



*Kris Brown/Vital Exotics

Crocodile Monitor (*Varanus salvadorii*)

Crocodile Sized Tree Monitors!

Crocodile monitors are large, arboreal to semi-arboreal monitor species with many different common names including but not limited to crocodile monitor, crocodile tree monitor, Salvadorii's monitor, and Papua(n) monitor. As with most monitors, crocodile monitors are highly versatile animals that use their strong claws, limbs, and tails for digging, swimming, and climbing. Crocodile monitors are a semi arboreal species, with large and powerful claws, limbs, and tails for climbing. The crocodile monitor is a large to very large, moderately built semi arboreal monitor species with a dorsal and base ground coloration ranging from blackish, dark olive green, to dark olive brown. There are also a series of paler whitish, cream colored, to yellowish rings, spots, flecks, and/or ocelli along the back (dorsum) and sides of the animal. The head is relatively long, ending in a large, bulbous snout unlike any other monitor species found in the Indonesian/Papuan region of Southeastern Asia. The tail is also very long and semi prehensile, is banded in black and yellow, and is oftentimes more than twice to two thirds the animal's SVL (or snout-to-vent length). Crocodile Monitors and some other large monitor 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: Lacertilia

Infraorder: Platynota

Family: Varanidae

Genus: Varanus

Subgenus: Papsaurus

Species: *Varanus salvadorii**

*Taxonomy subject to change and revision.

Lifespan and Longevity

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If provided the proper care, crocodile monitors can attain longevity of 15 to 25 years or more.

Distribution and Habitat

Crocodile monitors are perhaps the largest monitor species occurring in the lowland tropical to sub-tropical rainforests, coastal mangrove swamps and wetlands, and occasionally surrounding areas of the island of New Guinea (which are comprised of a portion of Indonesia in the western half, and Papa New Guinea in the eastern half).

Conservation Status

IUCN Red List Least Concern (LC).

Experience Level Required

Advanced.

Size

Crocodile monitors range from about 12 to 16 inches as hatchlings, but will quickly grow. Adult crocodile monitors can vary in size depending on their bloodlines, subspecies and locality, but in general, are a large monitor species. They can range from 6 to 8 ½ feet, or 72 to 102 inches on average, with a maximum recorded length of nearly 12 feet, or 122 inches, including their tail, and weigh anywhere from 30 to 50 lbs. Mature adult females may remain smaller at around 4 to 4 ½ feet or larger, or about 48 to 54 inches. **This is one major reason why it is important to consider the potential size and space, and housing requirements of a Crocodile Monitor prior to obtaining one.**

Housing and Enclosure

Housing must also be sealed and escape proof. Hatchling crocodile monitors can be started out in a roughly 40 gallon tall enclosure, but will soon require larger accommodations. Enclosure size should be increased accordingly depending on the animal's size. If standard glass terrariums with screen tops are used at any point, ensure that adequate humidity and temperatures are maintained using additional steps to retain it. Adult crocodile monitors will require a minimum of a six to eight foot by three foot terrarium or enclosure or larger. Very large, custom designed pens or enclosures are perhaps the most suitable housing for most mid to large sized monitors. As with other monitors, crocodile monitors also powerful diggers, and should also be provided with substrates that enable burrowing and retain humidity well such as chemical and pesticide free potting soil, cypress mulch, orchid bark substrates. Be sure to provide at least 18 to 24 inches of substrate. Monitors in general are very intelligent, alert and perceptive animals, and will require sufficient levels of safety, security, and stimulation and enrichment in order to do well in captivity. Provide a hide box and artificial foliage, driftwood, rocks, slabs, or logs for ample basking and hiding opportunities. A large enough water bowl or dish that they can readily enter and exit from that can work with one's enclosure setup and arrangement is also strongly recommended for maintaining adequate longer term hydration, humidity, and quality of life for these monitors. Water should be changed or filtered regularly at a minimum of every other day to maintain cleanliness and sanitary conditions. Crocodile monitors are a strongly arboreal terrestrial species, and will climb readily if given the opportunity.

Temperature, Lighting, and Humidity

For basking, create a thermal gradient (or a warm side) in the cage/enclosure with an appropriate sized under tank heating pad, ceramic, or radiant heat emitter. In general, the preferred ambient temperatures within the enclosure should be within the mid 70's to 80's, to even 90's. Basking and warm side temperatures can be allowed to reach up to 120 to 150 degrees F on the warm, basking side. Crocodile monitors also require overhead UVA, UVB incandescent and fluorescent

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lighting using the appropriate wattage bulbs or other heating elements. 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. 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, crocodile 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. Crocodile 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

Crocodile monitors are by no means a beginner's pet, and have long held a reputation for being a species requiring more experienced care and handling. When they are agitated, a crocodile monitor may tail whip, inflate their throats by hissing to appear larger and more intimidating, and/or attempt to scratch or bite if handled or restrained incorrectly. Nevertheless, it is possible to end up with an adult crocodile monitor that is accustomed to people and being handled, but this takes considerable time, patience, and effort on the keeper's part in order to achieve. Crocodile monitors, and other monitors in general, are animals that require considerable amounts of regular time, patience, and commitment in order to become docile, handleable adult animals. Many different techniques and mindsets are out there with regards to handling and working with these reptiles, which can certainly go into far greater depth than the scope of this basic care sheet. Many believe a more hands off approach is more successful overall, and allowing the animal to gradually and routinely become accustomed to their keeper's presence, to being touched, and handled. Others may choose to practice a more direct, routine handling approach, which may or may not be effective, but often unfortunately causes greater stress and/or injury to the keeper and the animal. Once in the hand, hatchling monitors can be handled with both hands cupped with care not to drop or restrain them tightly. An adult monitor (as well as other species of large lizards) should always receive adequate bodily support from underneath using the hand, and arm for support. Additional restraint can be made by tucking or pinning the animal's tail or hind quarters between the arm and body as well. Each animal is an individual,

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and these techniques may not be effective for all monitors, but are nonetheless the most commonly utilized. Large monitors in general certainly are not for everyone, but with the right techniques and husbandry, can make for very intelligent and personable pets for advanced keepers.

****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 the Madison Area Herpetological Society at info@madisonherps.org

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.

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