsides, grassy fields, and the borders of streams and rivers. Forest edges, roadside cuts, and forest openings such as log landings and skid trails also provide attractive, sunny sites.

It takes around 3 years for these animals to reach maturity, and ring-necked snakes often will live longer than 10 years. Most adults mate in May and June, and egg-laying occurs at the end of June or early July. Females usually lay 2 to 10 oblong eggs, each about 1 inch long, in nest sites inside logs, under rocks, or in old burrows. Because females often share their nest sites, it is common to see many eggs incubating together. Young snakes 4 to 6 inches long hatch out around 6 weeks later, and begin to feed and grow rapidly before the winter begins.

Ring-necked snakes seldom are seen moving about during the day. Even where abundant, they tend to be secretive, and can usually only be seen by lifting up rocks or boards during the day in the summer or early fall months. While searching for ring-necked snakes, it is common to find two or more ring-necked snakes under the same cover object. Once these snakes begin to use a cover object they often return to it, using their sense of smell to relocate the site.

Although docile, when handled ring-necked snakes often exude a pungent, unpleasant-smelling musky substance. This defense mechanism probably provides some protection from predators. Likely predators of this animal include animals that can enter burrows or dig, such as the Eastern milk snake, black racers, shrews, weasels, and skunks. Other animals, such as owls, hawks, foxes, and domestic cats may occasionally prey on ring-necked snakes when they venture out to feed. The snakes, in turn, may feed on a wide variety of items including salamanders, small snakes, frogs, slugs and worms. However, salamanders are often the most common food item eaten, followed by earthworms.

As the days grow colder in September and October, ring-necked snakes move into deep rock crevices, anthills, or burrows made by other animals. Ring-necked snakes have preferred locations where they retreat to hibernate during the winter. Often the same sites are used year after year by the same individuals. They often share their winter den sites with other ring-necked snakes as well as other species.

To enhance habitat for ring-necked snakes on your land, maintain any open slopes with exposed rocks for cover and basking areas. If you have a timber harvest, ask your logger to push the butt ends of the logs that are usually left behind into piles at the edge of the landing. These piles provide excellent nesting and resting cover for ring-necked snakes and other snakes too. Leaving logs on the forest floor and along the woodland edge will provide habitat not only for the snakes but also for the salamanders they feed on.

Kristi Sullivan coordinates the Conservation Education Program at Cornell's Arnot Forest. More information on managing habitat for wildlife, as well as upcoming educational programs at the Arnot Forest can be found by visiting the Arnot Conservation Education Program web site at ArnotConservation.info

Ring-necked snake photo courtesy of
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