

## Leopard Gecko (*Eublepharis macularius*) Husbandry Guidelines Written by Danielle Inman

## **Set-Up/Enclosure and Captive Maintenance**

**Lighting/Heating -** Captive habitat should always mimic an animal's natural environment as closely as possible. Leopard Geckos are nocturnal (night active). Pakistani animals: keeping this in mind there are several factors to take into consideration if one is to successfully keep these animals in captivity. Lighting, or in this case heating is one of the most important aspects of the set-up as it enables lizards to properly synthesize and metabolize nutrients and encourages natural behavior. Leopard geckos should have an average photo period (10-14 hrs daylight/10-14 hrs without light) induced with either direct or ambient lighting. Though leopard geckos are generally nocturnal animals, they do rest in partial sun at times and hunt at dusk or dawn in their natural environment, thus getting some exposure to UVB radiation is beneficial. A fluorescent UVB bulb (5.0-10.0) should be mounted no more than 12 inches from the basking area. The regions of The Middle-East and Asia that leopard geckos inhabit are arid; however due to their nocturnal habits they spend the majority of their day sleeping in rock crevices, caves, or even underground in abandoned burrows where it is more humid, cooler during the day, and warmer at night. Because of this cryptic behavior, these geckos minimize their exposure to the most brutal extremes of the climate around them, instead experiencing more moderate temperatures from 70-90 degrees Fahrenheit. To recreate this in captivity one may use lights, heat pads, or a combination of these, striving for a gradient between the aforementioned temperatures. Avoid heat rocks as they can potentially cause burns with their "all or nothing" heat delivery method. If using a heat pad, ample substrate and a rheostat are good safety measures to keep your pet from injury. At night, all heat sources may be turned off allowing the enclosure to fall to your home's ambient room temperature so long as that does not dip below 65-70 degrees F.

**Substrate** - There are several options for appropriate substrate (bedding). A healthy leopard gecko is quite an exuberant hunter and they often get an accidental mouthful of substrate when going after prey. Because of this, substrate needs to be either digestible or eliminate the possibility of ingestion all together. Good digestible substrates include a fine bird seed (parakeet or finch works well) or even hay pellets made for rabbits and other small mammals. A VERY FINE, powder-like, calcium sand (like CaribSea's Reptilite) is acceptable though most others are from questionable sources and are not digestible as they claim. The safest bet would be to steer clear of any sort of sand. If one doesn't mind the unnatural look of newspaper or paper towel, these eliminate the potential for ingestion and are easy to change out frequently for a clean enclosure.

**Furniture -** Cage décor is a welcome addition. Again, be mindful of what your leopard gecko's natural environment would be. Your pet would appreciate some flat surface area as well as makeshift caves, crevices and even hiding areas under logs. At least one humid hide should be maintained at all times by keeping damp paper towel or moss in or under a hide spot. This should help in avoiding shedding issues among others. There should be cover provided throughout the terrarium to allow for thermoregulation (regulating body temperature) by moving through the different climates within the enclosure. Foliage, artificial or otherwise is a fine addition but would mostly be for one's own aesthetic pleasure.

**Diet-** Diversify! Leopard geckos are heavily insectivorous, though given the opportunity they will have carnivorous tendencies. As a rule, the more variety the better: Some examples of readily available food include: cockroaches, mealworms, crickets, wax or butter worms, silk worms and tomato horned-worms. There is no predetermined amount that the gecko should eat so let them have their fill (especially as they are growing for the first few years). Generally most extra fat will be stored in the tail for a rainy day!

**Supplementation-** A powdered Calcium/Vitamin D3 supplement with little to no phosphorus should be applied to food with every meal and a multi-vitamin supplement should be given about once a week.

If done properly, a leopard gecko terrarium can be conducive to a mentally and physically healthy gecko as well as an aesthetically pleasing display for one's home.

## **Interaction/Handling**

**Human Interaction -** We should always bear in mind when keeping reptiles is that they are naturally cryptic (secretive) and typically solitary animals. Though as social creatures we generally thrive on social interaction and contact, leopard geckos are quite the opposite. Handling for the first six to nine months of a leopard gecko's life should be as minimal as possible and for six to nine months following that handling may be difficult. Hatchlings are fragile and skittish and may run out of open hands or succumb to other accidental trauma. They may also become stressed by the interaction and quit eating or alter their natural behavior. Imagine from the animals perspective how it must feel to have a predator as large as us looming over them or restraining them. After your pet is established and at a size where it can be handled with less of a possibility of detrimental effects, the gecko may be starting to go through "lizard puberty" and encroaching on sexual maturity. During this time they may adopt a bit of an "attitude", but they will generally snap out of it as quickly as they snapped into it. Also be aware that one of the leopard gecko's primary defense mechanisms is to "drop" their tail when grabbed or frightened. Leopard geckos are usually more stoic than many other species of gecko, but if pressed they will rid themselves of their tail. They will regenerate their tail, but it never looks quite as nice as the original. This being said, a well-adjusted, adult leopard gecko is usually willing to endure handling with no issue and though they do not "like it" they readily tolerate it.

**Gecko to Gecko Interaction** – I will reiterate here that leopard geckos and reptiles in general are not social animals so they definitely do not *need* cage mates. Young leopard geckos that have not reached sexual maturity can cohabitate with one another but they sometimes attempt to eat anything that moves, which can lead to missing tails, toes or worse. Sexually mature males cannot cohabitate as there will inevitably be territorial skirmishes. Leopard geckos of the opposite sex should only be housed together if one is willing and fully prepared to take on the problems and

responsibility that can accompany reproductive animals, though it's appropriate to note here that female leopard geckos can produce infertile eggs without a male.