### LEOPARD GECKO CARE SHEET

### HABITAT AND HISTORY

Leopard geckos are native to Southeastern Afghanistan, Western India, Pakistan, Iran, and Iraq. Their natural habitat ranges from deserts to arid grasslands, where they spend their days scurrying across the sandy-gravel and hiding in coarse shrubbery. Captive leopard geckos remain active all year long but wild geckos tend to become dormant during the colder winter months.

Wild leopard geckos are solitary animals that spend most days in their burrows, coming out to feed at dawn and dusk when the desert temperature is more comfortable. The leopard gecko's ability to store fat in its tail makes it a very hardy animal in the wild and in captivity.

Leopard geckoes, when compared to other reptiles, are a long-lived species, living for an average of six to ten years. It's not unusual for some male specimens to live upwards of 10, and even 20, years. There's even one male on record that was still breeding at the ripe old age of  $27 \frac{1}{2}$ .

### SIZE AND APPEARANCE

Leopard gecko hatchlings average between 3 and 4 inches in length from the tip of the nose to the end of the tail. Adult females typically grow to a length of 7 to 8 inches, with males growing to be between 8 and 10 inches. Males of the super giant bloodline can grow to a length of about one foot and weigh up to 160 grams—over 5 ounces.

Leopard geckos stand apart from other gecko species by their movable eyelids. In fact, they are the only gecko species with eyelids at all; all other species of gecko have transparent membranes over their eyes that serve for protection. With their chubby tails and wide heads, leopard geckos are quite large as far as geckos go. Wild leopard geckos are typically darker in coloration while captive-bred leopard geckos have an assortment of skin colors and patterns. Leopard geckos are covered on top with bumpy skin and have smooth underbellies. They are typically covered in leopard-like spots or spots with thick horizontal bands.

Since they have been such a popular pet and captive-bred for so long, there are many different color combinations and patterns to choose from (called morphs). Some of the different morphs that exist are the albino leopard gecko, tangerine leopard gecko, patternless, carrot-topped or tailed, blizzard, jungle, giant, and super giant geckos.

#### DIET

In the wild leopard geckos are insectivores, eating just about anything that moves in front of them. They do not and will not eat plants or vegetables, so don't even offer them. Most pet leopard geckos will not eat dead insects, so make sure you have a good live-food source nailed down before you bring your pet leopard gecko home.

Feed your leopard gecko late in the day or early in the evening to mimic their natural feeding times, but know that every gecko has different eating habits so there is no one ideal routine to follow. Juvenile leopard geckos require a daily feeding while adult geckos can be fed once every other day, as much as they will eat in a 15-20 minute period. As a rule of thumb, do not feed your gecko an insect that is longer than the space between its eyes or it won't be able to properly digest it. Hatchlings can eat crickets that are 3/8 of an inch in length, juvenile geckos can eat crickets that are 1/4 inch, and adult geckos can eat smaller adult to full adult sized crickets.

Leopard geckos are also known for changing their food preferences as they age, so they may love to eat crickets one day and refuse to eat them the next. To avoid this, try to keep their diet varied on a regular basis, using a combination of crickets, worms, roaches, silkworms, waxworms, and other insects.

Do not feed your gecko any type of insect that glows; the chemical that makes glowing insects light up also makes them highly toxic to geckos. Also, never feed your gecko any bugs that you catch yourself. Wild insects carry parasites and can also contain trace amounts of pesticides. Always source your gecko's live food from a reputable pet store or breed the insects yourself. Always make sure that the crickets you will be feeding to your gecko have been fed properly, whether at the pet store or in your house. If the crickets are not healthy or well fed, they will not be a good source of nutrition for your gecko. This is called "gut-loading," which means that nutritious foods are fed to the prey animal—in this case, the crickets—in order to pass those nutrients onto the animal that is eating it. Also, all crickets should be dusted with a calcium supplement prior to feeding them to your gecko.

#### **HEALTH**

Captive born leopard geckos do not carry diseases that can be transmitted to humans, and since they come from a dry environment they also do not carry salmonella. However, there are a few diseases and medical conditions that your pet leopard gecko may experience. The following is a short summary of leopard gecko diseases and disorders.

#### **Nutritional & Metabolic Disorders**

Metabolic bone disease (MBD) is an extremely serious and oftentimes-fatal disease caused by a lack of calcium and vitamin D3. These are both important for proper bone formation and calcification of eggs. Geckos suffering from MBD will experience weakness, deformities in the limbs and spine, bones that become spongy, tremors or twitching, and a lack of appetite. Recovery is possible if caught early and with appropriate veterinary care.

Infectious Diseases and Parasites

<u>Gastroenteritis</u> is caused by a bacterial or protozoan infection and can lead to symptoms like watery diarrhea and/or bloody stool. Other symptoms include a skinny tail, weight loss, and masses of undigested cricket. Gastroenteritis is very contagious so if you suspect your gecko has it, visit your vet immediately. If left untreated, leopard geckos can die of Gastroenteritis.

<u>Sand impactions</u> may occasionally occur if the gecko eats the sand or substrate that it lives on. For that reason, most veterinarians do not routinely recommend sand bedding.

# **Shedding Complications**

<u>Dysecdysis</u> is a condition where the gecko has trouble shedding its skin. This can be due to poor nutrition, poor health, and a lack of humidity and moisture. Skin that has shed incompletely will look like dry, patchy areas on the animal's head, limbs, eyes, and tail. If left untreated, dysecdysis can lead to eye problems, noticeable constricting of old bands of skin around the gecko's limbs, trouble walking, and infection. If a reptile cannot see properly, it won't actively search out food and will quickly become emaciated.

# **Respiratory Infections**

<u>Pneumonia</u> is a serious respiratory tract infection caused by bacteria in the lungs. Leopard geckos become susceptible to contracting pneumonia if their enclosure is kept too cool and humid. Symptoms of pneumonia include mucus bubbles around the animal's nostrils and marked difficulty breathing. When caught early enough, the problem can be resolved by adjusting the enclosure temperature to about 85 degrees Fahrenheit but may also need antibiotics from an exotics veterinarian.

#### **BEHAVIOR**

#### It's All in the Tail

Leopard geckos are one of the most animated reptiles that you can have as a pet. Hatchlings and juvenile leopard geckos can be very vocal when hungry, crying out and whining to be fed. They also exhibit an interesting behavior called tail waving. Tail waving is a back-and-forth motion that leopard

geckos exhibit when they feel threatened. If you ever see your leopard gecko waving its tail at another gecko, separate them immediately.

Another fascinating behavior is tail rattling (not to be confused with tail waving). Very similar to a rattlesnake rattling its tail, leopard geckos will rattle their tails when they get excited. This can often be seen when they're hunting for food or mating.

Like many lizard species, leopard geckos have the ability to detach and drop their tails when threatened. The dropped tail continues to twitch, distracting the predator as the lizard makes a hasty departure from the scene. The tail does grow back, or regenerates, but it never looks the same as the original tail. In the absence of natural predators, some of the reasons a gecko might drop its tail includes illness, stress from living environment or from aggressive tank mates, and rough handling by owners.

Leopard geckos store fat in their tails and will return to where they dropped their tail after the threat has passed to eat the tail and regain the lost fat supply. In some groups, lizards will bite at another lizard's tail to force them to release it and then eat the dropped tail. If you see your lizards behaving aggressively toward each other, you will need to separate them to prevent this from happening.

# **HABITAT SETUP**

Leopard geckos are low-maintenance but they do have unique housing requirements. Once you've set up your leopard gecko habitat properly, it's pretty easy to maintain.

A proper terrarium is the very first piece of equipment you'll want to buy. Leopard geckos like long, shallow, glass enclosures with wire mesh tops that allows ventilation and light to pass through. Wire enclosures are not acceptable and can cause your gecko to become injured. The minimum size terrarium you'll want for a single leopard gecko is 10-gallons. For a pair you'll need a 15-gallon tank, and for three or four geckos you will need a 20-gallon tank at the very minimum.

Every gecko enclosure needs to have three areas: a basking area, a hiding area, and places for activity. When adding decorations and furnishing to a gecko terrarium, try to use things that fit the gecko's natural environment. Rocks, logs, and artificial plants should be used to create natural living spaces and encourage the gecko to climb, play, and hide. Have at least two hiding areas per gecko and use a nice smooth rock as a basking surface. The more geckos you have, the more basking surfaces you will need. Don't furnish your gecko's home with sharp or abrasive rocks; the gecko could hurt itself when rubbing against them to shed its skin. Also make sure you never use resinous woods like cedar or pine, as they are toxic to leopard geckos. Finally, don't forget a nice flat, shallow bowl for drinking water.

### Lighting

Your lighting setup needs to mimic the natural light cycle your gecko is used to—or would experience under natural conditions. Because leopard geckos are active at night (notice their vertical pupils), they do not need to bask under a special UVB light. Bright lights can, in fact, stress your gecko out. Proper lighting can be achieved with black heat lamps as well as red lamps placed outside of the enclosure. There should be 14 hours of light during summer days followed by 10 hours of darkness. When winter rolls around, gradually adjust the periods of light and darkness to 12 hours of each. Automatic timers are a necessity to achieve and maintain the correct photoperiods. For viewing, a simple low-wattage light can be placed overhead on the screen-cage top and left on 12 hours a day.

# Heating

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.

The ideal 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 73 degrees.

# Humidity

Proper humidity is crucial for a gecko's ability to shed. Too much humidity can lead to respiratory infections, while not enough humidity can cause skin problems. Maintain a humidity level of 40% or lower using a hygrometer.

Additionally, leopard geckos need "moist boxes" to help them shed. Lining one of the gecko's shelters or boxes with a moist substrate like peat moss, sphagnum moss, and even damp paper towel can create these humidified shelters.

**Substrates** should be non-abrasive and non-irritating to the gecko. Ceramic tile, newspaper, artificial or fake turf, or paper towels can be used. Leopard geckos will designate one corner of their cage for eliminating waste, so it shouldn't be hard to check for sand in the stool.

If you decide to use sand-like substrates and notice that your gecko is eating the sand or that sand is in the stool, change the substrate. Make sure the substrate is easy to clean and replace and that it isn't made from anything that causes dust. Dust will irritate the gecko's respiratory system and can cause health issues. Also, avoid substrates like cedar, pine, hardwood chips, cat litter, sawdust, and corncob bedding.

# **DAILY CLEANING AND MAINTENANCE**

Keeping your leopard gecko's terrarium clean is an important part of maintaining a healthy, proper habitat. On a daily basis you should remove waste, debris, dead insects, and shed skin. If any object or furnishing has fecal matter on it, remove and clean at once. Clean and disinfect dirty water bowls on a daily basis too. Cleaning and disinfecting the entire terrarium should be a weekly task and includes a thorough disinfection of all the items within the terrarium. If you're unsure of which cleaning products are safe to use, consult with your veterinarian or local pet shop.

A final tip when it comes to cleaning your gecko's terrarium: the best time of day to clean is at dusk or during the very early morning hours. This works with the gecko's natural sleep cycles and will limit the amount of stress it endures.

### HANDLING AND TEMPERAMENT

Due to their easy-going natures and relative ease of care, leopard geckos are a perfect choice for beginners through advanced herp enthusiasts. Your gecko should be handled frequently to socialize them to your touch, but not too much that they get stressed. Leopard gecko behavior can be very mellow though they can bite pretty hard if stressed or ill.