



WILDLIFE NOTES

Western Coral snake

There are two kinds of coral snakes in the U.S. The Eastern Coral Snake (*Micrurus fulvius*) occurs from North Carolina to Florida. The Western Coral Snake (*Micruroides euryxanthus*) also called the Arizona Coral Snake, or Sonoran Coral Snake is the one found in southwestern New Mexico. It is the state's only representative of the family Elapidae that also includes the cobra, mamba and sea snake.

DESCRIPTION

Western Coral Snakes are small compared to most poisonous snakes in New Mexico, usually 13-18 inches long as adults and pencil thin.

They exhibit an aposematic (warning) coloration of red, yellow (or white), and black bands that completely encircle the snake. There are yellow rings bounding every red ring. The scales are smooth and shiny. A few other snakes mimic this coloration, but the Western Coral Snake is the only species with red bands bordered by white or pale yellow.

Their small blunt heads are not much bigger than their blunt tails. The head is barely distinct from the neck. The snout is black. Their eyes are tiny with round pupils (some other poisonous snakes have elliptical pupils).

Unlike rattlesnakes, coral snakes have small fangs that are fixed in position on the front part of the upper jaw and cannot be folded back.

Certain harmless snakes may gain protection by mimicking dangerous snakes. The coral snake has several mimics including the New Mexico Milk Snake, Sonoran Mountain Kingsnake, Ground Snake, and Long-nosed Snake, but only the coral snake has all the following characteristics: a blunt, black snout, color bands that completely encircle the body, and broad red bands with yellow (or whitish) borders.

The folk rhyme Red to yellow, kill a fellow; Red to black, venom lack works well in the United States but cannot be relied upon in other regions.

RANGE

The Western Coral Snake lives in the Sonoran Desert of Arizona and northern Mexico, and the southwest corner of New Mexico (in extreme southwest Catron County and western Hidalgo and Grant counties). It is not known above 5900 feet.



Photo courtesy of the Gray Hawk Nature Center

Preferred habitat is rocky areas from plains to lower mountain slopes and uplands. Arroyos and dry river bottoms and mesquite-lined washes are favored.

BEHAVIOR

Most coral snakes are very secretive. They spend the vast majority of their time underground or hiding under rocks or logs. They may emerge after sundown, on overcast days, or in rainy weather when their usual haunts become flooded. This reclusive behavior keeps them away from humans under most circumstances.

Western Coral Snakes are nocturnal during the summer months, avoiding extreme heat, but may be active mornings and evenings during spring and fall. They hibernate during cold weather.

The red, black and yellow warning coloration may deter most predators, but if provoked or threatened, a Western Coral Snake will go into a coil with the head hidden underneath. It will then raise the tail and wave it like a fake head, presumably to cause an attacker to think that it is about to strike and/or to divert attention from the real head.

When threatened, many snakes produce warning sounds such as hisses or rattles. Western Coral Snakes use other another warning sound—a fart. They produce a popping sound like cloth ripping, made by releasing air from the vent while everting the anal lining. Scientists politely describe this practice as “cloacal popping”. This noise may startle the intruder and further enhance the perception of tail as head. Each pop lasts a fraction of a second but may be repeated several times, and can be heard from up to two meters away. This reverse Bronx cheer is always associated with defensive behavior.

REPRODUCTION

Western Coral Snakes mate in late spring, but there may be some fall mating as well. Females lay 2-3 eggs during the summer rains which hatch after about 10 weeks. The young are 7 to 8 inches long.

FEEDING

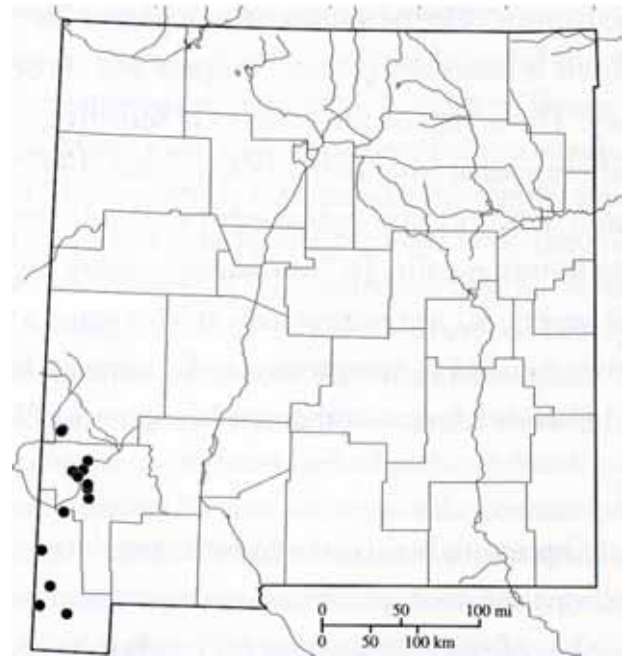
All snakes are predators, and many are fussy eaters. Western Coral Snakes feed mainly on other fossorial (underground dwelling) snakes. Blind Snakes (*Leptotyphlops*) and Black-headed

Snakes (*Tantilla*), about the size of worms, are favorite items, but small lizards are also eaten. Food is likely located by smell. Coral snakes, like other snakes, constantly flick their forked tongues to pick up odors. The tongue is then inserted into two holes on the roof of the mouth (Jacobson's organ), where the smells are interpreted by the brain.

Like other members of the snake family Elapidae, coral snakes use a pair of small stationary fangs to deliver their neurotoxic venom. They do not strike forward in the manner of rattlers, but bite by moving their heads rapidly to the side. The fangs are not the efficient hollow injection devices seen in rattlesnakes; rather they have grooves down which the venom flows. Because venom delivery is relatively ineffective, coral snakes have a tendency to bite and hold on until the venom takes effect, rather than striking and withdrawing as do rattlers. The effects of the potent venom cause rapid paralysis and respiratory failure in the prey.

BITES TO HUMANS

Coral snakes are not aggressive and account for less than a single percent of the number of snakebites each year in the United States. No deaths have been reported from the bite of a Western Coral Snake (unlike its eastern counterpart). Due to the small size of coral snakes, along with



their having much smaller fangs than rattlesnakes, bites can rarely penetrate heavy clothing or shoes. The modest venom delivery system requires that the snakes actually chew through skin layers to inject the poison. Most coral snake bites occur during accidental encounters like gardening.

However, the venom of this snake is similar to that of the cobra. Drop for drop, it is 2-3 times more potent than that of the Western Diamondback Rattlesnake. Despite the snake's relatively small size, the venom is a powerful neurotoxin, far more toxic than that of any other venomous snake in North America and quite capable of killing an adult human, even when antiserum is available. Although the odds of being bitten by a coral snake in the wild are very low, Western Coral Snakes should be considered dangerous and should not be handled.

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