

opportunity for your chameleon to hunt naturally. Any prey items that are not consumed after 2-3 hours should be returned to the insect colony to allow them to continue to gut load and to prevent them from biting and harming your chameleon. Use caution to avoid placing too many insects in the enclosure. Only offer what your chameleon will eat in one sitting which can range from 5-15 insects per meal. Juveniles should be fed once or twice daily and adults can be fed every other day.

Water

Chameleons typically do not drink water from a bowl and rely on water droplets on leaves and sides of their enclosure as their water sources. Therefore, frequent misting is needed throughout the day. Three to five times daily is recommended for misting. This can be achieved by hand misting, using a water dripper, or an automated misting system.

Supplements

Dusting prey items with calcium and vitamin powder before feeding them to your chameleon is required to make insects more nutritious. Dust insects immediately prior to feeding them to your chameleon. Use a calcium powder (without vitamin D₃ or phosphorus) daily in juveniles and every other day in adults. A multivitamin with preformed vitamin A should be used once weekly for both juveniles and adults. Reproductively active females will need increased calcium supplementation. Discuss a supplementation plan for your specific chameleon with your veterinarian.

Tips for a Happy, Healthy Animal

- Take your new chameleon to an experienced reptile veterinarian as soon as you acquire it for wellness exam and fecal examination.
- Provide UVB light the width of the enclosure for 10-12 hours a day
- Change the UVB bulb every 6 months
- Thoroughly mist the enclosure 3-5 times daily for proper hydration and humidity
- Feed a variety of insects that are gut loaded and dusted regularly with calcium and a multi-vitamin supplement
- Provide a basking site of 85-95° Fahrenheit (30-35° Celsius)
- Quarantine new chameleons in a separate area of the house for at least 30 days

It is Important to Avoid

- Particular type substrates on the bottom of the enclosure
- Direct contact with heating elements
- Housing chameleons together or housing your chameleon with any other species
- Temperatures colder than 75° Fahrenheit (24° Celsius) and higher than 95° Fahrenheit (35° Celsius)
- Excessive handling as this can be very stressful for your chameleon
- Feeding only one type of prey item. Variety is key for a healthy, happy chameleon.

- Allowing your chameleon to roam freely. Chameleons need exposure to UVB light, heat and high humidity which is hard to achieve in a room.
- Exposure to predators and other companion animals.
- Stagnant or standing water due to excessive misting or drip systems.

Common Disorders

- Nutritional Secondary Hyperparathyroidism or Metabolic bone disease
- Kidney disease (typically resulting from chronic dehydration)
- Reproductive disease such as egg binding
- Hemipenial prolapse
- Swollen eyes or eye discharge which can be a sign of hypovitaminosis A
- Respiratory Illness
- Intestinal parasites
- Skin infections and abscesses
- Stomatitis or mouth rot
- Eye infections
- Many common illnesses are seen due to malnutrition (improper diet and supplementation) and husbandry errors

Additional Reading:

Chameleon Handbook

Berre, F. L. (2009). (B.E.S. Pet Handbooks) (3rd ed.).

The Panther Chameleon: Color Variation, Natural History, Conservation, and Captive Management (1st ed.). Ferguson, G., Murphy, J. B., Ramanamanjato, J., Raselimanana, A. P., & Ferguson, G. (2004).

Panther Chameleons: The complete guide to owning this amazing pet lizard. Shaw, R.G. (2015). Clovelly Publications.

Regular visits to your reptile veterinarian should be scheduled to check for parasites and other early signs of disease and to promote a long, satisfying relationship with your Panther Chameleon. For help in finding a reptile/amphibian veterinarian in your area, contact the Association of Reptile and Amphibian Veterinarians (www.ARAV.org) or contact the American Board of Veterinary Practitioners (www.ABVP.com/diplomate)

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HOW TO KEEP YOUR PANTHER CHAMELEON HEALTHY, HAPPY AND SAFE!



NATURAL HISTORY

Panther Chameleons (*Furcifer pardalis*) are native to the tropical forests in the northern and eastern parts of the island of Madagascar. They are one of the most striking and beautiful lizards that are commonly found in the pet trade. They come in different colors and patterns depending on their "locale" or specific area they came from. Chameleons from each area are designated with the locale name such as Ambilobe, Nosy Be, and Ambanja, to name a few. Colors range from bright yellows, oranges, and reds to darker blues, purples, and greens.

Chameleons have independently moving eyes that can provide them with a 360-degree field of vision. They have prehensile tails that they use to grasp onto branches. Their feet have a zygodactyl arrangement, meaning that they have toes pointed both forward and backward, which gives them a strong grip. Their extraordinarily long tongues are a specialized feature of chameleons that is used to capture prey. They are arboreal, meaning they spend most of their time in the trees, and are diurnal, meaning that they are more active during the day.

What to Expect from My Animal

Panther chameleons are attractive, interesting, and unique animals that are more challenging to care for. Panther chameleons have very specific husbandry requirements that are needed to keep them happy and healthy. Contrary to popular belief, panther chameleons do not change colors to camouflage into their surroundings. They change their coloration to become more vibrant with contrasting colors when they feel threatened or before mating. They are territorial and need to be housed alone. Panther chameleons can tolerate mild handling, but due to their higher stress level, are better suited as a display animal.

Is My Animal Male or Female?

When young, both males and females have more dull coloration and look very similar. Young males will have almost a straight line from the underside of the stomach to the tail and the base of their tail is thicker. Young females have an indentation just behind the vent/cloaca (not a straight line) and have a thinner tail. As adults, males are generally larger and more colorful than females, and have a prominent bulge at the base of the tail. Females typically display pink, tan, brown, or grey colors and are smaller.

Housing and Substrate:

All chameleons should be kept in vertical screened enclosures for excellent ventilation. Glass cages are not appropriate and predispose chameleons to respiratory and skin infections. Babies should be kept in smaller cages (16x16x24 inches or 40x40x60 cm) so they can catch their prey easily. Adult females can be kept in large screen cages (18x18x36 inches or 45x45x90 cm) and males in extra-large cages (24x24x48 inches or 60x60x120 cm). Panther chameleons do not spend time on the ground, so providing a substrate for them is not necessary. Particulate types of substrate at the bottom of the enclosure are difficult to clean, allow insects a place to hide, and can become saturated with water. Paper towels or clean paper can be used as substrate. Chameleons need many branches for climbing and artificial or real plants with larger leaves to allow them many different options for places to hide.

WHAT YOUR VETERINARIAN LOOKS FOR IN A HEALTHY PANTHER CHAMELEON

Vital Statistics:

Body length

Males: 15-20 inches (40-50cm)

Females: 8-10 inches (20-25cm)

Body weight

Males: 140-180 grams

Females: 60-100 grams

Age of sexual maturity

Males: 6 months

Females: 6 months but breeding should wait until the female is full grown (about 1 year old)

Longevity

Males: 5-8 years

Females: 2-3 years

● Eyes open, bright and clear. No swelling, discharge, or asymmetry.

● Nares clear and free of discharge

● Mouth free of excessive mucus or crusting

● Tongue retracted fully within the mouth

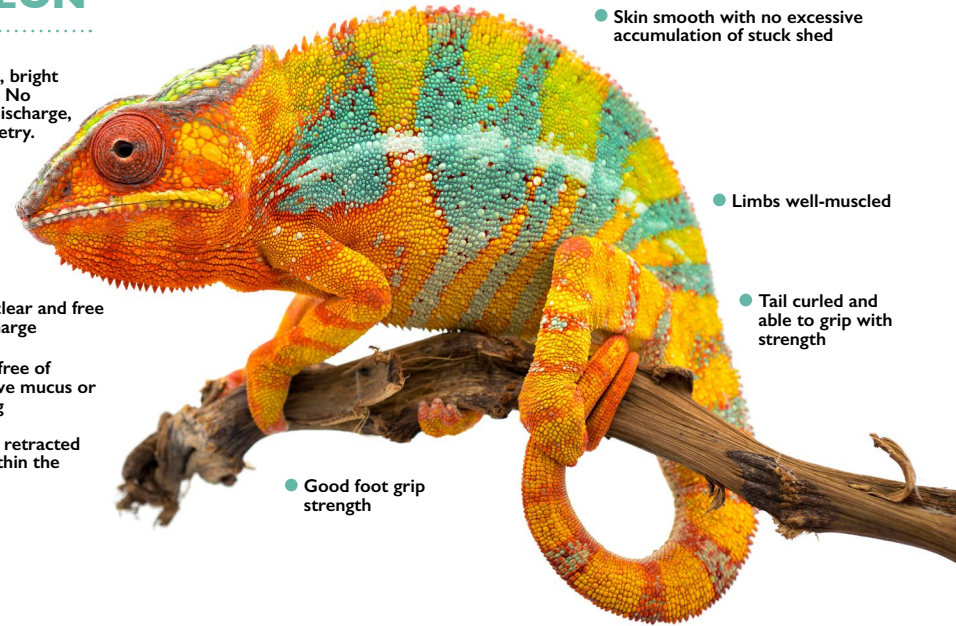
● Active and alert

● Skin smooth with no excessive accumulation of stuck shed

● Limbs well-muscled

● Tail curled and able to grip with strength

● Good foot grip strength



NOTE: Most, if not all, reptiles and amphibians carry *Salmonella* bacteria in their intestinal tract and intermittently or continuously shed these bacteria in their feces, so they are unsuitable pets for very young children and those with compromised immune systems. Good hygiene must always be practiced around all reptiles and amphibians, including Panther Chameleons. For more information, please see the handout, *Salmonella Information for Reptile Owners* at <http://arav.org/salmonella-bacteria-reptiles>.



Temperature and Humidity Requirements

Panther chameleons should have a basking area around 85-95° Fahrenheit (30-35° Celsius) with an ambient temperature of 77-84° Fahrenheit (25-29° Celsius). Temperatures should not drop below 75° Fahrenheit (24° Celsius) at night. Care should be taken to prevent chameleons from getting too close to heat sources in order to prevent burns. Humidity of 70-85% is recommended. This is achieved with frequent misting and moisture retaining decorations, such as leaves, moss, and live plants. Automated misting systems are ideal since they can be set to mist the enclosure several times a day to increase humidity. Be sure to avoid any standing water in the enclosure from excessive misting or drip systems.

Lighting Requirements

All chameleons need 10-12 hours of UVA/UVB light daily. This is best achieved with T5 high output forest (5.0) linear UVB bulbs. The bulb should span the entire length of the top of the enclosure.

Chameleons need UVB light to synthesize vitamin D3 which is needed to absorb calcium. UV lights need to be changed every 6 months to ensure proper UVB production.

Diet

Panther chameleons eat primarily insects in the wild. Variety is key for a well-balanced, healthy diet. Staple options include crickets, dubia roaches, silkworms, and hornworms. Occasionally adding in superworms, mealworms, waxworms, grasshoppers, and other insects will increase variety. All insects offered should be gutloaded for 24-72 hours before feeding them to your chameleon. Insects should be offered commercially available gut loading powders supplemented with greens and vegetables that are high in calcium and vitamin A. Live prey can be offered to your chameleon in deep containers. This is ideal for smaller worms or small insects to prevent them from escaping the enclosure. Live prey items can be offered and allowed to free roam in the enclosure in very small numbers. Allowing a very small number of live prey items to free roam will provide an