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# Green Anacondas (Eunectes murinus) and (Eunectes akayima)

\*Note: Recent genetic findings and analysis led by a group of scientists from the University of Queensland led by Professor Bryan Fry, as of 2023-2024, have found there to be two distinct species of Green Anacondas by a genetic variation of as much as 5.5%. Consequently, two recognized species are now known, the Northern Green Anaconda, *Eunectes akayima*, and the Southern Green Anaconda, which retains the name *Eunectes murinus*. These two species are visually identical in appearance, however, and only further genetic work and testing are able to differentiate these two new species. A link to these findings can be found here:

Diversity | Free Full-Text | Disentangling the Anacondas: Revealing a New Green Species and Rethinking Yellows (mdpi.com)

#### **Heaviest Snakes in the World with an Undeserved Reputation**

Green anacondas are a large species of new world boa, and quite possibly the heaviest in general snakes species in the world! These largely aquatic to semi aquatic boas use the water to their advantage, in order to help support their sometimes massive weights while also providing cover in order to act as sit and wait hunters. The largest green anaconda on reliable record weighed nearly 550 lbs.! A heavy bodied snake with an olive to olive brown ground color with two rows of oval shaped dark, alternating dorsal spots or blotches, and yellowish lateral specks bordered in black. There is also a reddish orange post ocular stripe running from behind the eyes and head. While certainly not for everyone, anacondas have experienced an especially bad reputation among movies and popular media; however, both species of anacondas, the green and yellow, which are most commonly available, have indeed earned their place among advanced reptile lovers and enthusiasts seeking more challenging large constrictor species to maintain and enjoy! It is also important to keep in mind that yellow anacondas and other large constrictor species are a controlled, regulated, or prohibited species in some states. Always check any applicable federal, state, and local laws and ordinances that may pertain to the specific possession of this species.

#### **Taxonomy**

**Life:** All living, physical, and animate entities

**Domain:** Eukaryota **Kingdom:** Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia
Order: Squamata
Suborder: Serpentes

Infraorder: Alethinophidia

Family: Boidae Subfamily: Boinae Genus: Eunectes

**Species:** Eunectes murinus\* and Eunectes akayima\*

\*Taxonomy subject to change and revision.

#### Lifespan and Longevity

If provided the proper care, green anacondas can attain longevity of 25 to 30 years or more, although up to 40 years is not unheard of.

## **Distribution and Habitat**

The green anaconda is a large, aquatic to semi-aquatic species of boa indigenous to much of the Amazonian basin of northern South America. More specifically, this large and well known species occurs from Venezuela, through Colombia, Brazil, Ecuador, Suriname, eastern Paraguay, and northern Bolivia. Additionally, this species also ranges from northeastern Peru, through Guyana, French Guiana, and Trinidad. Within this range, green anacondas occupy terrestrial to primarily semi-aquatic environments, including swamps, marshes, and brushy or well vegetated banks and margins of slow moving rivers, streams, and river or stream drainages and basins. Green anacondas can also be found in forested or seasonally flooded grasslands, savannahs, or wetlands, and irrigated or otherwise wet agricultural areas, plantations, or cultivated areas near human habitations.

#### **Origin/History**

Eunectes murinus (Linnaeus, 1758).

When green anacondas first became available, the majority were wild collected imports which had poor temperaments and heavy parasite loads. A lack of knowledge at the time resulted in high mortality rates, and they were notoriously difficult to entice to feed and thrive in captivity. Despite this, they were periodically exported for zoological collections, research, and for the pet trade during the 1980's and 1990's, although it is difficult to determine when exactly anacondas were first kept or imported due to a lack of documentation.

Now, however, most South American countries have restricted export of their native wildlife, and in March of 2016, green anacondas (as well as seven other boa and python species by then) were added to the injurious wildlife listing of the Lacy Act by the US Fish & Wildlife Service prohibiting their importation into the United States. These factors have all but eliminated the importation of green anacondas, and those that continue to be legally available in herpetoculture today are of captive-bred origin only.

## Experience Level Required

Advanced.

## **Size**

Green anacondas range from 18 to 24 inches as neonates. Adult green anacondas are larger than their smaller cousin the yellow anaconda, and usually range from 9 to 13 feet in males, or 108 to 156 inches, and up typically reaching 15 to 18 feet for females, or 180 to 216 inches. Larger lengths and weights have also been reported in captivity. These snakes are not for beginners, and always be sure to consider the potential adult size and long term commitment of keeping and housing a green anaconda or any other large snake prior to obtaining one as part of being a responsible reptile or other pet owner!

#### **Housing and Enclosure**

Enclosure System: Terrestrial to Semi-Aquatic. Housing must be sealed, well ventilated, and escape proof. Neonate to juvenile green anacondas can be started out in a 20 gallon long terrarium or similar sized enclosure, but will soon require larger accommodations. If glass enclosures are used at any point, be sure that the enclosure retains sufficient humidity. Many of the commercially made plastic or fiberglass enclosures, or otherwise custom-designed enclosures that can retain heat and humidity well are perhaps the best and most practical enclosures to use to house mid to large sized boas and pythons. Depending on the age and size of the animal, a minimum of a six to eight foot by three foot enclosure or larger is required. Green anacondas can be maintained on a substrate of cage liner material, cypress mulch, sphagnum moss, or sphagnum fir mixtures, but always ensure that the substrate does not become too damp or moist. Do not use pine or cedar shavings, as these substrates are toxic to snakes. Being largely semi aquatic, anacondas will also require a large sturdy water dish or tub they can readily enter and exit, and that must be cleaned, sanitized, and changed frequently, especially if dirtied. Providing an adequately sized hidebox, artificial foliage, driftwood, rocks, logs, and other cage furnishings can also provide additional hiding and basking opportunities.

## **Temperature, Lighting, and Humidity**

Create a thermal gradient, or a warm side, in the enclosure with an appropriate sized UTH (or tank heating pad), ceramic or radiant heat emitter, or incandescent, UVA/UVB, or other heat producing bulb. Ideal temperatures for green anacondas range from 75 to 82 degrees F on the cool side and 85 to 92 degrees F on the warm side. Most species of snakes have fairly simple and undemanding heating and lighting requirements in captivity, and do not require additional UVA/UVB lighting, although providing it can be greatly beneficial for their health, immune system, and overall wellness. Also be sure to spot clean the enclosure for urates, feces, or uneaten food at least once per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months. Providing adequate humidity is also important in maintaining anacondas. Green anacondas are less tolerant of and more susceptible to husbandry issues associated with lower humidity levels than yellow anacondas, and require at moderate to high relative humidity levels of at least 70 to 80% humidity, but can peak up to 90%. Additional humid hides or retreats can also assist with shedding and overall health. Using the correct substrate, as well as providing a humid hide box with sphagnum moss will help maintain desired humidity levels. Overall, the enclosure should be maintained at humid levels but not be wet or moist since this leads to other health related implications. More specific lighting, heating, and humidity product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

#### Feeding, Diet, and Nutrition

Carnivorous; In the wild, green anacondas are carnivorous, and will prey upon a wide range of small to large mammals, birds, and other reptiles that they can ambush and consume. In captivity, green anacondas can be given feeder rodents or rabbits of appropriate size, such as rats or mice. Larger feeder or prey items for large snakes such as large rabbits, and even poultry, pigs, and other pre-killed livestock can also often be obtained through alternative means through local wholesalers, meat, or agricultural suppliers in one's area. In most general circumstances, it is recommended to provide humanely pre-killed prey animals acquired from a reputable source, as offering live animals to any snake can carry risk of serious injury or even death to your snake when the prey item bites to defend itself or otherwise gnaws on your animal. A general rule of thumb when selecting feeder prey item sizes for your snake is to provide prey items that are approximately the same width as the snake's widest point. It should also be noted that many snakes may refuse food for longer periods of time over several weeks or months, especially in

the fall and winter months or if several other husbandry conditions are not being met. Green anacondas can also be finicky eaters amongst the large constrictors, especially those of wild caught or questionable origin and history. In these cases, other food items may need to be tried or more secure hiding opportunities provided. While these things can be alarming, it is oftentimes normal, but their overall health and weight should be monitored during these times to make sure they do not lose weight or otherwise deteriorate. Most snakes typically are fed whole prey items, and do not usually require additional calcium or vitamin D3 supplementation unless otherwise directed. Their feeding frequency will also depend on the age, size, and overall health of your animal. Use care as to not overfeed them, as obesity and other health related issues can become an issue. More specific dietary and supplementary product suggestions and recommendations that can best suit one's needs, as well as those of one's animals can be given as well.

## Handling

Both species of anacondas maintained in captivity (yellow anaconda and the green anaconda) require previous knowledge and experience in handling larger, and/or sometimes aggressive snakes. The origin of the animal chosen (wild caught vs. captive born), as well as the frequency and methods of how they are kept and handled will often determine to a great extent the disposition of anacondas to being handled. Despite their often negative widespread reputation for being nasty or unpredictable, captive bred and born green anacondas that are handled regularly from an early age can become traceable and more easily handled. Anacondas certainly are not for everyone, and are certainly not beginner's snakes (only for experienced and responsible individuals), but with the correct husbandry and handling, can make for a rewarding reptile keeping experience for the right individuals.

\*\*Also be sure to practice basic cleanliness and hygiene associated with proper husbandry after touching or handling any animals or animal enclosures to prevent the possibility of contracting salmonellosis or any other zoonotic pathogens\*\*

#### Contact

Authored by Eric Roscoe. For any additional questions, comments, and/or concerns regarding this animal, group of animals, or this care sheet, please email and contact: Eric.S.Roscoe@gmail.com

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