Aurora ANIMAL + HOSPITAL
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Veiled Chameleon (Chamaeleo calyptratus) Care

Please note these care sheets are intended for the average reptile owner to ensure that your pet is receiving basic care needed to have a healthy life and there are other aspects of advanced care that can be considered for healthy pets.

Brief Description:
The veiled chameleon (Chamaeleo calyptratus) is a very common species in the pet trade native to the Arabian Peninsula. They are well known for their prominent casque (crest on top of the head). When threatened they will frequently change color and inflate their body to appear larger and may hiss or bite. Some also display the unique ability to vibrate or buzz when frightened, which is an attempt to intimidate other chameleons, predators, or even an insect bothering them. Contrary to popular belief, chameleons don't change color in a direct attempt to match their background. Their color changes are influenced most by their state of health, emotions or level of stress, and the process of thermoregulation. Pet chameleons are stressed by frequent interaction and should not be handled regularly.

Lifespan:
With proper husbandry veiled chameleons can live 5-7 years on average.

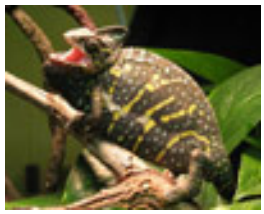
Identification:
Males have a noticeable tarsal spur (bump on the back of the hind feet) that females lack, making sexing of this species easy to verify at any age.

Adult Male

Male Tarsal Spur

Adult Female

Gravid Female



Baby Veiled

Cage Size:
Veiled chameleons are territorial and easily stressed by the presence of other chameleons, even of their own species. No more than ONE veiled chameleon should never be kept in the same cage (not even male and female pairs). Cages should be furnished with many plants and climbing branches to provide opportunities for exercise and plenty of places for hiding. Substrate (mulch, soil, etc.) should not be used in chameleon cages except for females to lay eggs. A screen cage should be at minimum 18x18x36" tall while males especially should be in 24x24x48" tall cages minimum.

Temperature:
Reptiles are ectotherms (cold-blooded), meaning they need to absorb heat from their environment to regulate their own body heat since they cannot produce it. They need a warm place to bask (**85-90 degrees**) at the top of the cage in order digest food and nutrients properly. The lower part of the cage should be cooler (**70-75 degrees**) so they don't overheat. A thermometer should be placed at both parts of the cage to accurately measure temperatures. Your chameleon will utilize different temperature zones throughout the day depending on its metabolism and needs. Lights should be on for 10-12 hours each day and then total darkness at night. Night temperatures can safely drop to 60 degrees so a night time heat source is not necessary.

Chameleons MUST have UVB light to survive and a lack of UVB will lead to Metabolic Bone Disease, severe deformation, and death. A commercially available UVB bulb is necessary as UVB does not penetrate glass or plastic so having the cage near a window does not work. Look for "UVB" listed specifically on retail packaging before buying. *After about 6 months of use most bulbs will stop emitting adequate levels of UVB, even though they are still shining, so it's important to change the bulb every 6 months.* T5 UVB bulbs provide better zones of UVB than compact fluorescents.

Food & Nutrition:
Veiled chameleons are insectivores meaning they should only be fed **live** insects. Great feeder insects include crickets, silkworms, hornworms, butterworms, dubia roaches and superworms. Wax worms and mealworms should only be given as a treat because of the high fat content and low digestibility. The rule of thumb is to not feed insects that are longer than the width of your chameleon's head. Juveniles should be fed every day while adults can be fed every other day.

Humidity & Hydration:
Humidity is an important aspect of chameleon husbandry. Veiled chameleons require levels around 50-60%, which can be achieved by several misting sessions a day over all areas of the cage, cool mist humidifier, or timer-controlled misting system. Water can be provided by means of a dripper (not a waterfall or water bowl). The dripper should be placed on top of the cage so

that the water droplets drip down and accumulate on plant leaves. Chameleons do not generally recognize standing water as a drinking source and standing water can be a safety/hygiene concern.

Gutloading
Gutloading is the process of feeding crickets, superworms, and/or dubia roaches a nutritious diet so they can ultimately provide your reptile with the proper nutrients it requires as it would in nature. Supplementing with a calcium and multivitamin powder is important, but not sufficient alone.

Creating a well-rounded gutload at home can seem daunting but can actually be fairly inexpensive and easy to make! Each time you go to the store get one or two staple vegetables on the list above, then rotate them for something else next time. Make sure you wash all produce to eliminate pesticide residues and cut off the peel of fruits and vegetables as they have waxes and pesticides you can't wash off. The time from feeding insects, to your reptile eating those insects, should be 6-24 hours, and gutloading must be done before every feeding to be successful.

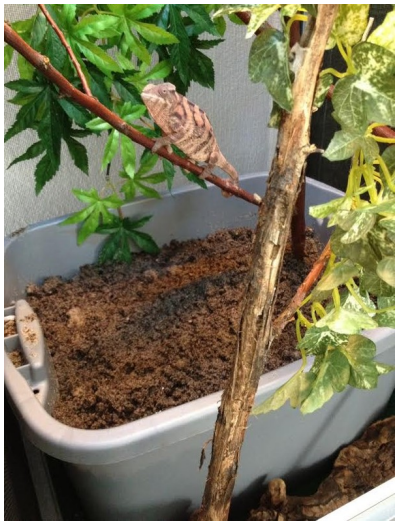
Staple Ingredients (Highest in calcium and other nutrients)					
					
Collard Greens	Turnip Greens	Mustard Greens	Escarole	Endive	Dandelion

Good Ingredients (Use as supplements to staples listed above)					
					
Sweet Potato	Papaya	Kale	Butternut Squash	Berries	Mango
Commercial gutloads: Repashy Superload, Cricket Crack, Super Chow					

Avoid These Ingredients (Low in calcium and/or high in phosphorus, oxalates, goitrogens)
Idaho potatoes, cabbage, iceberg lettuce, spinach, broccoli, tomatoes, corn, grains, beans, bread, cereal, meat, eggs, dog food, cat food, fish food, canned or dried insects, vertebrates (pinkies, lizards). While convenient, some commercially available gutloads (Farms Orange Cubes, Fluker Farms High Calcium Cricket Diet, Nature Zone Cricket Bites) are low in calcium, imbalanced and/or insufficient for good nutrition.

Supplementation
Chameleons are especially susceptible to metabolic bone disease which results from a lack of calcium and/or UVB lighting. A powdered calcium supplement (without phosphorus) should be used to lightly coat the crickets 3-4 times weekly until 2 years of age and then 1-2 times weekly after that. A multivitamin can be used less frequently (once or twice a month) if desired but with good nutrition this is not always necessary.

Female Chameleons - Egg Laying



Chameleons do not need to be mated or even have seen a male to develop eggs. Even if you only have a single female chameleon since she was a baby it will be critical to provide her a place to lay eggs because egg binding (being unable to lay eggs) is fatal. Veiled chameleons can start to develop eggs as early as 4-6 months of age. However, it is highly recommended not to breed your chameleon until the female is at least a year of age so she is mature and can dedicate calcium stores to eggs instead of stripping it from her own growing bones. A clutch can contain on average 20-50 eggs several times a year. A single breeding may produce several clutches from the same pairing due to sperm retention by the female. Egg laying is a big strain on the female's body so extra calcium should be given to gravid females to keep up with the need of making eggshells. A female that is unable to lay her eggs for environmental, nutritional or medical reasons causes a serious condition of egg-binding, or being eggbound. This is a medical emergency and will be fatal if not treated.

A female over 6 months of age should always have a laying bin available. The laying bin should be at least 16x16x16" with depth of substrate of at least 12" being crucial. The egg laying substrate should be either washed playsand or a mixture of washed play sand and organic soil moistened so that a tunnel retains its shape and does not collapse. There should be one or several branches going into the laying bin so that the female can crawl in and out as desired. They dig head first to make the tunnel and then back into the tunnel to lay their eggs before covering the tunnel completely. It is absolutely critical to give a chameleon complete privacy while she is in the laying bin. If she is disturbed she may abandon her tunnel and could be become eggbound. A female that is weak, very uncomfortable, or refuses to use a laying bin may need veterinary assistance immediately.

For more information on Lighting, Cage Setup, Nutrition, Humidity, Health and other questions visit http://www.chameleonforums.com/care/chameleons/