

## Brazilian Rainbow Boa (*Epicrates cenchria*)

**Difficulty:** Hard

Brazilian rainbow boas (*Epicrates cenchria*) are slender but strong constrictor-type snakes that typically grow 5-6.5' / 1.5-2m long. They have vertical pupils, a long tapered head, blunt snout, and heat pits on the lips. Base color is orange to red with a pattern of black rings along the back, black spots along the sides with pale crescents inside, and dark stripes on the head. The eyes are very dark and the belly is pale. However, they are best known for their intense oil slick-like iridescence.

Brazilian rainbow boas inhabit the Amazon Basin and Guiana Shield areas of South America. They prefer tropical forest habitats, where they can be found either on the ground or in the trees. As a truly nocturnal species, they do most of their hunting in the middle of the night.

Brazilian rainbow boas make fairly docile pets, but because they're nocturnal, you may not see them out and about very often. When you pay careful attention to providing appropriate Brazilian rainbow boa care, they may live for up to 30 years.

### Shopping List

- 6' x 3' x 6' reptile enclosure (front-opening)
- Dual dome heat lamp with ceramic sockets, x2
- 50w PAR30 halogen flood bulb, x4
- Thick, sturdy branch (for basking)
- Plug-in lamp dimmers, x4
- Digital thermometer/hygrometer device with probes, x2
- 34" T5 HO forest UVB bulb (Arcadia or Zoo Med brand)
- 36" T5 HO light fixture with reflector
- Pressure sprayer or automatic misting system w/6 nozzles
- Surge protector with digital timer
- 180 quarts tropical reptile substrate
- Reptile hides/caves (at least 2)
- Environmental enrichment items (hollow logs, sturdy branches, live/fake plants, leaf litter, etc.)
- Plastic soaking tub
- Calcium and vitamin supplements
- Soft-tipped feeding tongs, at least 12"

### Housing

A good formula for estimating the minimum enclosure dimensions for a semi-arboreal snake is: *Full snake length x half snake length x full snake length = length x width x height*

Given that most Brazilian rainbow boas grow to 6' / 1.8m long or smaller, ReptiFiles recommends providing an enclosure **no smaller than 6'L x 3'W x 6'H**, or 1.8m x 0.9m x 1.8m.

Using an enclosure larger than the minimum is strongly recommended. **Bigger is always better!** Although you may not see your pet climbing around all the time because it's nocturnal, they're still quite active when they're awake. It's important to provide an appropriately-sized enclosure that offers both terrestrial and arboreal space

to facilitate natural behaviors such as thermoregulation, hydoregulation, photoregulation, hunting, climbing, and hiding. This leads to a fitter and overall healthier snake.

Because you will need such a large enclosure, it's most cost-effective to build your own enclosure rather than commission one custom-made if you're up to the task. The [DIY Reptile & Amphibian Enclosures group](#) on Facebook is a good place to get tips on how to do this.

### **Can multiple Brazilian rainbow boas be housed together?**

Brazilian rainbow are not social animals, which means that you don't have to worry about them getting lonely. In fact, keeping multiple snakes together is stressful and causes competition for resources, preventing them from thriving. For this reason it's best to house only one Brazilian rainbow boa per enclosure.

### **Lighting & UVB**

Brazilian rainbow boas are nocturnal, but that doesn't mean that they don't occasionally sleep in places where they are exposed to UVB wavelengths. Aside from regulating their day/night cycle and associated hormonal rhythms, UVB lighting in particular gives the snake all of the vitamin D3 it needs, supports immune health, and encourages increased activity levels. Although rainbow boas can technically survive without UVB light, ReptiFiles strongly recommends providing it in order to promote optimum welfare!

Lights should be on for 12 hours/day.

#### **UVB Lighting**

UVB lighting can be tricky, because in order to get the right strength of UVB (UV Index, or UVI), distance and potential mesh obstruction must be considered. To provide appropriate UVB, you will need a Zoo Med T5 HO Reptisun 5.0 or Arcadia Forest 6% bulb, long enough to span half of the enclosure and placed on the warm side of the enclosure. This bulb should be housed in an Arcadia ProT5 or Vivarium Electronics reflective fixture (yes, this does make a difference).

The basking branch should be placed as follows. Given distance is from the snake's back to the UVB lamp.

- UVB mounted over mesh — 9-11"
- UVB mounted under mesh — 12-15"

*(These recommendations are approximations based on available data. For best results, use a Solarmeter 6.5 to determine the best placement to achieve a UVI of 2.0-3.0 in the basking area.)*

To remain effective, UVB bulbs must be replaced every 12 months.

### **Heating**

Humans are *warm-blooded*, which means that our body temperature is automatically regulated. Rainbow boas, however, are *cold-blooded*, which means that they have to move between areas of different temperatures in order to regulate their body temperature. In captivity, using a halogen flood heat bulb is the best way to replicate the type of warmth provided by sunlight.

- **Basking area: 90°F (32°C)**
- **Daytime ambient temperature: 78-86°F (26-30°C)**
- **Nighttime temps: 72-75°F (22-24°C)**

Generally speaking, a cluster of 50w halogen flood bulbs such as the Arcadia Halogen Flood Heat Lamp or Zoo Med Repti Tuff Halogen Lamp should be plenty to achieve your target surface temperature on the basking branch.

If you notice that they're getting too hot, dial them down with plug-in lamp dimmers or a proportional thermostat. If your basking surface is too cool, you will need higher wattage bulbs.

You will need multiple heat bulbs to create a large enough basking area to evenly heat your rainbow boa's coiled body. Start with two bulbs and add more to the cluster as your snake grows.

You may need additional equipment to maintain appropriate daytime ambient temperatures. ReptiFiles recommends using a 120w Vivarium Electronics Radiant Heat Panel regulated by a proportional thermostat such as the Herpstat 1 for this purpose. The thermostat should be programmed to the highest acceptable temperature and the probe should be placed 6-12" below the panel.

To monitor the ambient temperatures in your enclosure, place a digital thermometer probe in the middle of the enclosure (I like to wrap it around a branch). To monitor the basking temperature, place another digital probe thermometer on the basking surface, secured with a zip-tie if necessary. Most reptile-branded digital probe thermometers work well.

## Humidity

Brazilian rainbow boas dehydrate easily and are heavily dependent on having a high-humidity environment. **Keep humidity levels around 70%** during the day, and higher (at or near 100%) at night. Ambient humidity should be tracked via digital probe hygrometer with the probe placed in the middle of the setup.

To raise the humidity in your snake's enclosure, you can use a pressure sprayer like the Exo Terra Mister to mist the habitat every evening and morning, as well as possibly in the middle of the day. Alternatively you can install a Mistking automatic misting system with at least 6 nozzles (personally, I strongly recommend this approach). The enclosure should be well ventilated enough to dry out a bit between mistings.

It's good practice to use a reptile humidifier at night to help maintain those nightly humidity levels of 90-100%. Make sure to use reverse-osmosis or distilled water, and thoroughly clean out and sanitize the humidifier with veterinary-grade disinfectant like Rescue or F10SC weekly to prevent illness.

In addition, your snake will need free access to a humid hide lined by moistened sphagnum moss or substrate, as well as a tub of water for soaking.

## Substrate

Brazilian rainbow boas are likely to be healthiest and happiest when they are housed on a substrate (a.k.a. "bedding") that imitates the conditions of their natural habitat and supports high humidity levels.

Appropriate options include: DIY tropical mix (60% plain topsoil + 40% coconut fiber), Zoo Med Reptisoil, Zoo Med Eco Earth, Exo Terra Plantation Soil, and the Bio Dude Terra Fauna bioactive kit. Interestingly, *Rainbow Boas: Natural History & Captive Husbandry* by Bellosa and Bisplinghof states that a gravel substrate is also likely to be appropriate for this species, as their natural habitat often features rocky terrain.

Provide a substrate layer that is **4" deep** to cushion your snake's body and help maintain healthy humidity levels. This takes about 6 ft<sup>3</sup> or 180 quarts of substrate to achieve in a 6' x 3' enclosure. A generous layer of clean leaf litter on top is strongly recommended.

Feces and urates should be removed immediately, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced every 3-4 months, depending on how diligent you are about routine spot-cleaning.

## Décor

Decorations play an important role in your boa's enclosure as environmental enrichment. These items are not optional — they are essential to promoting positive welfare for your pet! Enrichment items encourage exercise, stimulate your snake's natural instincts, and help stave off boredom.

Décor ideas: cork logs, sturdy branches, sturdy live or artificial plants, additional hides

At minimum, you will need a sturdy climbing branch, foliage for cover, and two hiding places.

All branches should be firmly secured to the walls or floor of the enclosure to prevent them from falling and potentially injuring your snake. This is especially important as your pet matures and becomes heavier!

## Food

Brazilian rainbow boas are carnivores, which means that they need a diet of whole animal prey in order to get the nutrition that their bodies need. Juveniles should be fed every 1-2 weeks, and adults should be fed every 2-4 weeks.

A good rule of thumb is to provide a prey item(s) which totals around 10% of your snake's weight, assuming that the snake is not obese. Each item should be no wider than the snake at its widest point.

Although rats and mice are the most common feeders, rainbow boas should eat more than just rats and mice to truly thrive. The key to providing a healthy, balanced diet for your pet snake is VARIETY. Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier snake!

Prey item ideas: mice, African soft-furred rats, domestic rats, hamsters, gerbils, quail, chicks, Reptilinks

It's best to offer frozen-thawed prey rather than live to your pet snake. This is safer for the snake and generally considered to be more humane as well. Prey should be thawed in a plastic bag in warm water to around 100°F/38°C before offering. Use soft-tipped feeding tweezers to reduce the risk of getting accidentally bitten when the snake strikes.

## Supplements

Brazilian rainbow boas can survive without vitamin or mineral supplements, but they can be a good way to help prevent nutritional deficiencies. Occasionally lightly dust the prey item with a 50/50 mix of calcium and multivitamin before thawing. Arcadia RevitaliseD3 and Repashy CalciumPlus LoD are both good options.

## Water

Your snake should have free access to a large tub of fresh water every day. This water should always be kept clean, with the bowl scrubbed out with disinfectant weekly.