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SNAKES

Green Anaconda

Eunectes murinus

Eunectes murinus is the world's heaviest snake: an olive-green, extremely powerful constrictor from the rivers and flooded plains of South America that spends most of its life in water. Females are typically 4-5 m and weigh 30-80 kg, while males are far smaller. The species requires a purpose-built room with a large, deep pool, a keeper with great experience and at least two people for all handling.

Family: Boidae Former name: *Boa murina; Eunectes gigas; Eunectes barbouri*

KEY FACTS

THE ANIMAL

Adult size	**300-500 cm** total length incl. tail
Lifespan	**20-30 years**
Active	**At dusk and at night**
Lifestyle	**Semi-aquatic**
Habitat	**Savanna, rainforest and wetland**
Difficulty	**Expert**

CARE

Min. enclosure	**500 × 250 × 120 cm** L × W × H for 1 adult
Temperature, day	**26-30 °C**
Basking spot	**31-34 °C**
Temperature, night	**24-26 °C**
Humidity	**70-90%**
Water	**Aquaterrarium** depth 50-70 cm
Water temperature	**26-28 °C**
UVB	**Optional**
Diet	**Vertebrates**
Kept	**Singly**

BREEDING

Reproduction	**Live-bearing**
Sexually mature	**36-48 months**
Litter size	**20-40 young**
Gestation	**180-210 days**

PROTECTION AND PAPERWORK

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

About the species

Eunectes murinus is the world's heaviest snake and among the longest. The ground colour is dark olive green, and along the back and flanks sit round, brown to black blotches with diffuse black edges. The belly is yellowish. A distinct black stripe runs from the eye to the corner of the mouth, and the head is narrow relative to the body, with orange-yellow stripes on the sides. The eyes and nostrils sit high on the head, so the snake can see and breathe while the rest of the body lies hidden under water. The skin is soft and tolerates long periods in water.

Sexual dimorphism is marked. Females are much larger and heavier than males: a typical adult female is 4-5 m and 30-80 kg, while males average around 3 m. The largest reliably measured female was 521 cm and 97.5 kg. Reports of animals of 10-12 m are not backed by measured specimens. Young are around 70 cm and 200 g at birth and grow quickly in the first few years. Males have larger spurs, the two vestigial hind limbs beside the vent, than females.

The species is one of four anacondas in the genus *Eunectes*. The others are *Eunectes notaeus*, *Eunectes deschauenseei* and *Eunectes beniensis*. *E. murinus* can hybridise with *E. notaeus*. In 2024 the northern populations were described as a separate species, *Eunectes akayima*, but it cannot be told apart from *E. murinus* by appearance, and the split is not widely accepted. This guide follows the conventional delimitation. In rare cases females can produce viable young without a male (virgin birth).

In the trade the species is rare and makes demands that almost no private keeper can meet. Its size, strength and temperament make it one of the most demanding snakes of all.

Distribution and habitat

Eunectes murinus lives in South America east of the Andes: in Venezuela, Colombia, Ecuador, Peru, Bolivia, Brazil, Guyana, Suriname, French Guiana and northern Paraguay, as well as on the island of Trinidad. The core of the range is the Amazon and Orinoco drainage basins.

The species occurs both in the rivers and swamps of the rainforest and on the seasonally flooded plains of the Venezuelan and Colombian llanos and the Brazilian Pantanal. From Trinidad in the north to northern Paraguay in the south it follows watercourses, lagoons and marshes.

The species is caught in the wild for its skin and for the pet trade, and many people kill it out of fear or to protect livestock. Protected areas are not always effectively monitored, and deforestation continues.

> **Native range:** Venezuela, Colombia, Ecuador, Peru, Bolivia, Brazil, Guyana, Suriname, French Guiana, Paraguay and Trinidad & Tobago.

HABITAT

Eunectes murinus lives in and beside slow-moving water: swamps, marshes, lagoons, rivers and flooded grass plains in tropical rainforest and seasonally flooded savannah. The climate is hot and humid all year, with a distinct wet and dry season in the savannah areas. The snake spends most of its time in water, where murky water both conceals it and supports its heavy body, and rests on riverbanks and in branches over the water, so that it can quickly drop into the water.

The species is most active at dusk and at night. It is a good swimmer and diver and hunts by ambush: it lies almost completely hidden under the water and seizes prey when it comes to drink or swims past. Prey is killed by constriction, often in the water.

In the flooded savannahs the water dries up in the dry season. Here the snake burrows into mud and rests, or it moves to water that does not dry out. Females and males that are not breeding migrate to higher ground in the wet season. Snakes in the rivers are active all year. The young are exposed to predators such as caimans and jaguars and are therefore very aggressive.

Care

THE ENCLOSURE

Few documented set-ups exist for *Eunectes murinus*, and the figures here are based on its size and way of life: the species is a heavy, semi-aquatic snake, and care follows in broad terms that of the large pythons, for example *Malayopython reticulatus*. In practice the snake will never be an ordinary terrarium animal, and an adult female requires a purpose-built room.

The floor area must be at least as long as the snake and half as wide: 500 × 250 cm for a 500 cm female. The height can be lower than for climbing species, but 120 cm gives room for stout, firmly secured branches. At least half the floor must be water. Juveniles and subadults are kept in smaller enclosures with many hides and a water pool, which is enlarged as they grow.

The pool is the most important part of the set-up. It must be deep enough for the snake to lie fully submerged and swim: 50-70 cm. The land section consists of a dry, warm basking spot of wood or board, branches over the water and hides at both ends. The substrate on the land section is coconut fibre or wood chip in a thick layer. Everything must be so sturdy that a snake of 50-80 kg cannot move or overturn it. The weight of water and animal places heavy demands on the floor.

The enclosure and lid must be solid and lockable, and there must be two doors or an airlock, so that the snake cannot get out while work is being done inside the enclosure. Ventilation must remove moisture from the land section without drawing the heat out.

Read more: Heat and temperature

TEMPERATURE

There is no species-specific temperature plan for *Eunectes murinus*. The figures correspond to the hot, humid lowland climate of the range and to what is used for other large, tropical constrictors.

By day the air should be 26-30 °C with a basking spot of 31-34 °C and a cooler zone by the water. At night it should be 24-26 °C, and the water should be kept at 26-28 °C. The temperature must not fall below 22 °C or rise above 36 °C for any length of time.

Use radiant heat over the basking spot, put bulbs in guards, and regulate all heat sources with a thermostat. A snake of this size will crush an unprotected fitting. Measure the surface temperature at the basking spot with an infrared thermometer. A water heater in the pool must be covered by a solid guard. With a clear gradient between the warm and cool sides the snake chooses its own temperature.

HUMIDITY AND WATER

Humidity should be 70-90 %, corresponding to the climate of the rainforest and wetlands. With a large water area the air becomes humid by itself, so the problem is mostly keeping the land section dry enough for the snake to shed and rest without lying in damp all the time. Mist the land section once or twice a day, or use a humidity-controlled system, and let the substrate dry a little between times.

The water is bath, drinking water and toilet in one. It quickly becomes fouled by waste and must be heavily filtered and changed often. A large filter and a drain that can empty the pool quickly are a necessity. The snake can stay in the water for days.

Read more: Humidity, misting and ventilation

WATER AND WATER QUALITY

The pool must take up at least half the floor area and be 50-70 cm deep, so that the snake can lie fully submerged and swim. The water should be 26-28 °C. Anacondas often lie in water for long periods, and the skin tolerates it well as long as the water is clean.

A large volume of water requires powerful mechanical filtration, a drain in the bottom and a fixed routine of partial water changes several times a week. All waste is removed immediately. Deep pools must have a ramp so that the snake can easily get out, even when it is large and heavy. The pool must bear the weight of many hundreds of litres of water and an animal of up to 80 kg.

LIGHTING AND UVB

The species is most active at dusk and at night, and a need for UVB has not been documented. In the wild the snake basks on riverbanks and in branches over the water, and light and UVB presumably benefit the daily rhythm, appetite and immune system. UVB is therefore optional. If UVB is used, the tube should sit over part of the warm side, with a UV index of 1-2.

Lighting should follow 12 hours of day and 12 hours of night. Halogen lamps and UVB tubes are placed out of the snake's reach or in solid guards.

Read more: Lighting and UVB

FEEDING

E. murinus eats whole prey animals, mammals and birds. In the wild it takes anything it can overpower and swallow: fish, reptiles, birds and mammals such as capybaras, peccaries and caimans, and the prey often weighs 14-50 % of the snake's own weight. Juveniles take small birds and young caimans of 40-70 g. After a large meal a big snake can go for weeks to months without food.

In captivity it is fed thawed, frozen animals, not live ones. Juveniles get mice and small rats, subadults rats, and adults rats, rabbits and, in large facilities, bigger prey such as guinea pigs, quail and chicks. Prey should weigh 10-30 % of the snake's weight. Feeding frequency: - Juveniles, under 1 year: every week. - Subadults, 1-3 years: every 2-3 weeks. - Adults: every 4-6 weeks.

Prey size and feeding intervals are borrowed from *Malayopython reticulatus*. Overfeeding causes obesity and a short life, and feeding governs growth and thus final size. Use long feeding tongs, and have another person present. If the snake is fed in the water, it can swallow water along with the prey, so feeding on the land section is safest. Clean drinking water is always available.

BEHAVIOUR AND HANDLING

E. murinus is a solitary snake that only seeks out others during the breeding season. It is therefore always kept singly. Housing together causes stress, and the female eats males.

Captive-bred animals can be calm, but most anacondas are fierce biters and are not suited to handling. Young animals are especially aggressive and often bite. Bites cause deep wounds and a risk of infection, and the snake's strength is far beyond what a person can hold. An adult female of 50-80 kg can suffocate a human, and any dealings with the animal require at least two experienced people. When threatened, the snake coils up with its head hidden and releases a strong smell from the cloacal glands.

Never grab the tail, and never work with the snake in water. Cleaning the pool must be planned so that the snake has first been moved to an airlock or another room. New animals are kept in quarantine for at least three months. The species is not suitable for beginners, and only experienced keepers with the right facilities and help at hand should consider keeping it.

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

Breeding

SEXUAL MATURITY AND SEXING

Females are much larger than males, and size is the clearest sign of sex. Males have larger spurs than females. Reliable sexing requires an experienced keeper or vet. Both sexes become sexually mature after 3-4 years, but females must also have reached a certain size before they can carry a litter.

MATING

In the wild the species mates in the dry season, typically from March to May, in water. Several males, up to 13, gather around a single female in a breeding ball, where they wrestle slowly and quietly for access. Mating can last several weeks, and the female may mate several times. After mating the female does not eat for up to seven months and may in rare cases eat one or more of the males. Details of mating in captivity are not documented.

EGG-LAYING AND CLUTCHES

The species is live-bearing: the young develop inside the female's body, surrounded by a thin membrane, and are born as fully formed snakes. Gestation lasts 6-7 months, and birth takes place in shallow water in the evening or late afternoon at the end of the wet season. The female normally gives birth every other year, and the litter is 20-40 young, with the largest known being 82. The female can lose up to half her weight after giving birth. There is no parental care.

INCUBATION

The species does not lay eggs and therefore has no incubation. Gestation lasts 6-7 months. The female conserves movement and does not eat throughout gestation, so she needs quiet conditions, a warm spot and clean water. No figures are documented for temperature and care of gravid females in captivity.

Read more: Incubating eggs

REARING THE YOUNG

The young are around 70 cm and 200 g at birth and must be kept singly. They are independent from the first day, but aggressive and often bite. Give them a smaller enclosure with many hides and a water pool, and start with mice and small rats every week. They grow quickly and must be moved to larger enclosures along the way. There are far more young in a litter than there are homes, and an adult anaconda of 5 m is a lifelong task of 20-30 years. Breeding cannot be recommended.

Health and common mistakes

No actual disease profile has been documented for the species in captivity. The typical problems for large, aquatic constrictors are:

- Too little space: restlessness, rubbing the nose against the walls and overweight.
- Overfeeding: obesity, organ damage and a shorter life.
- Poor water quality: skin infections and blisters when the snake lies in dirty water, or when the land section is constantly wet.
- Burns from heat sources the snake can reach.
- Stress and refusal of food in new or wild-caught animals, which may also carry parasites.

A healthy animal is plump without being fat, has clear eyes and sheds evenly. Seek a vet with reptile experience if the snake loses weight, refuses food for a long time or is limp. Many vets do not have facilities for animals of this size, so arrange it well in advance.

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.