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CARING FOR YOUR LEOPARD GECKO

GENERAL: Leopard geckos are attractive and friendly lizards native to desert habitats. They are nocturnal and in the wild they spend their days underground away from extreme heat. Their burrows are kept humid by the soil and their own exhaled breath. In captivity they require moderately warm temperatures and good humidity. Like other geckos these lizards shed their entire skin at once. They can be long lived, with life spans over 20 years being occasionally recorded.

FOOD: Leopard geckos are carnivorous, eating mostly insects and other small prey. Earthworms and slugs are high in calcium and low in fat, making them good choices as food items if the lizard will accept them. Rolling pieces of worm in crushed reptile kibble may increase palatability. Silkworms are fairly nutritious. Crickets or Dubia roaches are decent food items if calcium enriched: you need to feed the insects a high calcium “gut loading” cricket diet for 2-3 days. Insects eliminate the gut loader rapidly; the insects need to be consumed within a few hours after gut loading. T-Rex Calcium Plus gut loader is the *only* product proven effective. Hungry crickets may chew a gecko’s delicate skin; do not put too many crickets in the cage, and provide food for those not immediately eaten by the lizard. Mealworms, other roaches & waxworms are nutritionally poor; minimize these.

Vitamin + mineral supplements should be used *sparingly*. Achieving a healthy balance with supplements is difficult. Never mix products; use one balanced vitamin-mineral powder with many vitamins + minerals provided (*not* a simple calcium + vitamin D powder), and put a tiny pinch on the food once weekly, no more. Reptocal and Reptivite are 2 brands which offer balanced formulations. Overdosing is a potential problem with these supplements; it is safer to dose conservatively. Another option is to dust the insects with reptile food such as aquatic turtle pellets that have been ground to a powder, which will provide safe vitamin and mineral levels. Crickets may be fed softened reptile food as well, prior to gut loading them for calcium.

HOUSING: Try to duplicate natural conditions. The most important factors are heat & light. The ideal daytime air temperature is 77-85° F. Temperatures **MUST** be measured with a reliable thermometer (digital, dial or mercury thermometer, **NOT** a paper strip or temp gun), and in the shade away from all heat sources, to get accurate readings. Place thermometers at floor level, away from lamps, under a solid cardboard or wood shield. The terrarium can have a slightly warmer side in the upper temperature range, and a cooler side in the lower temperature range; usually attempt to keep the air temperature at the middle of the pet’s range. Improper air temperatures can cause stress and failure to thrive. In the Pacific Northwest the cage sides and top should be mostly solid, not screen, in order to trap heat and humidity. A reptile heat pad placed under the terrarium is a good heating method. Hot rocks provide heat but must be covered to prevent direct contact which may burn the lizard. Heat lamps are useful but must be at a safe distance to prevent burns (at least 18 inches usually). Heat lamps must *not* be bright if used at night; the best are lightless ceramic-coated lamps; dim purple or red coated night bulbs may also be used.

Daytime lighting should be provided even though this species is nocturnal. No ultraviolet light is needed. A simple bright light bulb or fluorescent tube can be used; provide 12-14 hours of light daily. If an incandescent bulb is used, be sure it doesn't add excess heat to the cage when it's turned on.

A small water bowl can provide humidity in the cage via evaporation. Geckos may not drink much from a bowl, preferring to get water from their prey or from water droplets (you can spray mist the cage daily). Do not allow prolonged soaking and defecating in the water, as this contaminates the water source and may also cause skin infections. Provide a dark hiding cave containing damp moss or cloth, which keeps the gecko's skin from drying out while resting. Moss or artificial turf are good cage floor beddings; turf can be cleaned and reused. Sand, gravel, corn cob, walnut shells, etc. are harder to keep clean and may cause intestinal blockages if eaten. Calcsand (calcium crystals) may be safer than regular sand, as small amounts may digest if eaten.

COMMON DISEASES:

Osteodystrophy (Rickets): A calcium deficiency usually due to poor diet. This results in loss of bone density, causing stunted or crooked growth and fragile bones that fracture easily. Symptoms include weakness, tremors, soft jaw, swollen or crooked legs. Treatment is via injectable or oral calcium, and correction of diet.

Limb fractures: Due to trauma (falling), or secondary to soft bones (rickets). Broken limbs may drag or fail to move normally, although the lizard may still attempt to use the leg. The bones may bend at an abnormal angle. If you suspect a leg injury have your pet examined promptly. Fractures are quite treatable; the limb is usually splinted. Correcting the diet to promote healthy bones is essential.

Stomach or bowel blockage: Leopard geckos easily develop blockages from swallowing bedding such as bark chips, sand or gravel. Small amounts of bedding may be passed with the aid of oral mineral oil. Severe cases may need surgery to remove the obstruction. Be sure that moist food items such as worms are offered in a shallow bowl, not on the bedding material which may stick to them. Cool temperatures also slow the lizard's bowel and increase risk of blockage or constipation.

Heat burns, cricket bites, and skin infections: Unprotected hot rocks, heat pads or heat lamps can cause burns. Hungry crickets may bite the gecko if left uneaten. Injured skin often becomes infected. Treatment: for mild infections, chlorhexidene or Betadine solution applied 2-3 times daily for 5-10 days may be adequate. For severe lesions, dead tissue may need surgical removal followed by oral antibiotics. Correct the habitat also.

Mouth and respiratory infections: These are usually caused by normal bacteria which take advantage of a stressed or weakened lizard; underlying factors such as cool temperatures or imbalanced diets often play an important role in causing these illnesses. Mouth rot causes red swollen gums and sometimes pus, odor or drooling. Cool air temperatures or mouth injury are common causes. Respiratory infections can cause mucus discharge in the mouth or nose which may resemble mouth rot, but the gums are usually normal. These diseases are treated with antibiotics and correction of diet and environment.

Intestinal parasites: Various intestinal parasites are found in geckos. When severe they can cause diarrhea, weight loss, straining to defecate and even colon prolapse (bowel protruding from the anus). Diagnosis of intestinal parasites is done via examination of a fresh (within 24 hours) fecal sample. Treatment with appropriate medication, along with thorough cage cleaning, eliminates the parasites.

Egg binding: Female geckos may refuse to lay their eggs, either due to lack of suitable laying sites or due to inability to lay them. Retained eggs may be reabsorbed; if not they must be laid or surgically removed. Suspect egg production in a female who suddenly looks fat through the belly, especially if her appetite is slowly decreasing. Encourage egg laying by providing warm air temperatures and a dark laying box, accessible via a small hole in the side, and filled with a few inches of moistened sand (this will allow digging of an egg laying pit).

Obesity and xanthomatosis: Leopard geckos are good eaters and often become obese, especially if fed fatty prey such as mealworms and waxworms. The pet's tail should be somewhat fat normally, but not as wide as the body. Prevent obesity via limiting food and using less fatty prey. Xanthomatosis is a disease likely caused by excess fat intake; large deposits of cholesterol form in the abdomen and internal organs. This can cause organ damage and often produces a swollen abdomen with visible pale masses within. Suspect this disease when a lizard is losing appetite and body weight (thinning tail) but has a persistently large abdomen. Treatment is supportive care, including force feeding a lean high protein diet and vitamins. Many cases are fatal, and prevention is the best approach to this disease.

Molting problems: Leopard geckos shed their entire skin regularly, similar to snakes. When preparing to molt the lizard will turn a milky pale color and should be handled minimally. If humidity is too low and/ or the animal is too cool, molting may be difficult and skin may fail to shed properly. Old pale skin is often retained on the toes, face and tail tip. If not removed, this old skin can lead to eye damage or more commonly loss of toes due to lack of blood circulation. Treatment involves softening the skin with water and carefully removing it; the toes and eyes are delicate structures and veterinary assistance may be needed to remove skin without damaging the lizard. Prevent molting problems via keeping the cage mostly closed with a water bowl inside to humidify the air; spray misting the lizard daily when molting may also help the skin shed.

Tail loss: Leopard geckos have tails designed to break off if they are frightened or handled roughly. Hold your pet gently and never grab a gecko by its tail. The tail breaks near the base, leaving a short stub. If this occurs keep the stump clean and apply antibiotic ointment (such as Neosporin) daily until healed; be sure crickets do not chew the wound. The tail may regrow to nearly normal proportions eventually, especially in younger animals.

Hemipene impactions: Male geckos have 2 hemipenes (reproductive organs) in the base of the tail, just behind the vent opening. These are visible in mature lizards as a pair of soft bulges. When they become plugged with dried secretions, they can become hard, swollen and painful. Dark material may protrude from the vent opening, and the hemipenes may get infected or even prolapse (hang out). These problems require medical treatment. Impactions are probably due to low cage humidity and/ or temperature; correct the environment to prevent this disease.

Appetite loss: This often results from husbandry stresses (low temperatures, short day length, noise/disturbances around the cage, diet imbalances, etc). Illness such as infection can also reduce appetite. Treatment includes correction of diet and environment, and treating disease if present.