

Leopard Gecko Husbandry Guide

This guide is intended to give an overview of key basic requirements for your pet.

If you require more detailed guidance, think your pet is unwell, or would like specific advice, please contact your vet!



Fast Facts!

Some basic facts and needs for your Leopard Gecko.



ENVIRONMENT

Vivarium Minimum Size
60x40x30cm

Lighting - UVB required

(A low level UVB is needed, this will need replacing regularly as the UVA/UVB output per bulb decreases over time)

Humidity 30-40%

(Including a Moss hide with much higher humidity)

Temperature gradient

Hot End – 28-30°C

Cool End – 24-26°C

(Hides should be provided for both areas)

BEHAVIOUR

Basking

(Areas must be provided at both temperature ends to allow them to bask)

Solitary

(Should be kept individually. Occasionally females can be kept in groups)

Inquisitive personalities

(Lots of interaction and enrichment is needed to keep them happy)

Brumation

(Eating less and sleeping more over winter))

Crepuscular

(They are most active at dawn and dusk)

HEALTH

Life Span of **10-20 Years**

Common Health issues:

- Metabolic Bone Disease, 'MBD'
- Egg Production Issues
- Internal and External Parasites
- Shedding issues resulting in loss of toes

Diet - Live Insects

(Insects such as Crickets, locusts and calci-worms fed to adults every other day)

Supplements

(Live food should be gut loaded and dusted before feeding with an appropriate vitamin and calcium supplement)

Home Sweet Home!

Creating a mini wilderness for your Leopard Geckos!

Leopard Gecko's originate from Pakistan and Afghanistan, **our weather and climate are not suited to what they need to stay healthy.** Therefore, we must create a 'mini-climate' for them in our home. **Many of the health conditions seen in pet geckos can be traced back to issues with their husbandry (environment and care).** They are a crepuscular species which means they are most active at twilight.

Most leopard geckos are kept in a vivarium, this must be **made from a secure material** that is **easy to clean** and has **good ventilation**.

The minimum size requirement for an adult gecko is 60x40x30cm.

This gives plenty of room for a healthy temperature gradient and room for your pet to explore.

Your pet will usually need to have this home all to themselves – they can fight and injure each other if kept together. *However, in some cases, females can be kept safely in pairs.*



Substrate

Substrate is the name for the floor covering in your pets' home.

Choosing the right substrate is very important. With healthy adult geckos we recommend a **sand/soil (50:50%) mixture**.

Always use **reptile-safe sand** such as clean children's play sand rather than builders' sand which has sharp edges. **Stone tiles with rough surfaces or pieces of natural slate** may be used and can be nice and warm in basking areas and give different surfaces to explore.

A product called **'Calci-sand' can be dangerous** because with an incorrect environment, i.e., being too cold which can slow digestion, the sand can clog the digestive tract and cause a blockage. **This condition is called 'impaction'**.

Loose substrates with large pieces such as bark and wood chips, crushed walnut or corn cob granules are unsafe as they can easily cause impaction if accidentally eaten, especially by juvenile geckos. **Juvenile geckos are best kept on non-loose substrates.**

It is important to keep the substrate clean to ensure your pets' health. Spot cleaning any waste daily and removing uneaten food is essential.

The home should be cleaned with a **reptile-safe disinfectant** monthly too! Make sure to wash your hands after cleaning and handling as reptiles can carry **Salmonella** which can cause nasty stomach upsets in people.

'Bioactive' substrates can be implemented to use to keep your pet's home clean in a more 'natural' way. **This should be implemented only after research into the method.**



Lighting

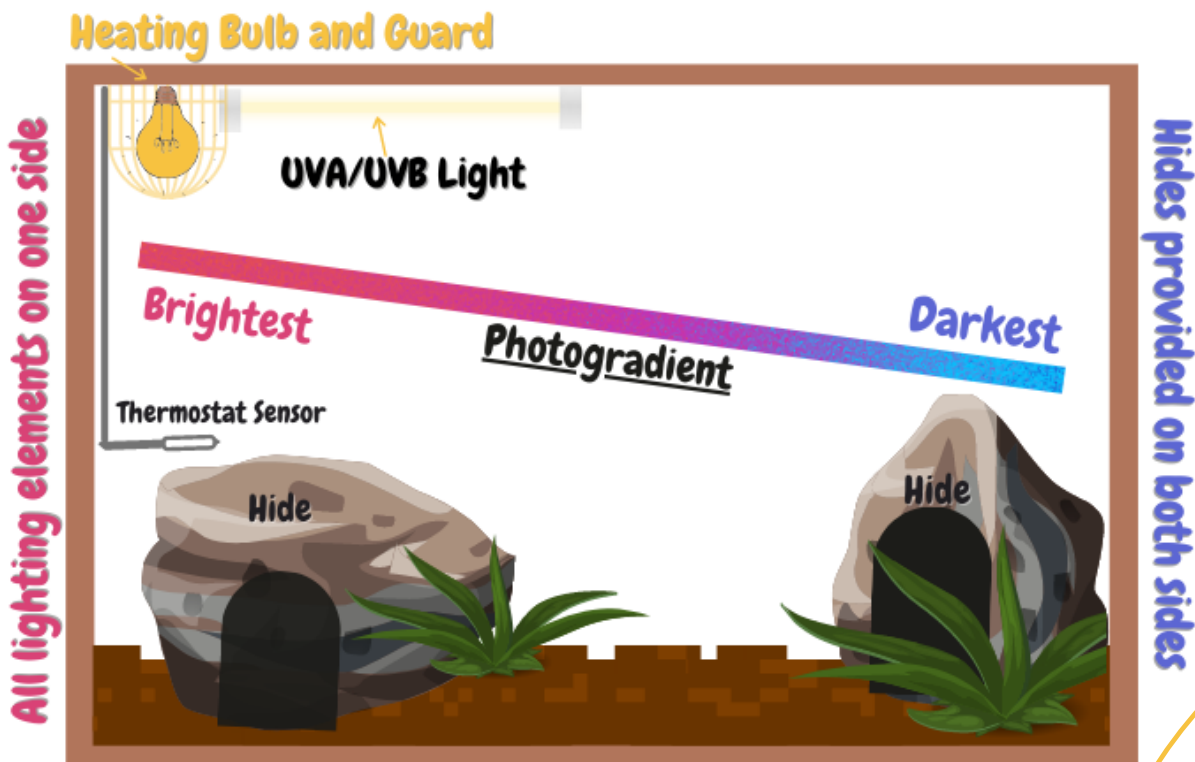
Providing the correct lighting is essential for your pet's home.

Reptiles use natural daylight to set their day and night patterns, in the wild they would warm up and bask in the sun.

We aren't quite so lucky with our sunshine here in the UK. **Sunlight contains visible light and 'ultraviolet' (UV) light.** Geckos can see part of the UV light, called UVA, essential for their colour vision.

Another very important part is called **UVB**, which allows your pet to make essential vitamin D3 in their skin. Vitamin D3 allows your pet to store and use calcium, an essential mineral. **UVB does not pass through glass windows** so placing the home near a window is not enough. Instead, a reptile **UVB lamp must be used inside your pets' home.**

Create a 'photogradient', from light to shade, by positioning your light source close to the basking zone at one end of the vivarium.



Lighting

Providing the correct lighting is essential for your pet's home.



Choose a 5-7% UVB fluorescent tube, up to one half of the vivarium length, and fix it into the roof of the vivarium as far into the hot end as possible.

UVB decreases with distance, so follow the UVB tube manufacturer's recommendations regarding distance between the lamp and your gecko. **UVB is partially blocked by mesh**, so you may need a stronger UVB bulb in a taller vivarium, or one with a mesh lid.

The cool end will then be more shaded, just as in the wild.

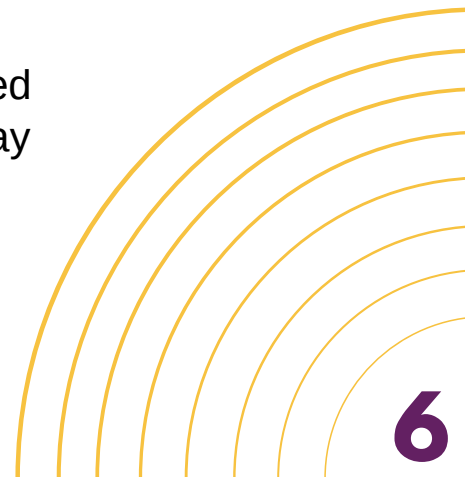
Use a reflector of the correct length to direct the light onto your pet. **Follow the UVB tube manufacturer's recommendations** regarding distance between the lamp and your pet.

The UVB output decreases over time so the **UVB output should be checked regularly using an appropriate UV Index (UVI) meter** positioned at the level of the animal directed towards the UV lamp.

Seek advice from us if you have a red-eyed morph as they may find bright light damaging.

The bulb will need changing when the UV produced is no longer high enough. UV lamps must always be guarded to prevent burns, or injuries should the bulb shatter.

Turn off all lights at night. Lamps can be controlled using a simple plug-in timer: 12 hours on during the day and 12 hours off at night.



Heating and Humidity

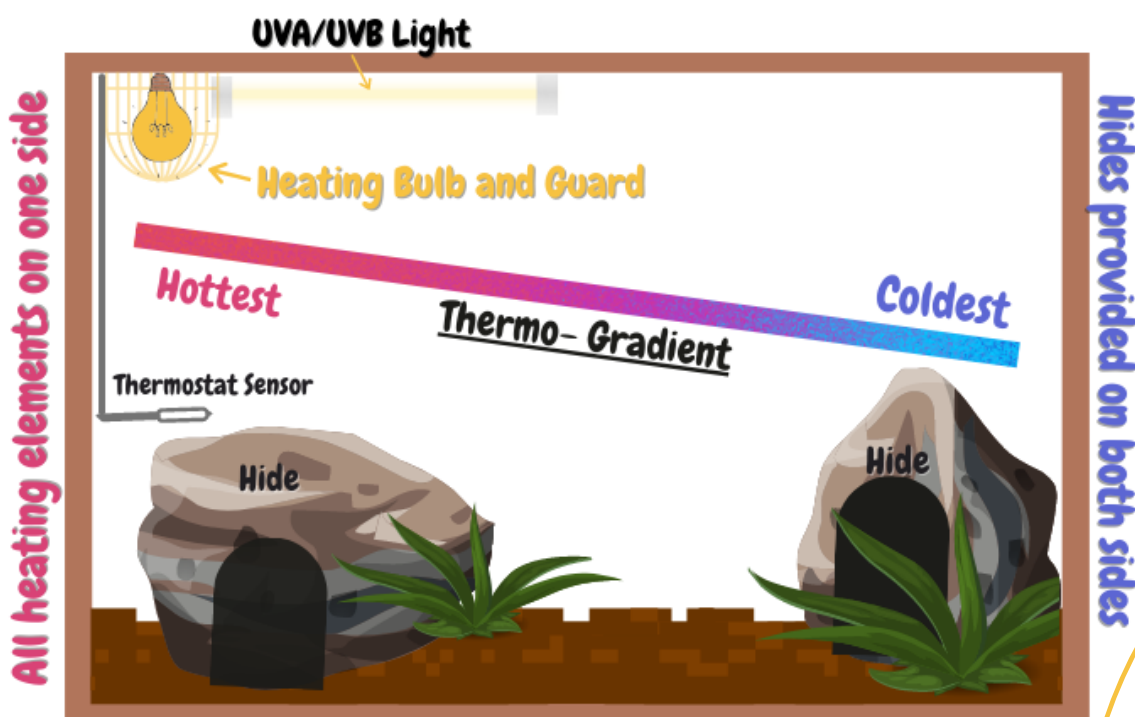
Providing the correct heating and hydration is essential for your pet's home.

Lower humidity is essential to prevent skin or breathing problems. It should be measured in the cool end of your pets' home and should normally be around **30 to 40%**. If it is too high, you will need more ventilation. **Use of a humid hide with moss can provide boosts of humidity if your Gecko needs this.**

Geckos cannot control their own body temperature like people can. They rely on warming up in the sun in the wild to raise their temperature. We must replicate the heat for them in their home. As above, with the photo-gradient, we must also create a **'thermo-gradient'** for them. This means we must have a **hot end** and a **cool end** for your pet.

This gives your pet a choice of what temperature they would like to be at. **It is important these temperatures are checked every single day.**

A digital 2-in-1 thermometer/hygrometer at each end of the home is the best way to check your pet's home is perfect!



Heating continued

Providing the correct heating and hydration is essential for your pet's home.

Geckos need a basking zone in their hot end with temperatures of 38-42°C. Position a 60 to 100 watt light bulb or ceramic heater at the hot end of their home pointing downwards. This heat emitting bulb will also emit visible light, therefore will need to be turned off at night.

Place a natural stone in the basking zone to provide access to the heat.

Heat lamps must be guarded to prevent burns.

A thermostat must be used with all heat sources. Place the thermostat probe at the level where the animal will sit. Adjust the thermostat temperature and check the basking zone with a digital thermometer until it reaches **38-42°C**.

The cool end should be between 22-26°C.

A temperature drop at night is natural however, **the temperature should not drop below 18°C at night.** A thermostat and non-light emitting heat source may be needed to **maintain the air temperature whilst keeping their home dark overnight.** To do this a **guarded ceramic heater or deep heat projector (DHP) can be used.**

Ideally your pet's home should be set up at least a week before you bring them home to ensure everything is running smoothly.

Feeding

Leopard geckos mainly feed on invertebrates in the wild.

In captivity, **feed a varied diet of live invertebrates**, called 'livefood'.

These include:

- Crickets (e.g. brown house crickets),
- 'Calciworms'
- Locusts

These should be no bigger than the size of the gecko's head. *Feed waxworms sparingly as they are high in fat.*



Cricket



Locust

You can also offer a washed dandelion or nasturtium flower once a month to supplement the diet.

Juveniles should be fed daily; adults every other day.

It is a good idea to **weigh your gecko regularly**.

Feed in a separate container to prevent the gecko swallowing the substrate.

If you feed in the vivarium, **remove uneaten bugs** to prevent them biting the gecko.

Supplements

Captive diets do not provide all the vitamins and minerals needed if fed alone.

The captive environment does not supply all of the vitamins and minerals available in the wild, so **supplements are required.**

Livefood should be lightly dusted with a vitamin and calcium supplement immediately before being offered to the gecko.

Vitamins and minerals can be overdosed so always follow the instructions of the chosen brand. For example, with a well-set UV system you will not need to supply a lot of vitamin D3.

You should also provide a small bowl of plain calcium powder at all times for them to lick.

Water

Geckos may not drink from water bowls often as a lot of their moisture is provided in their diet. However, **a large, shallow dish must be provided at all times in the cool end of their home with clean, fresh water.** This must be replaced at least daily and as soon as it is soiled.



Handling

Handling your pet is a great way to bond!



Never surprise or grab your lizard as this can cause stress and lead to a struggle. The gecko should be **gently scooped up with both hands so all four legs are supported**. If your pet backs away from you when you try to pick it up or threatens to bite, it's better to leave them alone and wait for another time.

They should not be taken from their home for so long that their temperature drops. **Around 10 to 15 minutes at a time** is a safe period for this, depending on the air temperature.

Never apply any pressure to the tail as the gecko can drop it. Their tail can grow back but it is dangerous for the gecko's health as it will have to rebuild its fat stores.

If your gecko loses their tail it is a good idea to book a vet visit so they can provide you with a solution to use to clean the area. The vet will not stitch the tail as it will eventually grow back.

Keep other pets separate, regardless of how trustworthy they have been before.

Trips to the vet

If your pet requires a trip to see a vet then it is important to bring them in a **secure container with ventilation**. It is also best to **bring a heat source with you so their temperature does not drop too low**. This can be a covered microwaveable heat disc or hot water bottle for example.

Enrichment

Your pet needs to feel safe in their home.

In the wild leopard geckos would **hide from predators under rocks and branches.**

While in captivity they also will enjoy climbing some branches when basking/exploring.

It is important to provide a hide at each end of their home so they can feel safe. The hide in the cooler end should contain something like moss which should be sprayed daily to ensure it stays moist.

Branches/plants/higher surfaces can also be provided to allow your pet to climb and explore.

Bathing

Leopard geckos do not need regular baths. They originally come from dry arid regions where pools of water are uncommon.

Leopard geckos cannot swim.

Leopard geckos are not built for the water and a typically don't like being submerged.

However, if they are **struggling with their shed or are dehydrated a short 10min bath in shallow, warm water can help with this.**

They must be supervised at all times.

Brumation

Some pets will become less interested in food over winter.

In the wild, in the winter when temperatures drop, days become shorter and food becomes scarce, **reptiles will go into 'energy saving mode' (brumation).**

Many pets will not do this due to artificial lighting and constant temperatures throughout the year in captivity. However, **you may notice your pet eats less and sleeps more over winter**, they should not lose weight though, so it is important to weigh them regularly.

Weight should be monitored weekly to ensure your pet is growing well if young or is not gaining/losing weight if fully grown.

The weight can vary, therefore we use something called body condition scoring (BCS) to assess if your pet is over/underweight. A vet can teach you how to check your pet's BCS to make sure you are able to assess them at home. **Well-fed geckos will have a thick tail.**



Shedding

Leopard Geckos shed their skin, from their nose to their toes, regularly.

Geckos **shed their skin in large pieces**. There is no rule as to how often this will happen, but young geckos will shed skin more frequently.

When ready to shed, **your pet may look dull as the old skin becomes dry**. The skin should then come off easily over a day or so. **Do not pull off old skin if it seems stuck as it can tear the new skin underneath**.

During shedding the leopard gecko will spend time in its humid hide, softening the skin. **Then it will normally pull it off gently and eat it**. If patches still remain after a shed, **try bathing them in shallow, tepid water for about five minutes to soften it**.

Poor shedding on the feet can cut off the blood supply and lead to the loss of toes. However, if your pet is well hydrated this should not be an issue. **Most shedding issues can be corrected with adjustments in hydration and humidity**.



MBD and Eggs

Metabolic Bone Disease can be very common in incorrectly housed pets.

One of the most common problems for captive reptiles is **metabolic bone disease, 'MBD'**, a term used to describe a range of nutritional diseases. However, it is most often **due to a lack of UVB lighting, resulting in vitamin D3 deficiency**. This prevents your pet absorbing calcium from food, causing muscle weakness and softening of the bones.

Symptoms include muscle twitching, swollen legs, fragile bones and eventually, permanently deformed limbs, jaws, the spine or tail. **This is why it is so important to ensure your pet's home and diet are perfect.**



Infertile eggs

Female geckos reaching adulthood **may produce infertile eggs**, even without a male present. If this happens, **her belly will swell and you might even be able to see the eggs in the belly**. It is very important she is given a **nest box of moist soil or a sand/soil mixture to lay the eggs in**, or she may become egg-bound. Please contact your vet if you are worried about your pet in this way.

Health Checks

It is important to check your pet daily for signs of illness, common things to check are:

Skin

Ensure all sheds has come away fully whilst shedding and that there are no wounds or damaged areas.

Vent/cloaca

Check the vent is clean and dry and there is nothing abnormal protruding from it. A leopard gecko's droppings should be quite dry and will be made up from faecal waste (the dark part) and urates, (the white part). Contact your vet if you have any concerns about your pet's droppings, sometimes faecal testing is required to check for parasites.

Eyes

Ensure are clean and bright and open with no discharge

Mouth

No signs of sores, scabs or discharge

Strength

Check your pet is able to support themselves and grip well and their limbs and spine are nice and straight. They should be active and the belly should not touch the floor, apart from when resting.



Further Information

Always ensure you buy your pet from a reputable breeder.



Sources

2019. Leopard Gecko Care Sheet. [ebook] Royal Society for the Prevention of Cruelty to Animals, pp.1-4. Available at: <<https://www.rspca.org.uk/documents/1494939/0/Leopard+Gecko+Care+Sheet+%28PDF+379KB%29.pdf/14188c25-57f7-feab-d801-a9dfddc7cb93?t=1556101270505>> [Accessed 6 May 2021].

Girling, S. and Raiti, P., 2004. BSAVA manual of reptiles. 2nd ed. British Small Animal Veterinary Association.

If you have any concerns do not hesitate to contact your vet.



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