



## Veiled Chameleons

*Chamaeleo calyptratus*

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Chameleons are one of the most difficult species of reptiles to keep successfully in captivity. Veiled chameleons are native to coastal mountainous regions of the Arabian Peninsula. There are invasive populations in Hawaii and Florida. Both sexes of veiled chameleons have a large casque on the head, believed to be used as a funnel to direct moisture to the mouth. Males have a slightly larger casque, have a “spur” on the hind heels, typically are longer, and have different color variations dependent on the subspecies. Males can reach 17-24” in length, while females usually top out at 10-13” usually by 12 months of age. Females become sexually mature at 3.5-6 months and live 2-5 years, while males do so at 6 months and live 4-8 years. Females have shorter lifespans due to difficulty giving birth/laying eggs. They excrete white salts from their nostrils as a normal physiologic process. Receptive females have robin’s-egg blue markings. They can lay up to over 80 eggs in a clutch, every 3-4 months. In cold, outdoor conditions, this species has been noted to climb down to sleep in warmer materials.

**Health care:** Chameleons can be very good at hiding illness. We recommend biannual exams, with fecal parasite screening and x-rays, to make sure your pet is healthy! Common problems are intestinal parasites, anorexia, and intestinal obstruction. Remember with any disease processes, the sooner we see the animal, the more successful we are at treating it!

**Husbandry concerns:** Do not house with species from other countries, to prevent exposure to new diseases. Excessive handling while they are new should be avoided. They are very territorial, so avoid housing 2 together. Terrariums that are taller than they are wide are preferred as chameleons are arboreal (tree dwelling). Chameleons require both high humidity and good airflow. Chameleons without sufficient airflow are prone to respiratory infections, while those kept in too low humidity often become chronically dehydrated causing problems shedding and predisposing to kidney disease. Mesh sided cages tend to work best. Humidity should be maintained at 50-75% and monitored using a hygrometer. If this level of humidity proves difficult to reach, covering 2-3 sides of the enclosure with plastic or foil, and misting the cage or using a humidifier may be helpful. The minimum tank size for an adult chameleon is 2’ x 1’ x 3’ high, with 1/8th” plastic mesh sides, and newspaper or indoor-outdoor carpet on the bottom to avoid swallowing non-food items and difficulty finding food. Immature chameleons

**More on the back!**

may need a smaller cage, 16" x 16" x 32", while learning to catch prey, until they are about 8 months old. Provide lots of items to climb on! Chameleons would rather sit in tangles of leaves high up than in caves on the ground. Non-toxic live plants, like bromeliads can be great and help keep up humidity. A ceramic heat lamp should provide a focal basking spot of 95-100°F, while the rest of the cage should have a gradient down to 80°F. At night, the cage can cool down to 65-75°F. Do not allow contact with the lamp. Do not use hot rocks or pads as they can easily cause thermal burns! At night, make sure lights are off. Use a digital thermometer for temperature measurement and measure at the level where the chameleon lives. A UV light is necessary, and should provide 12 hours of light with at least 5% UVB, not being screened by plastic/glass/mesh, and within 14 inches of the chameleon. If the light is going to pass through the mesh top of a cage, it should be at least 9% UVB, as 40% of UVB is lost passing through the mesh. In the wild, chameleons drink water droplets off of leaves. They often do not figure out how to use a water dish. Use either a water drip system or ice cubes on a mesh cage top and allow them to melt and drip on leaves beneath with a water dish below them. This may also help chameleons learn to use a water dish as the water splashing attracts their attention. Be sure that the water dish is shallow and chameleons can climb out of it if they fall in to prevent drowning!

**Diet:** Feed juvenile chameleons 1-2 times per day and adults every other day. Veiled chameleons are omnivorous as adults, eating dark leafy greens include red leaf/green leaf/romaine/Boston lettuces, collard/mustard/beet greens, endive, parsley, bok choy (avoid iceberg lettuce as it has almost no nutritional value). It can take young chameleons or those that have not been offered plant based foods a few months to start eating them. Be persistent and keep offering small salads! We recommend a varied diet of crickets, silkworms, hornworms, phoenix worms, earthworms, locusts, flies, moths, walking stick insects, grasshoppers, or dubia roaches. AVOID FIREFLIES AS THEY ARE POISONOUS! Make sure wild-caught food is pesticide free. Items need to be rotated and varied, as occurs in the wild. Adults can eat the equivalent of 30-50 adult crickets/week. Hatchlings do best with flightless fruit flies or baby crickets. Captive-raised insects need to be fed a gut-loading diet, such as Repashy Bug Burger, to increase their nutrient content for the chameleon. These insects should be misted in a zip-loc bag, then "shake-and-baked" with a calcium-only powder coating, such as Repashy SuperCal NoD (Avoid supplements containing vitamin D, as chameleons are sensitive to overdose which can result in kidney failure) before feeding to the chameleon. Occasionally hiding food provides enrichment and challenge for your pet also.

