

# Western Diamond-backed Rattlesnake

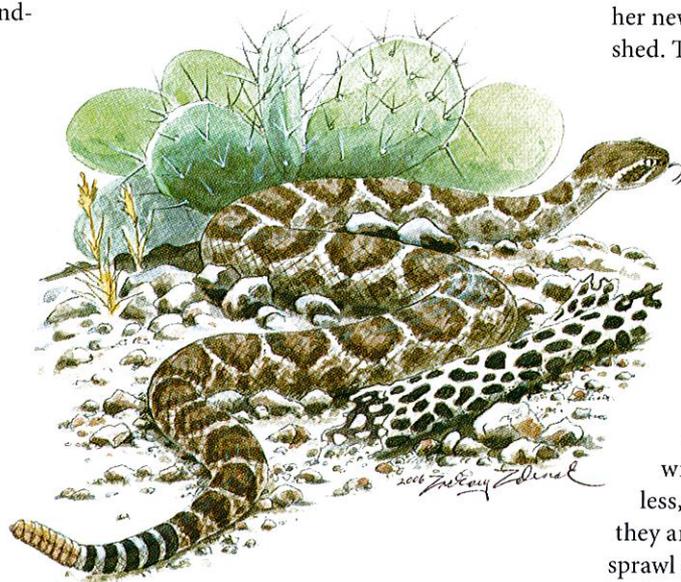
**SCIENTIFIC NAME:** *Crotalus atrox*. From the Greek *krotalon*, meaning “a rattle,” referring to the snake’s most obvious feature, and the Latin *atrox*, meaning “dark, fierce, savage,” referring to the bold disposition this snake often displays.

*Although small mammals are its most common prey, the western diamond-back also consumes birds and lizards.*

**DESCRIPTION:** The western diamond-backed rattlesnake is the largest of Arizona’s rattlesnakes. Adults can measure 5.5 feet (1.7 meters); adult males may be 10 percent larger than females. They can be various shades of gray or tan, sometimes with a pinkish tinge, and they have dark-edged, diamond-shaped markings down the middle of their backs. The tail is marked with black and white rings, earning this snake the nickname “coon tail.” Mohave rattlesnakes are similarly patterned, but the western diamond-back’s pattern, typically less distinct, is often described as “peppery” or “dusty.” Also, the black rings on its tail are usually about the same width as the white rings (in Mohave rattlesnakes, the white rings are generally much wider).

**DISTRIBUTION:** This is the most commonly encountered of the 13 species of rattlesnakes in Arizona. The western diamond-back is widely distributed in southern and western Arizona, primarily below the Colorado Plateau. These snakes also occur from Arkansas and Oklahoma through Texas and New Mexico to south-eastern California and well into Mexico.

**HABITAT:** Western diamond-backs occur in a variety of arid and semi-arid habitats, including desert scrub, grasslands, chaparral, and pinyon and juniper woodlands. They seem most common in rocky areas in the Arizona Upland subdivision of the Sonoran Desert and in Chihuahuan deserts.



**BIOLOGY:** Western diamond-backs are venomous. They employ a sit-and-wait ambush technique for securing food, spending hours or even days coiled along a well-used wood rat trail or next to a dwindling desert water hole, waiting for suitable prey. When a western diamond-back strikes, it injects venom through fangs that work like hypodermic needles. Although small mammals (including pocket mice, kangaroo rats, etc.) are its most common prey, the western diamond-back also consumes birds and lizards.

Western diamond-backs, like other rattlesnakes, typically detect prey by infrared detection. They belong to a group of snakes called “pit vipers,” which have specialized, forward-directed pits between the eyes and the nostrils. The pits contain extremely sensitive sensory organs that can detect the body heat of warm-blooded prey. Studies

indicate they can detect temperature differences as small as .0054 Fahrenheit (.003 Celsius).

Western diamond-backs mate in the spring and give birth to live young in mid-summer, in litters ranging in size from two to 25. The female usually stays with her newborns until they undergo their first shed. These snakes hibernate during the winter singly or in groups.

The rattle, for which they are famous, is attached to a set of muscles that undergo one of the fastest vertebrate movements known. The rattling behavior serves as a mechanism to deter potential predators, including humans.

**STATUS:** Western diamond-backs are fairly common and widespread within their Arizona range. Nonetheless, perhaps more than most snakes, they are victims of persecution. As urban sprawl encroaches on western diamond-back habitat, development brings them in closer contact with humans. This usually results in forced removal of the snake. Studies indicate that western diamond-backs that are moved half a mile or more have greatly diminished survival rates.

**MANAGEMENT NEEDS:** Western diamond-backs require little management, and can be common under a variety of conditions. Nonetheless, they face the threat of continued habitat loss from urbanization. Western diamond-backs can be collected with a hunting or combination license, and there is a year-round open season with a bag limit set at four in possession (alive or dead). 🦎

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