

Veiled Chameleon (*Chamaeleo calyptratus*)

Difficulty: Hard

Veiled chameleons are large, 22" long chameleons with a green and yellow striped pattern, sometimes interspersed with brown and blue (females being less colorful than males). Veiled chameleons are easily identified by the unique pointed shape of their skull, which is especially prominent in males. This feature is called a *casque*. And like other chameleons, veiled chameleons have wide, splayed toes ("zygodactylus feet"), bulging independently-moving eyes, and a curled tail.

Veiled chameleons are native to Yemen and southern Saudi Arabia, where they can be found in subtropical to tropical areas located near the mountains. Being arboreal, they prefer to inhabit trees, very rarely coming down to the ground.

Veiled chameleons live for up to 6-8 years, with females typically having a shorter lifespan.

Veiled chameleons are among the most common in the pet trade. They make beautiful, fascinating pets, but they tend to be more difficult to keep than other popular reptiles, as they are sensitive and require lots of specialized equipment.

Shopping List

- Front-opening 24" x 24" x 48" mesh cage
- Small fan
- Mini dual dome lamp fixture (5.5" diameter each)
- 50w reptile heat bulbs, x2 (white)
- Plug-in lamp dimmers, x2
- 24" T5 HO fluorescent lamp fixture
- 22" T5 HO forest UVB bulb
- 24" 6500K fluorescent bulb/LED and fixture
- Power strip with programmable digital timer
- Pressure sprayer
- Dripper (optional)
- Cool mist fogger/humidifier
- 5 gallon drainage bucket
- Branches
- Vines
- Live or artificial foliage (preferably live)
- Zip ties
- Infrared temperature gun
- Digital thermometer/hygrometer with probe
- Calcium supplement w/o vitamin D3
- Multivitamin
- Bee pollen powder

Housing

Veiled chameleons need an enclosure that is large enough to give them adequate opportunity to thermoregulate, explore, hunt, and generally exercise natural behaviors. They are also arboreal, which means that they are a tree-dwelling species, and generally prefer to live in tall terrariums. The minimum recommended enclosure size for a single veiled chameleon is 24”L x 24”W x 48”H. If possible, larger is always better. In fact, it may be required for particularly large males.

Can multiple veiled chameleons be housed in the same enclosure?

In the wild, veiled chameleons are fairly solitary. They may cross paths with other chameleons in the trees every once in a while, but they don’t actively seek each other out unless they’re looking for a mate. For this reason, it’s best to house only one chameleon per enclosure.

Lighting & UVB

Veiled chameleons are diurnal, which means that they are most active during the day. This also means that they need exposure to bright light and UVB during the day. Lights should be on for 12 hours daily.

UVB Lighting

UVB lighting can be tricky, because in order to get the right strength of UVB (measured by UV Index, or UVI), distance must be considered. As a rough estimate, to provide appropriate UVB to a veiled chameleon in a 24” x 24” x 48” enclosure with a basking branch that places the chameleon’s back 6” below the top mesh, you will need one 22” Arcadia T5 HO 6% or Zoo Med T5 HO ReptiSun 5.0 in a reflective T5 HO fixture.

(These recommendations are approximations. It is strongly recommended to use a Solarmeter 6.5 to determine the best placement to achieve a UVI of ~3.0 in the basking area.)

Daylight Lighting

A UVB bulb isn’t bright enough to meet a veiled chameleon’s light needs, as bright light is important to their mental health. So you will need to supplement with a bright, 6500K T5 HO fluorescent or LED lamp, long enough to span at least most of the top of the enclosure. The Arcadia Jungle Dawn LED Bar and Bio Dude Glow & Grow are both good choices.

Heating

Humans are *warm-blooded*, which means that our body temperature is automatically regulated. Veiled chameleons, however, are *cold-blooded*, which means that they have to move between areas of different temperatures to regulate their body temperature. In the wild, veiled chameleons warm up by basking in a warm patch of sunlight. In captivity, sunlight can be replicated with a heat lamp.

- **Basking area temperature:** 85°F (29°C)
- **General temperature:** 72-78°F (22-25°C)
- **Nighttime temperature:** 55-65°F (13-18°C)

The heat lamp should only be on for about 3 hours each morning.

Generally speaking, it doesn't take much to achieve such a low basking temperature. A couple of white 50w reptile heat bulbs should be plenty. Using two bulbs creates a larger basking area to heat your chameleon more evenly. However, if you notice that the basking area is too warm, dial down the heat down with a plug-in lamp dimmer or switch to lower wattage bulbs. If your basking area is too cool, you will need higher wattage bulbs.

If the room your veiled chameleon's enclosure is in is too warm at night, you may want to consider installing a miniature air conditioning unit near the enclosure to cool things down.

The basking area should be a vine or branch directly under the heat lamp, placing your chameleon's back about 6" below the mesh. Because your veiled chameleon is arboreal and will be living in a tall enclosure, the warmest temperatures will be at the top (near the heat lamp), and the coolest temperatures will be toward the bottom. You will need vines, branches, and foliage at all levels to allow for proper thermoregulation.

To measure the general temperature of different areas of your terrarium, use an infrared thermometer (a.k.a. temperature gun). To passively track basking temperature, use a digital probe thermometer, with the probe placed on the basking surface under the heat source. The Etekcity 774 is a good infrared thermometer, and most reptile-brand digital probe thermometers function well.

Humidity

Veiled chameleons do best in an environment with fairly low humidity during the day and high humidity at night: **40-50% during the day, and 80-100% at night** as measured by a digital probe hygrometer with the probe placed in the middle of the enclosure. Humidity levels that are consistently too high or low can cause health problems for your chameleon. However, it is natural for humidity to be lower in the warm area and higher in the cool area.

To raise the humidity in your chameleon's enclosure (and provide an extra source of drinking water), use a pump-style pressure sprayer to wet down the enclosure every morning and evening, preferably when it's dark. It's also a good idea to mist again (lightly) in the mid-afternoon, or provide a dripper. An automatic misting system like MistKing makes misting less of an inconvenience.

It's best to also use a cool mist humidifier or fogger on and off for a few hours prior to "sunrise". Please note that humidifiers and foggers must be used with distilled water and periodically disinfected to prevent illness. There should be no need to use the humidifier during the day.

It's best to use distilled water for misting and fogging, as tap water is likely to clog your equipment.

Substrate

Because of the sheer amount of water that goes through a veiled chameleon's enclosure on a daily basis, a traditional substrate layer will quickly get saturated. Instead, most keepers opt for using a drain at the bottom of the enclosure. There are many helpful videos online on how to rig your own drainage system using a table/shelf and a bucket.

Décor

Decorations play a vital role in your chameleon's enclosure as environmental enrichment. These items provide hiding places, encourage exercise, stimulate your pet's natural instincts, and help promote overall wellbeing. And, of course, they make the enclosure look nicer!

Branches, vines, and live or artificial plants work well as décor in a veiled chameleon terrarium. You can secure vines and branches with the help of zip ties looped through the mesh. Many chameleon keepers prefer to use potted or hanging plants to maximize available foliage. Arrange these items in a way that encourages your chameleon to climb and explore, provides an unobstructed place to bask, and provides a variety of options for places to hide as needed.

Food

Veiled chameleons are *insectivores*, which means that they need to eat a variety of insects in order to get the nutrition that they need. Here is a quick list of safe insects you can feed your pet chameleon:

- Banana roaches
- Black soldier flies and larvae
- Blue bottle flies and larvae
- Crickets
- Dubia roaches
- Hornworms and sphinx moths
- Locusts
- Mantis hatchlings
- Red runner roaches
- Silkworms
- Snails (captive bred only)
- Stick insects

How often veiled chameleons need to eat depends on age:

- **Juveniles** — As much as they can eat, daily
- **Adults** — 4-5 bugs, every other day

The key to providing a healthy, balanced diet for your pet is VARIETY! Provide as varied of a diet as you possibly can, and you will be rewarded with a healthier pet that always looks forward to mealtime.

Supplements

Chameleons tend to be extra sensitive to the vitamins and minerals present in their diet. However, supplementation is still needed. Feeder insects should be lightly dusted with an appropriate supplement prior to each feeding according to this schedule:

- **Every feeding:** Arcadia EarthPro A (contains bee pollen)
- **2x per month:** Arcadia Revitalise D3 or Repashy CalciumPlus LoD

All feeder insects should also be gutloaded with nutritious, species-appropriate food and water for 24-48 hours prior to offering.

For more information on veiled chameleon care, ReptiFiles recommends visiting [ChameleonAcademy.com](https://www.ChameleonAcademy.com).