



*Matthew Nauman

Green Tree Python (*Morelia viridis*) *And New Species Complex as of 2019

Green Tree Tenants of Australia and New Guinea

Green tree pythons are a medium sized, strongly arboreal species of python. They very seldom descend to the ground, and have several physical and physiological features for adapted life in trees including a highly prehensile tail, and a more triangular bodily cross section characteristic of many arboreal snakes. This species is a medium sized arboreal python that typically attains a vibrant green coloration as adults with bluish to whitish flecks and markings. Blue and yellowish adult phases are also seen. Hatchling green tree pythons undergo a noticeable ontogenetic color change from the time they are hatchlings or juveniles to adults, and can be bright red, reddish orange, to reddish brown in color. Juveniles can also be a bright, vibrant yellow in color, unlike newborn emerald tree boas (*Corallus caninus*). Green tree pythons are strongly believed to have evolved convergent to the Emerald tree boa, which are an unrelated species found in a separate area of the world despite having similar appearances, lifestyles, and natural history.

The Southern Green Python (*Morelia vividis*) includes animals from the Aru Islands, Australia's Cape York Peninsula, and specimens south of the Central Dividing Range on the Island of New Guinea being typically being referred to as Meraukes by most. The Southern Green Python (*Morelia vividis*) includes animals from the Aru Islands, Australia's Cape York Peninsula, and specimens south of the Central Dividing Range on the Island of New Guinea being typically being referred to as Meraukes by most.

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: Pythonidae

Genus: *Morelia*

Species: *Morelia viridis**, *Morelia a. azurea*, *Morelia a. utaraensis*, *Morelia a. pulcher*

*Taxonomy subject to change and revision.

Lifespan and Longevity

If provided the proper care, green tree pythons can attain longevity of 20 to 25 years or more. Up to 35 to 40 years is also not uncommon.

Distribution and Habitat

Green tree pythons are a unique species of medium sized, arboreal Australian to Indo-Australin pythons indigenous to Indonesia, to Papa New Guinea, and northern to northeastern Australia. More specifically, this species occurs from several islands of Indonesia and most of Western New Guinea, to Papa New Guinea and its surrounding islands, and along the northern coast of Queensland and Cape York Peninsula, Australia. Within this range, green tree pythons occupy primarily arboreal environments, including heavily forested, tropical to sub-tropical rainforests and other lowland tropical forests and woodlands, as well as forested swamplands, wetlands, and river basins. Green tree pythons prefer relatively pristine and undisturbed habitats and environments, where they occupy the tree branches, hollows, cavities, and other dense, tall shrubs, bushes, and other vegetation of the lower to mid-canopy level above the ground, where they also will occasionally venture.

Origin/History

Morelia viridis (Schlegel, 1872). First described by Hermann Schlegel in 1872, it was known for many years as *Chondropython viridis*, which would be where the trade name “Chondro” would be derived in herpetoculture.

During the mid-1970’s, Australia would prohibit all exportation of its indigenous wildlife. However, green tree pythons, or “Chondros” would continue to be “farmed” and then exported for the pet trade, which would pay locals to collect green tree pythons locally. These operations were most commonly out of Indonesia and West Papua. Later, these animals would be shipped as legal farm-bred stock. Historically, these wild-collected, farmed “chondros” did not fare well in captivity, often harboring heavy parasite loads, and suffered from improper care and husbandry, and overstress. As many as 40 to 50% of specimens would die before reaching their markets.

Luckily, however, an increasing number of breeders and reptile enthusiasts in more recent decades would ensure that “chondros” became much more available as more healthy and better-acclimated, truly captive-bred individuals, rather than the farmed specimens that were historically available. Now, green tree pythons are bred in captivity from a number of different locales, and even some genetic color and pattern morphs and variations.

Experience Level Required

Intermediate/Moderate to Advanced.

Size

Green tree pythons usually range from 6 to 10 inches as hatchlings. As adults, most green tree pythons range from 4 to 7 feet in length, or 48 to 84 inches.

Housing and Enclosure

Enclosure System: Primarily Arboreal. Housing must be sealed, well ventilated, and escape proof. Hatchling green tree pythons can be started out in a roughly 30” x 20” x 20” tall tub or 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 these specialized, mid-sized pythons. Depending on the age and size of the animal, a 36” x

24" x 24" (or larger) tall enclosure is required for an adult green tree python. Green tree pythons 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. Provide a water bowl at the bottom of the enclosure, and ample horizontal branches, vines, rocks, logs, and/or perches about the same width as the animal's body for climbing, basking, and hiding opportunities. Green tree pythons are a strongly arboreal species, and enclosure height is more important than floor space.

Temperature, Lighting, and Humidity

Create a thermal gradient (or a warm side) in the cage/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 tree pythons range from 75 to 82 degrees F on the cool side and 86 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. 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. Green tree pythons should be maintained at relatively moderate to high relative humidity levels, which may range from about 40 to 70%, and with additional humid hides or retreats to assist with shedding and overall health.

Feeding, Diet, and Nutrition

Carnivorous; In the wild, green tree pythons are carnivorous, and will prey upon a wide range of small mammals, birds, amphibians, and other reptiles that they can ambush, locate, and consume. In captivity, green tree pythons can be given feeder rodents of appropriate size, such as rats or mice. Some green tree pythons can be finicky eaters, however, and may prefer mice over rats, or vice versa. 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. 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

Hatchling green tree pythons have a delicate skeletal structure, and must be handled sparingly to prevent accidental injury to the animal. These pythons have long had a negative reputation for being mean or nasty; however, this notion is slowly changing as more animals are becoming captive born. This is a species that often responds well to calm and deliberate handling by removing the perch from the enclosure with the animal first, and then allowing it to voluntarily

move from perch to hands from underneath. Forcing the animal from its enclosure will cause injury and/or further stress to the animal. Some localities, such as the Sorongs, Mainlands, and Arus generally tend to be calmer and easier to handle than others, such as the Biaks, although this can also depend on each individual animal. While many green tree pythons can be handled for short periods of time in this manner, they are a species that, in general, are still less readily handle able than a ball python or Boa constrictor, for example.

****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

Disclaimer: Note that the information provided in these, or any care sheets, are not intended to be all-exhaustive, and further research and care should always be sought and provided when it comes to any species one may prospectively be interested in. These care sheets are also not intended to serve as substitutes for professional veterinary medical care and husbandry should any animal require it. Always seek proper and professional veterinary care for any animal should the need arise, and be prepared ahead of time for any and all husbandry costs and expenses that may occur with any animal beyond the initial purchase. Any animal owned is ultimately a matter of personal/individual care and responsibility. We cannot make any claims or guarantees regarding any information in this care sheet therein. This care sheet may be reprinted or redistributed only in its entirety.

***Copyright, 2023**