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SNAKES

Rosy Boa

Lichanura trivirgata

Lichanura trivirgata is a small, placid boa from the deserts and rocky terrain of the south-western USA and north-western Mexico. It reaches 60-90 cm, has three stripes along the body, lives in a small, dry enclosure and can live for more than 20 years. That makes it one of the easiest snakes for a beginner.

Family: Boidae Former name: *Lichanura roseofusca; Lichanura myriolepis*

KEY FACTS

THE ANIMAL

Adult size	**60-90 cm** total length incl. tail
Lifespan	**20-30 years**
Active	**At dusk and at night**
Lifestyle	**Rock-dwelling and terrestrial**
Habitat	**Desert, semi-desert and rocky terrain**
Difficulty	**Beginner**

CARE

Min. enclosure	**70 × 40 × 30 cm** L × W × H for 1 adult
Temperature, day	**22-26 °C**
Basking spot	**30-32 °C**
Temperature, night	**18-22 °C**
Humidity	**20-40%**
Water	**Water dish**
UVB	**Not required**
Winter rest	**13-16 °C** 12 weeks
Diet	**Vertebrates**
Kept	**Singly or in pairs**

BREEDING

Reproduction	**Live-bearing**
Sexually mature	**24-36 months**
Litter size	**3-6 young**
Clutches per year	**1**
Gestation	**150-180 days**

PROTECTION AND PAPERWORK

CITES	**Appendix II**
EU annex	**Annex B**
IUCN	**Least Concern (LC)**

About the species

Lichanura trivirgata is a small, stocky boa; even a large adult is only about 4 cm across. Almost all animals show traces of three stripes along the body, one down the middle of the back and one on each side. The stripes can be fairly straight and high-contrast, or broken and with almost no contrast. They are orange, rusty red, brown or black on a ground colour ranging from pale grey through yellow to tan. Colours vary greatly from population to population. Some animals have a pink or salmon-coloured belly, but most have spots instead.

The species is one of the smallest boas. Adults are typically 60-90 cm, and the largest reach a little over 110 cm. Newborns are about 25 cm. The scientific species name refers to the three stripes.

The snake is very docile and rarely bites. When threatened, it rolls into a ball with the head in the middle and releases a foul-smelling fluid from the base of the tail. Most bites happen when a hungry snake mistakes a hand for food. It moves slowly and cannot pursue its prey. It lies in wait and strikes with surprising speed when prey comes within reach.

The taxonomy of the genus is not fully settled. *Lichanura orcutti* from California is now treated as a separate species, and the genus has previously been placed in *Charina*. In the trade, animals are sold by locality and colour form, for example as desert and Mexican forms. Care is the same for all of them.

Distribution and habitat

Lichanura trivirgata lives in the south-western USA and north-western Mexico. In the USA it occurs in the far south of California and in south-western Arizona. In Mexico it is found throughout the Baja California peninsula, on the island of Isla Espíritu Santo and in western Sonora, from the border with the USA and at least as far south as Ortiz.

Further north in California it is replaced by the closely related *L. orcutti*, and the boundary between the two is not sharply drawn. Many animals in the trade are captive-bred.

Read more: Buying animals: captive-bred, wild-caught and transport

> **Native range:** United States and Mexico.

HABITAT

Lichanura trivirgata lives in deserts and other dry areas, most often in rocky terrain with granite boulders, crevices and scattered shrubs. The snake spends most of its life hidden under rocks, in rock crevices and in rodent burrows, where it is sheltered from heat and predators. Where there are few rocks, it uses rodent burrows.

The species is most active at night and at dusk. When it is hot, it keeps almost entirely to the night; in spring it often emerges in the afternoon and evening. Winter is too cold for digestion, and the snake goes into a winter rest, which in the wild is called brumation. Spring is the mating season and the most active period, and after rain many snakes come to the surface.

Prey is mainly small mammals, especially rodents, and also young hares, lizards, birds and their chicks, and the occasional bat.

Read more: Brumation and the seasons

Care

THE ENCLOSURE

An adult *Lichanura trivirgata* needs an enclosure of at least 70 × 40 × 30 cm (length × width × height). The species does not use height but needs floor area for a warm end and a cool end. A glass terrarium or a tight plastic box works equally well.

The most important thing is that the enclosure is completely escape-proof. *L. trivirgata* finds every gap, and the snake often rubs its snout against glass and lids looking for a way out. This causes injuries to the tip of the snout, especially against mesh. Use a solid lid with small, rounded ventilation holes instead of mesh, and make sure the holes are too small for the snake to push its nose into.

The substrate should be at least 5 cm deep so the snake can burrow: aspen shavings, sand or coconut fibre. Never use cedar, which contains harmful oils. Provide two hides, one in the warm end and one in the cool end, small enough that the snake sits snugly in them. A snake that can hide rubs its snout less often. Decorate with a flat rock or a branch, but secure anything heavy so it cannot topple when the snake burrows.

Hatchlings can be started in small plastic boxes with a hide and small ventilation holes. Remove droppings at least twice a week and replace the substrate completely about every two months.

TEMPERATURE

Lichanura trivirgata needs a clear temperature gradient. During the day the air temperature is 22-26 °C. Keep one end warmer with a heat mat or heat cable under about a third of the floor, so that the surface of the basking area is 30-32 °C. The heat source must always be controlled by a thermostat, so the floor does not get too hot.

At night the heating is switched off, and the temperature falls to 18-22 °C. Measure with a thermometer at both ends and an infrared thermometer on the basking area. If the snake constantly roams around the enclosure, it is often too warm; lower the temperature slightly.

These temperatures apply from spring to autumn. In winter the snake gets a winter rest (see Behaviour).

Read more: Heat and temperature

HUMIDITY AND WATER

Lichanura trivirgata comes from a dry climate, and the enclosure should be dry, with a humidity of around 20-40 %. The figure is an estimate based on the habitat. The substrate must not become wet.

Place a small, shallow bowl of fresh water in the cool end every second or third day, and remove it again. Always remove the bowl the day before and the day after feeding, because water right after a meal can cause regurgitation. During a shed, a hide with slightly damp sphagnum or coconut fibre in the cool end helps.

Hatchlings need water more often. A small cup fixed in the container so it cannot tip over is enough.

Read more: Humidity, misting and ventilation

LIGHTING AND UVB

Lichanura trivirgata lives hidden and is most active at night, so UVB is not necessary. Lighting is only there so you can see the snake. Switch it on and off with a timer so that day and night are kept separate.

Read more: Lighting and UVB

FEEDING

Lichanura trivirgata eats rodents. Adults get a large mouse or a small rat every 10-14 days from spring to autumn. Preferably give frozen and thawed prey rather than live, and offer it with long tongs. The prey should be no wider than the snake's body at its widest point. The snake is not fed during its winter rest.

Wait several days after a meal before handling, because the snake may otherwise regurgitate it. Newborns start on fuzzy mice or large pinky mice and may wait several weeks before their first meal; some do not eat until after their first winter rest. A youngster that refuses mice will often take a pinky mouse scented with a lizard. Young snakes are fed every 5-7 days.

If an adult snake refuses food, a winter rest at 10-15 °C for about a month and a slow warm-up afterwards can get it to eat again.

BEHAVIOUR AND HANDLING

Lichanura trivirgata is very docile and tolerates handling well. Touch it lightly with long tongs before picking it up, so it knows it is not feeding time. Let the snake crawl freely between your hands and support the whole body with both hands; if it is restrained, it will try to escape.

The species can be kept singly or in pairs, as long as the floor area is large enough for both. Feed the animals separately, so they do not grab the same prey item. The snake often hides in the substrate or in its hide, and if it is not visible, it has rarely escaped.

In winter the snake gets a winter rest of about three months. It supports the snake's health and gives a good feeding response in spring. Do not feed during the last 14 days before cooling, so the stomach is empty. Switch off the lights and heating, and let the enclosure cool slowly to 13-16 °C. Check on the snake every week and provide fresh water. As spring approaches, raise the temperature gradually, and make the first meal a slightly smaller prey item than usual.

Breeding

SEXUAL MATURITY AND SEXING

Lichanura trivirgata can be sexually mature in its second year, but should be at least three years old before it is bred. Size also matters, especially for the female: a small, thin female produces far fewer young than a large female in good condition. Sex is determined by probing, which should only be done by an experienced keeper or a veterinarian, but also by the spurs beside the cloaca, which are clearly larger in the male.

MATING

Mating follows the winter rest and usually takes place three weeks to three months after the heating is switched back on; animals from the northern populations mate later than those from the southern ones. Give the female plenty of food before and after the winter rest, so she is in top condition. Put the male in with the female in her enclosure, and remove him again once mating has taken place.

EGG-LAYING AND CLUTCHES

Lichanura trivirgata gives birth to live young and does not lay eggs. Gestation lasts 5-6 months, and a litter is typically 3-6 young; large females in good condition can have more than 10. The pregnant female spends clearly more time on the basking area than usual, and the basking area may be slightly warmer during gestation. She needs quiet and constant access to water and should be offered food regularly, including in the last weeks if she will eat.

INCUBATION

There is no incubation, because the young are born live and are independent from the first day. The pregnant female needs the same gradient as usual so she can regulate her temperature. Birth takes place in the enclosure. Remove dead young and birth membranes as soon as you notice them.

Read more: Incubating eggs

REARING THE YOUNG

The young are about 25 cm at birth. Keep them separately in small, tight boxes with aspen shavings, a hide, a small water bowl that cannot tip over and a warm spot of 27-29 °C. Start with fuzzy mice or large pinky mice, and offer food every 5-7 days. Some young will only take a pinky mouse scented with a lizard at first.

Health and common mistakes

Lichanura trivirgata is robust and long-lived, and most problems are caused by husbandry mistakes. The typical mistakes are:

- Snout injuries after attempts to escape through mesh or along glass. Use a solid lid and a hide at each end.
- A wet substrate, which causes skin infections. Keep the substrate dry.
- Too low a temperature, which causes poor digestion and regurgitation. Always measure the surface.
- Regurgitation after handling or water right after feeding. Wait before doing either.
- Digestive problems during the winter rest if the snake was fed too shortly before cooling. Always fast the snake for 14 days first.
- Retained shed on the tail tip and around the eyes after a shed that was too dry. Provide a damp hide.

A healthy animal has clear eyes and a firm body and eats readily. Contact a veterinarian with reptile experience if the snake loses weight, regurgitates repeatedly, has an open mouth or wheezing breathing, or if birth drags on.

Always ask someone who knows

This guide is a good place to start, but it cannot replace experience. Animals differ, and much of what matters most is learned from people who have kept the species for years. Talk to a breeder, an experienced keeper or a vet who knows reptiles and amphibians before you get the animal - and again if anything looks wrong.