

Rainbow Boa Care Sheet

(*Epicrates cenchria* sp)

by Eileen Underwood and Rebecca Sobol

For the Colorado Herpetological Society

General:

Rainbow boas are so named because of the iridescent sheen imparted by microscopic ridges on their scales which act like prisms to refract light into rainbows. They can be found from Costa Rica through central South America in forests, woodlands, plains and swamps. They are primarily nocturnal creatures, sleeping during the day and prowling at night. Rainbow boas range from 4 to 7 feet in length and can live for 20 years in captivity.

There are around nine to a dozen subspecies of rainbow boa (*Epicrates cenchria* sp). The most common in captivity are the Brazilian (*E.c. cenchria*) and the Colombian (*E.c. maurus*). Other subspecies can be found from time to time. Not all are well defined and various subspecies have been interbred in captivity making identification of unknown subspecies a challenge. Differences are found in colour, pattern and size. Juveniles have a very distinct pattern of ocelli which fades with age in some subspecies (e.g., *E.c. maurus*). The Brazilians (*E.c. cenchria*) are the largest with a length of around 6 or 7 feet. They are a slender boa, so a 6 foot rainbow boa is nowhere near as massive as a 6 foot common boa. Colombian rainbow boas (*E.c. maurus*) are typically 5 to 6 feet in length. The smallest subspecies is undescribed (by taxonomists), originating from the Jonestown area in Guyana (northern South America) (*E.c. ssp.*). This subspecies rarely exceeds 4 in length. There are breeders in the US working with this subspecies.

Care of all rainbow boa subspecies is similar although there are minor variations in preferred temperature reflecting temperature variations found through the large range of *Epicrates cenchria*. It appears that rainbow boas of one subspecies or another can be found anywhere that there is suitable habitat within that range. Since much of this suitable habitat is rather inaccessible, there may be other undescribed subspecies. Several islands off the coast of South America also have rainbow boas, and some subspecies only occur on one or two islands.

Housing:

The primary requirements for an enclosure is that it be large enough to provide the snake with exercise and that it retain heat and humidity. Babies will be calmer in a small enclosure. For the first few months babies can be kept in plastic shoe boxes, one snake per box. Holes should be drilled in the sides for ventilation. Paper towels make a good substrate. There should be a water dish large enough for the snake to submerge itself, kept filled with clean water. Young snakes can be moved to a 10 gallon aquarium as they get larger. The size of the water dish should increase as the size of the snake increases, and hide boxes and additional water dishes can be added as cage furniture.

Adults, on the other hand, like lots of space to roam, so bigger is better. Four to 6 square feet of floor space is the minimum recommended for adults. Neodesha brand plastic snake cages have been recommended (Fogel, 1983) with a 36 inch model adequate for most adults and the 48 inch model for larger (> 5 feet) specimens. Glass aquariums are not recommended, but a 40 to 50 gallon aquarium with branches to increase usable space is minimal for a single animal. A larger, custom cage would be preferable. They love to climb, so a tall cage with branches for climbing will give you more opportunity to view your snake climbing around.

It is generally recommended that rainbow boas be housed individually except during breeding attempts. This is not a hard fast rule, as long as all snakes have been quarantined and are healthy they should be fine in communal housing.

Substrate:

Substrates that have been used successfully with rainbow boas include newsprint, paper towelling, repti-bark (orchid bark), Cyprus mulch, Astroturf (high quality, woven-backed), and Dri-dek tiles. Bark or mulch substrates can be misted to keep the humidity high. A humid-box containing damp sphagnum moss will usually be heavily utilized. A large tub of water with a hide box inside will usually be a popular spot too. The warm, damp conditions favoured by Rainbow boas are also conducive to the growth of mould and bacteria, so cages and water dishes should be cleaned often. Recommended twice per week or more often as needed. Substrates should also be replaced or cleaned often.

Temperature:

Temperature preferences vary for different subspecies as they have adapted to different habitats, but all seem to do best when presented with a diurnal temperature cycle (especially if breeding is intended) and a temperature gradient. Brazilian rainbow boas (*E.c. cenchria*) do best with a night-time low (NTL) temperature of low to mid 70s and daytime high (DTH) in the upper 80s (total range of > 70 to < 90F; 21 to 32C), with an optimal ambient daytime temperature of 78 to 80F. Colombian rainbow boas (*E.c. maurus*) like it warmer, with NTL in high 70s to 80s and DTH of 90 (total range ~78 to 90F) and an optimal ambient daytime temperature of 83 to 85F. Some winter cooling may be necessary for successful breeding. Extended exposure to temperatures over 90F can kill rainbow boas. It is best to start with a temperature gradient centring around 80F (range of 75 to 85F), see where your animal spends most of its time and adjust accordingly. Heat can be provided from a combination of under-tank heat source (heating pad placed under ~one-third to one-half of the cage) and overhead incandescent light (wattage determined based on size of cage and room temperature).

Humidity:

All rainbow boas are extremely sensitive to dehydration and maintenance of high relative humidity is a must. Cages should be misted several times a day and a humid shelter should be provided. The humid shelter can be in the form of a plastic box with a hole at one end containing moist sphagnum moss. Pools of water large enough for the animal to soak its entire body in should be provided on both the cooler and the warmer sides of the cage. Screen top cages are generally not recommended because they allow too much evaporation. If the cage has a screen lid it should be partially covered with Plexiglas or a damp towel to help retain humidity. A relative humidity of 75-80% is ideal. Much lower than 50% for extended periods and regurgitation and death by dehydration may result. Because high relative humidity can encourage mould growth, rainbow boa cages must be kept scrupulously clean, with bedding and moss changed on a regular basis (preferably weekly or whenever soiled). Water dishes should be washed and refilled with fresh water twice a week.

Water:

As mentioned above rainbow boas are very sensitive to dehydration, so fresh drinking water must be available at all times along with larger, heated pools for soaking. A large tub placed in the warm end of the enclosure will help raise the relative humidity of the cage and provide a place to soak. Misting the entire cage several times a day will also help maintain required humidity. Snakes will drink out of any water source present in the cage, so soaking bowls need to be as clean as the "drinking water". Rainbow

boas seem to be resistant to "blister disease" and will spend most of their time in moist areas, but a dry area should also be present at both ends of the temperature spectrum.

Lighting:

As nocturnal animals, rainbow boas probably do not need or benefit from full spectrum lighting, however it can bring out the iridescence of the snakes and can be used during the daytime. Incandescent lights can be used to help raise temperature, with white light being used during the day and red light at night. The red light will be lower wattage allowing the preferred drop in temperature at night. Red lighting at night has the added advantage of letting the animal's movements be seen without disturbing its day/night cycle with bright light.

Food:

Rainbow boas in captivity eat primarily mice and or small rats. Larger specimen may eat medium to large rats. The size of the prey item is determined by the girth of the snake, with the prey about the same size or slightly smaller than the widest portion of the snake. It is recommended that only dead food items be offered to prevent injury to the snake. If the snake isn't hungry, a live mouse wandering around the cage may get bored and start nibbling on the snake. Neonates and juveniles can be fed every week to 10 days, with sub-adults and adult fed every 10 days to two weeks. They are willing feeders and may become obese if allowed to overfeed.

Handling and Temperament:

Some hatchlings will be nippy, but with patience and increasing periods of handling they should calm down. Several authors have indicated a wariness and lack of complete trust in rainbow boas, making this boa less of an ideal "pet" snake and not a snake for children to interact with.

Breeding:

The female will usually not take food while gravid, though rarely very small food items may be accepted. A box of damp sphagnum moss inside a hide box makes a good nesting area.

Since Rainbow Boas are live bearers the female's cage must be secure for the small young. Also deep water dishes that might be hard for a small snake to climb out of should be removed.