

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Animal Abstract**

**Element Code:** ARADA01021

**Data Sensitivity:** Yes

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Lichanura trivirgata gracia* Miller and Stebbins

**COMMON NAME:** Desert Rosy Boa

**SYNONYMS:** *Lichanura roseofusca gracia* Klauber, *Charina trivirgata gracia*

**FAMILY:** Serpentes: Boidae

**AUTHOR, PUBLICATION:** *Lichanura trivirgata gracia*, Miller and Stebbins, 1964, 189: The Lives of Desert Animals in Joshua Tree National Monument, Univ. Cal. Press vi + 452 pp. (Crothers et al. 2008. Squamata: Snakes. In B. I. Crother (ed.), Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, pp. 2-12 SSAR Herpetological Circular 37.)

**TYPE LOCALITY:**

**TYPE SPECIMEN:**

**TAXONOMIC UNIQUENESS:** Monotypic genus with 3 subspecies: *gracia* and *trivirgata* occur in Arizona. In addition, *gracia* also occurs in Southeast California, while *trivirgata* also occurs in western mainland Mexico and Southern Baja. The subspecies *roseofusca* occurs on the Southwest California coast, and the subspecies *myriolepis*, which is not currently a valid subspecies (but is often used), occurs in Baja California.

**DESCRIPTION:** A heavy bodied snake of medium length, 24 - 45 inches (61-114 cm), with weights ranging between 11 – 21 ounces (300-600 g); females are larger than males. The ground color above is typically gray, ranging from a pale gray to a dark bluish slate-gray, with or without 3 broad brown reddish/brown, or orange lengthwise stripes or irregular patches. Additional ground colors include light cream, tan, or rosy. Below, the coloration is pale cream or gray with brown to reddish/brown spots or blotches that give the appearance of two additional lengthwise stripes on the ventral surface. The head is only slightly larger than the neck. The eyes are small, and the pupils are vertical. The tail is relatively long and thick, coming to a blunt point. The scales are smooth and shiny. Infralabials 15.

**AIDS TO IDENTIFICATION:** At the species level, Rosy boas look much like their cousins, the Rubber boa (*Charina bottae*). Rosy heads are set off slightly more from their bodies, and the tops of their heads are covered with numerous small scales, rather than the fewer, but much larger, scales of the Rubber boa. Rubber boas have blunt, rounded tails while the Rosy tails are more tapered, ending in a rounded tip. (Kaplan 1995 *in* Herps UK).

**ILLUSTRATIONS:**

Color drawing (Stebbins 1966: plate 30)

Color photo (Behler and King 1979: plate 508 and 525)

Color photos (Tom Brennan 2002, in <http://www.reptilesfaz.com/h-l-t-gracia.html>)

Color photos (G. Nafis, in <http://www.californiaherps.com/snakes/images/ltgracia.jpg>)

Color photo (<http://members.tripod.com/jrreptile/id79.htm>)

**TOTAL RANGE:** Occurs from the Mohave Desert and Colorado Desert of central southern California, east to the Basin Ranges of western Arizona.

**RANGE WITHIN ARIZONA:** In western Arizona, from the Cerbat Mountains above Kingman south to the Gila Mountains west of Yuma, and east to Cabeza Prieta NWR. This includes La Paz, Maricopa, Mohave, Pima, Yavapai and Yuma counties. Localities include the Hualapai, Harcuvar, Harquahala, Dome Rock, Buckskin, Castle Dome, Cerbat and Kofa Mountains. Other localities include Telegraph Pass, Santa Maria River vicinity, Chico Shunie Hills, and areas near Quartzsite.

**SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** Primarily a nocturnal, non-venomous rock dweller that spends most of its time deep in rock crevices or underground. They hibernate in winter months, and also are inactive in extreme heat. Their estimated life span is 18-22 years.

Sometimes, the Rosy Boa rolls up into a ball when attacked by a predator, keeping its head in the center. It then releases a foul smelling musk from glands near the base of its tail. Its blunt tail may act to divert a predator from attacking its head, which remains buried in its coils. This habit of coiling around its own head appears to make it difficult for predators, such as birds of prey, to kill or even handle a Rosy Boa. (Melli 1999).

**REPRODUCTION:** A viviparous snake (live-bearing), with a breeding season from May-June, followed by a gestation period of 130 days. Females give birth to 3-12 (6-10) young; babies are independent from birth. Newly born desert rosy boas range in size from 10-12 inches (25-30 cm). During their first year, young usually double in size.

**FOOD HABITS:** A powerful constrictor that eats small mammals, birds, and lizards. When a prey item is in range, the boa strikes out in a single, explosive motion, using its many backward-curved teeth to grab hold of the prey. Quickly wrapping the prey up in the coils of its muscular body, it squeezes until the animal is unable to breathe and succumbs. Prey is then swallowed whole by the snake. They have minimal water requirements, which probably ensures their survival in very dry habitats.

**HABITAT:** In Arizona, rocky areas in desert ranges, especially in canyons with permanent or intermittent streams. Basalt, granite soils.

**ELEVATION:** From sea level to about 5,000 feet (1,525 meters). Based on records in the Heritage Data Management System (AGFD unpublished data accessed 2003), elevation ranges from 700 – 5,640 ft (213-1719 m).

**PLANT COMMUNITY:** Desert scrub, cottonwood-willow or pine-oak riparian communities. Associated species include: brittle bush (*Encelia*), creosote (*Larrea tridentata*), false mesquite (*Calliandra eriophylla*), ironwood, saguaro (*Cereus giganteus*), *Ephedra fasciculata*, white bursage (*Ambrosia dumosa*), ocotillo (*Fouquieria splendens*), big galleta (*Hilaria rigida*), gray ratany (*Krameria grayi*), Cholla (*Opuntia* sp.), yellow paloverde (*Cercidium microphyllum*), goldenrod (*Salidago* sp.), desert globemallow (*Sphaeralcea ambigua*), rose (*Rosa* sp.), grape (*Vitis* sp.).

**POPULATION TRENDS:** Unknown

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None (USDI, FWS 1996)  
[C2 - Full Species USDI, FWS 1994]

**STATE STATUS:** None

**OTHER STATUS:** Not Bureau of Land Management Sensitive  
– full sp. (USDI, BLM AZ 2010)  
[Bureau of Land Management Sensitive  
under full species (USDI, BLM AZ  
2000, 2005, 2008)]

**MANAGEMENT FACTORS:** They could be threatened by over-collection for the pet trade.

**PROTECTIVE MEASURES TAKEN:** No commercial collecting is allowed.

**SUGGESTED PROJECTS:** Distribution, habitat, population and life history studies.

**LAND MANAGEMENT/OWNERSHIP:** BLM – Havasu, Kingman, Phoenix and Yuma Field Offices; DOD – Barry M. Goldwater Air Force Range; FWS – Cabeza Prieta and Kofa National Wildlife Refuges; Private.

## SOURCES OF FURTHER INFORMATION

### REFERENCES:

- Behler, J.L. and F.W. King. 1979. The Audubon Society field guide to North American reptiles and amphibians. Alfred A. Knopf, New York. Pp. 587-588.
- Brennan, T. Reptiles of Arizona Website. <http://www.reptilesfaz.com/h-l-t-gracia.html>. Accessed: 3/18/2003.
- Crothers et al. 2008. Squamata: Snakes. In B. I. Crother (ed.), Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, pp. 2-12 SSAR Herpetological Circular 37.
- Integrated Taxonomic Information System (ITIS). Retrieved 3/18/2003 from ITIS, <http://www.itis.usda.gov>.
- Kaplan, M. 1995. Herps UK Care Sheet, Rosy Boas *Lichanura trivirgata* spp. <http://www.reptileallsorts.com/rosyboa.htm>. Accessed: 3/18/2003.
- Lowe, C.H. 1964. Amphibians and reptiles. The vertebrates of Arizona. University of Arizona Press. Tucson, Arizona. Pp. 166-167.
- Melli, J. 1999. San Diego Natural History Museum Field Guide, *Lichanura trivirgata* Rosy Boa. San Diego Natural History Museum, <http://www.sdnhm.org/fieldguide/herps/lich-tri.html>. Accessed: 3/18/2003.
- NatureServe Explorer: An online encyclopedia of life [web application]. 2002. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: February 25, 2003).
- San Diego Natural History Museum. Herpetology Type Specimens. <http://www.sdnhm.org/research/herpetology/herptype.html>. Accessed: 8/5/2002.
- Shaw, C.E. and S. Campbell. 1974. Snakes of the American West. Alfred A. Knopf. Pp.54-58.
- Stebbins, R.C. 1954. Amphibians and reptiles of western North America. McGraw-Hill Book Company, Inc., New York. Pp. 351-352.
- Stebbins, R.C. 1966. A field guide to western reptiles and amphibians. Houghton Mifflin Company. Boston, MA. Pp. 142-143.
- Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. Second edition, revised. Houghton Mifflin Company. Boston, MA.
- USDI, Bureau of Land Management. 2000. Arizona BLM Sensitive Species List. Instruction Memorandum No. AZ-2000-018.
- USDI, Bureau of Land Management. 2005. Arizona BLM Sensitive Species List.
- USDI, Bureau of Land Management Region 2. 2008. Arizona BLM Sensitive Species List.
- USDI, Bureau of Land Management Region 2. 2010. Arizona BLM Sensitive Species List.
- USDI, Fish and Wildlife Service. 1994. Endangered and Threatened Wildlife and Plants; Animal Candidate Review for Listing as Endangered or Threatened Species; Notice of Review; Proposed Rule. Federal Register 59(219): 58994.
- USDI, Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants: Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or

Threatened Species; Notice of Review; Proposed Rule. Federal Register 61(40): 7596-7613.

Woodland Park Zoo Animal Fact Sheets. 2001. Desert Rosy Boa, *Lichanura trivirgata gracia*. [http://www.zoo.org/educate/fact\\_sheets/day/r\\_boa.htm](http://www.zoo.org/educate/fact_sheets/day/r_boa.htm). Accessed: 3/18/2003.

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. 62-66.

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**ADDITIONAL INFORMATION:**

Specimen reported from Maricopa Mountains (B. Wirt, 1988).

Desert rosy boas are one of the best snakes to keep as pets, thriving in captivity with a minimal amount of care. They are calm and very deliberate in their actions.

Rosy boas are technically not “boas.” A “boa” is a snake classified in the Boinae, and include the rainbow boa, boa constrictor, and anaconda. Rosy boas are classified in the subfamily the Erycinae. Thus, they are considered to be close relatives to the Old World sand boas, the genus *Eryx* and they are called “erycine snakes.”

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