Jackson's Chameleon (Chameleo Trioceros jacksonii) Care Sheet

Description: Jackson's chameleons (Chameleo Trioceros jacksonii) are native to mountains of Kenya and Tanzania, and are now abundant in the wild in Hawaii. There are three subspecies: C. T. jacksonii jacksonii, C. T. jacksonii merumantanus, and C. T. jacksonii xantholupus. Size and slight color differences distinguish the subspecies. Adult males range 10", 6'-8", and 12"-14" total length respectively. Male's colors are a combination of green, yellow, turquoise and blue with males of each subspecies having these colors displayed in slightly different locations. Females are smaller and typically display more drab colors.

Chameleo Trioceros jacksonii merumontanus

Selection: The color of a chameleon is generally a good indicator of its condition. Dark and drab colors are generally indicative of stress or improper temperature. A healthy chameleon will have straight limbs. If you see a chameleon that looks "bowlegged", has difficulty grasping onto branches or walking, or has a crooked back or jaw, do not purchase it. These symptoms often indicate an animal that has developed metabolic bone disease, a preventable calcium deficiency. Healthy chameleons have their eyes open during the daytime and and are constantly surveying their environment. Chameleons that have their eyes closed for long periods of time during the day are usually sick. Sunken eyes generally indicate a dehydrated and stressed animal. There should be no elongated lumps beneath the skin (possible filarial worms). Look for any visible cuts bruises or broken skin. The skin should look well hydrated, not dry or withered. Large black or gray areas can be fungal infections.

Sexual dimorphism: Males have three very prominent and somewhat fragile horns. Females may have the same three horns only smaller underdeveloped, one smaller rostral horn, or no horns. Females are smaller than males and do not display the bright colors of their male counterparts. Males have a swollen tail base (hemipenile bulge). Sexing is possible at about 4 months when the horns start to develop, but can not be determined with certainty until the horns are more developed and the bulge is more prominent.

Sexual maturity: Sexual maturity is reached around 5-7 months, but it is recommended for females that any breeding wait until 12 months.

Average life expectancy: Males chameleons generally live five to six years average in captivity.

Size: Males can grow to 14 inches total length while females mature to a smaller size of 12 to 14 inches.

Growth and Breeding: Introduce the female into the male's enclosure. If she is ready to mate her color will lighten and she will raise her tail as if inviting the male over to her. If she is not ready to mate, her colors will darken and she will begin to sway and head bob. Five to ten months after

successful mating occurs, she will give birth to 3 - 30 babies. Babies are enclosed in a slimy liquid egg sack and are typically born and dropped from heights to help break the sack. Sperm retention is possible so two or more clutches can be possible from one successful mating, although this is not consistently predictable. One clutch per year is average, but two may be possible. Babies should be separated from each other and the parents to avoid stress and competition for food. Flightless fruit flies (Drosophila hydeii) are the best food for new babies, but they will soon be ready for pinhead crickets. You need to have fruit fly cultures available when delivery of the young is expected. They will be ready to eat within 24 hours of birth. Temperatures and humidity are critical with new babies. They are less tolerant of heat than adults. Just as the adults do, babies love to bask. Care when misting is also important. Small chameleons can easily be drowned if sprayed directly in their faces. Sex of the young can reasonably be determined around 2 months of age when horns start to develop.

Temperament: Jackson's chameleons are very aggressive toward other chameleons. They should be kept separately and out of sight of each other. They are more docile than veileds, but should be handled as little as possible.

Diet: Jackson's chameleons are insectivores. It is imperative that they receive enough calcium to prevent MBD. Babies take 5-10 two-week-old crickets 1-2 times per day. Feeder insects should be gutloaded with a high calcium diet and periodically dusted with vitamin supplements. Don't overfeed. This is especially critical with females. Overfeeding females causes larger clutch sizes (number of babies) and can greatly reduce their life expectancy. While crickets are the staple of their captive diet, meal worms (Zoophobus morio) waxworms (Galleria mellonella), locust Butterworm, silkworms, and captured insects (from safe pesticide free fields) provide great variety in their diet.

Hydration: Clean water should be provided daily via a drip bottle dripping over the foliage within the enclosure. Chameleons will typically not recognize water unless it is moving i.e. rolling off the foliage after misting or dripping. A drip bottle can be purchased at about any reptile supply at your local pet store. They can also be easily made from a cup with a pin hole poked in the bottom. Just misting the enclosure for a primary water source is inadequate. It will cause problems in the long run, the chameleon will not get sufficient water.

Enclosure: Their enclosure should allow air circulation which is typically achieved by two or more sides made of screen. Only one chameleon should be kept per enclosure because they are solitary animals and stress easily. Stress can lead to health problems.

Enclosure - temperature: Reptiles are ectothermic (cold-blooded). They do not manufacture their own body heat and rely on environmental elements to regulate body temperature. In order to raise or lower their body temperature, reptiles move from hot or cold area as needed. Chameleons also use color change (darker colors absorb heat, while lighter colors repel heat) and slight body shape manipulation (they flatten themselves out to absorb more heat) In captivity, we need to provide reptiles with a range of temperatures so that the animals may thermoregulate as they would in the

wild. For Jackson's chameleons, that means one end of the cage should be the preferred ambient temperature, and one end should be at the basking temperature. If the enclosure is large enough, there may also be temperature differences at different heights. If you keep your chameleon in a large enclosure, it is best to put the basking site at the highest point of the cage, so that the vertical temperature change mimics what occurs in nature. It is critically important that the owner provide a heating lamp to create a basking spot of 85ºFat one end of the enclosure. The ambient air temperature in the rest of the cage should be 70's over the course of the day with a preferred drop to the 60's at nighttime. There is no need for heat rocks or warming pads.

Enclosure - lighting: The lighting should include a basking light (any bulb placed near the top to create a warmer area) 6% or similar UVB output bulbs. Make sure the chameleon can not come into contact with the bulbs!!!

Enclosure - humidity: Jackson's are native to cool humid mountainous areas and require high humidity and lower temperatures than many other chameleons. The enclosure should be misted with warm water 4-5 times daily. An automated misting system is best, but if not available, then provide plenty of dripping water and mist frequently. This aids in shedding and adds a little humidity. Baby chameleons (and adults) will usually lap the water off the foliage. Fifty to sixty percent humidity is desirable and fresh airflow is mandatory to prevent bacterial growth.

Enclosure - size: A screen cage of measuring 24"x24"x36" is recommended but 24"x24"x48" is more preferable. As a guide cage dimensions should meet this criteria:

Enclosure - plants: There are many plants suitable for chameleon cages. The plant must have similar temperature and humidity requirements, and must not be considered toxic. This is a short list of the acceptable and unacceptable plants for chameleon enclosures:

Acceptable - Weeping fig Ficus benjamina, Hibiscus rosa-sinensis, pothos or devil's ivy Epipremnum aureum, Dwarf Umbrella Schefflera arboricola

Unacceptable - Octopus Tree or Queensland Umbrella Tree Schefflera actinophylla, Rubber Tree or Rubber Plant Ficus elastica

Health problems and veterinary care: Dystocia (egg binding) is a relatively common problem in reptiles. Dystocia can occur in live-bearing and ovoviviparous (reproducing by eggs which the female carries in her body until they hatch) species. Parasites are common in wild caught specimens.