
**Photo Credit: Andre Koch*


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Green, or Emerald Tree Monitor *(Varanus prasinus)*
Black, or Beccari's Tree Monitor *(Varanus beccarii)*

Green and Black Treetop Beauties

Tree monitors consist of a group of approximately two to three relatively small to mid-sized, specialized and highly arboreal monitor lizard species indigenous to the tropical to sub-tropical swamps and forests of northern Australia, Indonesia, to New Guinea and surrounding islands. Tree monitors are quite slender monitors, and the green, or emerald tree monitor (*Varanus prasinus*) ranges in color from green, yellowish-green to turquoise with darker traverse dorsal banding, while the Beccari's, or black tree monitor ranges from a darker black to bluish-black in color, sometimes with faint darker dorsal banding visible as well.

The Blue Tree Monitor, *Varanus macraei*, is another species that is sometimes available. Tree monitors have very long, prehensile tails, limbs, and claws used for climbing and gripping tree branches and other surfaces, and also have specialized scalation on their feet and digits enabling them to climb as well. These highly active and intelligent monitors can make for very rewarding pets to maintain with the correct level of knowledge and experience afforded by the intermediate to more advanced reptile enthusiast.

Taxonomy

Life: All living, physical, and animate entities
Domain: Eukaryota
Kingdom: Animalia
Phylum/Sub Phylum: Chordata/Vertebrata
Class: Reptilia
Order: Squamata
Suborder: Lacertilia
Infraorder: Platynota
Family: Varanidae
Genus: Varanus
Subgenus: Odatria
Species: *Varanus prasinus** and *Varanus beccarii**
**Taxonomy subject to change and revision.*

Lifespan and Longevity

If provided the proper care, the green and black tree monitor species can attain longevity of at

least 10 to 25 years or more in captivity.

Distribution and Habitat
The green, or emerald tree monitor is a relatively small to medium sized, arboreal species of monitor indigenous to New Guinea, including Indonesia, and Papa New Guinea, as well as several adjacent islands thereof, and into the northern Torres Strait Islands. Within this range, this species favors the tropical to sub-tropical, lowland evergreen forests, woodlands, palm swamplands, and cocoa and other plantations and cultivated agricultural areas. The black tree monitor is a closely related small, to medium sized arboreal monitor species indigenous to the Aru Islands of Indonesia, where this species occupies the tropical to sub-tropical, humid and forests and woodlands, as well as mangrove swamps and other coastal forested wetlands.

Origin/History
Varanus prasinus Schlegel, 1839; Varanus beccarii (Doria, 1874).

Despite its presence in the international pet trade for several decades, very little would be known about the ecology or natural history of these monitors in the wild. Indonesian traders would export several hundred tree monitors each year to the European Union alone. Considering the limited distribution of most of these species and advancing habitat loss, these trade practices would be not be considered sustainable by many.

Despite the large numbers of specimens maintained in captivity, long-term success with keeping and breeding tree monitors is still rare. There have been relatively few published breeding reports for members of the V. prasinus complex which also highlight potential problems associated with their care and reproduction in captivity (Dennis Fischer 2012).

Experience Level Required
Intermediate/Moderate to Advanced.

Size
Hatchling to juvenile tree monitors typically range from up to 12.0 inches in total snout-to-tail length. As adults, these monitors may range from 24.0 to 47.0 inches snout-to-tail length depending on their sex, species, subspecies, and locality. The black, or Beccari's tree monitors tend to be the slightly larger of the two readily available species in the pet trade. Maximum snout-to-vent length for *Varanus prasinus* is about 11.8 to 12.2 inches (SVL). Maximum snout-to-vent length for *Varanus beccarii* is up to 13.3 inches (SVL).

Housing and Enclosure
Enclosure System: Primarily Arboreal. Housing must be sealed and escape proof. Hatchling tree monitors can initially be started off in anywhere from a 20 to 30 gallon tall terrarium or similar sized enclosure, or an enclosure that is roughly 18 inches by 18 inches by 36 inches, but this enclosure size should be increased accordingly. For a single adult tree monitor, an enclosure of a minimum of a 40 to 55 gallon tall arboreal terrarium or enclosure, or roughly 4 feet by 4 feet by 6 feet or larger depending on age, size, sex, and number of animals being kept per enclosure. A deep layer of at least three to four or more inches of substrate should be added to the enclosure, as tree monitors are strong burrowers as well. Commercially available orchid bark, cypress mulch, chemical and pesticide free potting soil, or coconut fiber substrates are acceptable for these monitors, but must not be toxic. Most monitors will frequently disrupt and uproot most plants and other enclosure furnishings, but should still be provided sufficient hiding and basking areas in the form of log, rock, or cork hides. A large, sturdy water bowl or dish or appropriate size that ideally allows for easy entry and exit, as well as soaking should also be provided as well. These monitors can also be misted at least two to three times weekly to help maintain

hydration and humidity. Sphagnum moss can also be used as a substrate in hides to help increase humidity. Being largely arboreal species, tree monitors can and will climb if provided the opportunity, and should be provided adequate vertical and diagonal branches, logs, rocks, custom inserted dowels, or other opportunities to enable and provide for climbing and basking opportunities.

Temperature, Lighting, and Humidity

For lighting and heating, tree monitors require adequate temperatures, as their biology and natural history indicate appropriately. Maintain ambient temperatures inside the enclosure from 75 to 85 degrees F that can be allowed to drop about 10 degrees F from this at night. Tree monitors will also bask, and require basking temperatures of anywhere from 95 to 100 degrees F. This can be provided through overhead UVA/UVB lighting of appropriate wattage, under tank heating pads (UTHS), ceramic or radiant heat emitters, and/or red bulbs. Temperatures should also be adequately monitored using a reliable thermostat as well. Spot clean the enclosure for urates, feces, or uneaten food at least twice per week. Be sure to periodically replace the substrate, clean, and disinfect the enclosure and its furnishings at minimum every 2 to 3 months, particularly water bowls and substrates intended for raising humidity levels (such as cypress mulch, peat moss, or sphagnum moss). Unlike many other monitors, these species of tree monitors require higher humidity levels, and relative humidity for these arboreal species should be around at least 70 to 80%. 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

Insectivorous to Carnivorous; In the wild, tree monitors are primarily carnivorous to insectivorous, and will feed on a wide variety of food including insects and other invertebrates, crustaceans, mollusks, and other invertebrates, as well as many small vertebrates including small mammals, birds, bird and reptile eggs, amphibians, and other smaller reptiles. They will also eat carrion, or dead and decaying plant and animal matter as well.

In captivity, variety is essential to a proper and adequate monitor diet. Tree monitors can be fed a variety of feeder insects of appropriate size including crickets, roaches, mealworms, superworms, and waxworms supplemented with vitamin D3 and calcium. Frozen-thawed rodents of appropriate size and raw food items such as turkey, beef, or eggs can also be offered, but sparingly, if at all, as these food items are high in fat and protein for monitors. It is also important to remember not to overfeed any monitors, as they can become very prone to obesity. Feeding schedules can depend on the age, size, and overall health of your monitor, but typically, an appropriate feeding regime for young and hatchling monitors should be two to three times weekly. Most monitors are very alert, intelligent and personable species that can become food aggressive when in the presence of food, and therefore require additional care when handling. 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

Tree monitors are a species that may initially be nervous and skittish, particularly newly acclimated specimens or those that have otherwise been only recently acquired. They may bite, claw, tail whip, defecate, or otherwise attempt to flee or escape from what they perceive to be a potential threat or predator. However, with regular handling, interaction, these monitors can become more tame and personable pets to maintain provided that they are handled and interacted with regularly in a calm and deliberative manner.

Most monitors are very different than many other reptiles in terms of their intelligence and perception, and each individual animal may differ in their temperament or personality. Some will

come to acclimate with humans and being handled within a matter of a few months, while others may take many years. Two different trains of thought are out there when it comes to handling or "taming" one's monitors. The first is to handle and interact with them daily until they become used to or acclimated to handling. This method sometimes works, and sometimes does not, and depends on the individual animal and one's circumstances. This can also lead to the opposite desired effect, and make an animal further stressed. The other method, or train of thought is to simply leave them alone, and an added or increased trust among one's monitor may come over time with regular cage and enclosure cleaning, maintenance, or other routine duties. Over time, slow steps may be taken to continue to gain trust with, and eventually become able to handle and interact with them. With this second train of thought, many monitors will become more bold and curious, and interactive naturally on their own than if they are forced out of their hiding places or other areas in order to be handled. Moving slowly and deliberately is always better to help make the animal feel secure, rather than fast, rapid, or jerky movements.

Always keep in mind with regards to the second method, however, that all monitors are capable of delivering bites or scratches, and so some proper precautions when it comes to handling and interacting with them are always recommended. Even animals that can normally be considered "tame" can unexpectedly become threatened, or if one's hands and arms smell like their normal food. Any new animal should of course also be allowed to acclimate to its environment and surroundings before handling attempts are made. Overall, each animal is an individual, and these techniques may not be effective for all monitors, but are nonetheless the most commonly utilized. **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

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