

Introduction to Leopard Gecko Care

Native to the deserts of Pakistan, India, Afghanistan and Iran, the leopard gecko (*Eublepharis macularius*) lizard has been captive bred in the United States for more than 30 years and is one of the most commonly kept lizards today. Their friendly demeanor, small size, and easy level of care make them a good choice for any reptile enthusiast.

General information

Leopard gecko hatchlings measure 3 to 4 inches long. Adult females are typically 7 to 8 inches, and males are 8 to 10 inches. Some males of the giant bloodlines reach nearly a foot.

Leopard geckos are long-lived compared to some other captive reptiles. On average, you can expect your gecko to live 6 to 10 years. Some male geckos live 10 to 20 years with the proper care.

Housing

The primary goal of caging is to insure your leopard gecko's safety. The small plastic enclosures sold in most pet stores are too small to serve as living quarters; they should be considered traveling enclosures only. A 15- to 20-gallon aquarium houses one or two leopard geckos from hatchling to adult size. Incompatible tank mates can also cause stress, so be sure to only house similarly sized leopard geckos together and do not mix species. Multiple female leopard geckos can be housed together (if approximately the same size), but sexually mature males are territorial and will fight.

Any cage you choose should be at least 1 foot tall. Be sure to have a secure screen top on your gecko cage that will support a light fixture, and provide good ventilation. A hide box filled with moist moss or vermiculite is needed, so your leopard gecko can shed its skin properly. Your leopard gecko enclosure should have plenty of space and include branches to climb and places to hide. Provide non-toxic plants and caves for your gecko to hide under, as well as sloped branches for him to climb. In the wild, leopard geckos are considered terrestrial, or ground dwelling lizards. Providing as natural an environment as possible is important to the health and longevity of your gecko. Logs, rocks, plants and branches provide spaces to exercise and hide. It can be very stressful for a leopard gecko to have no place to hide. Rearrange the props in your pet's enclosure often to help prevent him from becoming bored.

Regular cleaning of the cage is very important. Uneaten food should be removed daily. The cage and all items in the cage should be thoroughly cleaned and disinfected at least every other week. The cage can be cleaned with a mild soap solution, and then disinfected with a solution of 1 capful of Clorox bleach to 1 gallon of water. Your local

pet stores also carry cleaning solutions specifically designed for reptiles. Betadine and Nolvasan are other commercial products that are available for disinfecting. Make sure to rinse the habitat well and dry it thoroughly before returning the leopard gecko.

Substrate

Several types of bedding are available for your leopard gecko. Adult geckos can be housed on calcium based sand or reptile specific artificial turf. Calcium based sand is a good bedding because it provides soft ground for your gecko to burrow in. It is also flame retardant so it is safe to use with heating elements. Solid waste is easily scooped out, making the habitat easier to clean. With any type of granular bedding however, impaction in the intestine is a risk, and surgery is required to remove any impacted material. This risk is slightly lower with calcium sand (as opposed to rock sand), but it is still there. For this reason, if you are using sand in your habitat, be sure to feed your gecko in a separate environment unless you can be one hundred percent certain that he is not going to ingest the sand.

Young leopard geckos should be kept on paper towels until they are 5-6 inches long. Young geckos have narrower digestive systems than adults, and it is easier for their system to become blocked if they consume sand.

Corncob, wood shavings, rock sand, newspaper, and gravel are not recommended substrate.

Lighting and Heating

Appropriate heating is essential for the survival of your leopard gecko. Giving your gecko warm and cool areas in his enclosure is important because it allows for the proper regulation of body temperature. The best way to heat your leopard gecko is by using an undertank heating pad or tape. These are available at any pet store or online. Heating one end of the cage is best. This allows for a temperature variation that your lizard needs. Heat rocks tend to become too hot for leopard geckos and should be avoided due to the risk of burns. A blue, red, or ceramic heat bulb can be used in combination with the undertank heating. This is especially important for larger cages, where achieving and maintaining the ideal temperature can be difficult.

The ideal temperature gradient for leopard geckos is 80-85 degrees in the warm side of the tank, and 70-75 degrees in the cool side. The temperature in the hide box is 88 to 90 degrees Fahrenheit at all times. The ambient air temperature of the room they are housed in should be above 68 degrees.

It is very important to monitor the cage temperature with a thermometer. Multiple thermometers should be used at either end of the cage to be sure you are achieving the appropriate temperature gradient.

UVA/UVB light is not required for leopard geckos, but is strongly recommended. The lighting should be turned on during normal day light hours all year long. Leopard geckos that do not get the amount of UV light they need can lose bone density, which can lead to bone disease and fractures. Because UV bulbs will stop emitting UV light after six to twelve months of use, it is recommended that the bulb be changed as per the manufacturer's recommendation. Generally this means every six months if it is a strip type light, and every twelve months if it is a coil type light.

Remember that UV light is invisible! Your bulb may still emit visible light but not produce any UV light. Also please note that fluorescent UV lights do not produce heat and must be used in addition to the heat source.

Natural sunlight, when available, is also beneficial. Windows and aquariums filter out much of the UV sunlight, so placing the cage or aquarium with a screen top by an opened window for a portion of the day is one option during warm weather. Your gecko should always have a shaded area to use if he chooses.

Diet

Live insects are a must for your gecko; they do not eat plants or veggies. The vast majority of nutritional imbalances often seen in leopard geckos are the result of an unbalanced diet. The best items to use are mealworms or crickets, but you can treat your pet to waxworms or superworms once a week if you wish. Avoid feeding leopard geckos pinky mice. All insects must be first given a nutritious powdered diet for at least 12 hours before being fed to your leopard gecko. This process is called "gut loading," and it is very important to the health of your pet. Tubs of gut loaded diets are available at pet stores for this purpose. Simply place the insects in a tub of gut-load diet with a piece of potato to serve as a source of water.

Dusting your insects is another way to deliver important vitamins and minerals to your leopard gecko. Insects and the dusting powder can be placed in a plastic bag or deep tin can, and shook gently to coat the insects' bodies. When adding the dusted insects to the cage, be sure not to let the powder get into a gecko's eyes.

Offer juvenile geckos a constant supply of worms, as well as live crickets twice daily. Offer adult geckos crickets and worms three to four times per week. The crickets you buy should be no larger than the distance between your pet's eyes. Remove any crickets that are not eaten within 10-15 minutes. It is okay to leave live mealworms or wax worms in the enclosure for up to 24 hours. Do not offer dead insects, insects that have been treated with chemicals such as insecticides, herbicides or pesticides, or insects from a colony that have been contaminated with mold. This can lead to serious health problems, such as bacterial or fungal infections. Also do not feed wild insects.

The best way to be sure your juvenile leopard gecko is getting enough nutrients is to weigh and/or measure her every week. There should be a measurable gain in weight

and body length over time. Look for an approximately 1" increase in length every month for the first 8 months. A leopard gecko that is not growing this quickly is either sick or not getting enough nutrients.

Water

A shallow water dish with fresh water must be available at all times. It should also be stable, so it cannot be spilled. Cage substrate should be kept dry, so be careful about spillage. Make sure that young and adult leopard geckos can climb easily out of the dish you use. Vitamin drops should not be added to the water.

Handling and Temperament

While leopard geckos are generally very friendly pets, excessive handling can be stressful to young geckos. In general, do not handle leopard geckos on a regular basis until they settle in and are more than 5-6 inches in total length. Once your gecko is large enough, it is best to sit on the floor, and let your gecko crawl through loose fingers and hand-over-hand for 10 to 15 minutes per day until they are accustomed to your touch. Never grab or hold the gecko's tail, or it might be dropped. The tail will regenerate, and the process generally takes 30-40 days.

All reptiles, even animals that are perfectly healthy, may potentially be carrying salmonella. It is safest to assume that your gecko is always shedding salmonella and take the appropriate precautions. Be sure to wash your hands after handling your gecko. Children and immunosuppressed individuals are at most risk of serious illness resulting from salmonella exposure. Instruct all children of the importance of hand washing after touching any reptile.

Illness

Knowing what is normal for your leopard gecko is very important in fighting disease. Become familiar with your gecko's normal appetite, activity level, amount and frequency of urination and defecation, appearance of waste products, and the general appearance of your reptile. A change in one of these normal behaviors may be a sign of disease. If you do notice a change in your gecko, observe him very closely. If the signs or symptoms persist for one or two days, or you notice new signs/symptoms, please call us for an appointment. The sooner we are able to address a problem, the more successful we will be in treating it. Bloody waste products, heavy breathing or panting, seizures, and lameness may suggest an emergency. Call us immediately if you notice any of the above.

Examinations

We recommend a yearly physical examination for your leopard gecko to be sure he is healthy. The signs of poor health in geckos can be subtle and if they are not recognized early, it can be too late to successfully treat a problem. It is possible for leopard geckos to harbor internal parasites for a long period of time before displaying any symptoms. Because of this, we recommend a yearly fecal test. We also recommend a yearly blood test to check calcium and phosphorus levels. This will ensure that your gecko's dietary needs are being met and will allow us to address any deficiencies before they cause a major problem such as metabolic bone disease.