

Leopard Gecko General Care

Eublepharis macularius

Preface: Leopard geckos, often called leos, are the most popular gecko in the pet trade and the second most popular lizard, with bearded dragons being the most popular. They are ground dwelling geckos that come from rocky, grassland deserts of the Middle East and southwestern fringe of Asia, not sandy deserts as many believe. Leopard geckos have been part of the pet trade since the 1960s and due to their ease of care, breeding and placid nature they remain popular to this day.

Having been captive bred for many decades leopard geckos display a vast range of color and pattern morphs. From bright Tangerines, yellow and lavender Boldstripes, pastel and cream albinos to the deep black of Black Knights, leopard geckos have a morph for every palette.

The wide range of color morphs is not the only reason people love keeping leopard geckos as pets. They have endearing personalities and often look like they are smiling without a care in the world.

Things you need before buying/adopting a crested gecko:

1. Cage: 36x18x18 terrarium or 40 gallon breeder aquarium for an adult
2. Lighting: LED light or low level UVB
3. Supplements: Repashy Calcium Plus
4. Thermometer and Hygrometer: Govee
5. Substrate: bare tank, paper towel, ceramic tile or bioactive desert substrate
6. Décor: driftwood, cork tubes and rounds, lots of plants, hides and plants
7. Food: insects
8. Water dish
9. Heat source: radiant heat, either CHE or heat pad
10. Thermostat with probe

Tank and Enclosures

Leopard geckos are terrestrial animals, spending nearly all their time on the ground.

As an adult, leopard geckos should be kept in an 36x18x18 terrarium or similar sized enclosure. 20 gallons used to be considered the minimum but as husbandry has progressed keepers and breeders have found a larger enclosure to be more optimal. A leopard gecko will utilize as much floor space as you provide for them. Creating different levels or areas that the leopard gecko can reach will help increase the floor space as well as giving your gecko the ability to be physically active.

Depending upon the age you receive your leopard gecko you may need to keep the gecko in multiple enclosures until it reaches adulthood. Hatchlings and juveniles can be kept in smaller enclosures, like a 20-gallon aquarium. Once they reach their adult size they should be given a larger enclosure.

Décor

Multiple hides are required for leopard geckos, three at the very minimum. You should have a hide on the hot side of the enclosure, cool side and a humid hide between the two regions. Hides can be as simple as an opaque plastic container with a hole in it or elaborately created tunnels and faux rocks. Slate stacks are also a popular option just ensure they are secure and cannot fall on your gecko. Your humid hide should be an enclosed container filled with sphagnum moss or papertowel, in a bioactive enclosure we like to use a large-mouthed mason jar filled with moss and buried into the substrate. Mist the humid hide frequently to maintain humidity and change out the towel or moss when it gets soiled. This humid hide will help assist in your geckos shedding.

Leopard geckos love clutter and cover, plenty of cover will make your gecko feel safe and secure. Branches, driftwood, cork tubes and flats are all great objects for them to climb on. Having a mix of elevations is also useful to keep your gecko in tip top physical shape, just make sure your gecko will not fall from a height that may injure it. Providing foliage with either fake or real plants is also useful and can really liven up their enclosure.

An item with a rough surface is also useful. A stone, piece of cork, faux rock, etc. can all work. This will provide your gecko with a surface they can rub against to help remove stuck shed.

Substrate

Substrate for a leopard can be as simple or complex as you would like it. The most common substrates are paper towels, ceramic tile, bare tank or bioactive. DO NOT use reptile carpet. If using paper towels, they should be changed as often as they get spoiled. Tile and bare tanks should be spot cleaned as necessary. Bioactive setups should use either a dedicated desert substrate or a homemade 70/30 mix of seven parts organic topsoil and three parts play sand. DO NOT use sand, calcium sand, coco coir, or woodchips. Paired with a cleanup crew (isopods, darkling beetles, and arid springtails) bioactive enclosures are easy to maintain, requiring less cleaning, hold humidity and temperatures better, and are beautiful when planted. Leopards will often rearrange their bioactive substrates, digging tunnels or moving it where they please.

If you are not using a bioactive setup many keepers like to offer a dig box for their leo. This box or plastic bin is filled with substrate and allows the gecko to dig for enrichment.

Temperature and Humidity

Leopard geckos should have a temperature gradient. The hot side of their enclosure should have an ambient temperature of 80-90°F and their cool side should be between 75-80°F. At night they can experience a drop in temperature, but it should not be too wild of a swing in temps.

These geckos are thigmothermic, meaning they do not bask in the sun like other reptiles but instead soak up heat from objects in their surroundings. In their natural habitat this is obtained by rocks and stones heated by the sun. In captivity it is important we offer them a 'basking' spot where they can obtain belly heat. You can provide this by using either a heating pad or ceramic heat emitter (CHE). These heating sources should be regulated for your gecko's wellbeing. Attach them to a thermostat with the thermostat's probe placed at the basking site and set to 88-93°F. We like to use a piece of slate or thick ceramic to retain that heat. It is important that your gecko does not have direct access to the heat source as it may cause burns.

Leopard geckos like ambient humidity to be between 40-65%, the average humidity in most homes. Typically, during the day there will be a drop in humidity due to lights and heat source. At night the humidity should rise. If you are finding it difficult to maintain humidity a humidifier in the area your enclosure is kept will solve the issue. You can also lightly mist the enclosure's walls once a week to help raise humidity, geckos also love to drink the water droplets of the walls. DO NOT mist too heavily as misting has been known to cause respiratory issues with leopard geckos. If your using a bioactive setup, watering your plants and substrate is typically enough to maintain correct levels of humidity.

Social Behavior and Cohabiting

Leopard geckos in captivity should not be housed together. They do not need friends. In captivity females cohabited with males face many risks of over-mating. Males are incessant and will attempt to mate with the female endlessly. Without a break the constant mating and egg laying may prove fatal. Females cohabited together do not typically show signs of aggression but it's not unheard of. They will compete for food, the best hiding spots, perches, etc., which creates undue stress leading to health problems. Males on the other hand are aggressive and will fight each other. In a small enclosure (all our enclosures are small vs nature) they do not have the opportunity to run away, this can lead to the death of your gecko. It is best to avoid cohabiting your leopard gecko and supplying them with individual enclosures.

If you feel your gecko needs a 'friend' there are a few species of darkling beetles that can be compatible and large enough that they won't be eaten by your leo (most of the time). Blue Feigning Death Beetles are one such darkling species.

Lighting

Being primarily crepuscular/nocturnal a day/night cycle is required for leopard geckos. This can be as simple as an LED light on a timer. A UVB light is not required but may be offered as leopard have been known to pseudo-bask. If you choose to use UVB a low level UVB like Arcadia ShadeDweller is recommended.

Another factor to consider is whether you have an albino morph. Albinos appreciate more subdued lighting due to light sensitivity.

Feeding and Supplements

Leopard geckos are insectivores and require a varied diet of live insects to remain healthy. Crickets, dubia roaches, black soldier fly larva, mealworms and locusts are all staple feeders that should be rotated or used in conjunction with each other. Other insects, like superworms, butterworms and waxworms, should be used as a treat not a staple as their high fat content can lead to fatty liver disease. You may provide a feeding dish, they make 'escape proof' dishes, tong feed or feed in a separate enclosure.

Feeding adult leopard geckos should be done 1-2 times. Juveniles should be fed 2-3 times per week. Hatchlings should be fed daily. Keep an eye on your gecko's body condition and adjust the amount you feed and the frequency of feedings.

All insects need to be dusted with a high-quality supplement like Repashy Calcium Plus at every feeding. Insects should also be gutloaded if possible. Failing to provide your leo with proper supplementation can

lead to health issues like metabolic bone disease (MBD). All supplements should be stored in the refrigerator and replaced every six months.

A shallow water dish may also be provided, changed daily. Though preferring to drink from water droplets on surfaces leopard geckos will utilize a water dish if thirsty.

Another small, shallow dish should be utilized as well. This dish should contain additional calcium powder and be changed weekly.

Handling

When you first receive your leopard gecko you should leave it alone and not attempt to handle it for the first 1-2 weeks. Leopard geckos can be easily trained to take handling well and do quite well being handled for short amounts of time. Many geckos are skittish at first but with time and effort your gecko can come to enjoy handling and hanging out with you outside of their enclosure. You can start out by slowly offering a hand near the face, allowing them to smell you and see you are not a threat. Do this daily for some time. Watch for tail movement, rapid shaking can be indicative of stress/fear and may result in a tail drop. Leos may also take a bite at you when offering a hand. These bites are typically a small nip and more of a defensive threat than an effort to hurt you. Some geckos may even scream at you. As they become accustomed to your hand you may begin light petting of their back and even hand feeding (be careful hand feeding, doing it as a treat, as crested geckos can become reliant on this and refuse to eat from a bowl). Eventually as they become more comfortable with you can begin picking them up. Always try to pick up from the side or front, never from above as this can trigger their prey flight response. Once you can pick up your gecko be prepared for them to scurry. Use your open hands and rotate them like a treadmill. With time and effort your gecko may even begin to climb onto your hand when offered.

A note of consideration when keeping leopard geckos with small children. Females tend to be a better option. They are more docile and less likely to nip. Males have larger heads and may mistake little fingers as food and can pack a serious little bite.

Lifespan

Leopard geckos can easily live to be 20 years old or even older!