

Ring-necked Snake



ILLUSTRATION BY ZACKERY ZDINAK

SCIENTIFIC NAME: The ring-necked snake was first described by the famed systematist Linnaeus in 1766 from a specimen collected in South Carolina. The genus name *Diadophis* is derived from the Greek words for “crown” or “headband,” *diadem*, and “snake,” *ophis*. The specific name *punctatus* means “spotted” in Latin and refers to the dark spots that usually adorn the snake’s belly. More than a dozen subspecies are recognized for this snake. The subspecies *regalis* is the form found in Arizona. *Regalis* comes from the word “regal,” referring to the large size of this subspecies.

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DESCRIPTION: Arizona specimens are slender snakes of up to 34 inches long with a dorsal coloration that typically is gray, often with a blue or green cast. The head is usually dark. The upper lip, chin and ventral surfaces are brightly colored, often orange or yellow grading into coral red before the

tail. Black spots typically mark the belly. A distinctive yellow or orange ring, bordered narrowly by black, spans the neck in most specimens. This neck ring, which gives this snake its common name, may be absent in some individuals. The snake’s scales are smooth, giving the serpent a glossy appearance. Its eyes are small.

DISTRIBUTION: Ring-necked snakes are found across the United States and from southern Canada to northern Mexico. In Arizona, this snake is found primarily across the Colorado Plateau and the central part of the state and throughout southeastern Arizona. It also occurs in western Arizona atop mountain ranges located great distances apart.

HABITAT: Ring-necked snakes seem particularly common in oak woodlands, mixed pine-oak woodlands and grasslands in southeastern Arizona. They seldom are encountered out crawling on the surface, but more typically are seen sheltering beneath surface debris.

BIOLOGY: Ring-necked snakes prey chiefly upon other snakes, such as ground snakes and night snakes. Garter snakes, which many other snake-eating species avoid, also are taken readily. Lizards also are known to be caught by ring-necked snakes, as are

salamanders in the eastern United States. Prey is subdued by means of mild venom administered using slightly enlarged teeth in the rear of the snake’s mouth. Interestingly, ring-necked snakes may drool when handled or harassed. This unusual habit is not known to be exhibited by any other Arizona snake.

Ring-necked snakes have a most impressive defensive display that uses color, motion, smell and taste to dissuade would-be predators. When threatened, these snakes typically coil their tail like a corkscrew (exposing the brilliant red underside) and wave it toward the intruder. They also may roll the lower portion of their body over, exposing their brilliantly colored underside. While performing their defensive display, ring-necked snakes conceal their vulnerable head beneath a coil or hold it close to the body where it is less accessible to predators. An unpleasant musk secreted from the vent further dissuades attack.

STATUS: Ring-necked snakes appear to be common if seldom-encountered members of Arizona’s reptile fauna. Populations are presumed to be stable. This species may be found in suitable environs throughout the state.

MANAGEMENT NEEDS: This species is best managed by ensuring suitable habitat remains intact and undisturbed. Potential threats would be any land use that removes potential shelter sites or compromises the prey base needed by this snake. The secretive nature of this snake and its disjunct distribution in the West increases the probability this species will eventually turn up in previously undocumented areas. They should be watched for in suitable habitat. If ring-necked snakes are someday divided into several distinct species, the management of this group quickly could become a complicated picture. 🐍

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