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SNAKES

Amazon Basin Emerald Tree Boa

Corallus batesii

Corallus batesii is a slender, arboreal boa from the Amazon Basin. Adults are dark green with white markings and a yellow belly, the young red-orange. Females reach about 195 cm, and the largest animals approach 270 cm. In 2009 the species was split off from *Corallus caninus*, which today covers only the populations on the Guiana Shield. It requires a large, tall and humid enclosure and an experienced keeper.

Family: Boidae Former name: *Chrysenis batesii*

KEY FACTS

THE ANIMAL

Adult size	**120-270 cm** total length incl. tail
Lifespan	**15-20 years**
Active	**At night**
Lifestyle	**Arboreal**
Habitat	**Rainforest**
Difficulty	**Experienced**

CARE

Min. enclosure	**180 × 60 × 120 cm** L × W × H for 1 adult
Temperature, day	**24-29 °C**
Basking spot	**30-33 °C**
Temperature, night	**22-26 °C**
Humidity	**65-80%**
Water	**Water dish**
UVB	**Recommended** Ferguson zone 2
Diet	**Vertebrates**
Kept	**Singly**

BREEDING

Reproduction	**Live-bearing**
Sexually mature	**36-60 months**
Litter size	**5-25 young**
Gestation	**180-210 days**

PROTECTION AND PAPERWORK

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

About the species

Corallus batesii is a medium-sized boa with a laterally compressed body, a distinct head, heat-sensing pits in the labial scales, very long front teeth and a prehensile tail. Adults are dark green, rarely black or almost black, with enamel-white markings on the back; a completely uniform green back does not occur. The back often has a white mid-stripe with confluent, triangular crossbands that can be edged with a little black, and the belly is yellow. The young are red-orange with white markings and begin to turn green after about 4 months.

Females are larger and heavier than males. Males reach up to about 120 cm and females about 195 cm, and the largest animals approach 270 cm. The species thus grows larger than *C. caninus*.

Until 2009 the populations in the Amazon Basin were counted as *C. caninus*. That year they were separated as *C. batesii*, while the name *C. caninus* now covers only the populations on the Guiana Shield north of the Amazon River. The species are distinguished by the scales of the snout: *C. batesii* has 3-12 scales across the snout between the third and fourth upper labial

scales, *C. caninus* 2-6. *C. batesii* also almost always has white spots on the sides and may have a white mid-stripe on the back, which *C. caninus* never has. The difference in mitochondrial DNA between the two is 3-16 %. The species can produce fertile offspring together in captivity, so animals of unknown origin can be difficult to identify.

Enclosure dimensions, sexual maturity, mating season and gestation are borrowed from *C. caninus*. The species name honours the British naturalist Henry Walter Bates, who collected animals and plants in the Amazon for 11 years.

During the day the animals are usually calm and more peaceable than *C. caninus*, but they are not suited to frequent handling. It is a species to look at, not to pick up.

Distribution and habitat

Corallus batesii lives in the Amazon Basin in Brazil (including Amazonas and Pará), Peru, Bolivia, Ecuador and Colombia, from sea level up to about 1,000 m. The type locality is "Upper Amazon". The species is found south of the Amazon River and west of the Rio Negro. To the north-east, on the Guiana Shield, *C. caninus* lives.

The boundary between the two species has not been precisely established. The species is also reported from southern Suriname, Guyana and Venezuela and from the Magdalena and Cauca valleys west of the Andes in Colombia, but those reports are uncertain.

> **Native range:** Brazil, Peru, Bolivia, Ecuador and Colombia.

HABITAT

The species is wholly arboreal and lives in undisturbed, humid lowland rainforest, both in forest that never floods and in forest that stands under water for part of the year. It stays mostly in the tree canopy, but is also found in smaller trees and young trees. After heavy downpours it may be knocked down and seen on the ground.

The climate is warm and even all year round, and the humidity is high. The animal drinks raindrops from leaves and from its own coiled body. During the day it lies coiled on a branch. At night it hunts from ambush, hanging in an S-shaped posture, and takes mainly mammals such as rodents, opossums and bats, but also birds, lizards and other snakes. Prey is caught with a lightning-fast strike and killed by constriction.

Read more: Humidity, misting and ventilation

Care

THE ENCLOSURE

An adult animal needs an enclosure of at least 180 × 60 × 120 cm (length × width × height), and larger and especially taller is better, as *Corallus batesii* grows larger than *C. caninus*. The length must at least match the length of the snake, so it can stretch out fully, and the height must provide room to seek warmth and humidity at different levels without going down to the floor. The enclosure should open at the front, and the sides should not be transparent, because that makes the animal insecure.

A young snake can live in an adult-sized enclosure once it is feeding steadily and there are enough hides. There must be sturdy but thin horizontal branches at several heights, which the animal can grip well. The branches must be firmly fixed, but preferably removable, so the animal does not have to be pulled off them. Hide boxes under the ceiling and on the sides give security, and live or artificial plants give cover and hold water droplets.

The substrate must be at least 10 cm deep and moisture-retaining, for example 40 % topsoil, 40 % coconut fibre and 20 % sand, with a layer of leaf litter on top. There must be good ventilation without draughts: openings high up on the warm side and low down on the cool side, and preferably a small fan at the cool end. Remove faeces immediately, and replace the entire substrate every 3-6 months.

The animals are kept singly. New animals must be quarantined for 3-6 months.

TEMPERATURE

Corallus batesii needs even warmth throughout the enclosure and a distinct basking spot. The basking spot, a horizontal branch under the heat source, must be 30-33 °C. The rest of the enclosure must be 24-29 °C during the day, with about 24 °C at the cool end. At night it must be 22-26 °C.

Use several identical heat lamps side by side, so the whole coiled animal is heated evenly, and position them so the animal cannot come into contact with them. Use incandescent or infrared lamps, not coloured bulbs. A heat panel at one end, controlled by a thermostat with the probe on the cool side, is also a good solution. If the room is colder than 22 °C at night, a light-free heat source with a thermostat must maintain the warmth. Measure the temperature in several places and at several heights with an infrared thermometer and fixed probes.

Read more: Heat and temperature

HUMIDITY AND WATER

The humidity must be high and stable at 65-80 %. The most important thing is that the humidity does not fluctuate wildly and that the enclosure can dry out between mistings. There must never be water standing and running down the glass, because stagnant, condensing moisture causes mould and respiratory infection.

Mist the substrate and plants several times a day for short periods, preferably with an automatic misting system and distilled or reverse-osmosis water. Do not spray directly on the animal, because evaporation can cool it down. The animal drinks droplets from the leaves and from its own body, and if a large water bowl is also placed high up next to a branch, it drinks from there as well. Change the water at least once a week. Measure the humidity with two digital hygrometers at different heights. A lack of fluid shows as retained faeces with large urates and incomplete sheds.

LIGHTING AND UVB

The species is nocturnal and can manage without UVB, but a weak UVB light gives a more distinct daily rhythm and ensures vitamin D3. The species belongs to Ferguson zone 2, with a UV index of about 2-3 at the basking spot. A T5 HO tube of 5-6 % UVB must sit 30-40 cm above the snake's back when it shines through mesh, and 35-45 cm without mesh. The tube must sit on the warm side together with the heat lamps and be replaced every 12 months, even if it still lights up. Preferably measure with a UV meter.

The light must be on for 12 hours a day and off at night. With enough shade and plants, the animal chooses for itself how much light it wants.

Read more: Lighting and UVB Read more: Calcium, vitamins and supplements

FEEDING

Corallus batesii needs whole prey animals. Rats are the best food, from rat pups of 4-6 g for the young up to medium-sized rats of about 175 g for adults. Mice, hamsters, gerbils, quail and chicks provide variety, but an adult mouse is too little for an adult animal. Use thawed frozen prey rather than live, which can bite and injure the snake. The prey is warmed to 32-38 °C and offered with long tongs, because the animal strikes quickly and may miss.

The prey must weigh about 10 % of the snake's weight and be at most 1-1.5 times as wide as the snake at its widest point. Adult females get a rat of 150-175 g every 3 weeks, and adult males a smaller rat of 75-125 g about once a month. Young animals are fed every 7-10 days and subadults every 2-3 weeks. The species is naturally slender and easily becomes too fat. It must look muscular, not round, and males in particular are kept slim.

The animal usually defecates after two to three meals, and a fourth meal is given only once it has defecated. The prey can occasionally be dusted lightly with calcium and vitamins before it is thawed.

BEHAVIOUR AND HANDLING

Corallus batesii is usually calm during the day and more placid than *C. caninus*, but it is not an animal for frequent handling, and young animals are often nervous and defensive. If it feels threatened, it adopts an S-shaped posture and strikes. The long front teeth cause deep wounds.

Touch the animal lightly with a hook or a paper roll before it is taken out, so it knows that no food is coming. Never pull it off the branch: if you gently scratch the coiled tail with a fingernail, it releases its grip. The tail is fragile, especially in the first year, and a kink becomes permanent. During handling the animal winds around arms and body to keep its balance; do not let it get around your neck. Wash your hands before and after, and never let children handle the animal alone.

Breeding

SEXUAL MATURITY AND SEXING

Females are larger and heavier than males, and males are slimmer and have larger spurs. The sex is most reliably determined by probing, by an experienced keeper or a vet. Males are sexually mature after 3-4 years and females after 4-5 years. A female should weigh 1,800-2,000 g at the age of four years before she is put to breeding, and she must be muscular, not fat.

MATING

The mating season is typically April-July, and females normally breed only every other year. During mating the male lies close to the female and tries to wrap his tail around hers. Males must be slim when placed with the female, because slim males are more willing to mate.

The female often fasts for several months in the last part of gestation without losing much weight. *Corallus batesii* and *C. caninus* can produce fertile offspring together, so the two species must be kept apart in breeding.

EGG-LAYING AND CLUTCHES

Corallus batesii gives birth to live young. Gestation lasts 6-7 months. A litter is typically 7-10 young, but can be from 5 to about 25. The pregnant female must have access to both warmth and water, because lack of fluid can cause young that become stuck at birth. The female does not care for the young after birth.

INCUBATION

There are no eggs to incubate, because the species gives birth to live young. During gestation the female needs a stable, warm gradient, fresh water and peace, and the humidity must be kept stable. The young are separated from the female as soon as they are born, and unfertilised eggs and stillborn young are removed.

REARING THE YOUNG

Newborn young are 40-50 cm long, weigh 20-50 g and are red-orange. After about 4 months they begin to turn green. Keep each young one separately in a small box with branches, damp substrate and a hide, and position the branches so the young one can reach both the floor and the water dish.

The young shed within two weeks of birth, and only then is food offered: a thawed rat pup of 4-6 g, warmed well. After that food is offered about every 10 days. Only about half take the rat pup on their own, and it is harder to get the young started than with *C. caninus*. Some take a live dwarf hamster or young mouse, while about a quarter need to be assisted with feeding for a time. At about 6 months of age most feed steadily and can move on to rats of suitable size.

Health and common mistakes

Most problems are caused by mistakes in the setup. Typical problems are:

- Dehydration at low humidity: retained faeces with large urates and shed that sticks.
- Respiratory infection in air that is too cold, stagnant or too damp: the animal breathes with its mouth open or has mucus in the mouth.
- Obesity from feeding too often or too much: the species must be muscular, not round.
- Kink or bump in the tail after tail yanking, especially in young animals.
- Mites and internal parasites, especially in wild-caught animals. Use captive-bred animals and quarantine new animals.
- Regurgitation from prey that is too large or a temperature that is too low.
- Mould and bacteria from persistent condensing moisture.

Weigh the animal regularly and keep a log of weight, feeding and sheds. A sudden weight loss is often the first sign of illness. Reptiles hide illness, so see a vet with reptile experience if the animal does not eat, loses weight, breathes with its mouth open or seems lethargic.

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

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.

The full guide with map and updates: herpy.org/en/snakes/corallus-batesii