

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Animal Abstract

Element Code: ARADC01010Data Sensitivity: No**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**NAME: *Micruroides euryxanthus*

COMMON NAME: Sonoran Coralsnake, Arizona Coral Snake, Western Coral Snake

SYNONYMS:

FAMILY: Serpentes:Elapidae

AUTHOR, PUBLICATION: Kennicott

TYPE LOCALITY: Listed as Sonora, Mexico in National Museum of Natural History records (Holotype USNM 1122).

TYPE SPECIMEN: HT: USNM 1122, adult male.

TAXONOMIC UNIQUENESS: Monotypic genus with 3 subspecies; only *M. e. euryxanthus* is found in the United States. Grouping is based on scale characteristics and color pattern.

DESCRIPTION: A small, slender snake with total lengths from 11-24 in (28-61 cm). This brightly-colored snake has red, yellow or cream, and black bands that completely encircle the body; the red bands touch the yellow bands. "The scales in the dorsal portion of the red bands often have black edges creating a net-like pattern over the red. Some specimens are marked with heavy black speckling or mottling in the dorsal portion of the red bands." (Brennan, 2008). The snout and small blunt head are black, and barely distinct from the neck. The relatively short, blunt tail usually lacks red bands. The cloacal scute is red on Arizona specimens. The pupils are round and the scales are smooth and shiny. The black snout distinguishes this snake from the similar looking *Chionactis occipitalis* (Western Shovel-nosed Snake) and *C. palarostris* (Sonoran Shovel-nosed Snake). (Brennan, 2008; Brennan and Holycross, 2006; Stebbins, 1966 and 2003).

AIDS TO IDENTIFICATION: This is the only species in Arizona with red and black rings, separated by white or yellowish rings, completely encircling the body, with colors slightly faded on the belly. Head is black and the first band is yellow or white. Harmless mimics are distinct in the color pattern of the bands, and gave rise to the rhyme, "red on yellow kill a fellow; red on black okay Jack." Examples of mimics in the United States and Arizona include *Lampropeltis pyromelana* (Sonoran Mountain Kingsnake) and *L. triangulum* (Milksnake).

ILLUSTRATIONS:

Color illustration (Stebbins 1966: plate 31; Stebbins 2003: plate 44)

Color photo (Behler and King 1979: plate 616)

Black and white illustration (Smith, p. 107)

Color photo (Degenhardt, etal. 1996: plate 116)

Color photo (Arizona-Sonora Desert Museum

<http://www.desertmuseum.org/programs/images/TRV-A003.jpg>)

Color photos (Brennan 2003, & Babb, in Brennan 2008 <http://www.reptilesfaz.com/Snakes-Subpages/h-m-euryxanthus.html>)

Color photo (Brennan and Holycross 2006: p. 99)

TOTAL RANGE: Across most of southern Arizona and southwestern New Mexico, southward to southern Sonora and southwestern Chihuahua, Mexico. In the low deserts of western Arizona, its distribution is spotty and poorly known (Brennan, 2008).

RANGE WITHIN ARIZONA: Most of southern Arizona south of the Mogollon Rim, although low desert distribution in western part of the state is not well known. Generally occurs below approximately 6,000 feet elevation.

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Largely a nocturnal or crepuscular snake that can be active around the clock when conditions are favorable, e.g. during summer rains. It hibernates during the cold months of late fall and winter. Fossorial, they make their homes in rodent burrows and rock crevices. Several defensive behaviors may be seen such as hiding the head within the coils, writhing, cloacal popping and tail waving, which are thought to divert the predator's attention to the tail instead of the head. The venomous Coral snake is docile and unlikely to bite unless handled. They do not strike in the same way as do rattlesnakes, but once attached to a victim they usually do not release until pulled free. It delivers neurotoxic venom through fixed, hollow fangs in the front of the mouth. Venom is nearly twice as toxic as rattlesnakes in Arizona, but no human deaths have been reported to have been caused by Arizona coral snakes.

REPRODUCTION: Up to 3 eggs are laid usually underground during the summer rainy season in July and August, with eggs hatching in September. Still unknown are the full reproductive cycles, age of maturity and mating behavior.

FOOD HABITS: This snake feeds primarily on ectotherms, using its neurotoxic venom to subdue a variety of small snakes including threadsnakes (*Leptotyphlops*), groundsnakes (*Sonora*), shovel-nosed snakes (*Chionactis*), nightsnakes (*Hypsiglena*), and black-headed snakes (*Tantilla*). Occasionally it also feeds on small lizards (skinks, etc.). Threadsnakes appears to be a preferred food (Brennan and Holycross, 2006).

HABITAT: In Arizona, they are usually encountered above flats in or near rocky or gravelly drainages, mesquite lined washes, and canyons. (Brennan, 2008). Most abundant in rocky Arizona upland desert and bajadas where there are diverse soil types, from loose sand to rock.

ELEVATION: Below about 6,000 feet (1,829 m).

PLANT COMMUNITY: The Sonoran Coralsnake can be found ranging in communities from Sonoran, Mohave, and Chihuahuan desertscrubs, through Semidesert Grassland, and

into the lower reaches of the woodlands. (Brennan, 2008). Associated species include: Creosotebush, desert saltbush, linear-leaved saltbush, wolfberry, globemallow, and mesquite trees.

POPULATION TRENDS: Not often seen but probably very numerous and certainly widespread. No downward trend suspected or likely.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: 2 (AZGFD, AWCS 2022)
[1B (AGFD SWAP 2012)]
OTHER STATUS: Category A, 2000 Mexican Fed Comm.

MANAGEMENT FACTORS: None

PROTECTIVE MEASURES TAKEN: None

SUGGESTED PROJECTS: Distribution, population trends, and life history studies are needed.

LAND MANAGEMENT/OWNERSHIP:

SOURCES OF FURTHER INFORMATION

REFERENCES:

- Arizona Game and Fish Department. 2012. Arizona's State Wildlife Action Plan 2012-2022. Phoenix, AZ.
- Arizona Game and Fish Department. 2022. Arizona Wildlife Conservation Strategy: 2022-2032. Arizona Game and Fish Department, Phoenix, Arizona. 378 pages.
- Behler, J.L. and F.W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred A. Knopf. Pp.680-681.
- Brennan, T.C. 2008. Reptiles of Arizona: Sonoran Coralsnake, *Micruroides euryxanthus*. <http://www.reptilesfaz.com>. Accessed 3/23/08.
- Brennan, T.C. and A.T. Holycross. 2006. A Field Guide to Amphibians and Reptiles in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. Pp. 98-99.
- Degenhardt, W.G, C.W. Painter, and A.H. Price. 1996. Amphibians and Reptiles of New Mexico. University of New Mexico Press, Albuquerque, New Mexico. Pp. 338-339.
- Grismer, L.L. 2002. Amphibians and reptiles of Baja California, Including Its Pacific Islands and the Islands in the Sea of Cortez. University of California Press. Pp. 316-317.
- Lowe, C.H. 1964. The vertebrates of Arizona: amphibians and reptiles. University of Arizona Press. Tucson, Arizona. P.172.
- Smith, R.L. 1982. Venomous Animals of Arizona. The University of Arizona Press. Tucson, Arizona. Pp. 107-108.

- Stebbins, R.C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Book Company, Inc., New York. Pp.459-461.
1966. A field guide to western reptiles and amphibians. Houghton Mifflin Company. Boston, Massachusetts. Pp.185-186.
1985. A field guide to western reptiles and amphibians. Second edition, revised. Houghton Mifflin Company. Boston, Massachusetts.
2003. A field guide to western reptiles and amphibians. Third edition. Houghton Mifflin Company. Boston, Massachusetts. Pp. 405-406.
- Wright, A.H. and A.A. Wright. 1957. Handbook of snakes of the United States and Canada. Vol.I. Comstock Publishing Associates. Ithaca, New York. Pp.885-890.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

- T.R. Van Devender, Arizona Sonoran Desert Museum, Tucson.
- T.B. Johnson, AGFD, Phoenix, Arizona.
- K.B. Jones, BLM, Phoenix.

ADDITIONAL INFORMATION:

“This is Arizona’s only representative from the Elapidae, a family of snakes that include mambas, cobras, kraits, and taipans.” (Brennan, 2008).

Revised: 1991-03-27()
2008-03-23 (TFH)
2008-03-28 (SMS)
2023-04-09 (MBL)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= year of last revision as indicated at end of abstract). X...X (= taxon of animal or plant). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.