

## Boa (*Boa constrictor ssp. & Boa imperator*)

**Difficulty:** Intermediate - Hard

Boas (also known as boa constrictors and red-tailed boas) are a group of semi-arboreal constricting snakes native to Central and South America. They are most often found in tropical and subtropical dry to moist broadleaf forests, where they move between the trees and the leaf-covered forest floor.

Boas are 5-8' long snakes, with males tending to be significantly smaller than females, although some females grow as large as 12'. Boas typically have a relatively slender body, a rectangular head. Exact length, pattern, and coloring depends on subspecies and locality.

There are 10 known subspecies of Boa, although some are more common than others in the pet trade (star indicates which are most common):

- *Boa constrictor amarali*
- *Boa constrictor constrictor*\*
- *Boa constrictor occidentalis*
- *Boa constrictor longicauda*
- *Boa constrictor nebulosa*
- *Boa constrictor orophias*
- *Boa constrictor ortonii*
- *Boa constrictor sabogae*
- *Boa imperator*\*
- *Boa sigma*

For descriptions and photos of each subspecies, visit <https://www.reptifiles.com/red-tailed-boas-care/boa-species-subspecies/>.

Boas are some of the most popular pet snakes in the United States. Although they can get fairly large, they tolerate humans well and make engaging pets. Boas can live upwards of 30 years with good care.

### Shopping List (for temporarily housing one juvenile boa)

- 4' x 2' x 2' reptile enclosure (preferably front-opening)
- Dual dome heat lamp with ceramic sockets
- 90w PAR38 halogen flood bulb, x2
- Thick, sturdy branch (for basking)
- Plug-in lamp dimmer, x2
- Digital thermometer/hygrometer device with probes
- Infrared thermometer ("temperature gun")
- 22" T5 HO forest UVB bulb (Arcadia or Zoo Med brand)
- 24" T5 HO light fixture with reflector
- Pressure sprayer
- Surge protector with digital timer
- 4" of moisture-retentive naturalistic substrate
- Leaf litter
- Reptile hides/caves (at least 2)
- Environmental enrichment items (hollow logs, sturdy branches, live/fake plants, etc.)
- Large water bowl
- Feeding tongs, at least 12"

## Housing

A 4'L x 2'W x 2'H enclosure is the absolute minimum for housing young boas shorter than 6'. For adults and boas longer than 6', a good minimum is 6'L x 3'W x 4'H. To be precise, here is a formula for calculating minimum boa enclosure dimensions:

*snake length x half snake length x half snake length = length x width x height*

Of course, using a larger enclosure than the minimum is strongly recommended. **Bigger is always better!** Boas are active snakes that need a spacious enclosure that offers both terrestrial and arboreal space to facilitate natural behaviors such as thermoregulation, hydroregulation, photoregulation, hunting, climbing, and general exploring. This leads to a fitter and overall healthier snake.

### Can multiple boas be housed together?

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

## Lighting & UVB

Boas are crepuscular, which means that they are most active at night, particularly around sunset. Many people attempt to use this fact to argue that boas do not benefit from, and are even stressed by, the presence of light in their environment. However, providing a light source is important to regulating their day/night cycle and associated hormonal rhythms. Lights should be on for 12 hours/day.

UVB lighting has also been proven to be beneficial to boa health. Although boas can technically survive without UVB light, we strongly recommend providing it in order to promote optimum welfare!

### 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 T8 Zoo Med Reptisun 5.0 or T8 Arcadia D3+ Forest 6% bulb, long enough to span half of the enclosure and placed on the warm side of the enclosure, preferably not obstructed by mesh.

The basking branch should be placed as follows. Recommended distance accounts for snake placement on top of the basking surface:

- UVB mounted over mesh: basking branch 7-10" below UVB lamp
- UVB mounted under mesh: basking area 11-16" below UVB lamp

*(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.)*

## Heating

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

- Basking surface: 90°F (32°C)
- Basking air temp: 80-85°F (28-29°C)
- Cool end: 75-80°F (24-26°C)
- Nighttime temps: 75-78°F (24-26°C)

Generally speaking, 90w PAR38 halogen flood bulbs should be plenty to achieve your target basking surface temperature, especially if the basking branch is placed 7-11" below the heat lamp. If you notice that they're getting too hot, dial it down with a plug-in lamp dimmer. If your basking surface is too cool, you need higher wattage bulbs.

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

To measure the basking surface temperature, use an infrared thermometer (a.k.a. temperature gun). To measure the temperature of the warm hide, use a digital probe thermometer. The Etekcity 774 is a good infrared thermometer, and most reptile-brand digital probe thermometers function well.

## Humidity

Boas need a **range of humidity levels from 55-75%** in their enclosure, as measured by a digital probe hygrometer with the probe placed inside the cool hide, which is where humidity should be highest. Humidity inside the humidity hide can actually be a little higher — up to 85% on average. Humidity levels that are consistently higher or lower than this range can make your pet sick.

To raise the humidity in your snake's enclosure, you can use a pressure sprayer to mist the habitat twice a day in the early morning and late evening. If more is needed, place moistened sphagnum moss inside the cool hide. Check and change this moss regularly to prevent mold growth. Placing a thick layer of leaf litter on top of the substrate can also help maintain humidity.

## Substrate

Boas are healthiest and happiest when they are housed on a substrate (a.k.a. "bedding") that imitates the conditions of their natural habitat and facilitates moderate to high humidity. Natural soil is generally best for meeting this need.

Zoo Med Reptisoil, Zoo Med Eco Earth, Exo Terra Plantation Soil, and Lugarti Natural Reptile Bedding are the closest commercially-available substrates to the soil in a boa's natural habitat. Reptichip and sugar cane mulch can also be suitable, although they are less naturalistic. Alternatively, you can use a DIY mix of 40% organic, additive-free topsoil + 40% Zoo Med Reptisoil + 20% play sand.

Provide a substrate layer that is 2-4" deep. Although boas don't dig, deeper substrate is better able to maintain humidity. Provide a generous layer of clean leaf litter on top, plus sphagnum moss if desired. Feces and urates should be removed daily, and contaminated substrate should be scooped out and replaced. Substrate should be completely replaced once every 3-4 months.

## Décor

Decorations play an important role in your boa's enclosure as environmental enrichment. Enrichment items encourage exercise, stimulate your snake's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nice!

Décor ideas: additional hideouts/caves, cork logs, sturdy branches, sturdy live or artificial plants

All branches should be firmly secured to the walls or floor of the enclosure to prevent accidents. This is especially important as your snake matures and becomes heavier!

## Food

Boas are carnivores, which means that they need a diet of whole animal prey in order to get the nutrition that their bodies need. How often they need to eat can be roughly determined by age:

- Newborn-6 months: every 10-12 days
- 6-12 months: every 10-12 days
- 12-18 months: every 12-14 days
- 18-24 months: every 2-3 weeks
- 2-2.5 years: every 2-3 weeks
- 2.5-3 years: every 3-4 weeks
- 3-4 years: every 4-6 weeks
- 4+ years: every 4-8 weeks

A good rule of thumb is to provide a prey item(s) which totals around 10% of your snake's weight, assuming that it 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, boas need to 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, quail, chicks

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

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 Earthpro-A and Repashy CalciumPlus LoD are both good options.

## Water

Your boa should have free access to a large bowl of fresh, clean water every day. It should be large enough for your boa to curl up inside if it's in the mood for a soak.

For more information about boa constrictor care, read the full-length [Boa Care Guide](#) at ReptiFiles.com.