

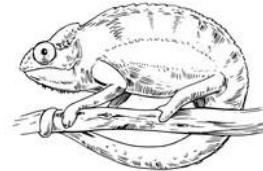


Zoo, Avian, Aquatic and Unusual Pets
Veterinary Consultancy

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Chameleon care



This fact sheet will give an overview of general chameleon care. Please use this as a guide to aid you but note that further information on your species of chameleon should always be carried out. All chameleons are high-maintenance pets and it is imperative that the correct set up/husbandry requirements are met in order for your chameleon to live a happy and healthy life.

Colour change

One of the reasons chameleons have become such popular pets is due to their ability to change colour to match their environment. This colour change is a result of complex internal and external mechanisms which are affected by factors such as environmental temperature, breeding behaviour and basking in sunlight. It is commonly believed that chameleons change colour to camouflage themselves from a predator when in fact this is not their first line of response to a threat. They would utilise their ability to stay incredibly still first.

Life spans for more commonly kept species:

Panther chameleon: 4 – 7 years

Veiled chameleon: 6 – 8 years

Jacksons chameleon: 5-10 years

Yemen chameleon: 4 -8 years

Housing:

Chameleons are arboreal species, meaning they live up in the trees and rarely coming down to the floor. For this reason, they should be housed in a large vertical vivarium (Taller than it is wide). A minimum of 2ft x 2ft x 3ft is documented for a panther chameleon but at Origin Vets we would recommend you provide larger than this if possible. More space allows for



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plenty of exercise and enrichment. Within the enclosure place different diameters of branches to grip onto and place lots of leaves to hide behind.

The cages available for chameleons are usually split into two categories: glass (where they have a glass front to them and have plastic or wooden sides, similar to a display cabinet style) or wire screen (where the whole enclosure is made from a wire material and you can see into it from all sides).

Advantages and disadvantages:

Ventilation- Chameleons require good air flow to ventilate their humid environment, this reduces the risk of respiratory illnesses and so a wire screen cage is better for this.

Size- glass cages are yet to come in very large sizes unless they are custom built

Price- Wire screen cages are cheaper to get in larger sizes

Temperature- In a wire screen cage maintaining the correct heat can sometimes be tricky however there is much less risk of overheating.

Humidity- A glass cage is better for maintaining a consistent humidity than a wire cage. However, with the correct set up and monitoring, humidity levels should be easy enough to maintain once established in a wire cage.

There are now hybrid cages of glass and wire available which offer the best of both types and it may be up to your preference and home environment to which you choose. As stated previously always go for as large as possible with whichever style of cage you choose.

Heating:

Chameleons are ectothermic meaning they require an external heat source to warm their bodies up to carry out normal metabolic processes. A basking heat lamp, usually a ceramic bulb should be placed at the top their enclosure with several horizontal branches nearby so that your chameleon can move closer or further away if they want to. Note: branches shouldn't be so close that your chameleon will climb onto the lamp and burn themselves. Usually, a cage can be fitted onto or around the bulb to prevent this from happening.

A temperature gradient is then created where the warmest part of the enclosure is at the top and the cooler end at the bottom of the enclosure. Probe thermometers should be placed at the top and bottom to ensure temperatures are correct. Alternatively, a thermometer gun can be used, and temperatures checked daily.



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The heat lamp should be attached to a thermostat which can maintain the required temperature and attached to a timer which will allow the heat lamp to be on for 12 hours of the day.

Night-time temperatures should not drop below 20 degrees.

Enclosure temperatures for more commonly kept species:

Panther chameleon:	Under basking lamp: 32°C	Cool end: 25°C
Veiled chameleon:	Under basking lamp: 35°C	Cool end: 23°C
Jacksons chameleon:	Under basking lamp: 30°C	Cool end: 23-25°C
Yemen chameleon:	Under basking lamp: 32-35°C	Cool end: 25°C

Lighting:

Chameleons are highly dependent on ultraviolet (UV) light for their health. It is a common mistake of inexperienced reptile keepers to forget this, which is extremely detrimental to their health. The most important ultraviolet light required is UVB. UVB allows chameleons to utilize the calcium in their body, regardless of the amount they might digest.

UVB strength is measured as a percentage. When buying a UVB light you will see this percentage on the side of the packaging. The strength required for chameleon's ranges from 5%-10%. We recommend using a strip UVB light across the top of your chameleon's enclosure as this allows the whole of enclosure to be exposed to the light. Combined heat and UVB lights are available however once the chameleon has heated itself up adequately, they will walk away from the light meaning they are not exposed to the UVB light, which is far from ideal.

Overtime UVB lights degenerate, meaning although they are still producing light it is not the required UVB spectrum that your chameleon needs. This means they need to be changed every 10-12 months depending on the product you buy. The guidelines should be on the box as to when to change your light. Alternatively, you can check your lights UV output using a UV gun.

The UV light should be attached to a timer which allows the light to be on for 12 hours of the day.

Please look at this website for further information on UVB and your chameleon:

<https://chameleonacademy.com/basics-uvb-for-chameleons/>



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Humidity:

Chameleons do not drink water from bowls or sipper bottles. Instead, they drink water droplets off plants/leaves. This means we need to provide the correct humidity to keep our chameleons suitably hydrated. To do this the enclosure can be misted with a spray bottle every 8 hours or an automatic watering system can be used to mist the enclosure. A hygrometer is then used to measure the humidity and more or less frequent misting can take place in order to maintain the correct humidity.

For most chameleons the humidity should be maintained between 60-80%.

Cage enrichment:

As previously mentioned, various sized branches and vines should be placed within the enclosure and plenty of foliage for your chameleon to hide behind. Branches can be artificial or real, however do not use any branches that produce sap as this could cause damage to your chameleon. All branches should be thoroughly cleaned before being placed into the environment. This can be done by soaking them in a product called F10 which is available to buy on the internet. Move the branches and vines around weekly to provide new obstacles and stimulation for your chameleon.

Commercially available hides can be placed throughout the enclosure or alternatively plant pots or logs can be used to allow your chameleon a safe place to rest.

At the bottom of the enclosure newspaper can be used or a mix of soil and moss to help maintain humidity can be used but this can be difficult to clean out. Avoid using substrates such as woodchip or sand as these can cause blockages which could be fatal. Spot clean your chameleon every day with a full clean out once a week.

Companions:

Generally, chameleons are solitary and only share their space if mating. Living with another chameleon over a prolonged period can be very stressful for them. If you own more than one, it is also advised to keep them away from each other so they cannot see or smell one another. This is also ideal if any health issues were to occur and helps prevent the spread of any infections.



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Diet:

Chameleons are mainly insectivores although they have been known to eat the occasional plant or fruit.

The following insects are suitable to feed:

House crickets, black crickets, grasshoppers, suitable sized Madagascar roaches and locusts should form the majority of the diet. Mealworms and waxworms can be given as occasional treats. They are extremely fatty and a regular diet of them can lead to obesity and a condition known as fatty liver. Dark leafy greens can also be offered but may not be eaten.

All live food should be gut loaded. Gut loading is where the insect is fed high calcium supplements before being fed to your chameleon. Insects can also be dusted with a calcium (Cali-dust) and vitamin D3 powder (Nutrobal) immediately before being fed to your chameleon.

Food can be placed in a bowl which is suspended halfway up the enclosure and your chameleon will learn to go to it during feeding times. An adult chameleon should be fed once a day.

If the insect is not eaten within 30 minutes they should be removed from the enclosure. As they may bite/attack your chameleon which can cause small wounds and abscesses to occur.

Medical conditions we most commonly see:

Many cases are connected to poor husbandry. Try to meet all their husbandry needs to avoid a vet visit. Conditions we may see are:

- Anorexia
- Endoparasites (worms) This is why we ask you to bring a faeces sample in when coming to your appointment. This is something we can easily rule out at the clinic if we have a fresh sample to check.
- Nutritional secondary hyperparathyroidism (metabolic bone disease)
- Stomatitis, periodontal disease
- Egg binding or dystocia
- Ophthalmic (eye) disease



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Note on hygiene

It is important you have an excellent hygiene routine in place, especially if you live with children or those whom are immune compromised. Reptiles carry salmonella as part of their normal gut bacteria. This can be shed in their faeces, contaminating their environment and as reptiles walk over their faeces, they can then carry the bacteria on their body. This is easily passed on onto us when we handle our reptiles or clean them out. Therefore we recommend the use of appropriate disinfectants when cleaning out enclosures, removing faeces as soon as possible and using appropriate antiseptics with the WHO handwash technique. This will ensure you do not contract the disease and become ill yourself.

Insurance

Unfortunately, we can never predict what may happen to our chameleons, so we highly recommend getting pet insurance. A monthly fee can give you peace of mind knowing your pet is covered for the best treatment should anything happen. There are many insurance companies available, so we advise contacting each of them to find a policy that is right for you. We advise a policy that will cover your chameleon for its whole lifetime, for chronic illnesses and for the maximum amount that is available. If this is not possible then covering your chameleon for as much as you can afford will give you peace of mind should an accident or emergency occur.