ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Animal Abstract **Element Code:** ARADE02050

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME:	*Crotalus lepidus* (Kennicott, 1861)
COMMON NAME:	Rock Rattlesnake
SYNONYMS:	*Uropsophus lepidus* (Kennicott, 1861)
	Caudisona lepida (Kennicott 1861)
OTHER COMMON NAMES:	Green Rock Rattlesnake
	Banded Rock Rattlesnake
	Pink Rattler
FAMILY:	Viperidae

AUTHOR, PLACE OF PUBLICATION: Kennicott, R. 1861. On three new forms of rattlesnakes. Proceedings of the Academy of Natural Sciences of Philadelphia 13:206-207.

TYPE LOCALITY:

***Crotalus lepidus*:** "Presidio del Norte and Eagle Pass" [Texas, USA]

***Crotalus lepidus klauberi*:** Carr Canyon, Huachuca Mountains, Cochise County, Arizona [USA]

TYPE SPECIMEN:

***Crotalus lepidus* syntype:** ANSP (?) two heads, now lost.

***Crotalus lepidus klauberi* holotype:** UMMZ 79895. L. H. Cook. 1931-10-08

TAXONOMIC UNIQUENESS: There are 55 species in the genus *Crotalus* (Uetz et al. 2026) with 13 occurring in the United States (Nicholson 2025) and 12 occurring in Arizona (Holycross and Mitchell 2020, Arizona Game and Fish Department (AZGFD) 2022). There are currently three recognized subspecies of rock rattlesnakes: *C. lepidus lepidus* (Mottled Rock Rattlesnake). *C. l. klauberi* (Banded Rock Rattlesnake), and *C. l. maculosus* (Durangan Rock Rattlesnake) (Uetz et al. 2026). *C. l. klauberi* is the only subspecies that occurs in Arizona (Holycross and Mitchell 2020).

DESCRIPTION:

Adults: The Rock Rattlesnake is a relatively small and slender snake (Holycross and Mitchell 2020). The color and patterns of individuals vary significantly by region and even within

populations. In general, the ground color hues may be green, blue, tan, red, brown, and pale pink, typically correlating with the environment (Campbell and Lamar 2004, Holycross and Mitchell 2020). The dorsum has 18–38 narrow, irregularly defined dark cross-bands or blotches that are widely–spaced across the body (Holycross and Mitchell 2020). This species also exhibits color sexual dimorphism where males tend to have a more greenish ground color while females are grey (Jacob and Altenbach 1977). As adults, males are larger than females; males range between 510–610 mm (20–24 in) in length, while females are 455–510 mm (Schuett et al. 2016). Rock Rattlenakes have 21–30 rows of dorsal anterior scales, 20–25 along the mid-body and 14–20 near the tail. The dorsal scales are pitted and keeled (Schuett et al. 2016). There are more subcaudal scales and tail bands on males than females (McCrystal et al. 1996).

Juveniles: Rock Rattlesnake juveniles have pronounced facial stripes and darker pigmentation between bands than adults (Holcross and Mitchell 2020). The tip of the tail is bright yellow/orange (Stebbins 2003, Murphy 2019).

AIDS TO IDENTIFICATION: Rocks Rattlesnakes can be differentiated from the similar looking Ridge-nosed Rattlesnake (*C. willardi*) and Twin-spotted Rattlesnake (*C. pricei*) by color and pattern. The dorsum of the Ridge-nose Rattlesnake has a darker ground color with pale crossbands contrasting the dark crossbands on Rock Rattlesnakes. The dorsum of the Twin-spotted Rattlesnake is similar in color to the Rock Rattlesnake, however it is lined with pairs of dark spots rather than crossbands (Holycross and Mitchell 2020).

C. l. klauberi is often paler than other *C. lepidus* subspecies and lacks the dark strip extending from the eye (Holycross and Mitchell 2020).

ILLUSTRATIONS

Color photo (Behler and King 1979, plates 636 and 640)
Color photo (Degenhardt 1996, plate 118 (B))
Color illustration (Stebbins 2003, plate 52)
Color photo (Murphy 2019, page 285)
Color photos (Holycross and Mitchell 2020, pages 529–541)
Color photo (Holycross et al. 2022, page 149)
Color photos (Arizona Game and Fish Department 2023, https://live-reptilesofaz.pantheonsite.io/snakes-subpages/h-c-lepidus/)
Color photos (Arizona Wildlife Conservation Strategy 2025, https://awcs.azgfd.com/species/reptiles/crotalus-lepidus)
Color photos (iNaturalist 2026, https://www.inaturalist.org/observations?taxon_id=30740)

TOTAL RANGE:

Rock Rattlesnake: The Rock Rattlesnake occurs in the United States and Mexico (Lemos-Espinal et al. 2019). Populations have been found in mountainous regions of southeastern Arizona, southern New Mexico, and western Texas in the United States, and Chihuahua, northeastern Sonora, Durango, southeastern Sinaloa, Zacatecas, Aguascaleintes, Coahuila, Nuevo León and San Luis Potosí in Mexico (Degenhardt et al. 1996, Schuett et al. 2016). Natural boundaries, including environmental conditions and changes in landscape, limit its range in Mexico and Texas (Degenhardt et al. 1996, Campbell and Lamar 2004).

Despite being within the species range, Rock Rattlesnakes are distinctly absent in the Mule, Swisshelm, and Patagonia Mountain ranges in Arizona (Schuett et al. 2016, Holycross and Mitchell 2020).

Banded Rock Rattlesnake: Banded Rock Rattlesnakes have been documented in the northwestern region of the Mexican Plateau and Sierra Madre Occidental to northern Jalisco in Mexico north to the Canelo Hills, Chiricahua, Dos Cabezas, Dragoon, Huachuca, Peloncillo, Santa Rita and Whetstone Mountains in Arizona (Dominguez 2000, Holycross and Mitchell 2020). They are also found in the western tip of Texas and southwestern New Mexico (Prival 2008).

RANGE WITHIN ARIZONA: Populations are limited to small ranges within the Sky Islands in the southeast region of the state in Cochise, Santa Cruz, and Pima counties from the Canelo Hills and the Chiricahua, Dos Cabezas, Dragoon, Huachuca, Santa Rita, and Whetstone mountains (Johnson and Mills 1982, Schuett et al. 2016, Holycross and Mitchell 2020). Based on its distribution in New Mexico, there is a possibility that it could be discovered in east-central Greenlee County (Holycross et al. 2022).

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: Rock Rattlesnakes are typically active in the morning and evening hours, but they have been observed at night during warm months (Degenhardt et al. 1996). The winter months (November–February) are spent hibernating in underground refugia that permit occasional basking. These overwintering locations often change yearly (Schuett et al. 2016, Holycross and Mitchell 2020). In Arizona, activity is driven by the monsoon season and typically peaks in July–September (Schuett et al. 2016). Snakes will be less active during the day from May–June when it is hot and dry (Holycross and Mitchell 2020). The ROck Rattlesnake's body temperature has a strong correlation to surrounding air temperatures (McCrystal et al. 1996).

In the spring (March–April), reproductive females will stay close to overwintering sites and only travel small distances of 2–30 m. The remaining females and males travel to feeding sites during these months (Schuett et al. 2016). Males have larger home ranges than females, with home range size averaging 7.29 ± 0.89 ha for females and 15.82 ± 3.71 ha for males (Mata-Silva et al. 2018).

Rock rattlesnake venom toxicity is above average among rattlesnakes (Schett et al. 2016). Venom composition and potency varies across its range and temporally within individuals, likely due to differences in diet. All subspecies are cytotoxic. Both Type I (low toxicity and high SVMP activity) and Type II (high toxicity and low snake venom metalloproteinase (SVMP) activity) venoms are present in the venom of Rock Rattlesnakes. The types may target invertebrates vs vertebrates and reptiles vs mammals among vertebrates (Schuett et al. 2016, Holycross and Mitchell 2020). Although Rock Rattlesnake venom most closely follows a type I venom with moderate median mice toxicity values, Banded Rock Rattlesnake venom exhibited significantly higher toxicity toward mice, approaching values typical of type II venoms (Saviola et al. 2017). Among the subspecies, the Banded Rock Rattlesnake venom is most toxic towards vertebrates such as lizards and mammals (Saviola et al. 2017).

Birds of prey, carnivorous mammals and other snake species are considered likely predators, though it's been poorly documented (Holycross and Micthell 2020). Though it is uncommon for these snakes to be seen in trees, Rossi and Felder (1993) observed two occasions of climbing behavior in the Huachua Mountains. Snakes typically attempt to avoid being approached and will only strike as a last resort (Prival 2008, Holycross and Mitchell 2020).

REPRODUCTION: Rock Rattlenakes have a biennial reproductive cycle (females typically reproducing every other year), though some reports suggest this may vary depending on region (Goldberg 2000). The mating season is primarily July–August, and rarely goes into September (Holycross and Mitchell 2020). Litter sizes are usually 1–8 young (Schuett et al. 2016). Hatchlings emerge during the monsoon season in concurrence with lizard hatchlings (Murphy 2019). Holycross and Mitchell (2020) report several observations of postpartum females with young in July and August. Combat between males has been reported during the mating season (Carpenter et al. 1976).

FOOD HABITS: The Rock Rattlesnake is carnivorous, with its main food source consisting of lizards (primarily Yarrow's Spiny Lizard (*Sceloporus jarrovii*) in the Madreans) and giant centipedes (*Scolopendra* spp.) (Starrett and Holycross 2000, Holycross et al 2002, Holycross et al. 2022). They also feed on frogs, other snakes, small mammals, and occasionally small birds (Degenhardt et al. 1996, Stebbins 2003, Holycross et al. 2022). Preferred prey may exhibit seasonal variation based on the availability of prey species. Centipedes are more

frequent in the fall in response to the rainy season, resulting in a proportional shift away from lizards as the main food source (Holycross et al. 2002).

Individuals seem to have habitual hunting spots near rock piles they occupy (McCrystal et al. 1996). Juveniles "lure" small lizards as prey with their brightly colored tails (Johnson 1987). Cannibalism has been documented within this species, though it is assumed not to be deliberate, but instead a result of opportunistic feeding (Harris and Simmons 1977).

HABITAT: Rock Rattlesnakes prefer rocky slopes or open rockslides, but also can be found in woodlands with dense vegetation. They commonly reside on talus slopes and along rocky streambeds, often adjacent to habitats such as semidesert or plains grasslands and brushlands (Schuett et al. 2016, Holycross et al 2022). Individuals are usually found among rocks or in open areas of forest land with sparse vegetation, often near permanent or intermittent waterways (Stebbins 2003, Campbell and Lamar 2004), and have been observed basking on flat rocks, beneath stones or among other large substrate such as pieces of bark (Wright and Wright 1957). Available habitat is characterized by gravel and sand dominated alluvial flats and slopes, alluvial rocky slopes, rocky slopes, and arroyos (Mata-Silva et al. 2018). In Arizona, the distribution is relatively uneven; populations concentrate in regions based on topography and substrate (Schuett et al. 2016, Holycross et al 2022).

ELEVATION: 4,000–9,400 ft (1,219–2,865 m) (Heritage Data Management System, AZGFD, unpublished data accessed 2026).

PLANT COMMUNITY: Rocky Mountain Montane Forest, Madrean Evergreen Woodlands, Chihuahuan Desertscrub, Plains and Great Basin Grassland, Semidesert Grassland. Associated plants include *Pinus discolor* (Border Pinyon), *Pinus leiophylla* (Chihuahuan Pine), *Quercus hypoleucoides* (Silverleaf Oak), *Quercus arizonica* (Arizona White Oak), *Quercus emoryi* (Emory Oak), *Juniperus deppeana* (Alligator Juniper), *Arctostaphylos* (Manzanita), *Garrya wrightii* (Wright's Silktassel), *Rhus virens* (Evergreen Sumac), *Agave palmeri* (Palmer's Century Plant), *Dasylirion wheeleri* (Common Sotol), and *Yucca madrensis* (Mountain Yucca) (Schuett et al. 2016).

POPULATION TRENDS: Populations are considered to be stable, locally common, and unthreatened (Hammerson et al. 2007). Populations are substantial throughout its historic range (Holycross and Mitchell 2020). Although some Tucson herpetologists suggest populations are potentially declining, quantitative population numbers and observation rates are lacking (Shuett et al. 2016), .

SPECIES PROTECTION AND CONSERVATION

Status definitions: https://hdms.azgfd.com/species-list/columns
Heritage Network Conservation Status Rank definitions:
https://hdms.azgfd.com/species-list/columns/#SRANK

AGENCY STATUS

AZGFD:	1 (AZGFD, AWCS 2022)
UFWS (Endangered Species Act):	None
U.S. Forest Service:	None in AZ, *C. lepidus lepidus* Sensitive in NM (USDA, FS Region 3, 2013)
Bureau of Land Management:	None
Mexico:	PR - Subject to Special Protection (Secretaría de Medio Ambiente y Recursos Naturales 2018)

OTHER STATUS

Heritage Network Status:	G5 S3
IUCN:	LC (Hammerson et al. 2007)

PREVIOUS STATUS

AGENCY STATUS

AZGFD:	1A (AZGFD, SWAP 2012)

MANAGEMENT FACTORS: Threats to the Rock Rattlesnake and its habitat in Arizona include mining, grazing, development, collecting, and an altered role of fire in the ecosystem (Johnson and Mills 1982). Isolated or small populations may be subject to extirpation from collecting by hobbyists (Holycross and Mitchell 2020). Climate change is likely to shift the ideal climate of Rock Rattlesnakes to higher elevations, imposing limitations on their available range. The alteration of the role of fire in the ecosystem in response to climate change is of particular concern (Holycross and Mitchell 2020).

PROTECTIVE MEASURES TAKEN: There is no open season for Rock Rattlesnakes in Arizona so they may not be collected from the wild without a Scientific Activity License (Arizona Game and Fish Department 2026).

SUGGESTED PROJECTS: Johnson (1987) suggests a thorough life history study to better understand specific habitat requirements.

LAND MANAGEMENT/OWNERSHIP[1]

BLM – Las Cienegas National Conservation Area, Safford Field Office
DOD – Fort Huachuca
NPS - Chiricahua National Monument
USFS – Coronado National Forest
Private

SOURCES OF FURTHER INFORMATION

REFERENCES:

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[1] The list is based on where HDMS has records for the species and potentially may not be complete.

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MAJOR KNOWLEDGEABLE INDIVIDUALS:

EXTERNAL LINKS:

Arizona Wildlife Conservation Strategy
Online Field Guide to the Reptiles and Amphibians of Arizona
NatureServe Explorer
iNaturalist

ADDITIONAL INFORMATION:

The genus name *Crotalus* originates from the Greek word *krotalon* or Latin word *crotalum* referring to the rattle. The species name *lepidus* is Latin for pleasant or charming. The subspecies epithet *klauberi* is a patronym to honor Laurence Monroe Klauber (Holycross and Mitchell 2020).

Revised: 1991-03-22( )
2001-05-02 (CBN/RAM)
2023-04-02 (MBL)
2026-03-27 (AGE)

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