



Lesley Marshall

Panther Chameleon (*Furcifer pardalis*)

Vibrant and Eye-Catching Mainstream Chameleons

Panther chameleons are a large chameleon species indigenous to the tropical forests and woodlands of Madagascar that can vary considerably in color depending on locale, gender, age, and disposition, with reds, oranges, blues, greens, yellows, blacks, or whites to emerald green or turquoise being noted on a highly variable patterning of darker bands, stripes, and/or spots. Panther chameleons are sexually dimorphic in terms of their sizes and coloration and color intensity, with females and juvenile panther chameleons typically becoming less vibrantly colored than males. Furthermore, the crests on both genders of panther chameleons tend to be low and less distinct than some other chameleon species. Panther chameleons are a widely sought after, bold, and spirited chameleon species that has attracted a strong following among the intermediate to advanced enthusiasts.

Chameleons in general are a highly diverse and specialized family of Old World lizards with several extremely unique features and adaptations for survival. Perhaps best known are their color and/or pattern changing abilities. The skin and scales of chameleons possess a thin, superficial layer of color changing pigments, with another deeper layer consisting of guanine cells. In order to change their coloration, chameleons rely on changing the space and distance between these guanine cells, thereby changing the wavelengths of light reflected from the skin and scales. While it is popularly believed that chameleons change their colors and patterns for camouflage or crypsis, and while it is true that this has functions in concealing the animal from predators and prey, this is not the primary reason for their color changes. Instead, they will change color as a means of social signaling, to display territoriality and dominance, displaying defensive behaviors, and/or to aid in thermoregulation. Most chameleons also have highly specialized zygodactylus feet and prehensile tails for climbing and gripping branches as well. They also have highly modified and rapidly extrudable sticky tongues used and designed for capturing prey. Chameleons also possess a pair of highly mobile, independently operating eyes, giving them excellent depth perception and motor coordination as well. These are only some of the many unique features chameleons possess, making them popular and unusual pet reptiles to maintain in herpetoculture.

Taxonomy

Life: All living, physical, and animate entities

Domain: Eukaryota

Kingdom: Animalia

Phylum/Sub Phylum: Chordata/Vertebrata

Class: Reptilia

Order: Squamata

Suborder: Lacertilia

Infraorder: Iguania

Family: Chamaeleonidae

Genus: Furcifer

Species: *Furcifer pardalis**

**Taxonomy subject to change and revision.*

Lifespan and Longevity

If provided the proper care, panther chameleons can attain longevity of 5 to 8 years on average.

Distribution and Habitat

The panther chameleon is a large, arboreal chameleon species indigenous only to the island of Madagascar near the southeastern coast of Africa. This species is distributed throughout the island of Madagascar and within a variety of elevations, but are most locally abundant in the east-central, northeastern, northern, and northwestern coasts of Madagascar. Within this range, these chameleons inhabit primarily the dry, lowland deciduous and scrub forests and woodlands, often bordering rivers, streams, and other waterbodies, as well as near roadways and other areas of agricultural and human habitation.

Origin/History

Furcifer pardalis (Cuvier, 1829).

Panther chameleons have long been one of the most popular chameleon species in the pet trade and herpetoculture due to their large sizes and vibrant colors. Thousands would be exported from Madagascar through the 1970's and 1980's. Since then, however, their exportation out of Madagascar has been outlawed, and panther chameleons became CITES Appendix II as of October 2017. Many would be wild-collected, and succumb during shipping or shortly after their arrival due to stress and poor husbandry.

Fortunately, however, a strong subset of reptile keepers and enthusiasts would continue to ensure that captive-bred panther chameleons would continue to be available in the U.S. and elsewhere. As a result, chameleon husbandry became better understood, and these relatively docile chameleons would attain longer longevity in these captive conditions than their wild collected counterparts.

Experience Level Required

Intermediate/Moderate.

Size

Adult Panther chameleons are sexually dimorphic in size, with adult males being larger than females. Adult males range from about 12.0 to 20.0 inches in total snout-to-tail length. Adult females range from about 8.0 to 14.0 inches in snout-to-tail length. Average snout-to-vent length (SVL) is up to 9.8 inches.

Housing and Enclosure

Enclosure System: Primarily Arboreal. Housing must be sealed, well ventilated, and escape proof. Hatchling and juvenile chameleons up to around six to eight months can be maintained in roughly a 20 gallon tall enclosure, but be sure to not use too large of enclosures as they can become stressed and have greater difficulty finding their food. Most adult chameleons should be kept in at least a 30 to 50 gallon tall or equivalent sized 36" x 18" x 36" enclosure. Glass or screen enclosures can be used depending on your household's ambient temperature and humidity. Providing a substrate is optional as chameleons are arboreal and will seldom use it, but

substrates that can be provided can include cypress mulch, sphagnum moss, chemical and pesticide free potting soils, or coconut fiber. Chameleons are highly arboreal and specialized lizards that require additional climbing, basking, and hiding opportunities by providing additional vertical artificial foliage, driftwood, branches, logs, and other furnishings. Most chameleons also will not recognize standing water, and should be misted, by hand or with a commercially available misting and/or fogging system to ensure they receive adequate moisture and hydration.

Temperature, Lighting, and Humidity

Provide a lighting and temperature gradient for panther chameleons from 85 degrees F to 95 degrees F. A basking temperature of about 85 to 95 degrees F. should be provided. Use an infrared night time bulb to create nighttime temperature gradients of 75 to 85 degrees F. Providing the correct amounts of UVA/UVB overhead incandescent and florescent lighting, and calcium-to-phosphorus ratios is essential for ensuring the health and overall well-being of panther chameleons in captivity. Without UVA/UVB, or adequate amounts of it, they can be susceptible to the abnormal bone growth and development known as Metabolic Bone Disease (MBD), and other health and development maladies. Also be sure to 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. Maintaining the correct relative humidity is a very important component of chameleon care, and panther chameleons require high levels at, or around 80 to 100%.

Feeding, Diet, and Nutrition

Insectivorous; In the wild, panther chameleons are primarily insectivorous, feeding on insects and other invertebrates they can locate and capture using their specialized eye-sight and long sticky tongues. In captivity, feed panther chameleons a variety of appropriately sized feeder insects such as crickets, roaches, mealworms, superworms, and waxworms. Feeder insects should be gut-loaded in order to increase their optimal nutritional value. Panther chameleons also require additional calcium and vitamin D3 supplementation 1 to 2 times weekly or as otherwise directed for optimal health and development. This is in order to prevent Metabolic Bone Disease (MBD) and other growth and nutritional deficiencies. Their feeding frequency will depend on the age, size, and overall health of your animal. Food can be given by hand or in a small dish mounted off of the enclosure's floor for arboreal animals. 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

As with most chameleons, panther chameleons will generally not tolerate frequent handling, and it should be kept to low levels. Should a chameleon be handled, it is important to remember to not forcefully pick up the animal, which may lead to further stress and/or injury. Allow a chameleon to walk onto your hands or gently coax them to do so if possible. Generally, chameleons are better suited as display animals.

****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:

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