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# Black Roughneck Monitor (Varanus rudicollis) Dumeril's Monitor (Varanus dumerilii)

## **Rough Necked Tree Dwellers**

Black roughneck monitors are also known simply as the roughneck, or rough necked monitor. Dumeril's monitors are occasionally called the brown roughneck monitor. The black roughneck monitor is a medium sized, stout monitor species that typically ranges from dark grayish to black in color. The most distinctive identifying feature of this species is its enlarged, pointed scales on the back of the head and neck, lending to the roughneck monitor's common name. The Dumeril's monitor is also a stout, mid-sized species of monitor with a dark tan to brown ground color with indistinct, lighter crossbands of tan, cream colored, to dirty yellow. Hatchling and juvenile Dumeril's monitors may often have brighter reddish-orange heads, and bolder, more vibrant dark and light cross-banding.

Both the Dumeril's and Black roughneck monitors are shy, secretive, arboreal species of monitors with a wide range over much of southern to southeastern Asia, from southern Myanmar, Thailand, Malaysia, Sumatra, Borneo, to Indonesia and surrounding islands. Due to this species' secretive nature, its range and distribution may be more wide ranging than is currently known. Although both of these monitor species have a wide distribution, they are habitat specialists, occupying the rainforests and other tropical forests near permanent waterbodies with high humidity and mangrove swamps, rivers, and coastal regions.

#### **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: Emphagusia

**Species:** Varanus rudicollis\* and Varanus dumerilii\*

\*Taxonomy subject to change and revision.

## **Lifespan and Longevity**

If provided the proper care, both Dumeril's and black roughneck monitors can attain longevity of 15 to 25 years or more in captivity.

#### **Distribution and Habitat**

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#### **Origin/History**

Varanus rudicollis (Gray, 1845); Varanus dumerilii (Schlegel, 1839).

Not much history is known or available on black roughneck monitors in the pet trade or in herpetoculture, although almost all would be wild-collected imports. Captive breeding of these varanids is still rather scarce to this day. Likewise, little to no information is available on the history of Dumeril's monitors in the pet trade, although both of these species possibly may have been so since at least the 1970's or 1980's.

#### **Experience Level Required**

Moderate/Intermediate to Advanced.

#### **Size**

As adults, Dumeril's, or brown roughneck monitors can range in size from 3 ½ to 4 ½ feet, or 42.0 to 54.0 inches in total snout-to-tail length. Black roughneck monitors, as adults, can reach size potential of 3 to 5 feet, or 36.0 to 60.0 inches in total snout-to-tail length. Maximum snout-to-vent length in *Varanus rudicollis* is about 20.0 to 23.2 inches snout-to-vent length (SVL). Maximum snout-to-vent length in Varanus dumerilii is about 22.2 inches snout-to-vent (SVL).

#### **Housing and Enclosure**

Enclosure System: Semi-Arboreal to Arboreal. Housing must also be sealed and escape proof. Hatchling roughneck and Dumeril's monitors can be started out in a 10 to 20 gallon tall arboreal 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 rough necked and Dumeril's monitors will require a minimum of a six foot by three foot arboreal terrarium or enclosure. Very large, custom designed pens or enclosures are perhaps the most suitable housing for most mid to large sized monitors. As with other monitors, these 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. Roughneck and Dumeril's monitors are arboreal species, and will climb readily if given the opportunity. An arboreal nest box or hide installed off the ground serves as an ideal feature for these monitors. Relative humidity for these arboreal species of monitors should be maintained at, or within 60 to 85%, but access to dry areas should be still available. A commercially available misting or fogging system can be used to help maintain hydration and humidity.

## **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. Roughneck monitors will tolerate a wide thermal gradient of temperatures, from 75 to 95 degrees F, and basking temperatures of 120 to 140 degrees F. Nighttime temperatures can be allowed to drop to around 70 to 75 degrees F. These monitors also require overhead UVA, UVB incandescent and fluorescent lighting using the appropriate wattage bulbs, ceramic heat emitters, black or "night" 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, black roughneck monitors will feed on a variety of small arboreal mammals, birds, eggs, frogs, and smaller reptiles, as well as a variety of insects, arachnids, worms, and other invertebrates. Dumeril's monitors, in the wild, are believed to be crab specialists, although they will also feed on snails, mollusks, small fish, frogs, insects, and other invertebrates, as well as smaller rodents.

In captivity, variety is essential to a proper and adequate monitor diet. Roughneck and Dumeril's 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. Frozenthawed 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**

Both black roughneck and Dumeril's 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, captive born 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 still 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

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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